Appendix 1. 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) for June 2017. The CPS is a monthly survey of about 52,000 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 is representative of the U.S. civilian, noninstitutionalized 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 includes a variety of demographic characteristics, such as age, sex, race, marital status, and educational attainment. Additional information about the CPS is provided on the Census Bureau's website.[1]

The CPS sample consists of independent samples in each state and the District of Columbia. The sample sizes for each state are set so that specific precision requirements for estimating unemployment rates will be met.[2] The sample design ensures that most of the households in a given state have the same probability of being selected, though, in general, household 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 metropolitan statistical areas (MSAs).

Unbanked/Underbanked Supplement

The fifth Unbanked/Underbanked Supplement was conducted in June 2017. The first, second, third, and fourth supplements were conducted in January 2009, June 2011, June 2013, and June 2015, respectively. The primary purpose of the supplement is to estimate the percentage of U.S. households that are "unbanked" and "underbanked" and to identify the reasons why. The supplement survey instrument used in 2017, attached as Appendix 3, included approximately 50 questions designed to provide this information.

The 2017 survey instrument is similar to previous survey instruments. The 2009 instrument was developed 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 the BLS. The 2009 survey instrument underwent four rounds of cognitive field pre-testing and was revised to address the feedback gathered from each round.[3] The questionnaire was revised in 2011, 2013, 2015, and 2017. For a detailed description of the most recent revisions, which underwent two rounds of cognitive testing, see Appendix 2. Because of changes in the questionnaire, direct comparisons between 2017 and prior-year estimates are not possible in some cases.

Eligibility and Exclusions

All households that participated in the June 2017 CPS were eligible to participate in the Unbanked/Underbanked Supplement. However, only households whose respondents specified that they had some level of participation in their household finances *and* responded "Yes" or "No" to whether someone in their household had a bank account (survey supplement Question 2, or Q2) were considered survey respondents.[4] CPS household respondents who did not answer or answered "Don't know" to Q2, or who did not participate in their household financial decisions (or refused to answer), were asked no further questions and were classified as nonrespondents for the supplement.

Coverage and Response Rates

For the June 2017 CPS, a statistical sample of 60,843 survey-eligible households was selected from the sampling frame.[5] Of these households, 52,068 participated in the CPS,

[1]See, for example, U.S. Census Bureau's Technical Paper 66, "Design and Methodology, Current Population Survey," available at http://www.census.gov/prod/2006pubs/tp-66.pdf.

[2]The precision targets that are the basis for the sample design of the CPS are provided in Chapter 3 of Technical Paper 66, available at http://www.census.gov/prod/2006pubs/tp-66.pdf.

[3]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.

[4]Respondents involved in their household finances include respondents in households where adults have separate finances or in households where the respondent was the only adult in the household. For households where adults share finances or have a mix of shared and separate finances, respondents were asked to specify how much they participated in their household financial decisions. Only those who reported having at least some level of participation were considered to be involved in their household finances.

[5]For details on the sampling frame, refer to the technical documentation for the June 2017 supplement, available at http://thedataweb.rm.census.gov/ftp/cps_ftp.html.

resulting in an 86 percent response rate. There were 8,775 nonrespondent eligible households. Most of these nonrespondents either refused to participate (76 percent) or were not home at the time of the interview visit or call (13 percent). The remaining 11 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 (44 households) did not participate as a result of language barriers.

Coverage ratios for the CPS are derived as a measure of the percentage of persons in the target universe (the U.S. civilian, noninstitutionalized population, aged 15 or older) that are included in the sampling frame.[6] The overall coverage ratio for the June 2017 CPS was 89 percent. The missing 11 percent consists of three groups: (1) persons residing in households that are not in the CPS sampling frame, (2) noninstitutionalized persons not residing in households at the time the CPS was conducted, and (3) household residents who were not listed as household members for the CPS for various reasons. The coverage ratios varied across demographic groups. For example, among women aged 15 and older, the coverage ratio was 93 percent for whites, 80 percent for blacks, and 84 percent for Hispanics.

Of the 52,068 households that participated in the CPS, 35,217 (68 percent) also participated in the Unbanked/Underbanked Supplement.[7] Supplement survey response rates vary by household characteristics, ranging from 60 to 73 percent for the segments of the population listed in Appendix Table A.2. 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 U.S. civilian, noninstitutionalized population, aged 15 or older.[8]

Analysis of Supplement Survey Results

Using supplement survey results, households were classified as unbanked if they answered "No" to the question, "Do you or anyone else in your household have a checking or savings account now?" Households that answered "Yes" to this question were classified as underbanked if they indicated that they used one of the following products or services from an alternative financial services provider in the past 12 months: money orders, check cashing, international remittances, payday loans, refund anticipation loans, rent-to-own services, pawn shop loans, or auto title loans.

The estimated proportion of U.S. households that are unbanked was derived by dividing the sum of the weights of the household respondents who 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 supplement sample of 35,217 respondent households, the sum of the household weights is roughly 129.3 million, which would be an estimate of all U.S. households as of June 2017. The Housing Vacancy Survey, another survey related to the CPS that uses household controls to produce household weights, provided an estimate of 119.1 million as the number of households in June 2017.[9] This difference (129.3 million versus 119.1 million) is because 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 count controls. Household count controls were not used to adjust household weights because the CPS is a person-level survey rather than a household-level 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 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 2010 Census with updates based on the American Community Survey).

[7]Taking into account the nonresponse to the base CPS, the overall response rate for the Unbanked/Underbanked Supplement was 58 percent.

[8]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 and geographic groups). The household weight is generally taken to be the weight of the householder/reference person; however, if the householder/reference person is a married male, the spouse's weight is used.

[9]See Table 13a Monthly Household Estimates: 2000 to Present, Vintage 2017 (July 26, 2018), available at http://www.census.gov/housing/hvs/data/hist_tab_13a_v2017.xlsx.

This report also contains a number of tables for which unbanked percentages and other household statistics are computed for subgroups defined by a particular socioeconomic or demographic characteristic. The household classification of a socioeconomic or demographic variable that is defined at the person level rather than the household level (e.g., race/ethnicity, education, or employment status) is based on the socioeconomic or demographic classification of the householder/reference person (i.e., the person who owns or rents the home).[10]

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 technical documentation on the CPS website.[11]

Households are categorized into racial/ethnic classifications as follows: if the householder is identified as black, the household is classified as "black" regardless of whether the householder is identified as Hispanic or any other race. If the householder is not identified as black and is identified as Hispanic, the household is classified as "Hispanic." If the householder is identified as Asian and not black or Hispanic, then the household is classified as "Asian." If the householder is identified as white and not any other race and not Hispanic, then the household is classified as "white." All remaining households are classified as "other."

This report provides unbanked and other estimates for the population of households with disabilities. As in the 2013 report (the first time these estimates were presented) and the 2015 report, households are categorized as follows: if the householder is between age 25 and 64 and either (a) indicates "Yes" to any of the six-question disability sequence in the base CPS or (b) is classified as "Not in labor force – disabled," the household is classified as "Disabled, age 25 to 64."[12] If the householder is between age 25 and 64 and neither condition (a) nor (b) above is met, the household is classified as "Not disabled, age 25 to 64." If the householder is not between the ages of 25 and 64, the household is classified as "Not applicable (not age 25 to 64)."[13]

This report presents estimates of unbanked and underbanked rates (and other outcomes of interest) for larger metropolitan statistical areas (MSAs). MSA delineations are established by the Office of Management and Budget (OMB). OMB published a revised set of MSA delineations in February 2013, based on data from the 2010 Census and the 2006-2010 American Community Surveys. The 2013 delineations superseded the earlier delineations based on Census 2000 data, first established by OMB in June 2003.[14]

As discussed in the technical documentation to the June 2015 supplement, the Census Bureau phased the 2013 MSA delineations into the CPS (and phased out the 2003 delineations) over the period May 2014 to July 2015.[15] Housing units first included in the CPS before May 2014 were assigned metropolitan area codes based on the 2003 delineations. These metropolitan area codes consisted of metropolitan New England city and town area (NECTA) codes for New England states (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont) and MSA codes for other states.[16] Housing units first included in the CPS in May 2014 or later were assigned metropolitan area codes based on the 2013 delineations. These metropolitan area codes consisted only of MSA codes, as housing units in New England were given MSA codes as part of the phase-in of the 2013 delineations.

For the 2017 survey data, all housing units were assigned metropolitan area codes based on the 2013 delineations. For the 2015 survey data, approximately three-quarters of housing units were assigned metropolitan area codes based on the 2013 delineations, while the remaining housing units were assigned metropolitan area codes based on the 2003 delinea-

[10]In a few cases, the householder/reference person is classified as an ineligible respondent for the CPS, but another eligible household resident participated in the CPS and in the Unbanked/Underbanked Supplement. In these cases we use the attributes of the eligible respondent to characterize the household.

[11]See http://www.census.gov/programs-surveys/cps/technical-documentation/subject-definitions.html.

[12]Specifically, we use the variable PEMLR (monthly labor force recode) to determine if the respondent is not in the labor force because of a disability. Refer to the CPS Data Dictionary for detail on the six-question disability sequence, available at the following link: http://thedataweb.rm.census.gov/ftp/cps_ftp.html.

[13]A universally accepted method to identify the population with disabilities does not exist. Key estimates from the FDIC Unbanked/Underbanked Supplement, such as the proportion of disabled households that are unbanked, are qualitatively similar using alternative disability measures. See Appendix I of the 2013 report for details, available at http://www.economicinclusion.gov/surveys/2013household/documents/2013_FDIC_Unbanked_HH_Survey_Appendix.pdf.

[14]For February 2013 delineations, see OMB Bulletin Number 13-01 (February 28, 2013), available at http://www.whitehouse.gov/sites/whitehouse.gov/files/omb/bulletins/2013/b13-01.pdf. For June 2003 delineations, see OMB Bulletin Number 03-04 (June 6, 2003), available at http://www.whitehouse.gov/wp-content/uploads/2017/11/bulletins_b03-04.pdf. In each year between 2003 and 2009, OMB published minor revisions to the MSA delineations, based on the Census Bureau's annual population estimates.

[15]The technical documentation for the June 2015 supplement is available at http://thedataweb.rm.census.gov/ftp/cps_ftp.html.

[16]Unlike MSAs, which are made up of one of more full counties or county equivalents, NECTAs are composed of cities and towns and often do not follow county boundaries.

tions. To facilitate MSA-level estimates using the 2015 survey data, a housing unit with an obsolete 2003 MSA code was assigned the corresponding 2013 MSA code.[17] A housing unit with a NECTA code was assigned the 2013 MSA code that comprised the majority of the NECTA population.[18] Overall, less than 3 percent of housing units in the 2015 survey data were affected by these adjustments.

For the 2013 and earlier survey data, all housing units were assigned metropolitan area codes based on the 2003 delineations. For these survey years, metropolitan area estimates provided in this report are based on the 2003 delineations. Because of changes in geographic boundaries (e.g., the addition or subtraction of a county), some metropolitan area estimates that use 2017 and 2015 survey data are not directly comparable to the corresponding metropolitan area estimates that use 2013 and earlier survey data. In the report tables, a tilde (~) next to an MSA name indicates that the MSA was affected by a geographic boundary change. All MSA names in the tables, however, reflect the 2013 delineations.

Statistical Precision of Estimates

To indicate the precision of certain estimates, standard errors were calculated based on the variation of the estimates across a set of 160 sample replicates provided by the Census Bureau. Details of the calculation of standard errors based on sample replicates (and on the CPS methodology in general) are available from the Census Bureau.[19]

Estimated differences discussed in this report are significant at the 10 percent level, unless noted otherwise. That is, if the population difference were zero, then the probability of obtaining estimates having the observed difference or a larger difference would be no more than 10 percent and could be considerably less. For example, the estimated difference in the proportions of U.S. households that were unbanked between 2017 (6.5 percent) and 2015 (7.0 percent) is -0.5 percentage points. The estimated standard error of this difference (computed using the 160 replicates as described above) is 0.2 percentage points. Under the assumption that the true difference in the unbanked rate between 2017 and 2015 is zero, the probability of observing the -0.5 percentage point difference in our sample data is 3.7 percent (i.e., the p-value is 0.037).

Certain 2017 report appendix tables include 90 percent confidence intervals in addition to point estimates. The confidence interval is one way to describe the uncertainty surrounding the estimate. For example, as shown in Appendix Table A.3, the estimated proportion of U.S. households that were unbanked in 2017 is 6.5 percent, and the 90 percent confidence interval around this estimate ranges from 6.2 to 6.8 percent.

[17] In the 2015 survey data, some housing units were located in counties populous enough to be identified, but no MSA code was assigned because these counties were not in an MSA based on the 2003 delineations (all of these housing units were first included in the CPS before May 2014). Because some of these counties were in an MSA based on the 2013 delineations, a 2013 MSA code was assigned to housing units located in such counties.

[18] For example, housing units with a NECTA code for Boston-Cambridge-Quincy, MA-NH, were assigned the MSA code for Boston-Cambridge-Newton, MA-NH. For each NECTA code in the 2015 survey data, at least 80 percent of the Census 2010 NECTA population (and the estimated July 1, 2015, NECTA population) resided within the corresponding MSA, and for the majority of the NECTAs this number was at least 90 percent.

[19] For a detailed description of the methodology used to calculate standard errors based on sample replicates, see Chapter 14 of Technical Paper 66, available at http://www.census.gov/prod/2006pubs/tp-66.pdf.

Appendix 2. 2017 Revisions to the *FDIC National Survey of Unbanked and Underbanked Households*

The 2017 survey instrument is largely similar to the 2015 survey instrument. However, some revisions were made from 2015 to 2017 based on lessons learned from past survey experience, cognitive testing of the 2017 instrument, and an interest in certain economic inclusion topics not covered in the 2015 instrument. In particular, the 2017 survey added new questions about households' visits to bank branches, use of a mobile phone for banking activities, and use of mainstream credit products.

To accommodate the new questions in the 2017 survey instrument and satisfy space constraints, some questions from the 2015 survey instrument were dropped. For example, the 2017 survey did not include questions on households' perceptions about banks' interest in serving households like theirs or on households' learning about finances.

Specific revisions to the 2017 survey are described below.

Bank Branch Visits Among Banked and Unbanked Households

The 2017 survey included new questions about bank branch visits. First, households that did not previously indicate that they visited a bank branch in the past 12 months (i.e., unbanked households, or banked households that did not access an account using a bank teller in the past 12 months) were asked whether they spoke with a teller or other employee in person at a bank branch in the past 12 months (Q70). Second, households that visited a bank branch in the past 12 months (i.e., households that answered "Yes" to Q70 or that accessed an account using a bank teller in the past 12 months) were asked how many times they spoke with a teller or other employee in person at a bank branch: one to four times in the past 12 months, five to nine times in the past 12 months, or ten or more times in the past 12 months (Q71).

Mobile Activities

The 2017 survey included a series of questions on use of a mobile phone for banking activities in the past 12 months. These questions were not asked in 2015, although several of these questions were asked in 2013.

In 2017, banked households and recently unbanked households (i.e., households that did not have an account at the time of the survey but did at some point in the 12 months before) were asked whether they used a mobile phone to check email from a bank about an account (Q80a) or whether they received a mobile text alert or push notification from a bank about an account (Q80b). Banked households that used mobile banking to access an account in the past 12 months were further asked whether they used a bank's mobile website or bank's mobile app to check a bank account balance or recent transactions (Q80c), to make a bill payment (Q80d), to send money to other people (Q80e), or to transfer money between bank accounts owned by the same person (Q80f). Banked households that used mobile banking to access an account in the past 12 months were also asked whether they used a mobile phone's camera to deposit a check into a bank account (Q80g).

All of the activities asked about in the 2017 survey, except for whether households used a mobile phone to check email from a bank about an account, were also asked in the 2013 survey (2013 survey Q2i). The 2013 survey included some activities not asked about in the 2017 survey, specifically, whether households downloaded or used a bank's mobile app, used a mobile phone to locate the closest in-network ATM or bank branch, or used a mobile phone for other activities.[1]

Prepaid Cards

The introductory language for the questions on prepaid card use was changed slightly. The statement "I am not asking about gift cards or debit cards linked to a checking account" was moved to the end of the introductory paragraph. In 2015, this statement was at the beginning of the introductory paragraph.

Alternative Financial Services

A new question was added to gather information on households' use of loans or lines of credit from alternative financial services (AFS) providers that might not have been included in their answers to preceding questions. Specifically, households that indicated that they did not have a payday loan (Q122), pawn shop loan (Q123), refund anticipation loan

[1] In the 2013 survey, all mobile activities were asked only of banked households that used mobile banking to access a bank account in the past 12 months. The proportion of all banked households that received a mobile text alert or push notification from a bank about an account is therefore not comparable over time because different types of households in the 2013 and 2017 surveys were asked about this activity.

(Q124), or auto title loan (Q126) in the past 12 months were asked whether they had taken out any other types of loans or lines of credit from a payday lender, auto title lender, pawn shop, or check casher in the past 12 months (Q127). To accommodate this new question, questions about auto title loans (Q126) and rent-to-own services (Q125) were reordered. Additionally, questions about sending money abroad in a typical month were dropped (2015 survey Q132 and Q134), and questions about places used to send money abroad in the past 12 months were streamlined (Q131 and Q133 from the 2015 survey were dropped and replaced with Q135 in the 2017 survey).

Mainstream Credit

The 2017 survey included a series of questions about use of mainstream credit products, expanding on questions asked in the 2015 survey. Specifically, households in the 2017 survey were asked whether, in the past 12 months, they had a credit card from Visa, MasterCard, American Express, or Discover (Q1600a); a store credit card that could only be used at that store (Q1600b); an auto loan (Q1600c); a mortgage, home equity loan, or home equity line of credit (Q1600d); a student loan (Q1600e); other personal loans or lines of credit from a bank (Q1600f); or other personal loans or lines of credit from a company other than a bank (Q1600g).[2]

The 2017 survey questions about credit cards from Visa, MasterCard, American Express, or Discover and about personal loans or lines of credit from a bank (Q1600a and Q1600f) replaced similar questions from the 2015 survey (2015 survey Q160 and Q161). The wording and location of these questions changed somewhat to accommodate the new questions in the 2017 survey about other types of mainstream credit products.

Income Receipt and Bill Payment in a Typical Month

The 2015 survey included new questions about the ways households receive income and pay bills in a typical month. These questions were retained in the 2017 survey, with some minor revisions.

First, in the introductory language to the questions about income receipt, “retirement” income was added to the example list of income sources. Second, a question that asked households to choose the primary (i.e., most common) method of bill payment in a typical month was dropped (2015 survey Q151), and the remaining questions on income receipt and bill payment methods were streamlined. Third, households that did not indicate that they received income by any of the methods asked about in the survey (Q140a-e) and that did not volunteer that they did not receive income were asked a new question about whether they received any income from work, retirement, government benefits, or other sources in the past 12 months (Q140x). Similarly, households that did not indicate that they paid bills by any of the methods asked about in the survey (Q150a-i) and that did not volunteer that they did not pay bills were asked a new question about whether they paid any bills for things like mortgage, rent, utilities, or child care in the past 12 months (Q150x).

Households’ Perceptions About Banks and Households’ Learning About Finances

A question in the 2015 survey that asked households how interested banks are in serving households like theirs (2015 survey Q101) was dropped. Questions about whether households sought financial information from banks in the past 12 months (2015 survey Q182) and about whether households attended financial education classes or financial counseling sessions in the past 12 months (2015 survey Q183 and Q184) were also dropped.

[2]For Q1600c, households that previously indicated that they had taken out an auto title loan were told that an auto loan is different from an auto title loan. For Q1600g, households that previously indicated that they had taken out a payday loan, pawn shop loan, refund anticipation loan, auto title loan, or other types of loans or lines of credit from a payday lender, auto title lender, pawn shop, or check casher were told to not include such loans when answering Q1600g.