# Revisions to the SCF Weighting Methodology: Accounting for Race/Ethnicity and Homeownership

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This paper discusses revisions to the weights for the Survey of Consumer Finances (SCF) to account for systematic deviations from home ownership rates estimated from the Current Population Survey (CPS). Under the weighting methodology presented by Kennickell and Woodburn [1998]—hereafter, "KW"—the implied overall homeownership rate in the SCF is, by construction, very close to that in the CPS.[1] At one stage of the weigh raking, the SCF estimates of homeownership are aligned with those estimated for a comparable population using the CPS. Without this adjustment, overall homeownership would be understated in the SCF. However, even with the adjustment, there is no guarantee that homeownership rates would be about the same for subgroups in the two surveys.

Preliminary results from the 1998 SCF using the KW weights indicated that the homeownership rate for non-Hispanic whites—about 77 percent of households in the 1998 SCF—was only slightly above the level estimated in the CPS for the group. However, the data together with the adjusted weights also showed a substantial decline in home ownership rates since 1995 for Hispanics, and for African-Americans and other nonwhites; this change is at odds with the patterns observed in the CPS as well as indications from other sources. A detailed examination of the historical series of SCF data (table 1) revealed that the mismatch of ownership rates by racial/ethnic groups is pervasive across the recent years of the survey, though the direction of the differences is not consistent over time.[2] Because of the importance of

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[1]Kennickell, Arthur B. and Woodburn, R. Louise (1999) "Consistent Weight Design for the 1989, 1992, and 1995 SCFs, and the Distribution of Wealth," *Review of Income and Wealth* (Series 45, number 2), June 1999, pp. 193-215.

[2]The weights of observations for which ethnicity was missing in the CPS were allocated proportionately to the other groups shown in the table.

**Table 1: Homeownership Rates Computed Using SCF and KW Weights, and CPS with Sample Adjustment; 1989, 1992, 1995, and 1998; Percent.**

| | 1989 | | 1992 | | 1995 | | 1998 | |
|---|---|---|---|---|---|---|---|---|
| | *SCF* | *CPS* | *SCF* | *CPS* | *SCF* | *CPS* | *SCF* | *CPS* |
| Non-Hispanic white | 70.8 | 69.2 | 69.0 | 69.5 | 69.4 | 70.8 | 73.1 | 72.3 |
| African-American | 41.1 | 42.0 | 49.2 | 42.5 | 46.8 | 42.2 | 40.6 | 46.5 |
| Hispanic | 40.8 | 41.8 | 42.8 | 40.1 | 44.4 | 42.4 | 43.9 | 45.2 |
| Other | 55.0 | 50.6 | 57.1 | 52.1 | 59.9 | 50.5 | 49.9 | 53.6 |

racial/ethnic distinctions in many analyses of financial behavior and the great importance of homeownership in determining financial well being, some revision of the weights was needed for reliable estimates of the position of minorities over time. At the same time, it was important to remain close to the structure developed by KW, which incorporates the results of much earlier research on weighting and nonresponse.

The first section of this paper outlines the differences in the CPS measures of home ownership in the CPS for the years 1989, 1992, 1995, and 1998 and those implied by the KW methodology. The following section discusses the implementation of a change in the weights to match more accurately the CPS and SCF ownership measures. A final section discusses some of the other implications of the revision. An appendix provides tables on the precise nature of the weight adjustments under the KW methodology and the revised methodology.

## I. Differences Between the CPS and the SCF Measurements

The definition of the sample elements in the CPS and the SCF differ somewhat. The CPS samples households, and it provides information organized by families and individuals within those households. The SCF obtains most of it information about the "primary economic unit," which is defined roughly as a the family (including single individuals) that is economically

dominant within a household. By exploiting the detailed CPS information on household structure, it is possible to construct a population in the CPS that is quite similar to the SCF population. That group of units is used to estimate control totals for the KW weighting adjustment, and the same construct is used in the comparisons given here.

In the CPS, racial/ethnic information is asked for all household members, but in the SCF, such information is only obtained for the actual respondent. In comparisons between the two surveys, the race/ethnicity of a selected CPS individual known euphemistically as the "head" in the SCF data, is compared against the race/ethnicity of the SCF respondent.[3]

The questions underlying the CPS and SCF home ownership measures (figures 1 and 2) are not identical, but it seems very

**Figure 1: CPS Question Sequence Underlying Homeownership Classification.**

| |
|---|
| Are your living quarters:<br>Owned or being bought by you or someone in hour household?<br>Rented for cash?<br>Occupied without payment of cash rent? |

[3]The SCF "head" is defined as follows: In a single-person household, the head is that individual. In more complex households, the head is defined in terms of the individual or couple that forms the core of the primary economic unit. When it is a single individual, that person is considered the head. In couples, the head is taken to be the male in a mixed-sex couple, or the older individual in the case of a same-sex couple. This nomenclature is adopted solely for purposes of consistent comparison of the data over time, and it implies absolutely no judgement about the actual structure and functioning of the actual survey households.

**Figure 2: SCF Question Sequence Underlying Homeownership Classification**

*INTERVIEWER CHECKPOINT:* WHERE DOES R LIVE?
R LIVES ON A FARM/RANCH —> GO TO Question A
R LIVES IN A MOBILE HOME/RV --> GO TO Question C
ALL OTHER TYPES OF HOUSING --> GO TO Question D

*Question A:* Do you (or anyone in your family living) here operate a farming or ranching business on this property?
YES —> GO TO Question B
NO —> GO TO Question D

*Question B:* What is the legal ownership status of this (farm/ranch)? Do you (or your family living here) own this (farm/ranch), do you own part of it, do you rent it, is it all owned by a business, or what?
Owns all
Owns only part
Sharecropper
Rents/Leases all
Owned by a business
Other

*Question C:* Do you (or your family living here) own both this mobile home and site or lot, do you own only the mobile home, do you own only the site, do you rent both the home and site, or what?
Own both home and site
Own only site
Own only home
Rent both
Neither own nor rent

*Question D:* Do you (and your family living here) own this (ranch/farm/house and lot/apartment), do you pay rent, do you own it as a part of a condo, co-op, townhouse association, or what?
Owns or is buying/land contract
Pays rent
Condo
Co-op
Townhouse Association
Retirement lifetime tenancy
Neither owns nor rents

A "homeowner" is defined as a respondent who answered "Owns all" or "Owns only part" to Question B; "Owns both home and site," "Owns only site," or "Owns only home" to Question C; or "Owns or is buying/land contract," "Condo," "Coop," "Townhouse association," or "Retirement lifetime tenancy" to Question D.

unlikely that the results of the two approaches would be very different. The CPS question is a fairly simple one, and it is used for people living in all housing situations covered by the survey. In the SCF, respondents are asked slighly different questions depending on whether they live on farms or ranches, in mobile homes, or some other type of housing. This division also allows

more directly appropriate wording for people with such different housing arrangements. In each of the ultimate ownership questions, there is a "neither owns nor rents" option, which is further specified in a verbatim transcription of the respondent's description of their housing arrangements. These remarks are reviewed intensively, and any remarks indicating that the respondent owns any part of the property triggers an edit to make them at least a part-owner of the residence.

There are also differences between the SCF and the CPS in the questions used to determine race/ethnicity. Figures 3 and 4 provide the underlying question wording in the CPS and the SCF respectively. In the CPS, there is a two-step sequence that asks first about racial identification and then about ethnic background. In the SCF, there is a single question that asks people to choose from a number of categories which include a category labeled "Hispanic." In the 1989, 1992, and 1995 SCFs, a single response was recorded, and in 1998 the question was reworked to accommodate multiple responses.[4] Because the CPS ethnicity question is asked

[4]Only 56 respondents out of 4390 provided more than a single response in 1998. The most common combination was white and American Indian or Alaskan Native (21 respondents), followed black and American Indian or Alaskan Native (7 respondents) and by white and Hispanic (6 respondents).

**Figure 3: Question Sequences Underlying CPS Racial/Ethnic Classification.**

What is the race of each person in this household?
RESPONDENTS ARE SHOWN A CARD CONTAINING THE FOLLOWING GROUPS:
White; black; American Indian, Aleut, Eskimo; Asian or Pacific Islander; Other.

What is the origin or descent of each person in this household?
RESPONDENTS ARE SHOWN A CARD CONTAINING THE FOLLOWING GROUPS: German, Italian, Irish, French, Polish, Russian, English, Scottish, Welsh, Mexican American, Chicano, Mexican, Puerto Rican, Cuban, Central or South American. Other Spanish, Afro-American (Black, Negro), another group, don't know.

**Table 2: Percent Distribution of Racial and Ethnic Identification Computed Using SCF with KW Weights, and CPS with Sample Adjustment; 1989, 1992, 1995, and 1998.**

| | 1989 | | 1992 | | 1995 | | 1998 | |
|---|---|---|---|---|---|---|---|---|
| | *SCF* | *CPS* | *SCF* | *CPS* | *SCF* | *CPS* | *SCF* | *CPS* |
| Non-Hispanic white | 74.6 | 78.5 | 75.2 | 77.6 | 77.7 | 77.4 | 77.3 | 75.0 |
| African-American | 12.9 | 11.2 | 12.7 | 11.4 | 12.8 | 11.6 | 12.1 | 11.9 |
| Hispanic | 8.0 | 7.7 | 7.5 | 8.1 | 5.7 | 8.2 | 7.4 | 9.4 |
| Other | 4.6 | 2.6 | 4.6 | 2.9 | 3.9 | 2.8 | 3.2 | 3.6 |

directly, even people who do not necessarily identify as "Hispanic" may well report an ethnic origin that is included in typical constructions of the Hispanic category. As shown in table 2, the SCF Hispanic category is smaller than the CPS category except in 1989.[5] Another notable difference between the two sets of estimates is the much larger fraction of "other" types in the 1989 and 1992 SCFs. This category includes a number of specific types (e.g., Asian, American Indian, etc.), as well as a general "other" types. The main driver of the difference is the SCF estimates of the proportion of households in the Asian and American Indian categories.

Aside from definitional differences and reporting errors, there are other possible explanations of the differences in homeownership rates in the CPS and the SCF. Interviewer and

[5]Note that the area-probability frame did not change between the 1989 and 1992 surveys, which were both based on a joint NORC-SRC design based on the 1980 Census. The 1995 and 1998 SCFs were selected from a frame based on the 1990 Census.

respondent behavior may be affected by the types of questions that are asked in a survey overall, and this behavior may lead to differential nonresponse rates. Compared with the CPS, the SCF covers subjects that are normally considered "sensitive." Moreover, respondents who are relatively wealthy are generally more likely to be asked more such questions than relatively poorer households. Although the wealthier respondents do not know exactly what they might be asked in a prospective interview, they do know the complexity of their own situation, and they are given a general description of the complexity of the survey. Thus, it is reasonable to suppose that the relatively wealthy respondents would be less likely to participate. The fact that interviewers quickly recognize this nonresponse tendency compounds the problem: Because interviewers are evaluated on the basis of completed cases, they have relatively less incentive to pursue relatively difficult cases. Because homeownership is more common among relatively wealthy households, the SCF should tend to obtain proportionatly fewer homeowners than the CPS—as is indeed the case. However, this line of reasoning does not help to explain differential behavior across racial/ethnic groups, and many obvious explanation for differences—for example, interviewers' perceptions of the "safety" of neighborhoods—have little power to explain varying directions of differences over time. It is possible that variations in the economic cycle explain something about the relative availability of different types of respondents across the surveys, though it would only be through interaction with some other aspect of the SCF that these variations could generate differences between the SCF and CPS estimates of the homeowership rate by racial/ethnic groups. Finally, it could be that the SCF samples, which are small relative to the CPS samples, misrepresented the joint distribution of homeownership and race/ethnicity, either because of random variation in the selection of neighborhoods, or because

of structural changes that may have occurred since the sample frame was constructed using the 1990 Census data.

There is some limited information that potentially bears on the deviation of the SCF homeownership estimates by racial/ethnic groups from those of the CPS. For each SCF sample household, the interviewers are required to fill out a description of the neighborhood, including an assessment of the racial composition of the area. Using the census tract identifier for the neighborhoods, information on homeownership rates within census tracts was merged with the full SCF area-probability sample. Restricting attention to only to the subsample of 1998 area-probability sample neighborhoods that interviewers were able to identify as largely or partially African-American, it appears that the distribution of the rate of homeownership is very similar at and above the median for both the respondents and the nonrespondents. Below the median, it appears that the nonrespondents live in neighborhoods with higher rates of homeownership. However, if the subsample is extended to include predominantly Hispanic neighborhoods (recall that homeownership was understated for both groups in 1998 with the KW weights), the distributions for respondents and nonrespondents are very little different above or below the median. Serious missing data problems cloud similar comparison using the 1995 survey, and comparable data are not available for earlier years.

**II. SCF Weight Revision**

The mismatch between the CPS and SCF estimates of homeownership is likely to have strong implications for estimates of the financial characteristics of different racial/ethnic groups because of the strong effect of housing on wealth estimates for most families. Given the importance of reliable estimates for minorities, the need for a weight revision to move the two

surveys into greater alignment seems pressing. However, at the same time, there is a reasonable amount of uncertainty about whether the two surveys measure precisely the same populations within the racial/ethnic groups. To hedge across these two sources of difference, it was decided to adjust the *proportions* of homeowners in SCF racial/ethnic groups to the proportions in the CPS, rather than adjusting the *number* of households directly. Thus, the number of minorities is independently estimated by the SCF, but the homeownership rates are largely set by the CPS.

The implementation of this change involves only a small alteration in the KW weighting design. Their approach involves independently adjusting the selection weights of cases in the area-probability and list samples, and then combining the two samples using a post-stratification technique based on gross assets. The change introduced with this paper affects only the construction of the area-probability sample weights. The original KW approach follows two steps. First, the selection weights are ratio adjusted to sum to the PSU population totals estimated from the original frame with some adjustments for ineligible units and new construction. Second, output of the first stage is raked through three iterations to control totals for current-year regional population totals, fine age categories, and coarser age categories crossed with homeownership. The change introduced here occurs at the end of the first iteration of the raking. At that point, the homeownership rates for the groups of households who are by the SCF definition non-Hispanic white, black, Hispanic, and other groups are adjusted to CPS rates for groups defined as comparably as possible in the CPS.[6] Then the remaining two raking iterations proceed as before without any additional changes.

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[6]If a CPS household is of a particular race and of Hispanic origin, the household is treated as Hispanic for purposes of this calculation.

## III. Implications of the Revised Weights

Because the weighted SCF homeownership rates by race/ethnicity are not forced to be exactly the same as in the CPS, they retain some independence of estimation. Nonetheless, they differ very little either within periods or in their movements across periods (table 3).

**Table 3: Homeownership Rates Computed Using SCF and Revised KW Weights, and CPS with Sample Adjustment; 1989, 1992, 1995, and 1998; Percent.**

| | 1989 | | 1992 | | 1995 | | 1998 | |
|---|---|---|---|---|---|---|---|---|
| | *SCF* | *CPS* | *SCF* | *CPS* | *SCF* | *CPS* | *SCF* | *CPS* |
| Non-Hispanic white | 70.3 | 69.3 | 70.1 | 69.5 | 70.5 | 70.9 | 71.7 | 72.3 |
| African-American | 42.0 | 41.9 | 43.1 | 42.5 | 42.6 | 42.2 | 45.9 | 46.6 |
| Hispanic | 44.9 | 45.6 | 44.9 | 44.7 | 43.6 | 43.3 | 45.8 | 47.2 |
| Other | 53.6 | 50.6 | 54.2 | 52.0 | 51.7 | 50.5 | 54.0 | 53.5 |

As noted earlier, a key motivation for revising the weights was to have more meaningful estimates of financial characteristics of households by racial/ethnic groups. One important such indicator is net worth. Table 4 provides estimates of a measure of median net worth by racial/ethnic groups for each of the survey years under the original KW weighting design and the revision presented here. As expected, there is very little difference in the wealth of non-Hispanic whites across the two weights in any of the years. For the other groups, some of the changes are substantial, and in every case, they mirror the change in the homeownership rate between the pairs of weights.

**Table 4: Median Net Worth Computed Using KW and Revised KW Weights; 1989, 1992, 1995, and 1998 SCFs; Thousands of Dollars.**

| | 1989 | | 1992 | | 1995 | | 1998 | |
|---|---|---|---|---|---|---|---|---|
| | *KW* | *KW-R* | *KW* | *KW-R* | *KW* | *KW-R* | *KW* | *KW-R* |
| Non-Hispanic white | 71.0 | 69.7 | 66.2 | 67.8 | 72.4 | 73.5 | 94.9 | 94.0 |
| African-American | 2.8 | 3.0 | 13.6 | 9.8 | 12.8 | 8.9 | 11.2 | 14.8 |
| Hispanic | 4.0 | 6.0 | 7.7 | 8.5 | 11.5 | 11.5 | 9.1 | 9.9 |
| Other | 36.6 | 35.0 | 38.5 | 36.7 | 41.5 | 30.8 | 33.1 | 38.8 |

## IV. Future Research

Given the advances in computerized data capture, it is now possible to monitor the reported characteristics of survey respondents with only a short lag. By at least watching the trends of survey estimates of key variables (such as homeownership) over the field period, it may be possible to gain a greater insight into the origins of the divergences between SCF estimates and reliable external estimates. The application of effort in the field is almost certainly not uniform. Because interviewers cannot be monitored completely, it is likely that the incentive structure they face is a key determinant of the level of effort applied to the set of available cases.

Quotas are a crude tool for controlling effort, but they can make a large difference in dimensions where it is known that selection issues are important—for example, without the use of quotas for the SCF list sample strata, it is very unlikely that there would be any significant number of wealthy observations interviewed. More generally, it may also be that it would be better, at least in terms of estimation variance, to achieve a balance in the set of respondents than to deal with misrepresentation after the fact through post-stratification or other weight

adjustments. However, there has traditionally been resistance to quotas among samplers.[7] There may also be a "treatment effect" in devoting additional effort to obtaining greater sample balance, but the differentials of effort already applied to the sample—e.g., the use of "refusal convertors" for some cases—means there may be already an unacknowledged treatment effect. Improved measurement along with targeted experiments are important for making progress in this area.

[7]See Seymour Sudman, (1966) "Probability Sampling With Quotas," Journal of the American Statistical Association, v.61 (315), September, pp. 749-771 for an insightful discussion of the use of quotas as a cost- and time-saving measure in a probability sample.

# APPENDIX

## Weight Adjustment Factors Under the Original and Revised KW Weight Design

The tables in this appendix report the adjustments at all stages for both the original KW weights (X42000) and the revised KW weights (X42001). The adjustments are given only for the first implicate of the multiply-imputed data. Results for the other implicates are either identical or very similar. In cases where the revision does not apply to a given adjustment, there is only one version of a table; in all other cases, the "a" table refers to the original KW weights, and the "b" table refers to the revised KW weights. The following outlines the major steps in the weight calculation (see KW for more details):

- Ratio adjust area-probability selection weights to PSU totals and adjust for overall population growth (table A1).
- Rake adjusted area-probability weights to regional, age, and age/tenure totals (table A2a). In the case of the revised weights, add an additional post-stratification to race/ethnicity tenure rates (table A2b).
- Reassign list sample wealth outliers by strata to neighboring strata (table A3).
- Post-stratify list selection weights to stratum totals and region totals (tables A4 and A5) and adjust for overall population growth.
- Rake adjusted list weights to totals by stratum, financial income post-stratum, and region crossed with an indicator for self-representing status of the PSU (table A6).
- Combine the adjusted area-probability and list weights by gross assets post-strata (table A7a and A7b).
- Post-stratify combined weights to gross asset post-strata totals (table A8s and A8b).
- Trim extreme outlying combined weights and readjust totals (table A9a and A9b).
- Post-stratify weights in gross assets post-strata 1 and 2 to age totals (table A10a and A10b).
- Rake weights in gross assets post-strata 1 and 2 to totals for age crossed with tenure, and to totals by region (table A11a and A11b).
- Post-stratify weights in gross assets post-strata 1 and 2 to age totals (table A12a and A12b).

Tables A13 and A14 provide information on the replicate samples selected for use in computing weights to estimate sampling variance.

**Table A1: Area-Probability Response Rates, by Type of PSU; 1992, 1995 and 1998 SCF; Percent.**

| | 1992 | 1995 | 1998 |
|---|---|---|---|
| Northeast region | 65.4 | 60.1 | 62.4 |
| Northcentral region | 68.5 | 70.9 | 67.4 |
| Southern region | 70.3 | 67.2 | 68.3 |
| Western region | 66.4 | 65.3 | 63.8 |
| Self-rep PSUs | 61.8 | 58.9 | 62.3 |
| Other MSAs | 67.4 | 66.6 | 66.6 |
| Non-MSAs | 75.7 | 77.6 | 70.3 |
| All PSUs | 68.0 | 66.3 | 65.9 |

Note: comparable 1989 data are not available.

**Table A2a: Second-Stage Raking Adjustments for Area-Probability Weights, 1989, 1992, 1995 and 1998 SCFs; Original KW Weights.**

| | Survey year | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1989 | | | 1992 | | | 1995 | | | 1998 | | |
| | Raking iteration | | | Raking iteration | | | Raking iteration | | | Raking iteration | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| Regional adjustments | | | | | | | | | | | | |
| Northeast | 1.00 | 1.01 | 1.00 | 1.07 | 0.99 | 1.00 | 1.05 | 0.98 | 1.00 | 0.97 | 0.99 | 1.00 |
| Northcentral | 1.00 | 0.99 | 1.00 | 1.20 | 0.99 | 1.00 | 1.05 | 1.00 | 1.00 | 1.08 | 0.98 | 1.00 |
| South | 1.00 | 0.99 | 1.00 | 1.22 | 1.00 | 1.00 | 1.11 | 1.01 | 1.00 | 1.09 | 1.00 | 1.00 |
| West | 1.01 | 1.01 | 1.00 | 1.23 | 1.02 | 1.00 | 1.12 | 1.00 | 1.00 | 1.05 | 1.03 | 1.00 |
| Age | | | | | | | | | | | | |
| 24 or younger | 1.18 | 1.05 | 1.01 | 0.74 | 1.03 | 1.00 | 0.81 | 0.98 | 1.00 | 0.84 | 1.09 | 1.01 |
| 25 to 34 | 0.99 | 0.99 | 1.00 | 0.99 | 0.99 | 1.00 | 0.88 | 1.00 | 1.00 | 0.91 | 0.98 | 1.00 |
| 35 to 44 | 0.92 | 1.00 | 1.00 | 0.96 | 1.01 | 1.00 | 0.94 | 1.01 | 1.00 | 0.96 | 1.00 | 1.00 |
| 45 to 54 | 1.07 | 1.00 | 1.00 | 1.00 | 0.98 | 1.00 | 0.96 | 0.99 | 1.00 | 1.01 | 0.99 | 1.00 |
| 55 to 64 | 0.99 | 1.00 | 1.00 | 1.20 | 1.00 | 1.00 | 1.13 | 1.00 | 1.00 | 1.06 | 1.00 | 1.00 |
| 65 to 69 | 1.02 | 1.00 | 1.00 | 0.93 | 1.00 | 1.00 | 1.25 | 1.00 | 1.00 | 1.21 | 1.01 | 1.00 |
| 70 to 74 | 1.08 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.19 | 1.00 | 1.00 | 1.02 | 0.98 | 1.00 |
| 75 or older | 0.97 | 1.00 | 1.00 | 1.14 | 1.00 | 1.00 | 1.31 | 1.00 | 1.00 | 1.22 | 1.01 | 1.00 |
| Age/tenure adjustments | | | | | | | | | | | | |
| Aged 34 or younger | | | | | | | | | | | | |
| Homeowner | 1.11 | 1.01 | 1.00 | 1.12 | 1.01 | 1.00 | 0.95 | 1.00 | 1.00 | 1.29 | 1.02 | 1.00 |
| Other tenure | 0.94 | 0.99 | 1.00 | 0.94 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 | 0.88 | 1.00 | 1.00 |
| Aged 35 to 54 | | | | | | | | | | | | |
| Homeowner | 1.00 | 1.00 | 1.00 | 1.07 | 1.00 | 1.00 | 1.04 | 1.00 | 1.00 | 1.05 | 1.00 | 1.00 |
| Other tenure | 0.97 | 1.00 | 1.00 | 0.87 | 1.00 | 1.00 | 0.92 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 |
| Aged 55 or older | | | | | | | | | | | | |
| Homeowner | 1.01 | 1.00 | 1.00 | 1.01 | 1.00 | 1.00 | 0.99 | 1.00 | 1.00 | 1.10 | 1.00 | 1.00 |
| Other tenure | 0.97 | 1.00 | 1.00 | 0.97 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 | 0.75 | 1.00 | 1.00 |

**Table A2b: Second-Stage Raking Adjustments for Area-Probability Weights, 1989, 1992, 1995 and 1998 SCFs; Revised KW Weights.**

| | Survey year | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1989 | | | 1992* | | | 1995* | | | 1998 | | |
| | Raking iteration | | | Raking iteration | | | Raking iteration | | | Raking iteration | | |
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| Regional adjustments | | | | | | | | | | | | |
| Northeast | 1.00 | 1.01 | 1.00 | 1.07 | 0.99 | 1.00 | 1.05 | 0.98 | 1.00 | 0.97 | 1.00 | 1.00 |
| Northcentral | 1.00 | 1.00 | 1.00 | 1.20 | 0.99 | 1.00 | 1.05 | 0.99 | 1.00 | 1.08 | 0.98 | 1.00 |
| South | 1.00 | 0.99 | 1.00 | 1.22 | 1.01 | 1.00 | 1.11 | 1.01 | 1.00 | 1.09 | 1.00 | 1.00 |
| West | 1.01 | 1.01 | 1.00 | 1.23 | 1.02 | 1.00 | 1.12 | 1.01 | 1.00 | 1.06 | 1.03 | 1.00 |
| Age | | | | | | | | | | | | |
| 24 or younger | 1.18 | 1.02 | 1.01 | 0.74 | 1.02 | 1.00 | 0.81 | 0.99 | 1.00 | 0.87 | 1.10 | 1.00 |
| 25 to 34 | 0.99 | 0.98 | 1.00 | 0.99 | 0.99 | 1.00 | 0.88 | 1.01 | 1.00 | 0.91 | 0.98 | 1.00 |
| 35 to 44 | 0.92 | 1.00 | 1.00 | 0.96 | 1.01 | 1.00 | 0.94 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| 45 to 54 | 1.07 | 1.00 | 1.00 | 1.00 | 0.99 | 1.00 | 0.96 | 1.00 | 1.00 | 1.01 | 0.99 | 1.00 |
| 55 to 64 | 0.99 | 1.01 | 1.00 | 1.20 | 1.01 | 1.00 | 1.13 | 1.00 | 1.00 | 1.06 | 1.00 | 1.00 |
| 65 to 69 | 1.02 | 1.01 | 1.00 | 0.93 | 1.00 | 1.00 | 1.25 | 1.00 | 1.00 | 1.21 | 1.01 | 1.00 |
| 70 to 74 | 1.08 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.19 | 1.00 | 1.00 | 1.02 | 0.97 | 1.00 |
| 75 or older | 0.97 | 1.01 | 1.00 | 1.14 | 1.00 | 1.00 | 1.31 | 1.00 | 1.00 | 1.22 | 1.01 | 1.00 |
| Age/tenure adjustments | | | | | | | | | | | | |
| Aged 34 or younger | | | | | | | | | | | | |
| Homeowner | 1.11 | 1.03 | 1.00 | 1.12 | 1.02 | 1.00 | 0.95 | 0.99 | 1.00 | 1.30 | 1.00 | 1.00 |
| Other tenure | 0.94 | 0.98 | 1.00 | 0.94 | 0.99 | 1.00 | 1.03 | 1.00 | 1.00 | 0.87 | 1.00 | 1.00 |
| Aged 35 to 54 | | | | | | | | | | | | |
| Homeowner | 1.00 | 1.01 | 1.00 | 1.07 | 1.01 | 1.00 | 1.04 | 1.00 | 1.00 | 1.05 | 0.99 | 1.00 |
| Other tenure | 0.99 | 0.97 | 1.00 | 0.97 | 0.97 | 1.00 | 0.92 | 1.00 | 1.00 | 0.91 | 1.02 | 1.00 |
| Aged 55 or older | | | | | | | | | | | | |
| Homeowner | 1.01 | 1.01 | 1.00 | 1.01 | 1.00 | 1.00 | 0.99 | 1.00 | 1.00 | 1.10 | 1.00 | 1.00 |
| Other tenure | 0.97 | 0.97 | 1.00 | 0.97 | 0.99 | 1.00 | 1.03 | 1.02 | 1.00 | 0.75 | 1.01 | 1.00 |
| Race-ethnicity/tenure adjs. | | | | | | | | | | | | |
| Non-Hispanic white | | | | | | | | | | | | |
| Homeowner | 0.98 | NA | NA | 1.01 | NA | NA | 1.02 | NA | NA | 0.99 | NA | NA |
| Other tenure | 1.05 | NA | NA | 0.98 | NA | NA | 0.95 | NA | NA | 1.03 | NA | NA |
| African-American | | | | | | | | | | | | |
| Homeowner | 0.99 | NA | NA | 0.85 | NA | NA | 0.91 | NA | NA | 1.19 | NA | NA |
| Other tenure | 1.01 | NA | NA | 1.15 | NA | NA | 1.08 | NA | NA | 0.88 | NA | NA |
| Hispanic | | | | | | | | | | | | |
| Homeowner | 1.10 | NA | NA | 1.01 | NA | NA | 0.98 | NA | NA | 1.05 | NA | NA |
| Other tenure | 0.93 | NA | NA | 0.99 | NA | NA | 1.01 | NA | NA | 0.97 | NA | NA |
| Other | | | | | | | | | | | | |
| Homeowner | 0.96 | NA | NA | 0.93 | NA | NA | 0.84 | NA | NA | 1.14 | NA | NA |
| Other tenure | 1.05 | NA | NA | 1.08 | NA | NA | 1.24 | NA | NA | 0.88 | NA | NA |

* NOTE: 1992, 1995, and 1998 input weights were not separately adjusted for population growth.

## Table A4: Interview Disposition, by Wealth Index Stratum, 1989, 1992, 1995 and 1998 SCF List Samples, Percent

**1989 SCF**

| | Wealth index stratum | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | All |
| Complete interviews | 39.8 | 37.1 | 35.8 | 34.1 | 25.4 | 17.0 | 29.0 |
| Postcard refusals | 38.9 | 33.2 | 33.6 | 36.2 | 42.0 | 40.7 | 38.1 |
| Ineligible | 1.8 | 3.5 | 1.1 | 0.4 | 1.5 | 2.9 | 1.7 |
| Other non-interv.* | 19.5 | 26.2 | 29.5 | 29.3 | 31.1 | 39.5 | 31.1 |
| All cases | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

**1992 SCF**

| | Wealth index stratum | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | All |
| Complete interviews | 42.6 | 40.8 | 36.7 | 34.4 | 31.3 | 25.8 | 14.3 | 31.0 |
| Postcard refusals | 19.2 | 23.5 | 24.6 | 25.8 | 23.5 | 22.4 | 23.6 | 23.4 |
| Ineligible | 0.4 | 1.4 | 2.0 | 0.8 | 0.3 | 0.8 | 0.6 | 0.8 |
| Other non-interv.* | 37.9 | 34.3 | 36.7 | 39.1 | 44.9 | 50.9 | 61.5 | 44.8 |
| All cases | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

**1995 SCF**

| | Wealth index stratum | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | All |
| Complete interviews | 44.3 | 38.7 | 35.1 | 34.7 | 30.2 | 23.7 | 12.7 | 30.1 |
| Postcard refusals | 16.2 | 27.1 | 25.0 | 22.8 | 21.2 | 19.7 | 15.5 | 21.2 |
| Ineligible | 2.1 | 2.1 | 1.1 | 0.8 | 0.7 | 1.0 | 0.6 | 1.0 |
| Other non-interv.* | 37.4 | 32.2 | 38.8 | 41.7 | 47.9 | 55.7 | 71.2 | 47.7 |
| All cases | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

**1998 SCF**

| | Wealth index stratum | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | All |
| Complete interviews | 40.9 | 38.7 | 35.8 | 35.6 | 30.2 | 23.7 | 8.2 | 28.3 |
| Postcard refusals | 10.8 | 19.0 | 15.0 | 16.8 | 16.3 | 11.4 | 7.6 | 13.5 |
| Ineligible | 1.0 | 1.3 | 1.2 | 0.5 | 0.8 | 0.9 | 0.8 | 0.9 |
| Other non-interv.* | 47.3 | 41.0 | 48.0 | 47.1 | 52.7 | 64.0 | 83.4 | 57.3 |
| All cases | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

* Includes cases deleted in sample review before field period, refusals, and cases that were incapacitated, censored, nonvalidating, or were unable to communicate in either English or Spanish..

**Table A3: Number of Observations Assigned Median Weight of Neighboring Strata, List Cases; 1989, 1992, 1995 and 1998 SCFs.**

| | Survey year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1989 | | 1992 | | 1995 | | 1998 | |
| Stratum | Direction of reassignment | | Direction of reassignment | | Direction of reassignment | | Direction of reassignment | |
| | Lower | Higher | Lower | Higher | Lower | Higher | Lower | Higher |
| 1 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 |
| 2 | 1 | 0 | 1 | 4 | 2 | 2 | 1 | 4 |
| 3 | 2 | 2 | 3 | 7 | 4 | 7 | 6 | 10 |
| 4 | 7 | 13 | 15 | 2 | 13 | 4 | 8 | 3 |
| 5 | 4 | 1 | 12 | 5 | 5 | 5 | 6 | 4 |
| 6 | 6 | 0 | 10 | 3 | 10 | 1 | 12 | 2 |
| 7 | NA | NA | 0 | 0 | 2 | 0 | 2 | 0 |

**Table A5: First-stage Adjustment Factors for List Weights, 1989, 1992, 1995, and 1998 SCFs**

| | Survey year | | | |
|---|---|---|---|---|
| | 1989 | 1992 | 1995 | 1998 |
| Adjustment cell | Adjustment factor | Adjustment factor | Adjustment factor | Adjustment factor |
| Stratum 1 | 19.75 | 2.70 | 3.39 | 3.52 |
| Stratum 2 | 4.62 | 2.46 | 3.22 | 3.21 |
| Stratum 3 | 3.25 | 2.72 | 3.04 | 2.96 |
| Stratum 4 | 3.06 | 3.53 | 3.16 | 3.45 |
| Stratum 5 | 6.49 | 2.57 | 3.69 | 3.76 |
| Stratum 6 | 22.32 | 3.80 | 3.94 | 3.43 |
| Stratum 7 | NA | 11.76 | 9.88 | 8.02 |
| Northeast | 1.22 | 1.13 | 1.17 | 0.76 |
| South | 1.26 | 1.21 | 0.92 | 0.98 |
| Northcentral | 0.94 | 0.88 | 1.13 | 1.21 |
| West | 0.71 | 0.92 | 0.82 | 1.03 |

**Table A6: Second-Stage Raking Adjustments for List Weights, 1989, 1992, 1995, and 1998 SCFs.**

| | Survey year 1989 Raking iteration | | | 1992 Raking iteration | | | 1995 Raking iteration | | | 1998 Raking iteration | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| WI Stratum 1 | 1.01 | 1.19 | 1.09 | 1.00 | 1.05 | 1.01 | 1.00 | 1.04 | 1.01 | 1.00 | 0.97 | 1.00 |
| WI Stratum 2 | 0.95 | 0.71 | 0.81 | 0.99 | 0.90 | 0.97 | 1.00 | 0.89 | 0.96 | 1.02 | 1.10 | 1.02 |
| WI Stratum 3 | 1.03 | 0.50 | 0.73 | 0.99 | 0.74 | 0.92 | 1.00 | 0.90 | 0.94 | 0.99 | 1.07 | 0.98 |
| WI Stratum 4 | 1.01 | 0.69 | 0.73 | 1.00 | 0.78 | 0.88 | 1.00 | 0.86 | 0.92 | 1.00 | 1.05 | 0.98 |
| WI Stratum 5 | 1.07 | 0.76 | 0.75 | 0.98 | 0.75 | 0.85 | 1.00 | 0.83 | 0.88 | 0.99 | 1.03 | 0.97 |
| WI Stratum 6 | 1.00 | 0.72 | 0.91 | 1.00 | 0.69 | 0.79 | 1.00 | 0.89 | 0.88 | 1.03 | 1.08 | 0.97 |
| WI Stratum 7 | NA | NA | NA | 1.00 | 0.63 | 0.79 | 0.91 | 0.79 | 0.92 | 1.01 | 1.11 | 0.95 |
| FI Post-Stratum 1 | 0.77 | 0.88 | 0.92 | 0.94 | 0.99 | 0.99 | 0.94 | 0.98 | 0.99 | 1.01 | 1.00 | 1.00 |
| FI Post-Stratum 2 | 1.56 | 1.02 | 1.04 | 0.96 | 0.95 | 0.99 | 1.06 | 1.02 | 1.00 | 0.86 | 0.99 | 1.00 |
| FI Post-Stratum 3 | 1.51 | 1.42 | 1.15 | 1.12 | 1.06 | 1.01 | 1.15 | 1.04 | 1.02 | 1.19 | 1.00 | 1.00 |
| FI Post-Stratum 4 | 0.97 | 1.15 | 1.13 | 1.01 | 0.95 | 1.00 | 1.28 | 1.10 | 1.05 | 0.99 | 0.92 | 0.99 |
| FI Post-Stratum 5 | 1.95 | 1.60 | 1.28 | 2.11 | 1.17 | 1.05 | 1.02 | 1.07 | 1.05 | 1.09 | 1.08 | 1.01 |
| FI Post-Stratum 6 | 2.12 | 1.13 | 1.25 | 1.27 | 1.12 | 1.05 | 1.15 | 1.16 | 1.07 | 1.30 | 1.07 | 1.01 |
| FI Post-Stratum 7 | 0.76 | 1.34 | 1.32 | 1.03 | 1.22 | 1.13 | 1.47 | 1.16 | 1.10 | 1.16 | 1.00 | 1.01 |
| FI Post-Stratum 8 | 1.02 | 1.16 | 1.27 | 1.34 | 1.28 | 1.16 | 1.05 | 1.18 | 1.11 | 0.96 | 1.06 | 1.03 |
| FI-Post-Stratum 9 | 1.07 | 0.96 | 1.04 | 1.37 | 1.32 | 1.25 | 1.21 | 1.10 | 1.13 | 0.95 | 1.07 | 1.04 |
| Northeast | | | | | | | | | | | | |
| SR PSU | 2.03 | 1.12 | 1.05 | 0.95 | 0.99 | 1.00 | 1.04 | 1.02 | 1.01 | 0.82 | 0.98 | 1.00 |
| NSR PSU | 0.61 | 1.00 | 1.03 | 0.98 | 1.00 | 1.00 | 0.93 | 0.99 | 1.00 | 1.41 | 1.01 | 1.00 |
| Northcentral | | | | | | | | | | | | |
| SR PSU | 1.17 | 1.07 | 1.03 | 1.61 | 1.03 | 1.00 | 0.97 | 1.00 | 1.00 | 0.71 | 0.99 | 1.00 |
| NSR PSU | 0.94 | 0.97 | 0.99 | 0.89 | 1.00 | 1.00 | 1.01 | 1.00 | 1.00 | 1.19 | 1.02 | 1.00 |
| South | | | | | | | | | | | | |
| SR PSU | 0.90 | 1.03 | 1.03 | 1.01 | 0.98 | 1.00 | 1.25 | 1.00 | 1.00 | 0.84 | 0.97 | 0.99 |
| NSR PSU | 0.98 | 0.93 | 0.95 | 1.02 | 1.00 | 1.00 | 0.94 | 1.00 | 1.00 | 1.09 | 1.01 | 1.00 |
| West | | | | | | | | | | | | |
| SR PSU | 2.24 | 1.08 | 1.05 | 1.79 | 1.03 | 1.01 | 0.90 | 1.00 | 1.00 | 0.72 | 0.98 | 1.00 |
| NSR PSU | 0.68 | 0.96 | 0.98 | 0.86 | 0.99 | 1.00 | 1.12 | 1.00 | 1.00 | 1.69 | 1.00 | 1.00 |

**Table A7a: Scaling factor for Area-Probability and List Cases in Each Post-Stratum, 1989, 1992, 1995, and 1998 SCFs; Original KW Weights.**

| | Survey year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1989 | | 1992 | | 1995 | | 1998 | |
| Gross assets cell | AP cases | List cases | AP cases | List cases | AP cases | List cases | AP cases | List cases |
| 1 | 0.934 | 0.066 | 0.922 | 0.078 | 0.927 | 0.073 | 0.929 | 0.071 |
| 2 | 0.926 | 0.074 | 0.854 | 0.147 | 0.878 | 0.122 | 0.863 | 0.137 |
| 3 | 0.719 | 0.281 | 0.523 | 0.467 | 0.581 | 0.419 | 0.690 | 0.310 |
| 4 | 0.468 | 0.532 | 0.232 | 0.768 | 0.279 | 0.721 | 0.357 | 0.643 |
| 5 | 0.226 | 0.774 | 0.085 | 0.915 | 0.083 | 0.917 | 0.113 | 0.887 |
| 6 | 0.089 | 0.911 | 0.014 | 0.986 | 0.028 | 0.971 | 0.024 | 0.976 |
| 7 | 0.057 | 0.943 | 0.001 | 0.999 | 0.004 | 0.996 | 0.000 | 1.000 |

**Table A7b: Scaling factor for Area-Probability and List Cases in Each Post-Stratum, 1989, 1992, 1995, and 1998 SCFs; Revised KW Weights.**

| | Survey year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1989 | | 1992 | | 1995 | | 1998 | |
| Gross assets cell | AP cases | List cases | AP cases | List cases | AP cases | List cases | AP cases | List cases |
| 1 | 0.934 | 0.066 | 0.923 | 0.077 | 0.927 | 0.073 | 0.927 | 0.073 |
| 2 | 0.926 | 0.074 | 0.853 | 0.147 | 0.878 | 0.122 | 0.864 | 0.136 |
| 3 | 0.720 | 0.280 | 0.531 | 0.469 | 0.581 | 0.419 | 0.700 | 0.300 |
| 4 | 0.469 | 0.531 | 0.231 | 0.769 | 0.278 | 0.722 | 0.361 | 0.639 |
| 5 | 0.226 | 0.774 | 0.084 | 0.916 | 0.081 | 0.919 | 0.114 | 0.886 |
| 6 | 0.090 | 0.910 | 0.014 | 0.986 | 0.028 | 0.972 | 0.023 | 0.977 |
| 7 | 0.056 | 0.944 | 0.000 | 1.000 | 0.004 | 0.996 | 0.000 | 1.000 |

**Table A8a: Post-Stratification Factors by Gross-Asset Post-Strata; 1989, 1992, 1995, and 1998 SCFs; Original KW Weights.**

| | Survey year | | | |
|---|---|---|---|---|
| Gross-assets cell | 1989 | 1992 | 1995 | 1998 |
| 1 | 1.01 | 0.99 | 0.98 | 0.98 |
| 2 | 0.98 | 1.01 | 1.01 | 1.03 |
| 3 | 0.96 | 0.93 | 0.86 | 0.98 |
| 4 | 1.10 | 0.95 | 0.95 | 0.92 |
| 5 | 1.10 | 1.03 | 0.99 | 0.98 |
| 6 | 1.08 | 1.01 | 1.02 | 0.98 |
| 7 | 1.05 | 1.00 | 0.99 | 1.00 |

**Table A8b: Post-Stratification Factors by Gross-Asset Post-Strata; 1989, 1992, 1995, and 1998 SCFs; Revised KW Weights.**

| | Survey year | | | |
|---|---|---|---|---|
| Gross-assets cell | 1989 | 1992 | 1995 | 1998 |
| 1 | 1.01 | 0.99 | 0.98 | 0.98 |
| 2 | 0.98 | 1.01 | 1.01 | 1.02 |
| 3 | 0.96 | 0.92 | 0.86 | 1.02 |
| 4 | 1.10 | 0.95 | 0.95 | 0.92 |
| 5 | 1.10 | 1.03 | 0.98 | 0.98 |
| 6 | 1.08 | 1.01 | 1.02 | 0.98 |
| 7 | 1.04 | 1.00 | 0.99 | 1.00 |

**Table A9a: Maximum Weight, Trim Point, and Adjustment Factor, by Gross-Asset Post-Strata; 1989, 1992, 1995, and 1998 SCFs; Original KW Weights.**

| | *Survey year* | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1989* | | | *1992* | | | *1995* | | | *1998* | | |
| *Gross assets cell* | *Trim pt.* | *Max.* | *Adj.* | *Trim pt.* | *Max.* | *Adj.* | *Trim pt.* | *Max.* | *Adj.* | *Trim pt.* | *Max.* | *Adj.* |
| 1 | 143,946 | 214,524 | 1.01 | 54,393 | 93,790 | 1.00 | 57,732 | 71,701 | 1.00 | 51,275 | 71,088 | 1.00 |
| 2 | 85,332 | 439,689 | 1.09 | 56,719 | 145,941 | 1.03 | 49,657 | 79,687 | 1.01 | 48,899 | 143,875 | 1.04 |
| 3 | 81,903 | 521,933 | 1.12 | 45,530 | 376,023 | 1.17 | 38,258 | 294,048 | 1.11 | 45,728 | 312,452 | 1.15 |
| 4 | 48,056 | 597,217 | 1.36 | 26,651 | 121,527 | 1.35 | 25,270 | 96,798 | 1.29 | 53,413 | 405,085 | 1.17 |
| 5 | 12,070 | 505,250 | 1.89 | 13,196 | 182,962 | 1.43 | 8,599 | 115,923 | 1.29 | 15,555 | 114,842 | 1.17 |
| 6 | 4,597 | 13,251 | 1.52 | 1,513 | 14,281 | 1.45 | 3,771 | 70,540 | 1.87 | 4,614 | 13,128 | 1.24 |
| 7 | 577 | 5,102 | 1.77 | 576 | 807 | 1.04 | 1,024 | 1,895 | 1.12 | 1,261 | 5.055 | 1.36 |

**Table A9b: Maximum Weight, Trim Point, and Adjustment Factor, by Gross-Asset Post-Strata; 1989, 1992, 1995, and 1998 SCFs; Revised KW Weights.**

| | *Survey year* | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1989* | | | *1992* | | | *1995* | | | *1998* | | |
| *Gross assets cell* | *Trim pt.* | *Max.* | *Adj.* | *Trim pt.* | *Max.* | *Adj.* | *Trim pt.* | *Max.* | *Adj.* | *Trim pt.* | *Max.* | *Adj.* |
| 1 | 142,837 | 219,388 | 1.01 | 54,639 | 93,315 | 1.00 | 57,903 | 57903 | 1.00 | 58,727 | 76,761 | 1.00 |
| 2 | 85,440 | 440,237 | 1.09 | 56,687 | 145,858 | 1.03 | 49,625 | 66,769 | 1.01 | 51,603 | 148,399 | 1.05 |
| 3 | 81,575 | 522,538 | 1.12 | 45,503 | 375,805 | 1.17 | 38,218 | 114,760 | 1.11 | 45,472 | 324,499 | 1.16 |
| 4 | 48,056 | 597,909 | 1.36 | 26,651 | 121,456 | 1.35 | 25,270 | 86,162 | 1.28 | 54,334 | 428,262 | 1.17 |
| 5 | 12,070 | 505,250 | 1.89 | 13,196 | 182,856 | 1.43 | 8,599 | 24,117 | 1.29 | 14,383 | 102,223 | 1.17 |
| 6 | 4,597 | 13,251 | 1.52 | 1,513 | 14,282 | 1.45 | 3,771 | 8,145 | 1.87 | 4,686 | 12,212 | 1.21 |
| 7 | 577 | 5,101 | 1.77 | 576 | 807 | 1.04 | 1,024 | 1,483 | 1.12 | 1,295 | 5,213 | 1.35 |

**Table A10a: First Post-Stratification Adjustment Factor for Gross Asset Post-Strata 1 and 2; 1989, 1992, 1995, and 1998 SCFs; Original KW Weights.**

| | Survey year | | | |
|---|---|---|---|---|
| Age | 1989 | 1992 | 1995 | 1998 |
| 24 or younger | 0.88 | 0.94 | 0.93 | 0.82 |
| 25 to 34 | 0.97 | 0.91 | 0.95 | 1.00 |
| 35 to 44 | 0.89 | 0.96 | 1.00 | 1.04 |
| 45 to 54 | 0.87 | 0.98 | 0.98 | 0.95 |
| 55 to 64 | 0.93 | 0.92 | 1.05 | 1.07 |
| 65 to 69 | 0.85 | 1.00 | 1.00 | 1.00 |
| 70 to 74 | 0.98 | 1.04 | 1.23 | 1.03 |
| 75 or older | 0.90 | 1.06 | 1.09 | 1.07 |

**Table A10b: First Post-Stratification Adjustment Factor for Gross Asset Post-Strata 1 and 2; 1989, 1992, 1995, and 1998 SCFs; Revised KW Weights.**

| | Survey year | | | |
|---|---|---|---|---|
| Age | 1989 | 1992 | 1995 | 1998 |
| 24 or younger | 0.88 | 0.94 | 0.93 | 0.90 |
| 25 to 34 | 0.97 | 0.91 | 0.95 | 1.00 |
| 35 to 44 | 0.89 | 0.96 | 1.00 | 1.03 |
| 45 to 54 | 0.87 | 0.98 | 0.98 | 0.94 |
| 55 to 64 | 0.93 | 0.93 | 1.05 | 1.05 |
| 65 to 69 | 0.85 | 1.00 | 1.01 | 0.99 |
| 70 to 74 | 0.98 | 1.04 | 1.23 | 1.01 |
| 75 or older | 0.90 | 1.06 | 1.09 | 1.05 |

**Table A11a: Final Raking, Final Adjustments, Gross Asset Post-Strata 1 and 2, 1989, 1992, 1995, and 1998 SCFs; Original KW Weights.**

| | Survey year | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1989 | | | 1992 | | | 1995 | | | 1998 | | |
| | *Raking iteration* | | | *Raking iteration* | | | *Raking iteration* | | | *Raking iteration* | | |
| *Adjustment cell* | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| Homeowner: age | | | | | | | | | | | | |
| <35 | 1.01 | 1.00 | 1.00 | 1.01 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 | 1.02 | 1.00 | 1.00 |
| 35 to 54 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 |
| >=55 | 1.01 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 | 1.02 | 1.01 | 1.00 |
| Non-homeowner: age | | | | | | | | | | | | |
| <35 | 0.99 | 1.00 | 1.00 | 0.99 | 1.00 | 1.00 | 0.98 | 1.00 | 1.00 | 0.99 | 0.99 | 1.00 |
| 35 to 54 | 1.02 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 0.96 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| >=55 | 0.94 | 0.99 | 1.00 | 0.90 | 1.00 | 1.00 | 0.90 | 0.99 | 1.00 | 0.93 | 1.00 | 1.00 |
| Region | | | | | | | | | | | | |
| Northeast | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.00 | 1.00 | 0.98 | 1.00 | 1.00 |
| South | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Northcentral | 0.98 | 1.00 | 1.00 | 0.98 | 1.00 | 1.00 | 0.99 | 1.00 | 1.00 | 0.98 | 1.00 | 1.00 |
| West | 1.04 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 | 1.05 | 1.00 | 1.00 |

**Table A11b: Final Raking, Final Adjustments, Gross Asset Post-Strata 1 and 2, 1989, 1992, 1995, and 1998 SCFs; Revised KW Weights.**

| | Survey year | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1989 | | | 1992 | | | 1995 | | | 1998 | | |
| | *Raking iteration* | | | *Raking iteration* | | | *Raking iteration* | | | *Raking iteration* | | |
| *Adjustment cell* | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| Homeowner: age | | | | | | | | | | | | |
| <35 | 1.01 | 1.00 | 1.00 | 1.01 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 | 1.01 | 1.00 | 1.00 |
| 35 to 54 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 |
| >=55 | 1.01 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 | 1.02 | 1.00 | 1.00 |
| Non-homeowner: age | | | | | | | | | | | | |
| <35 | 0.99 | 1.00 | 1.00 | 0.99 | 1.00 | 1.00 | 0.98 | 1.00 | 1.00 | 0.99 | 1.00 | 1.00 |
| 35 to 54 | 1.02 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 0.96 | 1.00 | 1.00 | 0.96 | 1.00 | 1.00 |
| >=55 | 0.95 | 0.99 | 1.00 | 0.90 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 |
| Region | | | | | | | | | | | | |
| Northeast | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.00 | 1.00 | 0.98 | 1.00 | 1.00 |
| South | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Northcentral | 0.98 | 1.00 | 1.00 | 0.98 | 1.00 | 1.00 | 0.99 | 1.00 | 1.00 | 0.99 | 1.00 | 1.00 |
| West | 1.04 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 | 1.03 | 1.00 | 1.00 | 1.04 | 1.00 | 1.00 |

**Table A12a: Final Post-Stratification, Final Adjustments, Gross Asset Post-Strata 1 and 2; 1989, 1992, 1995, and 1998 SCFs; Original KW Weights.**

| | Survey year | | | |
|---|---|---|---|---|
| Age | 1989 | 1992 | 1995 | 1998 |
| 24 or younger | 1.01 | 1..00 | 1.01 | 1.01 |
| 25 to 34 | 1.00 | 1.00 | 1.00 | 1.00 |
| 34 to 44 | 1.00 | 1.00 | 1.00 | 1.00 |
| 45 to 54 | 1.00 | 1.00 | 1.00 | 0.99 |
| 55 to 64 | 1.00 | 1.01 | 1.00 | 1.00 |
| 65 to 69 | 1.00 | 0.99 | 1.00 | 1.00 |
| 70 to 74 | 0.99 | 1.00 | 0.99 | 0.99 |
| 75 or older | 1.00 | 0.99 | 1.00 | 1.00 |

**Table A12b: Final Post-Stratification, Final Adjustments, Gross Asset Post-Strata 1 and 2; 1989, 1992, 1995, and 1998 SCFs; Revised KW Weights.**

| | Survey year | | | |
|---|---|---|---|---|
| Age | 1989 | 1992 | 1995 | 1998 |
| 24 or younger | 1.01 | 1.00 | 1.00 | 1.01 |
| 25 to 34 | 1.00 | 1.00 | 1.00 | 1.00 |
| 34 to 44 | 1.00 | 1.00 | 1.00 | 1.00 |
| 45 to 54 | 1.00 | 1.00 | 1.00 | 1.00 |
| 55 to 64 | 1.00 | 1.01 | 1.00 | 1.00 |
| 65 to 69 | 1.00 | 0.99 | 1.00 | 1.00 |
| 70 to 74 | 0.99 | 1.00 | 0.99 | 0.99 |
| 75 or older | 1.00 | 0.99 | 1.01 | 1.00 |

**Table A13: Actual and Bootstrap Sample Sizes; 1989, 1992, 1995, and 1998 SCFs.**

| | Full sample | Area-prob. | List |
|---|---|---|---|
| **1989 SCF** | | | |
| Actual size | 3,143 | 2,277 | 866 |
| Bootstrap samples: | | | |
| Mean | 3,140 | 2,275 | 865 |
| Median | 3,141 | 2,279 | 864 |
| Stand. dev. | 82.2 | 60.7 | 82.2 |
| Minimum | 2,890 | 2,102 | 708 |
| Maximum | 3,385 | 2,469 | 1,057 |
| CV (%) | 3.8 | 4.1 | 7.5 |
| **1992 SCF** | | | |
| Actual size | 3906 | 2456 | 1450 |
| Bootstrap samples: | | | |
| Mean | 3905 | 2455 | 1450 |
| Median | 3903 | 2453 | 1450 |
| Stand. dev. | 58.8 | 45.3 | 35.6 |
| Minimum | 3718 | 2333 | 1357 |
| Maximum | 4067 | 2601 | 1552 |
| CV (%) | 1.5 | 1.8 | 2.5 |
| **1995 SCF** | | | |
| Actual size | 4,299 | 2,776 | 1,523 |
| Bootstrap samples: | | | |
| Mean | 4,299 | 2,776 | 1,523 |
| Median | 4,299 | 2,777 | 1,523 |
| Stand. dev. | 53.7 | 38.7 | 38.6 |
| Minimum | 4132 | 2643 | 1407 |
| Maximum | 4,473 | 2,919 | 1,633 |
| CV (%) | 1.2 | 1.4 | 2.5 |
| **1998 SCF** | | | |
| Actual size | 4,309 | 2,813 | 1,496 |
| Bootstrap samples: | | | |
| Mean | 4,308 | 2,812 | 1,496 |
| Median | 4,308 | 2,812 | 1,495 |
| Stand. dev. | 62.5 | 51.2 | 32.8 |
| Minimum | 4,120 | 2,660 | 1,412 |
| Maximum | 4,525 | 2,978 | 1,596 |
| CFV (%) | 1.5 | 1.8 | 2.2 |

**Table A14: Number of Times a Case Was Selected for Bootstrap Replicates; 1989, 1992, 1995, and 1998 SCFs.**

| **1989 SCF** | | | |
|---|---|---|---|
| | Full sample | Area-prob. | List |
| Mean | 728 | 740 | 696 |
| Median | 745 | 748 | 736 |
| Stand. dev. | 45.6 | 33.3 | 56.9 |
| Minimum | 586 | 613 | 586 |
| Maximum | 792 | 792 | 792 |
| CV (%) | 6.3 | 4.5 | 8.2 |
| **1992 SCF** | | | |
| | Full sample | Area-prob. | List |
| Mean | 730 | 749 | 699 |
| Median | 748 | 749 | 745 |
| Stand. dev. | 43.1 | 5.9 | 58.1 |
| Minimum | 599 | 739 | 599 |
| Maximum | 784 | 784 | 784 |
| CV(%) | 5.9 | 0.8 | 8.3 |
| **1995 SCF** | | | |
| | Full sample | Area-prob. | List |
| Mean | 722 | 744 | 682 |
| Median | 748 | 749 | 652 |
| Stand. dev. | 46.7 | 17.0 | 56.1 |
| Minimum | 594 | 644 | 594 |
| Maximum | 749 | 784 | 771 |
| CV (%) | 6.5 | 2.3 | 8.2 |
| **1998 SCF** | | | |
| | Full sample | Area-prob. | List |
| Mean | 717 | 745 | 664 |
| Median | 748 | 749 | 640 |
| Stand. dev. | 50.7 | 16.0 | 51.8 |
| Mimimum | 582 | 696 | 582 |
| Maximum | 784 | 784 | 759 |
| CV (%) | 7.1 | 2.2 | 7.8 |