

APPENDIX

COMPARISON BETWEEN RESULTS OF SAMPLE TABULATIONS AND COMPLETE COUNTS

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The 1940 family statistics shown in this report are based on tabulations of two samples of families, identified as Sample D and Sample F (see sections of text on "Sources of family statistics" and "Nature of the sample data"). There are two original sources of data for the characteristics presented in this report, namely, the information contained on the Population schedule, and the information contained on the Housing schedule. These two sources constituted two separate censuses, although they were taken simultaneously.

The information for a family in Sample D was obtained in two ways: Data for several subjects were obtained from entries on the Sample D transcription sheet which contained one line of information from the Population schedule for the family and the family head; data for the remaining subjects were reproduced mechanically from the card for the corresponding family head in Sample B (data for the B cards were obtained from entries on the Population schedule for the individuals in a five-percent sample, identified as Sample B).

The information for a family in Sample F was also obtained in two ways: Data for several subjects were obtained from the entries on the Sample F transcription sheet which contained one line of information from the Population schedule for the family and the family head; data for the remaining subjects were reproduced mechanically from the E card for the corresponding occupied dwelling unit (data for the E cards were obtained from entries on the Housing schedule for occupied and vacant dwelling units).

Since the statistics on certain subjects were derived from different sources for Sample D than for Sample F, it is to be expected that the results from the two samples on a given subject may differ by a small amount for any area. Moreover, even for data derived from the same original source, some differences will be observed between the two samples because the data from the two samples were processed separately, as is explained below. Table A shows certain data from the two complete counts (the count of private households and the count of occupied dwelling units) and from Samples D and F.

In this report, the subjects shown from both Sample D and Sample F are color, nativity, sex, marital status, and age of the family head. All of these items were obtained for Sample D from information on the cards for Sample B, whereas all were obtained for Sample F from entries on the Sample F transcription sheet. The nature of the differences between these two sources may be illustrated by an inspection of the figures on color of head (see table A). Figures from Sample D show 21,820, or 0.7 percent, fewer nonwhite family heads than those from Sample F. This bias resulted from a tendency in the coding of Sample B to classify persons as white at the expense of the nonwhite. More precisely, the bias was one in which persons in Sample B were

sometimes coded as native white of native parentage, whereas they should have been classified in one of the other categories.

Differences also appear between the sample data on families and the data from the complete counts of private households and occupied dwelling units. For any area, the total number of families selected for Sample D was expected to be the same as the total number of families for Sample F. Likewise, it was expected that the total number of families shown from Samples D and F would agree with the total number of private households in the area, within the limits of sampling variation. Any differences among these total numbers for an area, therefore, are the outcome of sampling errors or systematic biases. For the United States as a whole, there were only 1,400 more families indicated by Sample F than by Sample D. For certain States the differences were somewhat larger but tended to offset one another. Again, for the United States as a whole, there were 138,774 more families indicated by Sample D than there were private households in the complete count.

The complete count of private households exceeded the complete count of occupied dwelling units by 94,134. This excess represents the net effect of two differences between the definition of a private household or of a family and the definition of an occupied dwelling unit. About 115,000 "nonresident" private households or families (households or families enumerated in a place other than their usual place of residence) were counted in the population statistics on private households and families, but their living quarters were not counted in the housing statistics on occupied units. (All of the items in Sample F for nonresident families were obtained from entries on the Sample F transcription sheet which contained information from the Population schedule.) On the other hand, about 20,000 households with more than 10 lodgers were excluded from the statistics on private households and families, but their living quarters were counted in the statistics on occupied units. The larger number of tenant families than tenant-occupied units shown in table A may be explained in part by the classification of a considerably larger proportion of the nonresident families as tenants than as owners.

A larger proportion of the occupied dwelling units than of the private households were classified as rural-farm. This difference, which is reflected in the corresponding figures from Sample F and Sample D, is the result of a tendency for some of the nonfarm occupied dwelling units to be reported as farm units on the Housing schedule.

Most of the deviations discussed in this section are relatively small, yet some are appreciably larger than would be expected to result from sampling variation alone. Such deviations, however, would not affect many of the general conclusions that may be drawn from the statistics presented in this report.

Table A. COMPARISON BETWEEN RESULTS OF SAMPLE TABULATIONS OF FAMILIES AND COMPLETE COUNTS OF PRIVATE HOUSEHOLDS AND OCCUPIED DWELLING UNITS, BY URBAN-RURAL RESIDENCE, COLOR AND SEX OF HEAD, AND TENURE, FOR THE UNITED STATES: 1940

| AREA, COLOR AND SEX OF HEAD, AND TENURE | NUMBER | | | | DIFFERENCE | | | | | | | |
|---|-----------------------|-----------------------|--|---|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|
| | Families | | Private households (based on complete count) (3) | Occupied dwelling units (based on complete count) (4) | Col. 2 minus Col. 1 | | Col. 1 minus Col. 3 | | Col. 2 minus Col. 4 | | Col. 4 minus Col. 3 | |
| | Based on Sample D (1) | Based on Sample F (2) | | | Amount | Percent of Col. 1 | Amount | Percent of Col. 3 | Amount | Percent of Col. 4 | Amount | Percent of Col. 3 |
| AREA | | | | | | | | | | | | |
| Total..... | 35,087,440 | 35,088,840 | 34,948,666 | 34,954,532 | 1,400 | - | 138,774 | 0.40 | 234,308 | 0.67 | -94,134 | -0.27 |
| Urban..... | 20,749,200 | 20,735,200 | 20,548,432 | 20,596,500 | -14,000 | -0.07 | 100,768 | 0.49 | 138,700 | 0.67 | -51,932 | -0.25 |
| Rural-nonfarm..... | 7,261,340 | 7,211,120 | 7,225,889 | 7,151,473 | -50,220 | -0.69 | 35,451 | 0.49 | 59,647 | 0.83 | -74,416 | -1.03 |
| Rural-farm..... | 7,076,900 | 7,142,520 | 7,074,345 | 7,106,559 | 65,620 | 0.93 | 2,535 | 0.04 | 35,961 | 0.51 | 32,214 | 0.46 |
| COLOR OF HEAD | | | | | | | | | | | | |
| White..... | 31,615,320 | 31,794,900 | 31,679,766 | 31,561,126 | -20,420 | -0.06 | 135,554 | 0.43 | 233,774 | 0.74 | -118,640 | -0.37 |
| Nonwhite..... | 3,272,120 | 3,293,940 | 3,268,900 | 3,293,406 | 21,820 | 0.67 | 3,220 | 0.10 | 534 | 0.02 | 24,506 | 0.75 |
| SEX OF HEAD | | | | | | | | | | | | |
| Male head..... | 29,734,200 | 29,785,900 | 29,679,712 | (1) | 51,700 | 0.17 | 54,482 | 0.18 | - | - | - | - |
| Female head..... | 5,353,240 | 5,302,940 | 5,268,948 | (1) | -50,300 | -0.94 | 84,292 | 1.60 | - | - | - | - |
| TENURE | | | | | | | | | | | | |
| Owner..... | (1) | 15,248,540 | (1) | 15,195,763 | - | - | - | - | 52,777 | 0.35 | - | - |
| Tenant..... | (1) | 19,840,300 | (1) | 19,658,769 | - | - | - | - | 181,531 | 0.92 | - | - |

¹ Statistics not available.