Some Background from Census 2000

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Census 2000 provides a snapshot of the population of the U.S. as of April 1, 2000. In this section we present certain data from Census 2000 as background to the research and discussion in this volume. All Census data employed in this presentation are available in tabular form on the Census Bureau website (www.census.gov). We overview these data in graphical form and provide some discussion germane to the interests expressed in this volume. In many instances, we are constrained by the age detail contained in the Census 2000 summary files, where tables may terminate in age categories such as 65+ or 85+. Nonetheless, we hope that these data will still provide useful background to the papers in this volume.

Age Structure

The age structure of the population is most conveniently illustrated by age pyramids, which are histograms presenting the male and female populations in age detail, rotated such that age appears on a central vertical axis and the counts of males and females are represented by horizontal bars. The term "pyramid" arises because in a growing population, the counts of males and females decrease as age increases, leading to a roughly triangular shape. While this is no longer true of the U.S. population as a whole (figure 1), it remains true within the elderly segments of the population, who were born in the earlier parts of the 20th century when fertility was higher.

One noteworthy characteristic of modern human populations is a growing predominance of women with advancing age. The U.S. population in 2000 was no exception, as is readily apparent from figures 2 and 3.

Race/Ethnic Categories

In Census 2000, for the first time in the history of U.S. censuses, respondents were permitted to indicate multiple racial affiliations. The census questions asked of 100 percent of the population included an item on race that distinguished 15 categories. Respondents were permitted to check off as many categories as they considered appropriate, as well as to write in their own race. A separate item on Hispanic origin having five categories was also included. In practice, the overwhelming majority of respondents indicated only one race, and few indicated more than two racial affiliations.

The age-sex structure of Census 2000 respondents who selected White as their sole racial affiliation is illustrated in figure 4. This subpopulation departs from the

pyramid form, with a distinct bulge around ages 35 to 44[1], reflecting the "Baby Boom" cohorts born in the 1950s and early 1960s. The structure of the population ages 85 and older in this racial category is highly skewed toward females (figure 5). The White Alone centenarian population is even more heavily female in composition (figure 6).

The Black Alone population in Census 2000 features an age-sex structure that is more in keeping with the pyramid designation (figure 7), although "Christmas Tree" might be a more apt description. This is a result of the higher fertility level of the Black Alone population, which leads to a larger proportion of population at young ages. An increase in the female to male ratio at late age is also evident in this subpopulation (figures 8 and 9).

The age-sex composition of the Asian Alone population in Census 2000 (figure 10) is indicative of a population experiencing high rates of immigration and relatively low fertility. The most numerous contingents of this subpopulation are in the young working ages (20 to 39). At late age, the composition of the Asian Alone population becomes increasingly female, although less so than the White Alone or Black Alone categories (figures 11 and 12).

Census 2000 respondents who indicated American Indian and/or Alaska Native as their sole racial affiliation exhibit an age-sex structure closer to that of a pyramid than the Black Alone population (figure 13). As in the other racial categories discussed above, women greatly outnumber men at late age in the American Indian/Alaska Native Alone population (figures 14 and 15). As to the apparently greater number of supercentenarian males than supercentenarian females, or, for that matter, males ages 105 to 109 (figure 15), whether this deviation from the general global norm of rising predominance of females and declining population size with advancing age is an artifact of age misstatement or results from real attributes of the centenarian population in this racial category is a question beyond the scope of this discussion.

The Hispanic[2] population of the U.S. in Census 2000 possesses an age-sex composition (figure 16) that is genuinely bottom-heavy, reflecting the high fertility and immigrant influx that characterizes this category. Hispanics are no exception to the phenomena of increasing predominance of females with advancing age (figures 17-18).

Figure 19 illustrates the race/origin composition of the Census 2000 population in selected mutually exclusive categories for the total population as well as various

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[1] There is also a bulge in the total population, but not as large relative to surrounding ages, as that observed for the White Alone population.

[2] Hispanics may be of any race.

segments at successively later ages, including centenarians. At all ages White Alone, Non-Hispanic respondents comprise the overwhelming majority of the population. The proportion of the total population comprised by this category increases with age through 85+. Among centenarians, the Non-Hispanic Black Alone share rises considerably. As mentioned above, any evaluation of the accuracy of age reporting among the elderly in this race/origin category is beyond the scope of this discussion.

Disability Status in the Civilian Noninstitutionalized Population

Information on disability was obtained from two questions that were asked of a 1 in 6 sample[3] of the civilian noninstitutionalized population[4]. One question referred to long-lasting conditions such as blindness or deafness; the other asked about 4 categories of disability, such as difficulty concentrating and difficulty with activities such as dressing or bathing[5]. As illustrated in Figure 20, the proportion of the civilian noninstitutionalized population reporting one or more disabilities in Census 2000 increases with age. A majority of the civilian noninstitutionalized population ages 75 and older reports at least one disability. This population's portfolio of disabilities changes in composition with advancing age (figure 21). At ages 5 to15 mental disabilities are predominant. The shares of physical disabilities and disabilities that confine respondents to their homes rise with age. The latter two categories comprise the majority of tallied disabilities in the civilian noninstitutionalized population ages 65 and older in Census 2000.

In terms of very severe disability, figure 22 plots the percent of the civilian noninstitutionalized population in successive age categories with a disability limiting their capacity to care for themselves (e.g. washing, dressing, etc.). This share rises with age, becoming substantial at ages 75 and over. More than 15 percent of women in the civilian noninstitutionalized population at these ages report a disability making them unable to fully care for themselves.

Social Support

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[3] Strictly speaking, the 1/6 figure is an approximate overall average. In the sample design, housing units were divided into strata with a different sampling fraction applied to each, while persons in group quarters were sampled at the 1/6 rate (for further details, see Technical Documentation on Summary File 4, available on internet at www.census.gov).

[4] The civilian noninstitutionalized population excludes persons in hospitals and nursing homes, among others.

[5] The questionnaires are also available on the website indicated directly above.

The frequency of disability in the population is associated with demand (met or unmet) for support. Our last few figures address the presence of such social support, albeit indirectly. The most obvious and immediate potential source of support to the elderly is surely the nuclear family, specifically spouses. As figures 23 to 24 indicate, the respective proportions of men and women in Census 2000 who reported themselves as married and living with their spouses declines at late age. A minority of Census 2000 men ages 85 and older are married and living with their wives. Fewer than 10 percent of women in this age category in Census 2000 reported themselves as married with their husbands present.

Persons living alone represent a potentially vulnerable segment of the population with regard to built-in social support. Figure 25 depicts the living arrangements of the population as of Census 2000, separately by sex, for ages 15 to 65 and 65+. Roughly one third of all U.S. women ages 65 and older were living alone.[6] The corresponding share among men ages 65+ is about one sixth.

A wealth of further information is available at the Census Bureau's website: www.census.

[6] Persons living in hospitals and nursing homes were counted in the "not alone" category in Census 2000.