

A century of change: the U.S. labor force, 1950–2050

*With slower growth, aging, and increasing diversity,
the profile of the U.S. labor force is undergoing
a gradual, but significant, change*

Mitra Toossi

The history of the U.S. labor force is a story of dramatic change. The rippling effects of the massive demographic changes that occurred within the U.S. population over the latter part of the 20th century will create further changes in the first half of the 21st century. The labor force—the number of people working or looking for work—is a dynamic concept that demonstrates the net impact of all demographic, social, political, and historical forces affecting a population. The growth of the labor force is one of the main ingredients of economic growth and prosperity.

This article profiles and projects U.S. labor force trends for a period of 100 years, from 1950 to 2050, on a decennial basis. Changes in both growth rates of the population and labor force participation rates have created a steadily growing labor force that, compared with 1950, is today older, more diversified, and increasingly made up of women. The same forces that have influenced the size and composition of the U.S. labor force over the past 50 years are expected to shape the future of the workforce as well. Some of the key findings emanating from the research upon which the article is based are as follows:

- *Slowdown in growth of the labor force.* The high growth rate of the civilian labor force¹ in the last 50 years will be replaced by much lower growth rates in the next 50 years. The civilian labor force was 62 million in 1950 and grew to 141 million in 2000, an increase of nearly 79 million, or an annual growth rate of 1.6 percent per year, between 1950 and 2000. It is projected that the labor force will reach 192 million in 2050,

an increase of 51 million, or a growth rate of 0.6 percent annually, between 2000 and 2050. (See table 1.)

- *Changes in gender structure of the labor force.* Women in the labor force increased their numbers at an extremely rapid pace in the past 50 years. It is anticipated that their labor force growth will slow markedly in the next 50 years. The factor most responsible for the earlier high growth rate was the rapid increase in the labor force participation rate of women, which stood at 34 percent in 1950 and increased to 60 percent by 2000. The number of women in the labor force rose from 18 million in 1950 to 66 million in 2000, an annual growth rate of 2.6 percent. The share of women in the labor force grew from 30 percent in 1950 to almost 47 percent in 2000, and the number of working women is projected to reach 92 million by 2050—on the basis of an annual growth rate of 0.7 percent. That same year, women’s share of the workforce is expected to be nearly 48 percent.
- *Changes in the age structure of the labor force.* With the aging of the baby-boom generation, the older age cohorts are expected to make up a larger proportion of the labor force in the next two decades. The 55-and-older age group, which made up 13 percent of the labor force in 2000, is projected to increase to 20 percent by 2020. It is anticipated that, by 2050, the group will make up 19 percent of the labor force.
- *Changes in the racial and ethnic composition of the labor force.* The labor force is expected to become more diverse. With higher

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Table 1. Civilian labor force by sex, age, race, and Hispanic origin, 1950, 2000, and projected, 2050

[Numbers in thousands]

| Group | Level (in thousands) | | | Change | | Percent change | | Percent distribution | | | Annual growth rate (percent) | |
|------------------------------------|----------------------|---------|---------|-----------|---------|----------------|---------|----------------------|-------|-------|------------------------------|---------|
| | 1950 | 2000 | 2050 | 1950–2000 | 2000–50 | 1950–2000 | 2000–50 | 1950 | 2000 | 2050 | 1950–2000 | 2000–50 |
| Total, 16 years and older | 62,208 | 140,863 | 191,825 | 78,655 | 50,961 | 126.4 | 36.2 | 100.0 | 100.0 | 100.0 | 1.6 | 0.6 |
| Men | 43,819 | 75,247 | 100,280 | 31,428 | 25,033 | 71.7 | 33.3 | 70.4 | 53.4 | 52.3 | 1.1 | .6 |
| Women | 18,389 | 65,616 | 91,545 | 47,227 | 25,928 | 256.8 | 39.5 | 29.6 | 46.6 | 47.7 | 2.6 | .7 |
| 16 to 24 | 11,522 | 22,715 | 31,317 | 11,193 | 8,602 | 97.1 | 37.9 | 18.5 | 16.1 | 16.3 | 1.4 | .6 |
| 25 to 54 | 40,017 | 99,974 | 124,443 | 59,957 | 24,469 | 149.8 | 24.5 | 64.3 | 71.0 | 64.9 | 1.8 | .4 |
| 55 and older | 10,669 | 18,175 | 36,065 | 7,506 | 17,891 | 70.3 | 98.4 | 17.2 | 12.9 | 18.8 | 1.1 | 1.4 |
| White | — | 117,574 | 143,770 | ... | 26,196 | ... | 22.3 | ... | 83.5 | 74.9 | ... | .4 |
| Black | — | 16,603 | 27,094 | ... | 10,491 | ... | 63.2 | ... | 11.8 | 14.1 | ... | 1.0 |
| Asian and other ¹ | — | 6,687 | 20,960 | ... | 14,274 | ... | 213.5 | ... | 4.7 | 10.9 | ... | 2.3 |
| Hispanic origin | — | 15,368 | 45,426 | ... | 30,058 | ... | 195.6 | ... | 10.9 | 23.7 | ... | 2.2 |
| Other than Hispanic origin | — | 125,495 | 146,399 | ... | 20,903 | ... | 16.7 | ... | 89.1 | 76.3 | ... | .3 |
| White non-Hispanic | — | 102,963 | 102,506 | ... | (457) | ... | –4 | ... | 73.1 | 53.4 | ... | .0 |

¹ The “Asian and other” group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives. The historical data are derived by subtracting “black” and “white” from the total; projections are

made directly, not by subtraction.

NOTE: Dash indicates data not available.

population growth and increasing participation rates, the share of minorities in the workforce is projected to expand substantially. The share of white non-Hispanics is anticipated to decrease from 73 percent in 2000 to 53 percent in 2050. Over the same period, Hispanics are expected to more than double their share, from 11 percent in 2000 to 24 percent of the labor force in 2050. Blacks also are expected to increase their share, from 12 percent in 2000 to 14 percent in 2050. Asians, the fastest-growing group in the labor force, are projected to increase their share from 5 percent to 11 percent between 2000 and 2050.

The Bureau of Labor Statistics (BLS, the Bureau) publishes medium-term, or 10-year, labor force projections every 2 years. The latest ones covered the 2000–10 period.² The projections presented in this article provide a longer term perspective on the labor force by looking 50 years ahead. As in the decade-long projection,³ the projected labor force is a product of two factors: the size and growth of the population by age, sex, race, and ethnicity and the future trend of labor force participation rates for various age, sex, race, and ethnicity groups.

The Current Population Survey (CPS)⁴ is the source of historical data on the civilian noninstitutional population and the labor force. The population projections and the CPS are based on estimates of births, deaths, and net immigration since the most recent decennial census. The estimates are benchmarked to the census results. Because population projections based on the 2000 census are not yet available, the Census Bureau’s population projections used in this article still reflect the 1990 census.⁵

Future labor force participation rates for 136 different groups, including both genders, 17 age groups, and 4 race and ethnicity groups, are estimated on the basis of the labor

force participation behavior of each group in the past. (See box.) By applying the projected labor force participation rates of each group to the projected population of that group, the size of the labor force is estimated, both for detailed categories and for the economy as a whole.

Population growth and the changes in participation rates are the main determinants of labor force growth. Table 2 presents the growth rates of the civilian noninstitutional population,⁶ the labor force participation rate,⁷ and the civilian labor force during the 100 years examined. As the rate of change in labor force participation decreases, more of the growth rate of the labor force is accounted for by the growth rate of the population.

In the 1950–60 period, population growth alone was responsible for the growth of the labor force. During the 1960–70 period, population growth contributed about 94 percent of the growth in the labor force. In the 1970–80 period, when the labor force participation of women underwent rapid growth, 76 percent of the labor force growth was the result of population growth, and the rest was related to the growth of participation rates, mainly of women.⁸ From 2000 to 2050, with the expected overall decline in the participation rate, participation growth is projected to exert even less influence, and the growth of the labor force will likely be due mostly to the impact of population growth.

In what follows, the analysis begins with a discussion of the major factors that have affected the trend of the labor force in the past 50 years and their implications for future labor force change: (1) different birth patterns in the U.S. population during the previous 50 years; (2) the extremely rapid growth in the participation rate of women; and (3) the growing racial and ethnic diversity of the labor force. Then the results of the long-term labor force projection are pre-

Methodology used for the long-term labor force projections

Projections of labor force participation rates for each age, sex, race, and ethnicity group are developed initially by extrapolating trends, usually on the basis of participation behavior during the previous 7 years. Then, the resulting participation rates are modified when the projection for a specific labor force group is inconsistent with the results of cross-sectional and cohort analysis. This step ensures consistency in the projections across the various demographic groups. Finally, the projected labor force participation rates are applied to the population projections, producing a labor force projection for each of the different age, sex, race, and ethnicity categories. (For further information, see “Employment Projections,” in *Handbook of Methods* (Bureau of Labor Statistics, 1999), Chapter 13.)

Labor force participation rates for the various sex, age,

racial, and ethnic categories were projected, as just described, to the year 2015 and were held constant thereafter. In similar long-term projections of the labor force, the change in participation rates for various age and sex groups, usually based on their past behavior, is often assumed to approach zero beyond a certain point in the projection horizon. This assumption is due to uncertainties associated with long-term change in factors affecting the decision to participate in the labor force. Still, despite the fact that detailed participation rates for various population categories are expected to be constant, the overall labor force participation rate is projected to change through 2050. This overall mutability reflects the impact of changes in the relative sizes of the various sex, age, race, and ethnic groups, each of which can have different levels of participation.

sented. Finally, two other important concepts in the study of the labor force—the median age and economic dependency—are discussed in light of the changes in the composition of the labor force.

Major factors affecting labor force change

Population: birth patterns. A number of distinct birth patterns evolved in the population of the United States in the last century that led to similar labor force patterns as the various cohorts⁹ reached 16 years of age and joined the workforce. These demographic patterns can be traced chronologically as follows:

- *Birth dearth:* the decline in the number of births between the late 1920s and early 1930s.
- *Baby boom:* the significant increase in the number of births between 1946 and 1964, with the peak birth year being 1957.
- *Baby bust:* a decrease in the number of births occurring between the end of the baby boom and the late 1970s.
- *Baby-boom echo* or *baby boomlet:* a growth in the number of children born to the baby-boom generation during the 1980s and early 1990s.

The effect of the foregoing demographic events can be seen in table 3, which shows the civilian noninstitutional population, by sex, race, age, and Hispanic origin, from 1950 to 2050.

The *birth dearth* can be seen in the decrease of a million people in the 25–34 age group during the 1950–60 period and

a corresponding drop of 948,000 people in the 35–44 age group in the 1960–70 period. The same diminution in births can be further traced through succeeding decades as this cohort ages. The *baby boom* can be traced to the increase of nearly 9.4 million people in the 16–24 age group during the 1960–70 period and 7.3 million in the 1970–80 period. This increase in births can again be seen in the 25–34 age group a decade later, during the 1970–80 period. The *baby bust* is reflected by the decrease of nearly 3.8 million in the 16–24 age group during the 1980–90 period. The same impact can be seen in succeeding decades in older age groups. The *baby-boom echo* also can be seen in the increase of more than a million people in the 16–24 age group during the 1990–2000 period.

These distinct birth patterns can be traced as well in the shape of the population and labor force pyramids in three snapshots for 1950, 2000, and 2050. The birth dearth can be clearly seen in the indentation of the bar representing those in the 15–19 age group in the population pyramid of the 1950s. (See chart 1, top panel.) The surge in the births of the early baby-boom generation is reflected in the extended length of the bar corresponding to the 0–4 age group in 1950.

The middle panel of chart 1 shows the population and labor force pyramid for 2000. The birth dearth of the late 1920s and early 1930s is visible in the 65–69 age group. The swelling at the 35–54 age group in the population pyramid clearly shows the share of the baby boomers in the total population in 2000. The baby bust is visible as the indentation of the bar representing the 25–29 age group. The baby-boom echo is reflected in the bulge of the 15–19 age group of the population.

The bottom panel of chart 1 shows the projected population pyramid in 2050. It is expected that, in that year, the baby

boomers will be concentrated primarily in the 85-and-older age category of the population, represented by relatively longer bars, especially for women, compared with bars representing previous population cohorts. The pyramid of 2050 looks rectangular in shape in the higher age brackets, indicative of the swelling population of aging baby boomers.

The baby bust is reflected in 2050 as the indentation of the bars corresponding to the 80–84 age group of the population. The baby-boom echo is seen as the bulge in the 65–69 age group. A comparative look at the three population pyramids shows how their shapes have changed as a result of alterations in the sex and age composition of the population over the entire 100-year period. In addition, the effect that mortality differentials have on the composition of the population during the century under examination is worth noting: women’s tendency to exhibit lower mortality rates than men within specific age cohorts is visible in both tables for 2000 and 2050, especially in the older age groups.

Labor force participation: rapid growth of the participation rates of women. Among the factors that have contributed to the growth and development of the U.S. labor force, none has been as pronounced as the rise in the participation of women in the labor force. In the two decades after World War II, the U.S. economy enjoyed a major expansion, coupled with increases in productivity, higher standards of living, and rapid acceleration in the growth of college enrollments.¹⁰ Rapid economic growth vastly increased the demand for labor. The civil rights movement, legislation promoting equal opportunity in employment, and the women’s rights movement created an atmosphere that was hospitable to more women working outside the home. The combination of all of these factors created strong inducements for women to join the workforce, significantly affecting their participation rate.

The dramatic increase in the labor force participation rates of women during the period was accompanied by many other social, economic, and demographic changes in the status of women:

- Women remained single more often.
- Of those who married, many did so later in life, and the median age at first marriage increased substantially.
- Women elected to stay in school longer, achieving higher educational attainment than in the past and pursuing better paying careers.
- Women postponed childbirth to older ages and had fewer children than in previous decades. As a result of improved child care, women tended to enter the labor force even before their children started school, and they were able to maintain a longer job tenure than in previous periods.
- Women got divorced more often; this in itself increased their labor force participation rate.¹¹

In 1950, the overall participation rate of women was 34 percent. (See table 4.) The rate rose to 38 percent in 1960, 43 percent in 1970, 52 percent in 1980, and 58 percent in 1990 and reached 60 percent by 2000. The overall labor force participation rate of women is projected to attain its highest level in 2010, at 62 percent. From then on, it is anticipated to decline slowly, falling to 57 percent in 2050. The projected decline after 2010 is due to the assumption that changes in participation rates will approach zero by 2015, combined with the gradual movement of an aging female labor force into age groups that traditionally have lower participation rates.

Between 1970 and 1980, the labor force participation rates of women in the 25–34 and 35–44 age groups increased by 20.5 percentage points and 14.4 percentage points, respectively. No other labor force group has ever experienced an increase in participation rates of this magnitude in one decade. During the same period, the participation rate of women in the 16–24 age group increased by 10.6 percentage points. From 1980 to 1990, the participation rate for women in the 35–44 age group increased by 11.0 percentage points, and the rate for women in the 45–54 age group increased by 11.3 percentage points. The Bureau projects that after 2010, the participation rates for three age groups—25–34, 35–44, and 45–

Table 2. Annual growth rates of the civilian noninstitutional population, civilian labor force, and civilian labor force participation rate, 1950 to 2000, and projected, 2000 to 2050

[In percent]

| Category | 1950–60 | 1960–70 | 1970–80 | 1980–90 | 1990–2000 | 2000–10 | 2010–15 | 2015–20 | 2020–30 | 2030–40 | 2040–2050 |
|--------------------------------|---------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|-----------|
| Population growth | 1.10 | 1.60 | 2.00 | 1.20 | 1.00 | 1.10 | 0.80 | 0.80 | 0.80 | 0.70 | 0.60 |
| Participation growth | .03 | .16 | .54 | .40 | .12 | .05 | –.20 | –.53 | –.43 | –.11 | –.02 |
| Interaction ¹ | –.03 | –.06 | .06 | .00 | –.02 | –.05 | .00 | –.07 | –.07 | .01 | .02 |
| Labor force growth | 1.10 | 1.70 | 2.60 | 1.60 | 1.10 | 1.10 | .60 | .20 | .30 | .60 | .60 |

¹ Interaction measures the effect of the labor force participation rates on the changing composition of the labor force (its age structure and racial and Hispanic makeup). Interaction is the labor force growth that is not accounted for by growth in the aggregate population and aggregate labor force participation rate.

Table 3. Civilian noninstitutional population by sex, age, race, and Hispanic origin, 1950–2000 and projected, 2010–50

| Group | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 | 2015 | 2020 | 2030 | 2040 | 2050 |
|------------------------------------|---------|----------------|----------------|----------------|----------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Level | | | | | | | | | | | | |
| Total, 16 years and older | 104,995 | 117,245 | 137,085 | 167,745 | 189,164 | 209,699 | 233,658 | 243,591 | 253,069 | 272,956 | 292,891 | 312,372 |
| Men | 50,725 | 55,662 | 64,304 | 79,398 | 90,377 | 100,731 | 112,319 | 117,088 | 121,569 | 130,937 | 140,454 | 150,067 |
| Women | 54,270 | 61,582 | 72,782 | 88,348 | 98,787 | 108,968 | 121,338 | 126,503 | 131,500 | 142,019 | 152,436 | 162,304 |
| 16 to 24 | 19,223 | 20,460 | 29,841 | 37,178 | 33,421 | 34,453 | 39,201 | 39,047 | 38,550 | 41,709 | 45,177 | 47,780 |
| 25 to 34 | 23,013 | 21,998 | 24,435 | 36,558 | 42,976 | 37,417 | 39,287 | 41,628 | 43,129 | 43,192 | 47,022 | 50,596 |
| 35 to 44 | 20,681 | 23,437 | 22,489 | 25,578 | 37,719 | 44,605 | 39,535 | 38,874 | 40,767 | 45,087 | 45,596 | 49,487 |
| 45 to 54 | 17,240 | 20,601 | 23,059 | 22,563 | 25,081 | 36,905 | 43,894 | 41,728 | 38,594 | 40,088 | 44,617 | 45,136 |
| 55 to 64 | 13,469 | 15,409 | 18,250 | 21,520 | 20,720 | 23,615 | 34,846 | 39,303 | 41,472 | 36,697 | 38,497 | 42,987 |
| 65 and older | 11,363 | 15,336 | 19,007 | 24,350 | 29,247 | 32,705 | 36,895 | 43,012 | 50,557 | 66,183 | 71,982 | 76,385 |
| White | — | — | — | 146,122 | 160,625 | 174,428 | 189,512 | 195,745 | 201,452 | 212,810 | 223,707 | 234,046 |
| Black | — | — | — | 17,824 | 21,477 | 25,218 | 29,877 | 31,750 | 33,625 | 37,691 | 41,589 | 45,333 |
| Asian and other ¹ | — | — | — | 3,801 | 7,061 | 10,054 | 14,269 | 16,096 | 17,992 | 22,454 | 27,594 | 32,992 |
| Hispanic origin | — | — | — | 9,598 | 15,904 | 22,393 | 30,359 | 34,439 | 38,793 | 48,543 | 59,447 | 71,196 |
| Other than Hispanic origin | — | — | — | 158,147 | 173,260 | 187,306 | 203,298 | 209,152 | 214,276 | 224,413 | 233,444 | 241,175 |
| White non-Hispanic | — | — | — | 136,847 | 146,535 | 153,111 | 162,064 | 164,579 | 166,313 | 168,787 | 169,742 | 169,355 |
| Age of baby-boom generation | 0 to 4 | 0 to 14 | 6 to 24 | 16 to 34 | 26 to 44 | 36 to 54 | 46 to 64 | 51 to 69 | 56 to 74 | 66 to 84 | 76 to 94 | 86 to 104 |
| Share (percent) | | | | | | | | | | | | |
| Total, 16 years and older | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Men | 48.3 | 47.5 | 46.9 | 47.3 | 47.8 | 48.0 | 48.1 | 48.1 | 48.0 | 48.0 | 48.0 | 48.0 |
| Women | 51.7 | 52.5 | 53.1 | 52.7 | 52.2 | 52.0 | 51.9 | 51.9 | 52.0 | 52.0 | 52.0 | 52.0 |
| 16 to 24 | 18.3 | 17.5 | 21.8 | 22.2 | 17.7 | 16.4 | 16.8 | 16.0 | 15.2 | 15.3 | 15.4 | 15.3 |
| 25 to 34 | 21.9 | 18.8 | 17.8 | 21.8 | 22.7 | 17.8 | 16.8 | 17.1 | 17.0 | 15.8 | 16.1 | 16.2 |
| 35 to 44 | 19.7 | 20.0 | 16.4 | 15.2 | 19.9 | 21.3 | 16.9 | 16.0 | 16.1 | 16.5 | 15.6 | 15.8 |
| 45 to 54 | 16.4 | 17.6 | 16.8 | 13.5 | 13.3 | 17.6 | 18.8 | 17.1 | 15.3 | 14.7 | 15.2 | 14.4 |
| 55 to 64 | 12.8 | 13.1 | 13.3 | 12.8 | 11.0 | 11.3 | 14.9 | 16.1 | 16.4 | 13.4 | 13.1 | 13.8 |
| 65 and older | 10.8 | 13.1 | 13.9 | 14.5 | 15.5 | 15.6 | 15.8 | 17.7 | 20.0 | 24.2 | 24.6 | 24.5 |
| White | — | — | — | 87.1 | 84.9 | 83.2 | 81.1 | 80.4 | 79.6 | 78.0 | 76.4 | 74.9 |
| Black | — | — | — | 10.6 | 11.4 | 12.0 | 12.8 | 13.0 | 13.3 | 13.8 | 14.2 | 14.5 |
| Asian and other ¹ | — | — | — | 2.3 | 3.7 | 4.8 | 6.1 | 6.6 | 7.1 | 8.2 | 9.4 | 10.6 |
| Hispanic origin | — | — | — | 5.7 | 8.4 | 10.7 | 13.0 | 14.1 | 15.3 | 17.8 | 20.3 | 22.8 |
| Other than Hispanic origin | — | — | — | 94.3 | 91.6 | 89.3 | 87.0 | 85.9 | 84.7 | 82.2 | 79.7 | 77.2 |
| White non-Hispanic | — | — | — | 81.6 | 77.5 | 73.0 | 69.4 | 67.6 | 65.7 | 61.8 | 58.0 | 54.2 |
| Change (thousands) | | 1950–60 | 1960–70 | 1970–80 | 1980–90 | 1990–2000 | 2000–10 | 2010–15 | 2015–20 | 2020–30 | 2030–40 | 2040–50 |
| Total, 16 years and older | | 12,250 | 19,840 | 30,660 | 21,419 | 20,535 | 23,959 | 9,933 | 9,478 | 19,887 | 19,934 | 19,481 |
| Men | | 4,937 | 8,642 | 15,094 | 10,979 | 10,354 | 11,588 | 4,769 | 4,481 | 9,367 | 9,518 | 9,613 |
| Women | | 7,312 | 11,200 | 15,566 | 10,439 | 10,181 | 12,370 | 5,164 | 4,997 | 10,519 | 10,417 | 9,868 |
| 16 to 24 | | 1,237 | 9,381 | 7,337 | –3,757 | 1,032 | 4,749 | –154 | –497 | 3,159 | 3,467 | 2,603 |
| 25 to 34 | | –1,015 | 2,437 | 12,123 | 6,418 | –5,559 | 1,870 | 2,341 | 1,501 | 64 | 3,830 | 3,574 |
| 35 to 44 | | 2,756 | –948 | 3,089 | 12,141 | 6,886 | –5,070 | –662 | 1,893 | 4,320 | 509 | 3,892 |
| 45 to 54 | | 3,361 | 2,458 | –496 | 2,518 | 11,824 | 6,989 | –2,166 | –3,134 | 1,494 | 4,529 | 519 |
| 55 to 64 | | 1,940 | 2,841 | 3,270 | –800 | 2,895 | 11,231 | 4,457 | 2,170 | –4,775 | 1,800 | 4,490 |
| 65 and older | | 3,973 | 3,671 | 5,343 | 4,897 | 3,458 | 4,190 | 6,117 | 7,545 | 15,626 | 5,800 | 4,403 |
| White | | ... | ... | ... | 14,503 | 13,803 | 15,083 | 6,233 | 5,707 | 11,358 | 10,897 | 10,339 |
| Black | | ... | ... | ... | 3,653 | 3,741 | 4,659 | 1,874 | 1,875 | 4,066 | 3,898 | 3,744 |
| Asian and other ¹ | | ... | ... | ... | 3,260 | 2,993 | 4,215 | 1,827 | 1,896 | 4,462 | 5,140 | 5,398 |
| Hispanic origin | | ... | ... | ... | 6,306 | 6,489 | 7,966 | 4,080 | 4,354 | 9,750 | 10,903 | 11,750 |
| Other than Hispanic origin | | ... | ... | ... | 15,113 | 14,046 | 15,993 | 5,854 | 5,124 | 10,137 | 9,031 | 7,731 |
| White non-Hispanic | | ... | ... | ... | 9,687 | 6,576 | 8,953 | 2,515 | 1,734 | 2,473 | 955 | –387 |

Table 3. Continued—Civilian noninstitutional population by sex, age, race, and Hispanic origin, 1950–2000 and projected, 2010–50

| Group | 1950–60 | 1960–70 | 1970–80 | 1980–90 | 1990–2000 | 2000–10 | 2010–15 | 2015–20 | 2020–30 | 2030–40 | 2040–50 |
|------------------------------------|---------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|---------|
| Annual growth (percent) | | | | | | | | | | | |
| Total, 16 years and older | 1.1 | 1.6 | 2.0 | 1.2 | 1.0 | 1.1 | .8 | .8 | .8 | .7 | .6 |
| Men | .9 | 1.5 | 2.1 | 1.3 | 1.1 | 1.1 | .8 | .8 | .7 | .7 | .7 |
| Women | 1.3 | 1.7 | 2.0 | 1.1 | 1.0 | 1.1 | .8 | .8 | .8 | .7 | .6 |
| 16 to 24 | .6 | 3.8 | 2.2 | -1.1 | .3 | 1.3 | -1 | -3 | .8 | .8 | .6 |
| 25 to 34 | -.5 | 1.1 | 4.1 | 1.6 | -1.4 | .5 | 1.2 | .7 | .0 | .9 | .7 |
| 35 to 44 | 1.3 | -.4 | 1.3 | 4.0 | 1.7 | -1.2 | -.3 | 1.0 | 1.0 | .1 | .8 |
| 45 to 54 | 1.8 | 1.1 | -.2 | 1.1 | 3.9 | 1.7 | -1.0 | -1.5 | .4 | 1.1 | .1 |
| 55 to 64 | 1.4 | 1.7 | 1.7 | -.4 | 1.3 | 4.0 | 2.4 | 1.1 | -1.2 | .5 | 1.1 |
| 65 and older | 3.0 | 2.2 | 2.5 | 1.8 | 1.1 | 1.2 | 3.1 | 3.3 | 2.7 | .8 | .6 |
| White | ... | ... | ... | 1.0 | .8 | .8 | .6 | .6 | .5 | .5 | .5 |
| Black | ... | ... | ... | 1.9 | 1.6 | 1.7 | 1.2 | 1.2 | 1.1 | 1.0 | .9 |
| Asian and other ¹ | ... | ... | ... | 6.4 | 3.6 | 3.6 | 2.4 | 2.3 | 2.2 | 2.1 | 1.8 |
| Hispanic origin | ... | ... | ... | 5.2 | 3.5 | 3.1 | 2.6 | 2.4 | 2.3 | 2.0 | 1.8 |
| Other than Hispanic origin | ... | ... | ... | .9 | .8 | .8 | .6 | .5 | .5 | .4 | .3 |
| White non-Hispanic | ... | ... | ... | .7 | .4 | .6 | .3 | .2 | .1 | .1 | .0 |

¹ The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives. Historical data are derived by subtracting "black" from the "black and other" group; projections are made directly, not by subtraction.

NOTE: Dash indicates data not available.

54—will remain above the 80-percent mark through 2050.

The difference between the participation rates of men and women has been decreasing steadily between 1950 and 2000, and the Bureau expects this narrowing to continue into the future. As table 4 demonstrates, the difference between the participation rates of men and women was 53 percentage points in 1950, decreasing to 46 percentage points in 1960. In 1970, the difference was reduced even further, to 36 percentage points. In 1980 and 1990, the difference was 26 percentage points and 19 percentage points, respectively. In 2000, the difference was 15 percentage points. It is projected that, during the 2000–50 period, the men-women participation rate difference will decrease even further, to about 10 percentage points in 2050. (See chart 2.)

Diversity. During the last 50 years of the 20th century, the U.S. population grew more and more racially and ethnically diverse. The greater diversity of the population resulted in an increased diversity in the labor force. Following the standards provided in the Office of Management and Budget's Statistical Policy Directive No. 15, this article divides the population and the labor force into four major racial categories: "white," "black," "American Indian and Alaska Native," and "Asian and Pacific Islander."¹² The Office of Management and Budget also recognizes two ethnic groups: "Hispanic origin" and "not of Hispanic origin." Although Hispanics can be of any race, most report that they are white. Data on race and ethnicity are based on self-

reports or self-identification.

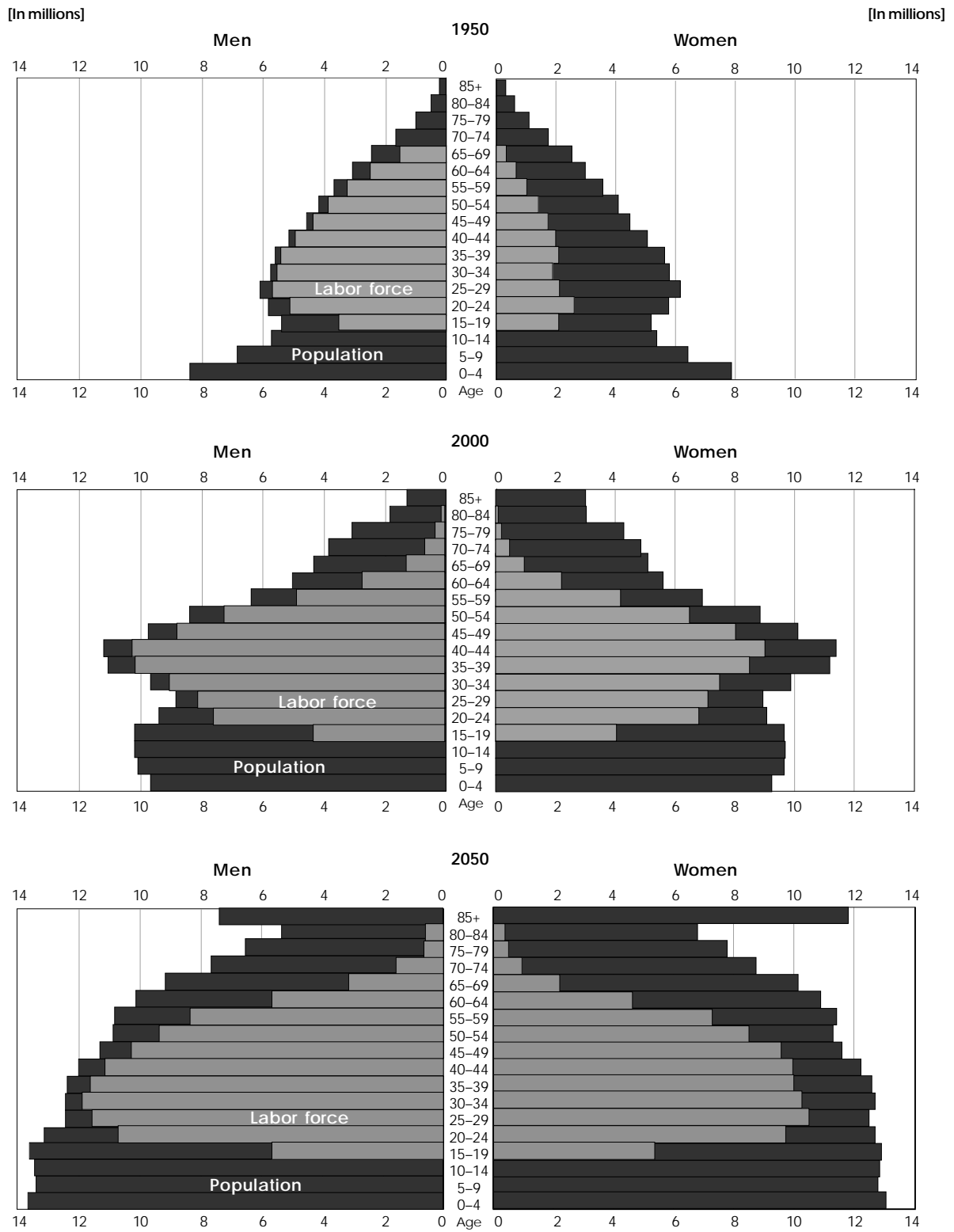
Immigration has been the major source of growing diversity. Most immigrants come to the United States seeking better job opportunities and higher wages. They tend to be in younger age groups with higher labor force participation rates. Because many come from high-fertility societies, they have considerably higher fertility rates than those of the resident population, and this factor has contributed in large part to the growing diversity of the U.S. population and labor force.

In 1980, the first year data were available on both race and Hispanic origin, the total civilian noninstitutional population aged 16 years and older consisted of 87 percent whites (of which 82 percent were non-Hispanic whites), 11 percent blacks, and 2 percent Asians and others. (See table 3.) In 2000, the share of whites had fallen to 83 percent (with the share of non-Hispanic whites declining to 73 percent), while the share of the black population rose to 12 percent and the share of Asians and others jumped to 5 percent. The share of Hispanics, which was 6 percent in 1980, soared to 11 percent by 2000. It is projected that the share of Hispanics will reach 13 percent of the population in 2010 and 23 percent in 2050.

The shares of the various race and ethnicity groups in the civilian noninstitutional population are projected to change significantly between 2000 and 2050:

- White non-Hispanics are expected to slowly decrease their share, to make up 54 percent of the civilian noninstitutional

Chart 1. U.S. population and labor force, 1950, 2000, and projected, 2050



SOURCE: Bureau of Labor Statistics.

Table 4. Civilian labor force participation rates by sex and age, 1950–2000 and projected, 2010–50

| Group | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 | 2015 | 2020 | 2030 | 2040 | 2050 |
|---|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Percent | | | | | | | | | | | | |
| Total, 16 years and older | 59.2 | 59.4 | 60.4 | 63.8 | 66.4 | 67.2 | 67.5 | 66.8 | 65.1 | 62.3 | 61.6 | 61.5 |
| 16 to 24 | 59.9 | 56.4 | 59.8 | 68.1 | 67.3 | 65.9 | 66.5 | 67.1 | 66.5 | 66.0 | 65.9 | 65.5 |
| 25 to 34 | 63.5 | 65.4 | 69.7 | 79.9 | 83.6 | 84.6 | 87.1 | 88.0 | 87.9 | 87.6 | 87.4 | 87.3 |
| 35 to 44 | 67.5 | 69.4 | 73.1 | 80.0 | 85.2 | 84.8 | 86.0 | 86.6 | 86.5 | 86.4 | 86.3 | 86.2 |
| 45 to 54 | 66.4 | 72.2 | 73.5 | 74.9 | 80.7 | 82.6 | 83.8 | 84.1 | 84.0 | 83.9 | 83.7 | 83.4 |
| 55 to 64 | 56.7 | 60.9 | 61.8 | 55.7 | 55.9 | 59.2 | 60.9 | 61.6 | 60.8 | 60.1 | 60.7 | 60.3 |
| 65 and older | 26.7 | 20.8 | 17.0 | 12.5 | 11.8 | 12.8 | 14.8 | 16.2 | 16.3 | 15.2 | 13.3 | 13.4 |
| Men | 86.4 | 83.3 | 79.7 | 77.4 | 76.1 | 74.7 | 73.2 | 71.9 | 70.3 | 67.6 | 67.0 | 66.8 |
| 16 to 24 | 77.3 | 71.7 | 69.4 | 74.4 | 71.5 | 68.6 | 67.9 | 68.2 | 67.6 | 67.2 | 67.3 | 67.0 |
| 25 to 34 | 96.0 | 97.5 | 96.4 | 95.2 | 94.2 | 93.4 | 93.1 | 93.0 | 93.0 | 93.0 | 92.9 | 93.0 |
| 35 to 44 | 97.6 | 97.7 | 96.8 | 95.5 | 94.4 | 92.6 | 92.3 | 92.2 | 92.2 | 92.1 | 92.1 | 92.1 |
| 45 to 54 | 95.8 | 95.7 | 94.3 | 91.2 | 90.7 | 88.6 | 87.8 | 87.3 | 87.3 | 87.3 | 87.1 | 87.1 |
| 55 to 64 | 86.9 | 87.3 | 83.0 | 72.1 | 67.7 | 67.3 | 67.0 | 66.8 | 66.1 | 65.7 | 66.5 | 66.2 |
| 65 and older | 45.8 | 33.1 | 26.8 | 19.0 | 16.4 | 17.5 | 19.5 | 21.0 | 21.0 | 19.6 | 17.3 | 17.3 |
| Women | 33.9 | 37.7 | 43.3 | 51.5 | 57.5 | 60.2 | 62.2 | 62.1 | 60.3 | 57.4 | 56.7 | 56.6 |
| 16 to 24 | 43.9 | 42.8 | 51.3 | 61.9 | 63.1 | 63.2 | 65.1 | 66.1 | 65.4 | 64.8 | 64.6 | 64.0 |
| 25 to 34 | 34.0 | 36.0 | 45.0 | 65.5 | 73.6 | 76.3 | 81.4 | 83.3 | 83.0 | 82.4 | 82.1 | 81.9 |
| 35 to 44 | 39.1 | 43.4 | 51.1 | 65.5 | 76.5 | 77.3 | 80.0 | 81.2 | 81.1 | 81.0 | 80.7 | 80.5 |
| 45 to 54 | 37.9 | 49.9 | 54.4 | 59.9 | 71.2 | 76.8 | 80.0 | 81.1 | 80.8 | 80.7 | 80.4 | 79.9 |
| 55 to 64 | 27.0 | 37.2 | 43.0 | 41.3 | 45.3 | 51.8 | 55.2 | 56.7 | 55.8 | 54.9 | 55.3 | 54.7 |
| 65 and older | 9.7 | 10.8 | 9.7 | 8.1 | 8.7 | 9.4 | 11.1 | 12.5 | 12.6 | 11.7 | 10.1 | 10.1 |
| White | — | — | — | 64.1 | 66.8 | 67.4 | 67.6 | 66.8 | 65.0 | 62.1 | 61.5 | 61.4 |
| Black | — | — | — | 61.0 | 63.3 | 65.8 | 67.1 | 66.6 | 65.0 | 62.1 | 60.9 | 59.8 |
| Asian and other ¹ | — | — | — | 64.6 | 65.4 | 66.5 | 67.5 | 67.4 | 66.4 | 64.9 | 64.2 | 64.9 |
| Hispanic origin | — | — | — | 64.0 | 67.0 | 68.6 | 69.0 | 69.1 | 67.9 | 65.8 | 64.6 | 63.8 |
| Other than Hispanic origin | — | — | 63.7 | 66.3 | 67.0 | 67.3 | 66.5 | 64.6 | 61.6 | 60.9 | 60.9 | 60.9 |
| White non-Hispanic | — | — | — | 64.0 | 66.8 | 67.2 | 67.3 | 66.4 | 64.4 | 61.1 | 60.5 | 60.5 |
| Age of baby-boom generation | 0–4 | 0–14 | 6–24 | 16–34 | 26–44 | 36–54 | 46–64 | 51–69 | 56–74 | 66–84 | 76–94 | 86–104 |
| Difference between men's and women's labor force participation rates | | | | | | | | | | | | |
| Total, 16 and older | 52.5 | 45.6 | 36.3 | 25.9 | 18.6 | 14.5 | 11.0 | 9.8 | 10.0 | 10.1 | 10.2 | 10.2 |
| 16 to 24 | 33.4 | 28.8 | 18.1 | 12.5 | 8.4 | 5.4 | 2.8 | 2.0 | 2.2 | 2.4 | 2.7 | 3.0 |
| 25 to 34 | 62.0 | 61.5 | 51.4 | 29.7 | 20.5 | 17.0 | 11.7 | 9.8 | 10.0 | 10.6 | 10.8 | 11.1 |
| 35 to 44 | 58.5 | 54.3 | 45.7 | 30.0 | 18.0 | 15.4 | 12.3 | 10.9 | 11.1 | 11.1 | 11.5 | 11.5 |
| 45 to 54 | 57.9 | 45.8 | 39.9 | 31.3 | 19.5 | 11.8 | 7.8 | 6.2 | 6.4 | 6.6 | 6.7 | 7.1 |
| 55 to 64 | 59.9 | 50.1 | 39.9 | 30.8 | 22.4 | 15.5 | 11.7 | 10.1 | 10.2 | 10.8 | 11.2 | 11.5 |
| 65 and older | 36.1 | 22.3 | 17.1 | 10.9 | 7.7 | 8.1 | 8.4 | 8.5 | 8.5 | 8.0 | 7.2 | 7.3 |
| Change (percentage points) | | | | | | | | | | | | |
| Total, 16 years and older | — | .2 | 1.0 | 3.4 | 2.6 | .8 | .3 | -.7 | -1.8 | -2.8 | -.7 | -.1 |
| 16 to 24 | — | -3.5 | 3.4 | 8.2 | -.8 | -1.4 | .6 | .6 | -.6 | -.6 | .0 | -.4 |
| 25 to 34 | — | 1.9 | 4.3 | 10.2 | 3.7 | 1.0 | 2.5 | .9 | -.2 | -.3 | -.2 | -.1 |
| 35 to 44 | — | 1.9 | 3.7 | 6.9 | 5.2 | -.4 | 1.1 | .6 | -.1 | -.1 | -.2 | .0 |
| 45 to 54 | — | 5.8 | 1.3 | 1.4 | 5.8 | 1.8 | 1.2 | .3 | -.2 | .0 | -.3 | -.2 |
| 55 to 64 | — | 4.2 | .9 | -6.1 | .2 | 3.3 | 1.7 | .7 | -.8 | -.7 | .6 | -.4 |
| 65 and older | — | -5.9 | -3.8 | -4.4 | -.7 | 1.0 | 1.9 | 1.5 | .1 | -1.1 | -1.9 | .0 |
| Men | — | -3.1 | -3.6 | -2.3 | -1.3 | -1.4 | -1.5 | -1.3 | -1.6 | -2.7 | -.6 | -.1 |
| 16 to 24 | — | -5.6 | -2.2 | 5.0 | -2.9 | -2.9 | -.7 | -.2 | -.5 | -.5 | .1 | -.3 |
| 25 to 34 | — | 1.5 | -1.1 | -1.2 | -1.0 | -.8 | -.3 | -.1 | .0 | .0 | -.1 | .0 |
| 35 to 44 | — | .1 | -.9 | -1.4 | -1.0 | -1.8 | -.3 | -.1 | .0 | -.1 | .0 | .0 |
| 45 to 54 | — | -.1 | -1.4 | -3.1 | -.5 | -2.1 | -.8 | -.5 | -.1 | .0 | -.2 | .0 |
| 55 to 64 | — | .4 | -4.3 | -10.8 | -4.4 | -.4 | -.3 | -.2 | -.7 | -.4 | .8 | -.3 |
| 65 and older | — | -12.7 | -6.3 | -7.8 | -2.6 | 1.1 | 2.0 | 1.5 | .0 | -1.4 | -2.3 | .0 |
| Women | — | 3.8 | 5.6 | 8.1 | 6.0 | 2.7 | 2.0 | -.1 | -1.9 | -2.8 | -.7 | -.2 |
| 16 to 24 | — | -1.1 | 8.5 | 10.6 | 1.2 | .1 | 1.9 | 1.0 | -.7 | -.7 | -.2 | -.6 |
| 25 to 34 | — | 2.0 | 9.0 | 20.5 | 8.2 | 2.7 | 5.1 | 1.9 | -.3 | -.6 | -.3 | -.3 |
| 35 to 44 | — | 4.3 | 7.7 | 14.4 | 11.0 | 0.8 | 2.7 | 1.3 | -.1 | -.1 | -.3 | -.1 |
| 45 to 54 | — | 12.0 | 4.5 | 5.5 | 11.3 | 5.6 | 3.2 | 1.1 | -.2 | -.1 | -.3 | -.4 |
| 55 to 64 | — | 10.2 | 5.8 | -1.7 | 4.0 | 6.5 | 3.5 | 1.5 | -.9 | -.9 | .4 | -.6 |
| 65 and older | — | 1.1 | -1.1 | -1.6 | .6 | .7 | 1.7 | 1.4 | .0 | -.9 | -1.6 | .0 |
| White | — | — | — | — | 2.8 | .6 | .2 | -.7 | -1.9 | -2.9 | -.6 | .0 |
| Black | — | — | — | — | 2.4 | 2.5 | 1.2 | -.4 | -1.6 | -2.9 | -1.2 | -1.1 |
| Asian and other ¹ | — | — | — | — | .8 | 1.1 | 1.0 | -.1 | -1.0 | -1.5 | -.7 | .7 |
| Hispanic origin | — | — | — | — | 2.9 | 1.6 | .4 | .1 | -1.2 | -2.0 | -1.2 | -.8 |
| Other than Hispanic origin | — | — | — | — | 2.6 | .7 | .3 | -.8 | -1.9 | -3.0 | -.7 | .0 |
| White non-Hispanic | — | — | — | — | 2.8 | .4 | .1 | -.9 | -2.0 | -3.3 | -.6 | .1 |

¹ The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives. Historical data are derived by subtracting "black" from the "black and other" group; projections are made directly, not by subtraction.

NOTE: Dash indicates data not available.

population by 2050. The population of white non-Hispanics is actually projected to decrease between 2040 and 2050.

- The Hispanic population, which had a 5.2-percent growth rate in the 1980–90 period and a 3.5-percent growth rate in the 1990–2000 period, is projected to grow by 3.1 percent in 2000–10 and is eventually expected to make up 23 percent of the civilian noninstitutional population by 2050.
- The black population is anticipated to increase at a much lower rate in future decades than in the past, and its share is projected to constitute 15 percent of the total population by 2050.
- The “Asian and other” category is projected to grow considerably in the coming years, with its members expected to make up 10 percent of the total civilian noninstitutional population in 2050.

With the influx of immigrants during the last three decades, the U.S. labor force is rapidly diversifying. The new immigrants, mostly Hispanic and Asian, and in younger age groups with higher participation rates, are expected to increase the overall participation rate and diversify the labor force even further in the coming decades. (See table 4.) It is worth mentioning that the differences in the labor force participation rate by race and Hispanic origin are usually not as big as those among different age and sex groups. In 1980, the labor force participation rate was 65 percent for Asians, 64 percent

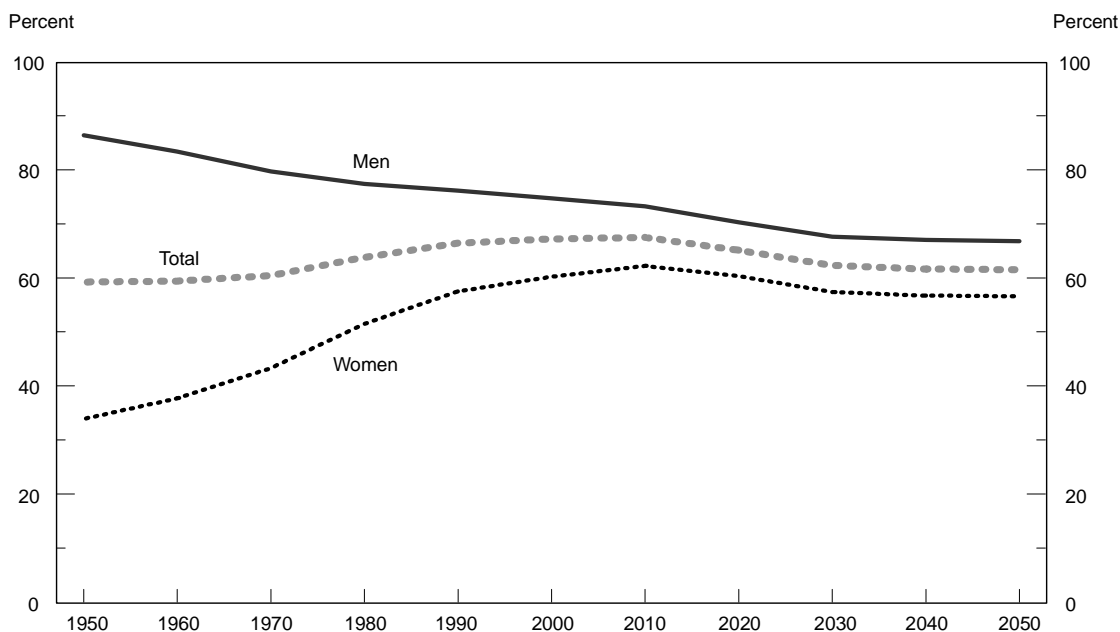
for both Hispanics and white non-Hispanics, and 61 percent for blacks. It is projected that in 2050, Asians will still have the highest participation rate, 65 percent, followed by Hispanics, with 64 percent. White non-Hispanics and blacks are expected to have participation rates of 61 percent and 60 percent, respectively.

Labor force projections

During the 1950–2000 period, the annual growth rate of the labor force was 1.6 percent, whereas, from 2000 to 2050, the annual growth rate is projected to be 0.6 percent. (See table 1.) In the 1950–60 period, the labor force increased at a 1.1-percent rate, the same as that of the population. (See table 5.) During 1960–70, labor force growth increased to 1.7 percent per year, as the baby-boom generation began entering the labor force and labor force participation rates increased significantly. The annual growth rate of the labor force peaked at 2.6 percent during the 1970–80 period, due mainly to the continued absorption of the baby-boomer cohorts into the job market and the even more rapid acceleration in the participation rate of women in the workforce. In the 1980–90 period, labor force growth slowed down, because nearly all baby boomers who were to enter the labor force had already done so. The growth rate during this period decreased to 1.6 percent.

During the 1990–2000 period, the growth rate of the labor force decreased further, to 1.1 percent, a little higher than the

Chart 2. Aggregate labor force participation rates, 1950–2000 and projected to 2050



SOURCE: Bureau of Labor Statistics.

Table 5. Civilian labor force by sex, age, race, and Hispanic origin, 1950–2000 and projected, 2010–50

| Group | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 | 2015 | 2020 | 2030 | 2040 | 2050 |
|------------------------------------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Level (thousands) | | | | | | | | | | | | |
| Total, 16 years and older | 62,208 | 69,628 | 82,771 | 106,940 | 125,840 | 140,863 | 157,721 | 162,822 | 164,681 | 170,090 | 180,517 | 191,825 |
| Men | 43,819 | 46,388 | 51,228 | 61,453 | 69,011 | 75,247 | 82,221 | 84,202 | 85,430 | 88,503 | 94,041 | 100,280 |
| Women | 18,389 | 23,240 | 31,543 | 45,487 | 56,829 | 65,616 | 75,500 | 78,620 | 79,250 | 81,588 | 86,476 | 91,545 |
| 16 to 24 | 11,522 | 11,545 | 17,846 | 25,300 | 22,492 | 22,715 | 26,081 | 26,216 | 25,653 | 27,518 | 29,792 | 31,317 |
| 25 to 34 | 14,619 | 14,382 | 17,036 | 29,227 | 35,929 | 31,669 | 34,222 | 36,651 | 37,905 | 37,828 | 41,099 | 44,156 |
| 35 to 44 | 13,954 | 16,269 | 16,437 | 20,463 | 32,145 | 37,838 | 33,990 | 33,659 | 35,277 | 38,968 | 39,336 | 42,647 |
| 45 to 54 | 11,444 | 14,852 | 16,949 | 16,910 | 20,248 | 30,467 | 36,783 | 35,108 | 32,406 | 33,644 | 37,330 | 37,640 |
| 55 to 64 | 7,633 | 9,385 | 11,283 | 11,985 | 11,575 | 13,974 | 21,204 | 24,200 | 25,195 | 22,047 | 23,359 | 25,901 |
| 65 and older | 3,036 | 3,195 | 3,222 | 3,054 | 3,451 | 4,200 | 5,442 | 6,988 | 8,243 | 10,086 | 9,601 | 10,164 |
| White | — | — | — | 93,600 | 107,447 | 117,574 | 128,043 | 130,811 | 130,881 | 132,116 | 137,494 | 143,770 |
| Black | — | — | — | 10,865 | 13,740 | 16,603 | 20,041 | 21,158 | 21,856 | 23,399 | 25,316 | 27,094 |
| Asian and other ¹ | — | — | — | 2,476 | 4,653 | 6,687 | 9,636 | 10,853 | 11,944 | 14,575 | 17,707 | 20,960 |
| Hispanic origin | — | — | — | 6,146 | 10,720 | 15,368 | 20,947 | 23,787 | 26,321 | 31,951 | 38,403 | 45,426 |
| Other than Hispanic origin | — | — | — | 100,794 | 115,120 | 125,495 | 136,774 | 139,034 | 138,359 | 138,140 | 142,114 | 146,399 |
| White non-Hispanic | — | — | — | 87,633 | 97,818 | 102,963 | 109,118 | 109,294 | 107,043 | 103,138 | 102,637 | 102,506 |
| Age of baby-boom generation | 0–4 | 0–14 | 6–24 | 16–34 | 26–44 | 36–54 | 46–64 | 51–69 | 56–74 | 66–84 | 76–94 | 86–104 |
| Share (percent) | | | | | | | | | | | | |
| Total, 16 years and older | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Men | 70.4 | 66.6 | 61.9 | 57.5 | 54.8 | 53.4 | 52.1 | 51.7 | 51.9 | 52.0 | 52.1 | 52.3 |
| Women | 29.6 | 33.4 | 38.1 | 42.5 | 45.2 | 46.6 | 47.9 | 48.3 | 48.1 | 48.0 | 47.9 | 47.7 |
| 16 to 24 | 18.5 | 16.6 | 21.6 | 23.7 | 17.9 | 16.1 | 16.5 | 16.1 | 15.6 | 16.2 | 16.5 | 16.3 |
| 25 to 34 | 23.5 | 20.7 | 20.6 | 27.3 | 28.6 | 22.5 | 21.7 | 22.5 | 23.0 | 22.2 | 22.8 | 23.0 |
| 35 to 44 | 22.4 | 23.4 | 19.9 | 19.1 | 25.5 | 26.9 | 21.6 | 20.7 | 21.4 | 22.9 | 21.8 | 22.2 |
| 45 to 54 | 18.4 | 21.3 | 20.5 | 15.8 | 16.1 | 21.6 | 23.3 | 21.6 | 19.7 | 19.8 | 20.7 | 19.6 |
| 55 to 64 | 12.3 | 13.5 | 13.6 | 11.2 | 9.2 | 9.9 | 13.4 | 14.9 | 15.3 | 13.0 | 12.9 | 13.5 |
| 65 and older | 4.9 | 4.6 | 3.9 | 2.9 | 2.7 | 3.0 | 3.5 | 4.3 | 5.0 | 5.9 | 5.3 | 5.3 |
| White | — | — | — | 87.5 | 85.4 | 83.5 | 81.2 | 80.3 | 79.5 | 77.7 | 76.2 | 74.9 |
| Black | — | — | — | 10.2 | 10.9 | 11.8 | 12.7 | 13.0 | 13.3 | 13.8 | 14.0 | 14.1 |
| Asian and other ¹ | — | — | — | 2.3 | 3.7 | 4.7 | 6.1 | 6.7 | 7.3 | 8.6 | 9.8 | 10.9 |
| Hispanic origin | — | — | — | 5.7 | 8.5 | 10.9 | 13.3 | 14.6 | 16.0 | 18.8 | 21.3 | 23.7 |
| Other than Hispanic origin | — | — | — | 94.3 | 91.5 | 89.1 | 86.7 | 85.4 | 84.0 | 81.2 | 78.7 | 76.3 |
| White non-Hispanic | — | — | — | 81.9 | 77.7 | 73.1 | 69.2 | 67.1 | 65.0 | 60.6 | 56.9 | 53.4 |
| Change (thousands) | | | | | | | | | | | | |
| Total, 16 years and older | 7,420 | 13,143 | 24,169 | 18,900 | 15,023 | 16,858 | 5,100 | 1,859 | 5,410 | 10,427 | 11,307 | |
| Men | 2,569 | 4,840 | 10,225 | 7,558 | 6,236 | 6,974 | 1,981 | 1,229 | 3,072 | 5,538 | 6,239 | |
| Women | 4,851 | 8,303 | 13,944 | 11,342 | 8,787 | 9,884 | 3,119 | 631 | 2,337 | 4,888 | 5,069 | |
| 16 to 24 | 23 | 6,301 | 7,454 | -2,808 | 223 | 3,366 | 134 | -562 | 1,864 | 2,274 | 1,525 | |
| 25 to 34 | -237 | 2,654 | 12,191 | 6,702 | -4,260 | 2,553 | 2,429 | 1,255 | -78 | 3,271 | 3,056 | |
| 35 to 44 | 2,315 | 168 | 4,026 | 11,682 | 5,693 | -3,849 | -330 | 1,618 | 3,690 | 368 | 3,311 | |
| 45 to 54 | 3,408 | 2,097 | -39 | 3,338 | 10,219 | 6,316 | -1,675 | -2,701 | 1,238 | 3,686 | 310 | |
| 55 to 64 | 1,752 | 1,898 | 702 | -410 | 2,399 | 7,230 | 2,996 | 995 | -3,149 | 1,313 | 2,542 | |
| 65 and older | 159 | 27 | -168 | 397 | 749 | 1,242 | 1,546 | 1,255 | 1,843 | -485 | 563 | |
| White | ... | ... | ... | 13,847 | 10,127 | 10,470 | 2,768 | 70 | 1,235 | 5,378 | 6,276 | |
| Black | ... | ... | ... | 2,875 | 2,863 | 3,439 | 1,116 | 698 | 1,543 | 1,917 | 1,778 | |
| Asian and other ¹ | ... | ... | ... | 2,177 | 2,034 | 2,950 | 1,216 | 1,091 | 2,632 | 3,132 | 3,253 | |
| Hispanic origin | ... | ... | ... | 4,574 | 4,648 | 5,579 | 2,840 | 2,534 | 5,629 | 6,453 | 7,023 | |
| Other than Hispanic origin | ... | ... | ... | 14,326 | 10,375 | 11,279 | 2,260 | -675 | -219 | 3,974 | 4,285 | |
| White non-Hispanic | ... | ... | ... | 10,185 | 5,144 | 6,155 | 177 | -2,251 | -3,904 | -501 | -132 | |
| Annual growth (percent) | | | | | | | | | | | | |
| Total, 16 years and older | 1.1 | 1.7 | 2.6 | 1.6 | 1.1 | 1.1 | .6 | .2 | .3 | .6 | .6 | |
| Men | .6 | 1.0 | 1.8 | 1.2 | .9 | .9 | .5 | .3 | .4 | .6 | .6 | |
| Women | 2.4 | 3.1 | 3.7 | 2.3 | 1.4 | 1.4 | .8 | .2 | .3 | .6 | .6 | |
| 16 to 24 | .0 | 4.5 | 3.6 | -1.2 | .1 | 1.4 | .1 | -.4 | .7 | .8 | .5 | |
| 25 to 34 | -.2 | 1.7 | 5.5 | 2.1 | -1.3 | .8 | 1.4 | .7 | .0 | .8 | .7 | |
| 35 to 44 | 1.5 | .1 | 2.2 | 4.6 | 1.6 | -1.1 | -.2 | .9 | 1.0 | .1 | .8 | |
| 45 to 54 | 2.6 | 1.3 | .0 | 1.8 | 4.2 | 1.9 | -.9 | -1.6 | .4 | 1.0 | .1 | |
| 55 to 64 | 2.1 | 1.9 | .6 | -1.3 | 1.9 | 4.3 | 2.7 | .8 | -1.3 | .6 | 1.0 | |
| 65 and older | .5 | .1 | -.5 | 1.2 | 2.0 | 2.6 | 5.1 | 3.4 | 2.0 | -.5 | .6 | |
| White | ... | ... | ... | 1.4 | .9 | .9 | .4 | .0 | .1 | .4 | .4 | |
| Black | ... | ... | ... | 2.4 | 1.9 | 1.9 | 1.1 | .7 | .7 | .8 | .7 | |
| Asian and other ¹ | ... | ... | ... | 6.5 | 3.7 | 3.7 | 2.4 | 1.9 | 2.0 | 2.0 | 1.7 | |
| Hispanic origin | ... | ... | ... | 5.7 | 3.7 | 3.1 | 2.6 | 2.0 | 2.0 | 1.9 | 1.7 | |
| Other than Hispanic origin | ... | ... | ... | 1.3 | .9 | .9 | .3 | -.1 | .0 | .3 | .3 | |
| White non-Hispanic | ... | ... | ... | 1.1 | .5 | .6 | .0 | -.4 | -.4 | .0 | .0 | |

¹ The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives. Historical data are derived by subtracting "black" from the "black and other" group; projections are made

directly, not by subtraction.

NOTE: Dash indicates data not available.

growth rate of the population. It is projected that the labor force growth rate will remain steady at 1.1 percent during the 2000–10 period, falling to 0.6 percent in 2015–20 and 0.2 percent between 2015 and 2020. It is also projected that during the 2020–30 period, the annual labor force growth rate will fall further, to 0.3 percent, whereupon it will rise to 0.6 percent during both the 2030–40 and 2040–50 periods.

The size of the labor force was 62 million in 1950, of which nearly 44 million were men and 18 million were women. The 62 million figure more than doubled during the 1950–2000 period, reaching nearly 141 million in 2000, with 75 million men and 66 million women. The labor force is projected to grow by 0.6 percent between 2000 and 2050, reaching 192 million—100 million men and 92 million women—the latter year. Following is a breakdown of the projected labor force by sex and by age.

Sex. The number of men in the labor force has always been greater than the number of women, but, historically, the growth rate of women in the labor force has been significantly higher than that of men. As a result, women’s share of the labor force has increased considerably during the last 50 years, moving from 30 percent in 1950 to 47 percent in 2000. It is projected that in 2050, the shares will be 48 percent for women and 52 percent for men.

During the 1950–60 period, the women’s workforce grew 2.4 percent annually in comparison with 0.6 percent for men. In the next decade, from 1960 to 1970, the growth rate of the labor force for women was 3.1 percent per year, more than three times greater than the labor force growth rate of men. During the 1970–80 period, the growth rate for women was 3.7 percent, twice that for men. During 1990–2000 and 2000–10, the growth of the women’s labor force was 1.4 percent, compared with men’s 0.9 percent. The disparity in labor force growth rates for men and women is expected to continue throughout the projection horizon, causing the gender gap in the U.S. workforce to shrink to 8.7 million by 2050.

Population and labor force pyramids also show the gains made by women in their share of the workforce during the last 50 years. (See chart 1.) In the 1950 pyramid, the labor force of women at all age groups looks different from that of men. In 2000, however, because of the narrowing of the gender gap in the labor force, the shape and size of the pyramid for both men and women look very much alike. As this trend continues to 2050, the shape of the pyramid for both men and women becomes even more symmetric—a reflection of a further narrowing of the gender gap in the workforce.

Age. Among all the age categories in the labor force, the 55-and-older group is expected to undergo the most sweeping changes in the years to come, due primarily to the aging of the baby-boom cohorts. The group’s share in the labor force was 17 percent in 1950. As a result of a number of factors, includ-

ing the availability of Social Security to men 62 years of age since 1960, the increased availability of disability awards, and the money accrued in pensions, the share of those 55 and older decreased to 13 percent in 2000. However, the share is projected to increase again in the next 50 years, reaching 20 percent of the total labor force in 2020 and then decreasing to 19 percent in 2050. The growth rate of the 65-and-older age group—1.2 percent in the 1980–90 period—rose to 2.0 percent during 1990–2000. The growth rate of this group within the labor force is projected to be 2.6 percent in the 2000–10 period, 5.1 percent in 2010–15, and 3.4 percent between 2015 and 2020. After 2020, the growth rate of the 65-and-older age group is projected to taper off as baby boomers begin to leave the labor force in increasing numbers. The decrease in the labor force growth rate over this period is also a result of the increase in population in age groups with lower participation rates.

The share of the 35–44 age group peaked in 2000 at 27 percent. This group is expected to decline in numbers as the baby boomers continue aging, but it will maintain its share of the labor force—between 21 and 22 percent—over the next 50 years. The labor force share of the 45–54 age group is projected to decrease from 22 percent in 2000 to 20 percent in 2020 as a result of retirements and because of departures from the labor force.

The 16–24 and 25–34 age groups are expected to maintain their shares of the labor force between 2000 and 2050. In 2000, their shares were 16 percent and 23 percent, respectively. The Bureau projects that by 2050 their respective shares will be about the same.

Labor force rates by race and ethnicity

White non-Hispanic labor force. The white non-Hispanic group has the largest share of the U.S. labor force, but that share has been on the decline and is projected to continue to decline over the next 50 years. In 1980, the white non-Hispanic labor force was 88 million, and its share of the labor force was 82 percent. Two decades later, in 2000, the number of non-Hispanic whites increased to 103 million, but their share of the labor force fell to 73 percent. By 2015, the white non-Hispanic group is projected to reach 109 million, or 67 percent of the total labor force. It is anticipated that, in 2020, the white non-Hispanic labor force will actually decrease by a little more than 2 million, to 107 million, which will constitute 65 percent of the total workforce. The white non-Hispanic share of the labor force is projected to drop even further in later years, reaching a low of 53 percent in 2050.

The white non-Hispanic labor force grew 1.1 percent between 1980 and 1990 and 0.5 percent between 1990 and 2000. The growth rate is expected to be 0.6 percent over the 2000–10 period and negative after 2015. These factors will serve to make the labor force even more diverse by 2050.

The decline in the number of white non-Hispanics currently is accompanied by faster growth of other racial and ethnic groups in the U.S. workforce. Also, the upcoming retirement of the baby boomers, a group that has a large share of white non-Hispanic men, will lower that group’s share of the total labor force. Finally, the low fertility rate and low migration of white non-Hispanics relative to other racial groups is another factor that will contribute to the group’s decreasing share of both the population and the labor force.

Black labor force. In 1980, blacks had the second-largest share of the labor force, 10 percent. Their share increased to 12 percent in 2000, and blacks continued to maintain their relative position as the second largest among all racial and ethnic groups. BLS projections indicate that by 2010, their share will increase to nearly 13 percent, after which blacks will slip to third place in their share of the labor force as Hispanics jump to a 13-percent share.

The number of blacks in the labor force was 17 million in 2000 and is expected to be 27 million in 2050. The increase will be due mostly to the faster growth of the black population through higher fertility rates among black women and relatively high participation rates, also among black women.

Hispanic origin. The share of Hispanics in the labor force was 6 percent in 1980 and increased to 11 percent in 2000. It is projected that in 2010, the share of the Hispanic-origin group in the labor force will be 13 percent. The Hispanic share is anticipated to increase steadily through 2050. Although the growth rate of Hispanics in the labor force has declined somewhat from its peak of 6 percent during the 1980–90 period, it is still growing very rapidly. The Bureau projects that the Hispanic-origin category will constitute 24 percent of the U.S labor force by 2050. The growing share of Hispanics in the labor force is due mainly to their high level of immigration from 1950 to 2000. These new immigrants have been mostly in the younger age cohorts, with higher-than-average fertility rates, a factor that, in large measure, contributes to their population growth in the United States.

Asians and others. Asians have been the fastest-growing sector of the labor force in the past and are projected to remain so for the next 50 years. With 2.5 million people in the labor force in 1980, the category of “Asians and others” had a labor force share of 2 percent that year. By 2000, with nearly 7 million, the group had more than doubled its share, to 5 percent. The high growth of “Asians and others” is expected to continue through the projection period. In 2050, the group is anticipated to number 21 million, or 11 percent of the labor force. As a result of a large number of immigrants in the last 50 years, this group, although small, is likely to be the fastest-growing part of the labor force.

As can be seen from table 5, racial and ethnic minorities have assumed an increasing presence in the labor force. This presence is evident in the growing diversity of the workforce.

Median age

The foregoing analysis has demonstrated that the changes in the age structure of the population result in different aggregate participation rates and could ultimately affect the number of people in the workforce. The median age summarizes the age structure of the labor force and is defined as the age that splits the population group into two equal parts, with 50 percent younger and 50 percent older. (See table 6.)

The median age of the U.S population was at its highest in 1960, at 40.5 years. With the entry of the baby-boom generation into the labor force, the median age began to decrease, reaching a low of 34.6 years in 1980. In 1990, the median age increased to 36.6. In 2000, the median age again increased, to 39.3, and was the same for men and women.

The aging of the baby boomers will result in significant changes in the age structure of the labor force, chief among them an increase in its median age. The rise in the median age is projected to continue until 2010 and reach 40.6. With the retirement of the baby-boom generation after 2015, the median age of the labor force will decrease slowly and is projected to be 39.7 by 2050. The retirement of a large number of white men in the boomer generation is projected to lower

Table 6. Median age of the labor force, 1970–2000 and projected, 2010–2050

| Group | 1970 | 1980 | 1990 | 2000 | 2010 | 2015 | 2020 | 2030 | 2040 | 2050 |
|------------------------------------|------|------|------|------|------|------|------|------|------|------|
| Total | 39.0 | 34.6 | 36.6 | 39.3 | 40.6 | 40.5 | 40.2 | 40.0 | 39.9 | 39.7 |
| Men | 39.4 | 35.1 | 36.7 | 39.3 | 40.6 | 40.5 | 40.2 | 40.1 | 40.0 | 39.9 |
| Women | 38.3 | 33.9 | 36.8 | 39.3 | 40.6 | 40.7 | 40.7 | 40.8 | 40.6 | 40.7 |
| White | 39.3 | 34.8 | 36.8 | 39.7 | 41.3 | 41.1 | 40.7 | 40.4 | 40.3 | 39.9 |
| Black | – | 33.3 | 34.9 | 37.3 | 37.7 | 38.0 | 38.2 | 38.8 | 38.9 | 39.0 |
| Asian and other ¹ | – | 34.1 | 36.5 | 37.8 | 38.7 | 38.8 | 38.8 | 38.8 | 39.1 | 39.3 |
| Hispanic origin ² | – | 32.0 | 33.2 | 34.9 | 36.4 | 36.6 | 36.7 | 36.8 | 37.1 | 37.6 |

¹ The “Asian and other” group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives. Historical data are derived by subtracting “black” from the “black and other” group; projections are made directly.

² Persons of Hispanic origin may be of any race.

NOTE: Dash indicates data not available.

Table 7. Economic dependency ratio, 1950–2000 and projected, 2000–10

| Age group | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 | 2015 | 2020 | 2030 | 2040 | 2050 |
|------------------------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|
| Total population | 139.3 | 150.4 | 140.4 | 108.9 | 98.3 | 93.9 | 90.3 | 91.9 | 97.4 | 106.4 | 109.0 | 111.4 |
| Under 16 | 67.7 | 81.5 | 73.0 | 50.7 | 45.8 | 44.1 | 40.1 | 40.2 | 41.5 | 43.2 | 43.5 | 44.3 |
| 16 to 64 | 56.9 | 50.2 | 47.4 | 37.4 | 30.5 | 28.3 | 28.9 | 28.2 | 28.7 | 28.3 | 28.6 | 29.8 |
| 65 and older | 14.7 | 18.7 | 19.9 | 20.8 | 22.1 | 21.6 | 21.3 | 23.5 | 27.2 | 34.9 | 37.0 | 37.2 |

men's median age to 40.2 in 2020 and 39.9 in 2050. Women's median age is expected to be higher, at 40.7, in 2020 and to stay higher than men's in the decades that follow.

The Hispanic labor force is the youngest group, with a median age of 34.9 in 2000. The median age of Hispanics is projected to increase to 37.6 in 2050, but the group will continue to have the lowest median age among all the race and ethnicity groups. The high fertility rate among Hispanics will keep their population and labor force relatively younger throughout the projection period. In addition, the impact of large numbers of Hispanic immigrants, which are mostly in the younger age groups, is expected to be significant.

Economic dependency ratio

The economic dependency ratio is defined as the number of persons in the total population (including Armed Forces personnel overseas and children) who are not in the labor force per 100 of those who are in the labor force. (See table 7.) For every 100 persons in the 1950 labor force, about 139 were not in the labor force. Of this group, 48 percent were children under age 16, 43 percent were between 16 and 64 years of age, and only 10 percent were 65 and older. With the influx of the baby boomers into the workforce and a significant drop in the number of births, the economic dependency ratio has decreased considerably since 1960. The ratio dropped below 100 for the first time in 1987 and declined further to 94 in 2000, of which 47 percent were children under 16, 30 percent were between 16 and 64 years of age, and 23 percent were 65 and older.

It is projected that the economic dependency ratio will continue to decline until 2010, when it is expected to reach a low of 90 people dependent on every 100 workers. As the baby-boom generation retires and leaves the workforce sometime between 2010 and 2015, the economic dependency ratio is anticipated to rise again. The Bureau projects that, by 2050, for every 100 people working, there will be 111 who are not in the labor force, of which 44 will be children under age 16, 30 will be between 16 and 64 years, and 37 will be 65 and older.

With the passage of each decade, the share of the 65-and-older age group in the total population will rise along with the economic dependency ratio. In 1950, the number of older persons who were out of the workforce per 100 working population was 15. In 2000, the figure rose to 22, and it is expected to

reach 37 in 2050. The Census Bureau anticipates more immigration between 2020 and 2050 in response to this increase in the projected economic dependency ratio of the 65-and-older age group. The increase in the ratio is characterized as a "dramatic downward shift in the availability of potential workers relative to people outside the normal working age."¹³

THE LAST 50 YEARS OF THE 20TH CENTURY have witnessed momentous changes in the size, composition, and characteristics of the U.S. labor force. The same social, demographic, and economic forces that influenced the level, growth, and composition of the labor force during the past 50 years will continue to influence the workforce in the coming decades. Chief among these forces has been an explosion of women's participation rates for all age groups, which caused the share of women in the labor force to increase from 30 percent in 1950 to 47 percent in 2000. In contrast to the last 50 years, during which the surge in women's participation propelled labor force growth, the next 50 years will likely see stabilization in the growth of women's participation, resulting in workforce growth dropping to 0.6 percent annually.

Another factor responsible for the labor force growth of the past 50 years is the baby-boom generation. Just as the entry of the baby boomers swelled the ranks of the labor force in the last three decades, their exit will have a profound effect on the level and composition of the U.S. labor force in the next two decades. The baby-boom generation will remain a generator of change even at its retirement.

The labor force will continue to grow more diverse, despite a slower rate of labor force growth among minorities. With relatively high fertility rates and increasing participation rates, minorities in the workforce are projected to expand their shares substantially. The share of Hispanics especially will rise steadily, approaching one-quarter of the labor force.

The future is unknown and difficult to predict. Any attempt, such as this one, to glean what will happen in the future is an exercise in extrapolation of past trends and is based mainly on the assumption that the future will be subject to the same economic structures as the past. However, by relaxing or otherwise modifying one's assumptions, one can arrive at differing sets of results. In fact, the future is always full of surprises, and 50 years is a relatively long time on the scale of economics, so one should not be surprised if the future labor force changes in ways just as dramatic as those of the last 50 years. □

Notes

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¹ The civilian labor force consists of all employed and unemployed persons actively seeking jobs in the civilian noninstitutional population.

² See Howard N Fullerton, Jr., and Mitra Toossi, “Labor force projections to 2010: steady growth and changing composition,” *Monthly Labor Review*, November 2001, pp. 21–38.

³ The following assumptions about the future course of events are made before the labor force projections are carried out:

- The current definition of the labor force will remain the same over the projection period.
- Work patterns will not change significantly during the projection period.
- No major war or social upheaval will occur during the projection period.
- Laws and legislation will not change the conditions under which individuals decide to enter or stay out of the labor force.
- The general structure of economic relationships in the future will be roughly identical to those in the past, and economic condition will follow the basic trends of the post-World War II era.

⁴ The CPS is a monthly survey of households, conducted by the Bureau of the Census for the Bureau of Labor Statistics.

⁵ Fredrick W. Hollman, Tammany J. Mulder, and Jeffrey E. Kallan, “Population Projections of the United States, 1999 to 2100: Meth-

odology and Assumptions,” working paper no. 38 (U.S. Bureau of the Census, 1999).

⁶ The civilian noninstitutional population does not include the Armed forces and comprises all persons 16 years and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged.

⁷ The civilian labor force participation rate is the proportion of the civilian noninstitutional population that is in the labor force.

⁸ See Howard N Fullerton, Jr., “Labor force 2006: slowing down and changing composition,” *Monthly Labor Review*, November 1997, pp. 23–38.

⁹ A *cohort* is defined as those people within a population who have experienced the same significant life event within a given period of time. The cohorts used for social scientific research usually consist of people who experienced a common significant life event within a period of from 1 to 10 years.

¹⁰ Douglas S. Massey, University of Pennsylvania Symposium on the Role of research universities in innovation, social mobility, and quality of life in the 20th Century, Washington, DC, Association of American Universities, Apr. 17, 2000.

¹¹ Kingsley Davis and Pietronella Van den Oever, “Demographic foundations of new sex roles,” *Population and Development Review*, September 1982, pp. 495–511.

¹² These standards were revised in 1997 for implementation no later than 2003. For more information, see “Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity” (Office of Management and Budget, Oct. 30, 1997); on the Internet at <http://www.whitehouse.gov/omb/fedreg/ombdir15.html> (accessed 6/18/02).

¹³ Hollman, Mulder, and Kallan, “Population Projections,” p. 18.