## Employment outlook: 2008-18

## Labor force projections to 2018: older workers staying more active


#### Abstract

As the baby-boom generation ages, the share of workers in the 55-years-and-older age group will increase dramatically; the participation rates of older workers in the labor force are expected to increase, but will remain significantly lower than those for the prime age group, and, as a result, the participation rate and overall labor force growth rate will decline


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The U.S. labor force is undergoing a gradual but significant change. Beginning in the latter part of the 20th century, three major demographic trends-slowing growth, aging, and increasing diversity-led to changes that have had a considerable impact on the profile of the labor force in the United States and are projected to affect the workforce in the foreseeable future.

Slowdown in the growth of the labor force. The high growth rate of the labor force from the 1970s to the 1990s has been replaced by a much slower growth since 2000. The slow growth rate of the labor force is expected to continue over the next decade.

Aging of the labor force. With the aging of the baby-boom generation, defined as persons born between 1946 and 1964, the older age cohorts are expected to make up a much larger share of the labor force. In 2008, the baby-boom cohort was 44 to 62 years of age. By 2018, almost all the baby boomers will be in the 55 -years-and-older age group. Age is a major factor in labor
market behavior, and the aging of the labor force will dramatically lower the overall labor force participation rate and the growth of the labor force.

Changes in the racial and ethnic composition of the labor force. As a result of higher population growth-stemming from an increased number of births and increased immigration-and high labor force participation rates by Hispanics and Asians, the share of the workforce held by minorities is expected to increase significantly.

In addition to exploring these trends, this article describes the labor force projections by the Bureau of Labor Statistics (BLS) for the 2008-18 timeframe, for 136 demographic groups broken down by age, sex, race, and Hispanic origin. The dynamic factors that have led to changes in the composition of the workforce resulting from persons entering, leaving, or staying in the labor force also are highlighted. Finally, the article discusses the median age of the labor force for the different groups, along with the economic dependency ratio in the labor force. ${ }^{1}$

The U.S. labor force is projected to increase by 12.6 million over the 2008-18 period, reaching nearly 167 million in $2018 .{ }^{2}$ (See
chart 1.) During each of the last two decades (1988 to 1998 and 1998 to 2008) the labor force grew by more than 16 million. The projected 8.2-percentage-point increase is less than both the 12.1-percentage-point increase over the previous decade and the 13.2 -percentage-point growth over the 1988-98 timeframe. The BLS projects that nearly 12 million of the 12.6 million additional workers in the labor force over the next 10 years will be in the 55 -andolder age group. This group is expected to be nearly 40 million in 2018, an increase of 43 percentage points. As a result, this age cohort will compose nearly a quarter of the labor force in 2018. (See table 1.)

The prime age group, composed of 25- to 54 -year-olds, is projected to increase by 1.6 million and make up 63.5 percent of the total labor force in the target year. The youth labor force, composed of 16 - to 24 -year-olds, is expected to decline from the 2008 level, but will remain over 21 million in 2018. The share of youths in the overall labor force is estimated to be 12.7 percent in 2018, roughly half of that for the older age group.

The annual rate of growth for women in the labor force is expected to slow to 0.9 percent over the 2008-18 timeframe, still a faster growth rate than that of men. As a result, women are projected to increase their share of the
labor force slightly from 46.5 percent in 2008 to 46.9 percent in 2018. The number of men in the labor force is projected to grow by an annual rate of 0.7 percent during 2008-18, a much slower rate than the 1.1 -percent rate during the 1998-2008 period.

With an anticipated increase in the number of immigrants, the U.S. population is expected to increase its size and composition. As a result of different fertility rates and major differences in their immigration patterns, the various race and ethnic groups are projected to continue to show different trends in population and labor force growth. The Hispanic labor force is expected to increase rapidly. By 2018, Hispanics are expected to reach more than 29 million in number, composing 17.6 percent of the labor force as a result of an annual growth rate of 2.9 percent over the projected timeframe. Although the share of Asians in both the population and labor force is relatively small, the number of Asians has been growing rapidly in the past two decades. The BLS projects that Asians will grow at an annual rate of 2.6 percent, reaching more than 9 million workers by 2018. The black labor force is projected to continue to have a steady growth of 1.3 percent over the next decade and is anticipated to surpass 20 million in 2018.

Chart 1. Civilian noninstitutional population and labor force, 1988, 1998, 2008, and projected 2018


Labor Force

Table 1. Civilian labor force, by age, sex, race, and ethnicity, 1988, 1998, 2008, and projected 2018
[Numbers in thousands]

| Group | Level |  |  |  | Change |  |  | Percent change |  |  | Percent distribution |  |  |  | Annual growth rate (percent) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1988 | 1998 | 2008 | 2018 | $\begin{gathered} 1988- \\ 98 \end{gathered}$ | $\begin{array}{\|c} 1998- \\ 2008 \end{array}$ | $\begin{gathered} 2008- \\ 18 \end{gathered}$ | $\left\lvert\, \begin{gathered} 1988- \\ 98 \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} 1998- \\ 2008 \end{gathered}\right.$ | $\begin{gathered} 2008- \\ 18 \end{gathered}$ | 1988 | 1998 | 2008 | 2018 | $\begin{gathered} 1988- \\ 98 \end{gathered}$ | $\left\lvert\, \begin{gathered} 1998- \\ 2008 \end{gathered}\right.$ | $\begin{array}{\|c} 2008- \\ 18 \end{array}$ |
| Total, 16 years and older $\qquad$ | 121,669 | 137,673 | 154,287 | 166,911 | 16,004 | 16,614 | 12,624 | 13.2 | 12.1 | 8.2 | 100.0 | 100.0 | 100.0 | 100.0 | 1.2 | 1.1 | 0.8 |
| Age, years $16 \text { to } 24 . . . . . .$ | 22,536 | 21,894 | 22,032 | 21,131 | -642 | 138 | -901 | -2.8 | . 6 | -4.1 | 18.5 | 15.9 | 14.3 | 12.7 | -. 3 | . 1 | -. 4 |
| 25 to 54....... | 84,041 | 98,718 | 104,396 | 105,944 | 14,677 | 5,678 | 1,548 | 17.5 | 5.8 | 1.5 | 69.1 | 71.7 | 67.7 | 63.5 | 1.6 | . 6 | . 1 |
| 55 and older. $\qquad$ | 15,092 | 17,061 | 27,857 | 39,836 | 1,969 | 10,796 | 11,979 | 13.0 | 63.3 | 43.0 | 12.4 | 12.4 | 18.1 | 23.9 | 1.2 | 5.0 | 3.6 |
| Sex: <br> Men | 66,927 | 73,959 | 82,520 | 88,682 | 7,032 | 8,561 | 6,162 | 10.5 | 11.6 | 7.5 | 55.0 | 53.7 | 53.5 | 53.1 | 1.0 | 1.1 | . 7 |
| Women............... | 54,742 | 63,714 | 71,767 | 78,229 | 8,972 | 8,053 | 6,462 | 16.4 | 12.6 | 9.0 | 45.0 | 46.3 | 46.5 | 46.9 | 1.5 | 1.2 | . 9 |
| Race: $\qquad$ <br> White $\qquad$ | 104,756 | 115,415 | 125,635 | 132,490 | 10,659 | 10,220 | 6,855 | 10.2 | 8.9 | 5.5 | 86.1 | 83.8 | 81.4 | 79.4 | 1.0 | . 9 | . 5 |
| Black............. | 13,205 | 15,982 | 17,740 | 20,244 | 2,777 | 1,758 | 2,504 | 21.0 | 11.0 | 14.1 | 10.9 | 11.6 | 11.5 | 12.1 | 1.9 | 1.0 | 1.3 |
| Asian ............. | 3,718 | 6,278 | 7,202 | 9,345 | 2,560 | 924 | 2,143 | 68.9 | 14.7 | 29.8 | 3.1 | 4.6 | 4.7 | 5.6 | 5.4 | 1.4 | 2.6 |
| All other groups ${ }^{1}$...... | - | - | 3,710 | 4,832 | - | - | 1,122 | - | - | 30.2 | - | - | 2.4 | 2.9 | _ | - | 2.7 |
| Ethnicity: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hispanic origin $\qquad$ Other than | 8,982 | 14,317 | 22,024 | 29,304 | 5,335 | 7,707 | 7,280 | 59.4 | 53.8 | 33.1 | 7.4 | 10.4 | 14.3 | 17.6 | 4.8 | 4.4 | 2.9 |
| Hispanic origin | 112,687 | 123,356 | 132,263 | 137,607 | 10,669 | 8,907 | 5,344 | 9.5 | 7.2 | 4.0 | 92.6 | 89.6 | 85.7 | 82.4 | . 9 | . 7 | . 4 |
| White nonHispanic | 96,141 | 101,767 | 105,210 | 106,834 | 5,626 | 3,443 | 1,624 | 5.9 | 3.4 | 1.5 | 79.0 | 73.9 | 68.2 | 64.0 | . 6 | . 3 | . 2 |
| Age of baby boomers.... | 24 to 42 | 34 to 52 | 44 to 62 | 54 to 72 | - | - | - |  | _ | _ | - | - | - | - | - | - | - |

${ }^{1}$ The "all other groups" category includes (1) those classified as being of multiple racial origin and (2) the race categories of (2a) American Indian and Alaska Native and (2b) Native Hawaiian and Other Pacific Islanders. Dash
indicates no data collected for category. Details may not sum to totals because of rounding.

The labor force projections are a product of two factors: population growth and participation rate changes. The Census Bureau provides projections of population by age, sex, race, and ethnicity, while the BLS develops future trends of the labor force participation rates for various age, sex, race, and ethnic groups. The next two sections discuss these two components in turn.

## Population

In the past century, a number of unique birth patterns have substantially affected the future size and composition of the U.S. population and labor force. These influen-
tial birth patterns are

- the birth dearth cohorts, born in the late 1920s and early 1930s
- the baby-boom generation, born between 1946 and 1964
- the baby bust cohort, born between 1965 and 1975
- the baby-boom echo, also known as Generation Y or the millennial generation, born between 1976 and 2001. ${ }^{3}$

In addition to birth patterns, immigration patterns af-
fect the growth and composition of the U.S. population and labor force.

The BLS labor force projections are based on Census Bureau projections of the resident population of the United States. These projections in turn are based on alternative assumptions having to do with the three factors that affect population growth: fertility, life expectancy, and net international migration. The BLS uses the Census Bureau's published "middle series" population projections, based on the mid-level assumption for each of the preceding factors. The "middle series" population projections are considered the most likely path of future population change. The most recent of the resident population projections were provided to the BLS in November 2008. ${ }^{4}$

The BLS converts the resident population concept of the Census Bureau population projections to the civilian noninstitutional population concept of the Current Population Survey (CPS). The conversion takes place in four steps. First, the population of children under age 16 is subtracted from the total resident population. Second, the population of the Armed Forces, broken down into different age, sex, race, and ethnic categories, is subtracted. Third, the institutional population is subtracted from the civilian population for all the different categories. ${ }^{5}$ Finally, the Census Bureau's long-term population projections are benchmarked to CPS data. ${ }^{6}$

Of the three factors affecting population growth, immigration is of paramount importance to the future size and composition of the U.S. population. Immigration, however, is the greatest uncertainty in population projections. A significant number of immigrants to the United States, both legal and illegal, are of Hispanic ethnicity. According to the Census Bureau's most recent projections, net immigration to the United States is projected to add 1.5 million persons annually to the U.S. resident population. This is a sharp increase over the roughly 800,000 immigrants per year projected by the Census Bureau's previous long-term projections of the resident population. As the projected number of immigrants to the United States nearly doubles, a substantial change will occur in both the size and composition of the population.

Table 2 provides four snapshots of the civilian noninstitutional population at 10 -year intervals over the 1988-2008 period and as projected over the 2008-18 period. The civilian noninstitutional population is expected to continue to increase by an annual rate of 1.0 percent over the 2008-18 period. This projected rate of growth is slower than that of the 1998-2008 period, when it was 1.3 percent.

The share of youths in the population peaked in 1976 at 22.9 percent. The group's share dropped to 17.9 percent in 1988 and to 16.2 percent in 1998. In 2008, the share of youths in the civilian noninstitutional population declined to 16.0 percent. The BLS projects that their share will further decrease to 15 percent of the total civilian noninstitutional population in 2018, continuing a declining trend. (See chart 2.) The number of youths is anticipated to increase by 1.3 million, reaching 38.8 million in 2018. The 25 -to- 54 -year-old group is expected to increase by 2.8 million over the 2008-18 period, considerably less than both the 16.1 million figure the group posted during the 1988-98 period and the 8.2 million it registered over the 1998-2008 timeframe. The 55-and-older age group increased by 4.3 million from 1988 to 1998 and then by more than 16 million-four times that amount-in the 1998-2008 period. During the 2008-18 timeframe, the civilian noninstitutional population aged 55 years and older is projected to increase by nearly 21 million, to reach a total of 91.6 million. The older group's share of the civilian noninstitutional population in 2018 is expected to be 35.4 percent, an increase from 26.6 percent in 1998 and 30.2 percent in 2008.

In addition to its role in affecting the size of the population, immigration also influences the composition of the population by age distribution. For example, persons age 25 to 34 years numbered 38.8 million in 1998 and 40.0 million in 2008. The only way this cohort could have increased by that much is through net immigration. Because the main reason for immigration is the opportunity to work, the composition of the population and the labor force at younger age groups are most affected by immigration.

As a result of more immigrants entering the country and their significantly higher fertility rates, the rapid diversification of the population is projected to continue. Immigration of different race and ethnic groups to the United States changes the racial and ethnic composition of the U.S. population over time. Although growth rates of Hispanics and Asians are expected to be lower than they were in previous decades, the projected growth rates for these two groups are nevertheless much higher than for the other groups. Hispanics and Asians are projected to have about 3.0 percent annual growth over the 2008-18 timeframe. Blacks are expected to experience an annual growth rate of 1.4 percent, greater than the growth rate of the overall labor force. By contrast, the white non-Hispanic group is projected to grow more slowly, at a rate of 0.3 percent.

## Chart 2. Percentage of 16- to 24-year-olds in the total civilian noninstitutional population, 1948-2008



## Labor force participation rates

Because some Government agencies adopt different assumptions in projecting the overall labor force participation, their projections often differ. However, there is a general consensus that the overall participation rate will be inching downward for the foreseeable future. ${ }^{7}$ This trend is primarily a result of the baby-boom generation's entry into the 55 -and-older age group. ${ }^{8}$

As the historical trends in table 3 indicate, the labor force participation rate of youths aged 16 to 24 years has decreased significantly since 1988. The major factor in this continual decrease has been an increase in school attendance at all levels, especially secondary school and college. This decreasing trend in participation among youths is projected to continue in the future. The prime age group also has experienced declining participation rates-since 2000-from a period of relatively flat participation in the 1990s. This group's declining trend in participation is projected to continue into the future.

The older age group is the only group that has significantly increased its labor force participation rate
in 2008 and that is projected to exhibit further increases in the future. As previous literature on this subject has noted, a number of factors are responsible for the increase in the participation rates of older workers since the late 1980s. First, people are living longer and healthier lives, so older people are working more years to earn additional income. In addition, the high cost of health insurance has forced many older workers to remain in the labor force in order to keep their employer-based health insurance or to return to work in order to obtain health insurance through their employer. ${ }^{9}$

In addition, changes in Social Security laws since 2000 have raised the normal retirement age for certain birth dates and decreased the benefits for early retirement. The modified laws were intended to discourage workers from early retirement and encourage increased participation of older workers in the labor market. The changes also established credits for delayed retirements, and that has encouraged older workers to delay their retirement and benefit from higher income for each additional year of work.

The changing structure of pension plans from defined benefit to defined contribution has affected the activity

Table 2. Civilian noninstitutional population, by age, sex, race, and ethnicity, 1988, 1998, 2008, and projected 2018
[Numbers in thousands]

| Group | Level |  |  |  | Change |  |  | Annual growth rate (percent) |  |  | Percent distribution |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1988 | 1998 | 2008 | 2018 | $\begin{gathered} \text { 1988- } \\ 98 \end{gathered}$ | $\begin{gathered} \text { 1998- } \\ 2008 \end{gathered}$ | $\begin{gathered} 2008- \\ 18 \end{gathered}$ | $\begin{gathered} 1988- \\ 98 \end{gathered}$ | $\begin{gathered} 1998- \\ 2008 \end{gathered}$ | $\begin{gathered} 2008- \\ 18 \end{gathered}$ | 1988 | 1998 | 2008 | 2018 |
| Total, 16 years and older. $\qquad$ | 184,613 | 205,220 | 233,788 | 258,906 | 20,607 | 28,568 | 25,118 | 1.1 | 1.3 | 1.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 16 to 24................. | 32,960 | 33,237 | 37,484 | 38,768 | 277 | 4,247 | 1,284 | . 1 | 1.2 | . 3 | 17.9 | 16.2 | 16.0 | 15.0 |
| 16 to 19............... | 14,527 | 15,644 | 17,075 | 17,358 | 1,117 | 1,431 | 283 | . 7 | . 9 | . 2 | 7.9 | 7.6 | 7.3 | 6.7 |
| 20 to 24 ............... | 18,434 | 17,593 | 20,409 | 21,409 | -841 | 2,816 | 1,000 | -. 5 | 1.5 | . 5 | 10.0 | 8.6 | 8.7 | 8.3 |
| 25 to 54................. | 101,398 | 117,450 | 125,652 | 128,492 | 16,052 | 8,202 | 2,840 | 1.5 | . 7 | . 2 | 54.9 | 57.2 | 53.7 | 49.6 |
| 25 to 34 ............... | 42,611 | 38,778 | 39,993 | 44,685 | -3,833 | 1,215 | 4,692 | -. 9 | . 3 | 1.1 | 23.1 | 18.9 | 17.1 | 17.3 |
| 35 to 44 ............... | 34,784 | 44,299 | 41,699 | 41,791 | 9,515 | -2,600 | 92 | 2.4 | -. 6 | . 0 | 18.8 | 21.6 | 17.8 | 16.1 |
| 45 to 54 ............... | 24,004 | 34,373 | 43,960 | 42,017 | 10,369 | 9,587 | -1,943 | 3.7 | 2.5 | -. 5 | 13.0 | 16.7 | 18.8 | 16.2 |
| 55 and older.......... | 50,253 | 54,533 | 70,652 | 91,646 | 4,280 | 16,119 | 20,994 | . 8 | 2.6 | 2.6 | 27.2 | 26.6 | 30.2 | 35.4 |
| 55 to 64 ............... | 21,641 | 22,296 | 33,491 | 42,192 | 655 | 11,195 | 8,701 | . 3 | 4.2 | 2.3 | 11.7 | 10.9 | 14.3 | 16.3 |
| 65 to 74 ............... | 17,515 | 17,947 | 19,881 | 29,668 | 432 | 1,934 | 9,787 | . 2 | 1.0 | 4.1 | 9.5 | 8.7 | 8.5 | 11.5 |
| 75 and older ....... | 11,097 | 14,290 | 17,281 | 19,786 | 3,193 | 2,991 | 2,505 | 2.6 | 1.9 | 1.4 | 6.0 | 7.0 | 7.4 | 7.6 |
| Men, 16 years and older. $\qquad$ | 87,857 | 98,758 | 113,113 | 125,695 | 10,901 | 14,355 | 12,582 | 1.2 | 1.4 | 1.1 | 47.6 | 48.1 | 48.4 | 48.5 |
| 16 to 24................. | 16,233 | 16,772 | 18,909 | 19,515 | 539 | 2,137 | 606 | . 3 | 1.2 | . 3 | 8.8 | 8.2 | 8.1 | 7.5 |
| 16 to 19 ............... | 7,304 | 7,968 | 8,660 | 8,795 | 664 | 692 | 135 | . 9 | . 8 | . 2 | 4.0 | 3.9 | 3.7 | 3.4 |
| 20 to 24 ............... | 8,931 | 8,804 | 10,249 | 10,720 | -127 | 1,445 | 471 | -. 1 | 1.5 | . 5 | 4.8 | 4.3 | 4.4 | 4.1 |
| 25 to 54................. | 49,570 | 57,724 | 62,078 | 63,733 | 8,154 | 4,354 | 1,655 | 1.5 | . 7 | . 3 | 26.9 | 28.1 | 26.6 | 24.6 |
| 25 to 34 ............... | 20,937 | 19,094 | 19,999 | 22,258 | -1,843 | 905 | 2,259 | -. 9 | . 5 | 1.1 | 11.3 | 9.3 | 8.6 | 8.6 |
| 35 to 44 ............... | 17,008 | 21,857 | 20,567 | 20,766 | 4,849 | -1,290 | 199 | 2.5 | -. 6 | . 1 | 9.2 | 10.7 | 8.8 | 8.0 |
| 45 to 54 ............... | 11,625 | 16,773 | 21,512 | 20,709 | 5,148 | 4,739 | -803 | 3.7 | 2.5 | -. 4 | 6.3 | 8.2 | 9.2 | 8.0 |
| 55 and older.......... | 22,052 | 24,262 | 32,125 | 42,447 | 2,210 | 7,863 | 10,322 | 1.0 | 2.8 | 2.8 | 11.9 | 11.8 | 13.7 | 16.4 |
| 55 to 64 ............... | 10,193 | 10,649 | 16,123 | 20,325 | 456 | 5,474 | 4,202 | . 4 | 4.2 | 2.3 | 5.5 | 5.2 | 6.9 | 7.9 |
| 65 to 74 ............... | 7,773 | 8,074 | 9,158 | 13,825 | 301 | 1,084 | 4,667 | . 4 | 1.3 | 4.2 | 4.2 | 3.9 | 3.9 | 5.3 |
| 75 and older ....... | 4,086 | 5,539 | 6,844 | 8,297 | 1,453 | 1,305 | 1,453 | 3.1 | 2.1 | 1.9 | 2.2 | 2.7 | 2.9 | 3.2 |
| Women, 16 years and older. $\qquad$ | 96,756 | 106,462 | 120,675 | 133,210 | 9,706 | 14,213 | 12,535 | 1.0 | 1.3 | 1.0 | 52.4 | 51.9 | 51.6 | 51.5 |
| 16 to 24................. | 16,727 | 16,466 | 18,575 | 19,252 | -261 | 2,109 | 677 | -. 2 | 1.2 | . 4 | 9.1 | 8.0 | 7.9 | 7.4 |
| 16 to 19............... | 7,224 | 7,676 | 8,415 | 8,563 | 452 | 739 | 148 | . 6 | . 9 | . 2 | 3.9 | 3.7 | 3.6 | 3.3 |
| 20 to 24 ............... | 9,503 | 8,790 | 10,160 | 10,689 | -713 | 1,370 | 529 | -. 8 | 1.5 | . 5 | 5.1 | 4.3 | 4.3 | 4.1 |
| 25 to 54................. | 51,828 | 59,725 | 63,574 | 64,759 | 7,897 | 3,849 | 1,185 | 1.4 | . 6 | . 2 | 28.1 | 29.1 | 27.2 | 25.0 |
| 25 to 34 ............... | 21,674 | 19,683 | 19,994 | 22,426 | -1,991 | 311 | 2,432 | -1.0 | . 2 | 1.2 | 11.7 | 9.6 | 8.6 | 8.7 |
| 35 to 44 ............... | 17,776 | 22,442 | 21,132 | 21,024 | 4,666 | -1,310 | -108 | 2.4 | -. 6 | -. 1 | 9.6 | 10.9 | 9.0 | 8.1 |
| 45 to 54 ............... | 12,378 | 17,600 | 22,448 | 21,308 | 5,222 | 4,848 | -1,140 | 3.6 | 2.5 | -. 5 | 6.7 | 8.6 | 9.6 | 8.2 |
| 55 and older.......... | 28,201 | 30,271 | 38,527 | 49,199 | 2,070 | 8,256 | 10,672 | . 7 | 2.4 | 2.5 | 15.3 | 14.8 | 16.5 | 19.0 |
| 55 to 64 ............... | 11,448 | 11,646 | 17,367 | 21,868 | 198 | 5,721 | 4,501 | . 2 | 4.1 | 2.3 | 6.2 | 5.7 | 7.4 | 8.4 |
| 65 to 74 ............... | 9,742 | 9,873 | 10,723 | 15,842 | 131 | 850 | 5,119 | . 1 | 0.8 | 4.0 | 5.3 | 4.8 | 4.6 | 6.1 |
| 75 and older ....... | 7,010 | 8,752 | 10,437 | 11,489 | 1,742 | 1,685 | 1,052 | 2.2 | 1.8 | 1.0 | 3.8 | 4.3 | 4.5 | 4.4 |
| White, 16 years and older $\qquad$ | 158,194 | 171,178 | 189,540 | 205,278 | 12,984 | 18,362 | 15,738 | . 8 | 1.0 | . 8 | 85.7 | 83.4 | 81.1 | 79.3 |
| Men..................... | 75,855 | 83,352 | 92,725 | 100,948 | 7,497 | 9,373 | 8,223 | . 9 | 1.1 | . 9 | 41.1 | 40.6 | 39.7 | 39.0 |
| Women................ | 82,340 | 88,126 | 96,814 | 104,331 | 5,786 | 8,688 | 7,517 | . 7 | . 9 | . 8 | 44.6 | 42.9 | 41.4 | 40.3 |
| Black, 16 years and older. $\qquad$ | 20,692 | 24,373 | 27,843 | 31,991 | 3,681 | 3,470 | 4,148 | 1.7 | 1.3 | 1.4 | 11.2 | 11.9 | 11.9 | 12.4 |
| Men..................... | 9,289 | 10,927 | 12,516 | 14,576 | 1,638 | 1,589 | 2,060 | 1.6 | 1.4 | 1.5 | 5.0 | 5.3 | 5.4 | 5.6 |
| Women............... | 11,402 | 13,446 | 15,328 | 17,415 | 2,044 | 1,882 | 2,087 | 1.7 | 1.3 | 1.3 | 6.2 | 6.6 | 6.6 | 6.7 |
| Asian, 16 years and older $\qquad$ | 5,725 | 9,369 | 10,751 | 14,383 | 3,644 | 1,382 | 3,632 | 5.0 | 1.4 | 3.0 | 3.1 | 4.6 | 4.6 | 5.6 |
| Men..................... | 2,714 | 4,479 | 5,112 | 6,637 | 1,765 | 633 | 1,525 | 5.1 | 1.3 | 2.6 | 1.5 | 2.2 | 2.2 | 2.6 |
| Women............... | 3,011 | 4,890 | 5,639 | 7,746 | 1,879 | 749 | 2,107 | 5.0 | 1.4 | 3.2 | 1.6 | 2.4 | 2.4 | 3.0 |


| Table 2. Con <br> [Numbers in thous | nued- <br> ds] | vilian | oninsti | utional | popula | n, by | ge, sex, | ace, a | d eth | $\text { ity, } 19$ | $8,19$ | 2008, | d pr | cted |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Group | Level |  |  |  | Change |  |  | Annual growth rate (percent) |  |  | Percent distribution |  |  |  |
|  | 1988 | 1998 | 2008 | 2018 | $\begin{gathered} 1988- \\ 98 \end{gathered}$ | $\begin{aligned} & 1998- \\ & 2008 \end{aligned}$ | $\begin{gathered} 2008- \\ 18 \end{gathered}$ | $\begin{gathered} 1988- \\ 98 \end{gathered}$ | $\begin{aligned} & 1998- \\ & 2008 \end{aligned}$ | $\begin{gathered} 2008- \\ 18 \end{gathered}$ | 1988 | 1998 | 2008 | 2018 |
| All other groups ${ }^{1}$... Men. $\qquad$ Women. $\qquad$ | - | - | $\begin{aligned} & 5,654 \\ & 2,760 \\ & 2,894 \end{aligned}$ | $\begin{aligned} & 7,253 \\ & 3,534 \\ & 3,719 \end{aligned}$ | - | - | $\begin{array}{r} 1,599 \\ 774 \\ 825 \end{array}$ | - | - | $\begin{aligned} & 2.5 \\ & 2.5 \\ & 2.5 \end{aligned}$ | - | - | $\begin{aligned} & 2.4 \\ & 1.2 \\ & 1.2 \end{aligned}$ | $\begin{aligned} & 2.8 \\ & 1.4 \\ & 1.4 \end{aligned}$ |
| Hispanic origin, 16 years and older. $\qquad$ | 13,325 | 21,070 | 32,141 | 43,525 | 7,745 | 11,071 | 11,384 | 4.7 | 4.3 | 3.1 | 7.2 | 10.3 | 13.7 | 16.8 |
| Men..................... | 6,604 | 10,734 | 16,524 | 21,803 | 4,130 | 5,790 | 5,279 | 5.0 | 4.4 | 2.8 | 3.6 | 5.2 | 7.1 | 8.4 |
| Women................ | 6,721 | 10,335 | 15,616 | 21,722 | 3,614 | 5,281 | 6,106 | 4.4 | 4.2 | 3.4 | 3.6 | 5.0 | 6.7 | 8.4 |
| Other than Hispanic origin, 16 years and older.. $\qquad$ | 171,288 | 184,150 | 201,647 | 215,381 | 12,862 | 17,497 | 13,734 | . 7 | . 9 | . 7 | 92.8 | 89.7 | 86.3 | 83.2 |
| Men..................... | 81,253 | 88,024 | 96,589 | 103,892 | 6,771 | 8,565 | 7,303 | . 8 | . 9 | . 7 | 44.0 | 42.9 | 41.3 | 40.1 |
| Women............... | 90,035 | 96,127 | 105,059 | 111,488 | 6,092 | 8,932 | 6,429 | . 7 | . 9 | . 6 | 48.8 | 46.8 | 44.9 | 43.1 |
| White non- <br> Hispanic, 16 years and older. $\qquad$ | 145,346 | 151,406 | 159,674 | 165,015 | 6,060 | 8,268 | 5,341 | . 4 | . 5 | . 3 | 78.7 | 73.8 | 68.3 | 63.7 |
| Men..................... | 69,521 | 73,100 | 77,317 | 80,713 | 3,579 | 4,217 | 3,396 | . 5 | . 6 | . 4 | 37.7 | 35.6 | 33.1 | 31.2 |
| Women............... | 75,825 | 78,305 | 82,357 | 84,302 | 2,480 | 4,052 | 1,945 | . 3 | . 5 | . 2 | 41.1 | 38.2 | 35.2 | 32.6 |
| Age of baby boomers $\qquad$ | 24 to 42 | 34 to 52 | 44 to 62 | 54 to 72 | - | - | - | - | - | - | - | - | - | - |

' The "all other groups" category includes (1) those classified as being of multiple racial origin and (2) the race categories of (2a) American Indian
and Alaska Native and (2b) Native Hawaiian and Other Pacific Islanders. Dash indicates no data collected for category.
rate of the older workers, influencing them to stay in the labor market for longer intervals. On the one hand, de-fined-benefit plans encourage retirement at an early age, before the plan's standard retirement age. On the other hand, defined-contribution pension plans are based on an individual's contribution, the employer's contribution, and the investment returns on those contributions. The structure of defined-contribution plans is such that the plans are age neutral and are indifferent to retirement age. However, under defined-contribution plans, the benefits increase with additional years of work. In 2008, more workers were covered by defined-contribution plans than defined-benefit plans.

In addition, the Age Discrimination in Employment Act was amended in 1986 to eliminate any mandatory retirement age. Also, today's older individuals are more educated than their counterparts in the past. In general, those with more years of higher education have higher participation rates in the labor market than those who are less educated. Finally, the current financial crisis has
hit the retirement savings of all workers, including older workers, so these older workers may decide to stay in the labor market longer in order to replenish their retirement assets as markets recover. As a result, the labor force participation rate of older workers is expected to increase in the future.

Factors in the decreasing participation rate. After 60 years of steady increase, the overall labor force participation rate reached an all-time high of 67.1 percent between 1997 and 2000. Since 2001, however, the overall participation rate has been on a gradual decline, reaching 66.0 percent in 2008, the latest year for which CPS data are available. A number of factors are responsible for this recent downward pressure on the overall labor force participation rate:

- As the baby-boom generation has aged and moved from the prime age group to the older age group, the overall labor force participation rate has declined and will continue to do so in the future. In 2008,

Table 3. Civilian labor force participation rates by age, sex, race, and ethnicity, 1988, 1998, 2008, and projected 2018
[In percent]

| Group | Participation rate |  |  |  | Percentage-point change |  |  | Annual growth rate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1988 | 1998 | 2008 | 2018 | $\begin{gathered} 1988- \\ 98 \end{gathered}$ | $\begin{gathered} 1998- \\ 2008 \end{gathered}$ | $\begin{gathered} 2008- \\ 18 \end{gathered}$ | $\begin{gathered} 1988- \\ 98 \end{gathered}$ | $\begin{gathered} 1998- \\ 2008 \end{gathered}$ | $\begin{gathered} 2008 \\ 18 \end{gathered}$ |
| Total, 16 years and older ...................... | 65.9 | 67.1 | 66.0 | 64.5 | 1.2 | -1.1 | -1.5 | 0.2 | -0.2 | -0.2 |
| 16 to 24............................................... | 68.4 | 65.9 | 58.8 | 54.5 | -2.5 | -7.1 | -4.3 | -. 4 | -1.1 | -. 8 |
| 16 to 19 ......................................... | 55.3 | 52.8 | 40.2 | 33.8 | -2.5 | -12.6 | -6.4 | -. 5 | -2.7 | -1.7 |
| 20 to 24 .......................................... | 78.7 | 77.5 | 74.4 | 71.3 | -1.2 | -3.1 | -3.1 | -. 2 | -. 4 | -. 4 |
| 25 to 54.............................................. | 82.9 | 84.1 | 83.1 | 82.5 | 1.2 | -1.0 | -. 6 | . 1 | -. 1 | -. 1 |
| 25 to 34 ............................................ | 83.3 | 84.6 | 83.3 | 82.4 | 1.3 | -1.3 | -. 9 | . 2 | -. 2 | -. 1 |
| 35 to 44 ............................................ | 84.6 | 84.7 | 84.1 | 83.2 | . 1 | -. 6 | -. 9 | . 0 | -. 1 | -. 1 |
| 45 to 54 ............................................ | 79.6 | 82.5 | 81.9 | 81.7 | 2.9 | -. 6 | -. 2 | . 4 | -. 1 | . 0 |
| 55 and older....................................... | 30.0 | 31.3 | 39.4 | 43.5 | 1.3 | 8.1 | 4.1 | . 4 | 2.3 | 1.0 |
| 55 to 64 ............................................ | 54.6 | 59.3 | 64.5 | 68.1 | 4.7 | 5.2 | 3.6 | . 8 | . 8 | . 5 |
| 55 to 59 .......................................... | 65.7 | 69.5 | 73.1 | 75.9 | 3.8 | 3.6 | 2.8 | . 6 | . 5 | . 4 |
| 60 to 64 .......................................... | 43.4 | 46.8 | 54.1 | 59.7 | 3.4 | 7.3 | 5.6 | . 8 | 1.5 | 1.0 |
| 60 to 61 ........................................ | 53.6 | 56.5 | 62.0 | 66.8 | 2.9 | 5.5 | 4.8 | . 5 | . 9 | . 7 |
| 62 to 64 ........................................ | 36.3 | 39.9 | 47.2 | 54.7 | 3.6 | 7.3 | 7.5 | 1.0 | 1.7 | 1.5 |
| 65 and older ...................................... | 11.5 | 11.9 | 16.8 | 22.4 | . 4 | 4.9 | 5.6 | . 3 | 3.5 | 2.9 |
| 65 to 74 .......................................... | 16.1 | 17.7 | 25.1 | 30.5 | 1.6 | 7.4 | 5.4 | 1.0 | 3.6 | 2.0 |
| 65 to 69 ........................................ | 20.1 | 22.5 | 30.7 | 36.9 | 2.4 | 8.2 | 6.2 | 1.1 | 3.2 | 1.9 |
| 70 to 74 ........................................ | 10.9 | 12.5 | 17.8 | 22.0 | 1.6 | 5.3 | 4.2 | 1.4 | 3.6 | 2.1 |
| 75 and older ................................... | 4.2 | 4.7 | 7.3 | 10.3 | . 5 | 2.6 | 3.0 | 1.1 | 4.5 | 3.5 |
| 75 to 79 ........................................ | 6.1 | 6.6 | 10.3 | 14.3 | . 5 | 3.7 | 4.0 | . 8 | 4.6 | 3.3 |
| Men, 16 years and older ....................... | 76.2 | 74.9 | 73.0 | 70.6 | -1.3 | -1.9 | -2.4 | -. 2 | -. 3 | -. 3 |
| 16 to 24............................................... | 72.4 | 68.4 | 61.0 | 56.3 | -4.0 | -7.4 | -4.7 | -. 6 | -1.1 | -. 8 |
| 16 to 19 ............................................ | 56.9 | 53.3 | 40.1 | 33.2 | -3.6 | -13.2 | -6.9 | -. 7 | -2.8 | -1.9 |
| 20 to 24 ............................................ | 85.0 | 82.0 | 78.7 | 75.2 | -3.0 | -3.3 | -3.5 | -. 4 | -. 4 | -. 5 |
| 25 to 54.............................................. | 93.6 | 91.8 | 90.5 | 89.9 | -1.8 | -1.3 | -. 6 | -. 2 | -. 1 | -. 1 |
| 25 to 34 ............................................ | 94.3 | 93.2 | 91.5 | 90.6 | -1.1 | -1.7 | -. 9 | -. 1 | -. 2 | -. 1 |
| 35 to 44 ............................................. | 94.5 | 92.6 | 92.2 | 92.0 | -1.9 | -. 4 | -. 2 | -. 2 | . 0 | . 0 |
| 45 to 54 ............................................. | 90.9 | 89.2 | 88.0 | 87.1 | -1.7 | -1.2 | -. 9 | -. 2 | -. 1 | -. 1 |
| 55 and older....................................... | 39.9 | 39.1 | 46.0 | 48.0 | -. 8 | 6.9 | 2.0 | -. 2 | 1.6 | . 4 |
| 55 to 64 ............................................ | 67.0 | 68.1 | 70.4 | 71.2 | 1.1 | 2.3 | . 8 | . 2 | . 3 | . 1 |
| 55 to 59 .......................................... | 79.3 | 78.4 | 78.8 | 78.6 | -. 9 | . 4 | -. 2 | -. 1 | . 1 | . 0 |
| 60 to 64 .......................................... | 54.4 | 55.4 | 59.9 | 63.1 | 1.0 | 4.5 | 3.2 | . 2 | . 8 | . 5 |
| 60 to 61 ........................................ | 67.1 | 67.0 | 67.9 | 68.9 | -. 1 | . 9 | 1.0 | . 0 | . 1 | . 1 |
| 62 to 64 ........................................ | 45.4 | 47.3 | 53.0 | 58.8 | 1.9 | 5.7 | 5.8 | . 4 | 1.1 | 1.0 |
| 65 and older ..................................... | 16.5 | 16.5 | 21.5 | 26.7 | . 0 | 5.0 | 5.2 | . 0 | 2.7 | 2.2 |
| 65 to 74 .......................................... | 21.3 | 22.6 | 29.7 | 34.4 | 1.3 | 7.1 | 4.7 | . 6 | 2.8 | 1.5 |
| 65 to 69 ....................................... | 25.8 | 28.0 | 35.6 | 40.3 | 2.2 | 7.6 | 4.7 | . 8 | 2.4 | 1.2 |
| 70 to 74 ....................................... | 15.2 | 16.5 | 21.9 | 26.4 | 1.3 | 5.4 | 4.5 | . 8 | 2.9 | 1.9 |
| 75 and older ................................. | 7.4 | 7.5 | 10.4 | 13.9 | . 1 | 2.9 | 3.5 | . 1 | 3.3 | 2.9 |
| 75 to 79 ........................................ | 9.6 | 9.9 | 13.5 | 17.6 | . 3 | 3.6 | 4.1 | . 3 | 3.2 | 2.7 |
| Women, 16 years and older ................. | 56.6 | 59.8 | 59.5 | 58.7 | 3.2 | -. 3 | -. 8 | . 6 | -. 1 | -. 1 |
| 16 to 24............................................... | 64.5 | 63.3 | 56.5 | 52.7 | -1.2 | -6.8 | -3.8 | -. 2 | -1.1 | -. 7 |
| 16 to 19 ............................................ | 53.6 | 52.3 | 40.2 | 34.4 | -1.3 | -12.1 | -5.8 | -. 2 | -2.6 | -1.5 |
| 20 to 24 ............................................. | 72.7 | 73.0 | 70.0 | 67.3 | . 3 | -3.0 | -2.7 | . 0 | -. 4 | -. 4 |
| 25 to 54.............................................. | 72.7 | 76.5 | 75.8 | 75.1 | 3.8 | -. 7 | -. 7 | . 5 | -. 1 | -. 1 |
| 25 to 34 ............................................. | 72.7 | 76.3 | 75.2 | 74.2 | 3.6 | -1.1 | -1.0 | . 5 | -. 1 | -. 1 |
| 35 to 44 ............................................. | 75.2 | 77.1 | 76.1 | 74.6 | 1.9 | -1.0 | -1.5 | . 2 | -. 1 | -. 2 |
| 45 to 54 ............................................ | 69.0 | 76.2 | 76.1 | 76.6 | 7.2 | -. 1 | . 5 | 1.0 | . 0 | . 1 |
| 55 and older....................................... | 22.3 | 25.0 | 33.9 | 39.5 | 2.7 | 8.9 | 5.6 | 1.1 | 3.1 | 1.5 |
| 55 to 64 ............................................. | 43.5 | 51.2 | 59.1 | 65.3 | 7.7 | 7.9 | 6.2 | 1.6 | 1.4 | 1.0 |
| 55 to 59 .......................................... | 53.3 | 61.3 | 67.7 | 73.3 | 8.0 | 6.4 | 5.6 | 1.4 | 1.0 | . 8 |
| 60 to 64 .......................................... | 33.8 | 39.1 | 48.7 | 56.6 | 5.3 | 9.6 | 7.9 | 1.5 | 2.2 | 1.5 |
| 60 to 61 ........................................ | 41.7 | 47.3 | 56.5 | 64.8 | 5.6 | 9.2 | 8.3 | 1.3 | 1.8 | 1.4 |
| 62 to 64 ....................................... | 28.5 | 33.3 | 42.0 | 50.9 | 4.8 | 8.7 | 8.9 | 1.6 | 2.3 | 1.9 |
| 65 and older ................................... | 7.9 | 8.6 | 13.3 | 18.9 | . 7 | 4.7 | 5.6 | . 9 | 4.5 | 3.6 |
| 65 to 74 ............................................. | 11.9 | 13.7 | 21.1 | 27.1 | 1.8 | 7.4 | 6.0 | 1.4 | 4.4 | 2.5 |
| 65 to 69 ........................................ | 15.4 | 17.8 | 26.4 | 33.9 | 2.4 | 8.6 | 7.5 | 1.5 | 4.0 | 2.5 |
| 70 to 74 ........................................ | 7.5 | 9.3 | 14.3 | 18.3 | 1.8 | 5.0 | 4.0 | 2.2 | 4.4 | 2.5 |
| 75 and older .................................. | 2.4 | 2.9 | 5.2 | 7.7 | . 5 | 2.3 | 2.5 | 1.9 | 6.0 | 4.0 |
| 75 to 79 ........................................ | 3.8 | 4.2 | 7.9 | 11.7 | . 4 | 3.7 | 3.8 | 1.0 | 6.5 | 4.0 |


| Continued—Civilian labor force participation rates, by age, sex, race, and ethnicity, 1988, 1998, 2008, and projected 2018 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [In percent] |  |  |  |  |  |  |  |  |  |  |
| Group | Participation rate |  |  |  | Percentage-point change |  |  | Annual growth rate |  |  |
|  | 1988 | 1998 | 2008 | 2018 | $\begin{gathered} 1988- \\ 98 \end{gathered}$ | $\begin{aligned} & 1998- \\ & 2008 \end{aligned}$ | $\begin{gathered} 2008- \\ 18 \end{gathered}$ | $\begin{gathered} 1988- \\ 98 \end{gathered}$ | $\begin{gathered} 1998- \\ 2008 \end{gathered}$ | $\begin{gathered} 2008- \\ 18 \end{gathered}$ |
| Race: |  |  |  |  |  |  |  |  |  |  |
| White ............................................. | 66.2 | 67.3 | 66.3 | 64.5 | 1.1 | -1.0 | -1.8 | 0.2 | -0.1 | -0.3 |
| Men.............................................. | 76.9 | 75.6 | 73.7 | 71.1 | -1.3 | -1.9 | -2.6 | -. 2 | -. 3 | -. 4 |
| Women.......................................... | 56.4 | 59.4 | 59.2 | 58.2 | 3.0 | -. 2 | -1.0 | . 5 | . 0 | -. 2 |
| Black ..................................................... | 63.8 | 65.6 | 63.7 | 63.3 | 1.8 | -1.9 | -. 4 | . 3 | -. 3 | -. 1 |
| Men.............................................. | 71.0 | 69.0 | 66.7 | 65.7 | -2.0 | -2.3 | -1.0 | -. 3 | -. 3 | -. 1 |
| Women......................................... | 58.0 | 62.8 | 61.3 | 61.2 | 4.8 | -1.5 | -. 1 | . 8 | -. 2 | . 0 |
| Asian................................................... | 65.0 | 67.0 | 67.0 | 65.0 | 2.0 | . 0 | -2.0 | . 3 | . 0 | -. 3 |
| Men.............................................. | 74.4 | 75.5 | 75.3 | 73.8 | 1.1 | -. 2 | -1.5 | . 1 | . 0 | -. 2 |
| Women.......................................... | 56.5 | 59.2 | 59.4 | 57.4 | 2.7 | . 2 | -2.0 | . 5 | . 0 | -. 3 |
|  | - | - | 65.6 | 66.6 | - | - | 1.0 | - | - | . 2 |
| Men............................................... | - | - | 71.4 | 70.1 | - | - | -1.3 | - | - | -. 2 |
| Women........................................... | - | - | 60.1 | 63.3 | - | - | 3.2 | - | - | . 5 |
| Ethnicity: |  |  |  |  |  |  |  |  |  |  |
| Hispanic origin................................ | 67.4 | 68.0 | 68.5 | 67.3 | . 6 | . 5 | -1.2 | . 1 | . 1 | -. 2 |
| Men................................................. | 81.9 | 79.8 | 80.2 | 78.2 | -2.1 | . 4 | -2.0 | -. 3 | . 1 | -. 3 |
| Women......................................... | 53.2 | 55.6 | 56.2 | 56.4 | 2.4 | . 6 | . 2 | . 4 | . 1 | . 0 |
| Other than Hispanic origin................. | 65.8 | 67.0 | 65.6 | 63.9 | 1.2 | -1.4 | -1.7 | . 2 | -. 2 | -. 3 |
| Men................................................ | 75.7 | 74.3 | 71.7 | 68.9 | -1.4 | -2.6 | -2.8 | -. 2 | -. 4 | -. 4 |
| Women......................................... | 56.8 | 60.3 | 60.0 | 59.2 | 3.5 | -. 3 | -. 8 | . 6 | -. 1 | -. 1 |
| White non-Hispanic .......................... | 66.1 | 67.2 | 65.9 | 64.7 | 1.1 | -1.3 | -1.2 | . 2 | -. 2 | -. 2 |
| Men.............................................. | 76.4 | 75.0 | 72.4 | 70.7 | -1.4 | -2.6 | -1.7 | -. 2 | -. 4 | -. 2 |
| Women............................................ | 56.7 | 59.9 | 59.8 | 59.0 | 3.2 | -. 1 | -. 8 | . 6 | . 0 | -. 1 |
| ${ }^{1}$ The "all other groups" category includes (1) those classified as being and Alaska Native or (2b) Native Hawaiian and Other Pacific Islanders. Dash of multiple racial origin and (2) the race categories of (2a) American Indian indicates no data collected for category. |  |  |  |  |  |  |  |  |  |  |

the baby-boom cohort was 44 to 62 years of age. In 2018, they will be 54 to 72 years old. In 2008, the participation rate of 25 - to 54 -year-olds was 83.1 percent, whereas the participation rate of those 55 years and older was 39.4 percent, less than half that for the prime age group. The movement of roughly 77 million baby boomers from participation rates above 80 percent to the significantly lower (less than 40 percent) participation rates of older age groups will significantly dampen the overall participation rate.

- The labor force participation of women seems to have peaked in 1999 and has been decreasing in the past 2 years. It is not expected to rebound to higher rates in the near future.
- The labor force participation rate of men has been steadily declining since its peak at the end of the 1940s. The increased availability of disability and So-
cial Security benefits has been one factor. In addition, the structure of benefits and defined-benefit pension plans has been responsible for the early retirement of men in the past two decades. The downward trend of the men's participation rate is projected to continue in the future.
- The labor force participation rate of youths decreases in recessions and has declined considerably since the 2001 recession. With increasing school enrollments, more young people than ever are continuing their education in hopes of pursuing better paying careers and becoming more marketable. ${ }^{10}$ As a result, the participation rate of youths is not projected to increase in the coming years.

In contrast to the factors producing decreasing trends of participation in the aforementioned groups, a number of factors have been responsible for an upward pressure on the overall labor force participation rate. However,
the strength of two factors has not been able to keep the overall rate from falling even further:

- The labor force participation rate of the 55 -years-and-older age group has increased significantly since the mid-1990s. (See chart 3.) The participation rate of this group were relatively flat during the 1970s and 1980s. By 1988, the group's rate was 30.0 percent. In 1998, the rate increased again to 31.3 percent. A decade later, in 2008, the rate had risen significantly, to 39.4 percent. All the subgroups of the older age group, including 65- to 74-year-olds and those older than 75, experienced significant growth in their participation rates. (See chart 4.) In addition, chart 5 highlights the monthly participation rates of the 55-years-and-older group from January 2007 to August 2009, the last month for which data were available at the time this article was written. ${ }^{11}$
- The labor force participation rate of Hispanics and Asians has been increasing steadily in the past several decades. Compared with other groups, Hispanic and Asian men have very strong attachments to the labor market.

Labor force participation peaks between the ages of 25 and 54. In 2008, the participation rate of this age group was 83.1 percent. The BLS projects that this group's participation rate in 2018 will be 82.5 percent, a decline of 0.6 percentage point. The participation rate of the 55 -andolder age group in 2008 was 39.4 percent, less than half of the activity rate of the prime age group. In 2018, the baby boomers will be between 54 and 72 , and they will be past their strongest years of attachment to the labor market. Thus, the main factor in reducing the overall labor force participation rate in the next decade will be the aging of the baby-boom generation and its movement into the 55-and-older age group.

Over the next 10 years, decreases in participation rates are projected to be mainly in the young and prime age groups, together comprising those from 16 to 54 years of age. However, all the subgroups in the 55 -and-older age group are projected to increase their participation rates. The strong growth of the older group's participation rates is a continuation of the trends of the last two decades. The BLS projects that the labor force participation rate of the 55 -and-older age group will continue its strong growth and reach 43.5 percent by 2018. In particular, two subgroups of the older group-those 62 to 64 years and those 65 to 74 years-are projected to show strong growth in
their participation rates. Chart 6 shows the labor force participation rates of youths, the prime age group, and older people in 1988-2008 and projected 2018 figures. Note that the increase in the labor force participation rates of older workers will not be able to compensate for the decreasing participation rates of the other age groups and, as a result, the overall labor force participation rate is projected to decrease by 1.5 percentage points between 2008 and 2018, dropping to 64.5 percent.

Demographic Patterns. Labor force participation rates follow different, but consistent, patterns over time across specific age groups, between the sexes, and among race and ethnic groups.

Age. Labor force participation is low for youths because some are still enrolled in school. Labor force participation increases during the prime working years (ages 25 to 54) and then declines sharply after age 55 , as workers retire. For example, the participation rate was 58.8 percent in 2008 for persons aged 16 to 24 years, 83.1 percent for the prime age group, and 39.4 percent for the 55 -and-older age groups.

Sex. Historically, the men's participation rate has exhibited a downward trend since at least the 1950s, while the women's rate has been steadily increasing. The long-term declines in the labor force participation rates of men in all age groups are expected to continue for a variety of reasons. With an increase in school attendance at all levels, especially the secondary school and college levels, labor force participation rates of the younger age groups-for both men and women-have decreased drastically. The increased availability of pensions and Social Security disability benefits beginning in the 1980s has resulted in a decrease in the activity rates of older men and encouraged their early retirement from the workforce. The slower-than-average labor market recovery since 2000 and the serious economic downturn and financial crisis of the most recent recession has contributed to a lower participation rate of men in the labor market, and this outcome is expected to continue to affect the labor market in the foreseeable future.

In addition, men are employed predominantly in the construction and manufacturing industries, both of which have been hit hard by the current economic slowdown. In 2008, men represented nearly 93 percent of employed workers in the construction industry and 72 percent in the manufacturing industries ${ }^{12}$. In contrast, women are


Chart 4. Labor force participation rates of older workers, 1978, 1988, 2008, and projected 2018


NOTE: Shaded area represents projection.

Chart 5. Monthly labor force participation rate, 55 years and older, January 2007 to August 2009


Chart 6. Labor force participation rates by age, 1988, 1998, 2008, and projected 2018

employed predominantly in the service sector, which has done relatively better during this recession. Moreover, women are more likely to work part time and without any benefits. During recessions, the probability of employees losing their jobs is less for workers in part-time jobs that do not offer benefits than for workers in full-time jobs with full benefits. Women, therefore, have had the ability to hold on to their part-time jobs.

Historically, men's participation rates, both in the aggregate and for the various age groups, have been higher than women's participation rates. This trend, however, has changed since 2006, when the labor force participation rates of 16 -to-19-year-old women caught up with their male counterparts, at 43.7 percent. The participation rate for both teen groups will decline by 2018, but the women's participation will continue to be higher than that of men. The difference in rates by sex holds across race and Hispanic origin groups. (See table 3.)

1. Men. The decrease in the labor force participation rate of men is expected to continue over the next decade. The overall labor force participation rate of men is projected to drop by another 2.4 percentage points between 2008 and 2018 and is expected to reach 70.6 percent in 2018. Men in the 16-to-24 age group are projected to decrease their participation in the labor market from a rate of 61 percent in 2008 to 56.3 percent in 2018. The 25 -to- 54 -year age cohort of men also is projected to decrease its participation rate to 89.9 percent by 2018, a decline of 0.6 percentage point from 2008. In contrast, the 55 -and-older age group of men is projected to increase its participation rate by 2.0 percentage points from 46 percent in 2008 to 48 percent in 2018. Those in the 60 -to-64-years age group also are anticipated to increase their participation rate-by 3.2 percentage pointsand are expected to reach 63.1 percent in 2018. Even the older age group of 65- to 74-year-olds is expected to show an increase of 4.7 percentage points in its participation, reaching 34.4 percent in 2018.
2. Women. The labor force participation rate of women, which had displayed a pattern of steady increases in the past and peaked in 1999, is projected to decrease in the future. From its 2008 value of 59.5 percent the participation rate of women is projected to decline to 58.7 percent in 2018. Young women aged 16 to 24 years are
expected to decrease their participation in the labor force from a rate of 56.5 percent in 2008 to 52.7 percent in 2018. Similarly, 25- to 54 -yearold women are projected to decrease their participation rate to 75.1 percent in 2018, a loss of 0.7 percentage point from the 2008 rate. In contrast to the younger age groups, the 55 -years-and-older age group of women is projected to have a significant increase of 5.6 percentage points, reaching 39.5 percent in 2018. Likewise, those in the 60 -to-64-years group are anticipated to experience a significant increase- 7.9 percentage points-in participation, attaining a rate of 56.6 percent in 2018. Even the older age group of 65- to 74-year-olds are expected to show an increase of 6.0 percent in their participation rates, reaching 27.1 percent in 2018.

Race and ethnic origin. Although the labor force participation rates of the various racial and ethnic categories are different, the differences usually are not as great as those observed for the different age and sex groups. Both participation rate changes and population growth for the various racial and ethnic categories result in substantial differences in their future labor force growth.

The data shown in the lower part of table 3 are duplicated in the following box, which shows the variation in, and ranking of, the various labor force participation rates by race in 2008 (the groups are ranked from 1, which signifies the highest labor force participation rates in 2008, to 4 , the lowest).

| Total | Men | Women | Rank |
| :---: | :---: | :---: | :---: |
| Hispanic | Hispanic | Black | 1 |
| Asian | Asian | White non- <br> Hispanic | 2 |
| White non- <br> Hispanic | White non- <br> Hispanic | Asian | 3 |
| Black | Black | Hispanic | 4 |

As the table indicates, the rankings of labor force participation rates by race and by sex are different. The overall Hispanic labor force participation rate and the rate for Hispanic men are the highest relative to men's rates in other racial and ethnic categories. Hispanic women, by contrast, have the lowest participation of all women in the workforce. The Hispanic population is younger relative to other race and ethnic groups and has a greater proportion
of workers at the ages with higher participation rates. The overall Asian participation rate and the rate of Asian men ranked second among the rates of all the race and ethnic groups. Asian women rank third among all women. Black women have the highest labor force participation rate among all race and ethnic groups of women, while both the overall black participation rate and the rate of black men were the lowest among all race and ethnic groups. The overall white non-Hispanic participation rate and the rate of non-Hispanic men were third among the race and ethnic groups, while white non-Hispanic women had the second-highest ranking among women. Interestingly, as a general pattern, the women's rankings were the reverse of both the men's rankings and the overall rankings.

These preceding examples, based on 2008 data, indicate that age, sex, and race are important in describing the complexities inherent in the future scenario of labor force participation. Although the overall labor force participation rates for men and women are projected to change during the next 10 years, the changes are not expected to alter the current ranking of the different racial and ethnic categories.

Significantly higher participation in the labor force by Hispanic men and Asians are expected to increase their shares of the labor force over the next 10 years, continuing the trend of even more racial and ethnic diversity in the labor force.

## Labor force growth

Labor force growth has always been a significant factor in the growth of the U.S. economy. Over the 2008-18 period, the U.S. population is expected to grow at a slower rate than it did in the previous decade, and the labor force participation rate is projected to decrease from its 2008 value. Both factors indicate a slowdown of labor force growth during the next decade. The annual labor force growth over the 1988-98 period was 1.2 percent. The next decade saw labor force growth decline even further, to 1.1 percent. It is projected that, over the 2008-18 decade, the annual growth rate of the labor force will be a much lower 0.8 percent. The labor force grew by more than 16 million during each of the 1988-98 and 1998-2008 periods; it is expected to grow by a lesser 12.6 million over the next 10 years. (See table 4.)

Age. The rapid growth of the labor force during the 198898 period was brought about largely by the baby boomers' entrance into the prime working-age years. Another significant factor was the earlier mentioned increase in the
labor force participation of women during that timeframe.
The youth labor force, which was about 22 million in 2008 , is projected to be around 21 million in 2018, a decrease of more than 900,000 workers. The prime-age labor force is projected to increase its numbers by about 1.5 million over the 2008-18 timeframe. In this age group, the subgroup of workers aged 25 to 34 years is expected to increase by 3.5 million. Because 35 - to 44 -year-olds and 44- to 54-year-olds, members of the baby bust generation, are each projected to have a reduction in their labor force numbers, the overall prime age group will grow by just 0.1 percent annually.

The older workers' labor force, which has experienced the fastest rates of population growth and the greatest increases in labor force participation, is expected to grow by nearly 12 million in the next decade. Within that group, 55 - to 64-year-olds are expected to add more than 7 million to their 2008 numbers, and 65- to 74 -year-olds are projected to increase their numbers by more than 4 million. The labor force cohort of those 75 years and older is projected to grow by nearly 800,000 . As a result of the rising shares of the older age groups in the labor force, the 55 -years-and-older labor force is anticipated to increase its share to nearly 24 percent of the total labor force. Similarly, the share held by 55 - to 64 -year-olds is projected to increase to about 17 percent, while that of 65 - to 74 -year-olds is expected to grow to 5.4 percent. Even the 75 -years-and-older labor force is projected to increase its share to 1.2 percent of the total labor force.

Sex. The men's labor force grew by 10.5 percentage points in the 1988-98 timeframe. The growth rate then increased to 11.6 percentage points between 1998 and 2008. As women's labor force participation rates rose significantly during the 1988-98 period, the women's labor force increased by more than 16 percentage points. The growth rate was still an impressive 12.6 percentage points during the 1998-2008 period.

Labor force growth for men was less than that for women in the past two decades. Following the trends of the past 20 years, the labor force growth rates of both men and women are projected to slow, with the men's labor force projected to grow more slowly than the women's. The slowing labor force growth rates result from more gradual population growth and decreasing participation rates for both groups. The men's labor force is projected to have a 0.7 -percent annual growth rate, while the women's is expected to grow by 0.9 percent. The women's share of the labor force is projected to increase from 46.5 percent to 46.9 percent, and the men's share is projected to de-

Table 4. Civilian labor force, by age, sex, race, and ethnicity, 1988, 1998, 2008, and projected 2018
[Numbers in thousands]

|  | Level |  |  |  | Change |  |  | Percent change |  |  | Percent distribution |  |  |  | Annual growth rate (percent) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1988 | 1998 | 2008 | 2018 | $\begin{gathered} 1988- \\ 98 \end{gathered}$ | $\begin{array}{\|c} 1998- \\ 2008 \end{array}$ | $\begin{gathered} 2008- \\ 18 \end{gathered}$ | $\begin{gathered} 1988- \\ 98 \end{gathered}$ | $\begin{array}{\|c} 1998- \\ 2008 \end{array}$ | $\begin{array}{\|c} 2008- \\ 18 \end{array}$ | 1988 | 1998 | 2008 | 2018 | $\begin{array}{\|c} 1988- \\ 98 \end{array}$ | $\begin{array}{\|l} 1998- \\ 2008 \end{array}$ | $\begin{array}{\|c\|} \hline 2008-18 \\ \hline \end{array}$ |
| Total, 16 years and older.... | 121,669 | 137,673 | 154,287 | 166,911 | 16,004 | 16,614 | 12,624 | 13.2 | 12.1 | 8.2 | 100.0 | 100.0 | 100.0 | 100.0 | 1.2 | 1.1 | 0.8 |
| 16 to $24 . . . . . .$. | 22,536 | 21,894 | 22,032 | 21,131 | -642 | 138 | -901 | -2.8 | . 6 | -4.1 | 18.5 | 15.9 | 14.3 | 12.7 | -. 3 | . 1 | -. 4 |
| 16 to 19 .... | 8,031 | 8,256 | 6,858 | 5,868 | 225 | -1,398 | -990 | 2.8 | -16.9 | -14.4 | 6.6 | 6.0 | 4.4 | 3.5 | . 3 | -1.8 | -1.5 |
| 20 to 24 .... | 14,505 | 13,638 | 15,174 | 15,263 | -867 | 1,536 | 89 | -6.0 | 11.3 | . 6 | 11.9 | 9.9 | 9.8 | 9.1 | -. 6 | 1.1 | . 1 |
| 25 to 54....... | 84,041 | 98,718 | 104,396 | 105,944 | 14,677 | 5,678 | 1,548 | 17.5 | 5.8 | 1.5 | 69.1 | 71.7 | 67.7 | 63.5 | 1.6 | . 6 | . 1 |
| 25 to $34 . . .$. | 35,503 | 32,813 | 33,332 | 36,814 | -2,690 | 519 | 3,482 | -7.6 | 1.6 | 10.4 | 29.2 | 23.8 | 21.6 | 22.1 | -. 8 | . 2 | 1.0 |
| 35 to 44 .... | 29,435 | 37,536 | 35,061 | 34,787 | 8,101 | -2,475 | -274 | 27.5 | -6.6 | -. 8 | 24.2 | 27.3 | 22.7 | 20.8 | 2.5 | -. 7 | -. 1 |
| 45 to $54 \ldots$. | 19,104 | 28,368 | 36,003 | 34,343 | 9,264 | 7,635 | -1,660 | 48.5 | 26.9 | -4.6 | 15.7 | 20.6 | 23.3 | 20.6 | 4.0 | 2.4 | -. 5 |
| 55 and <br> older.... | 15,092 | 17,062 | 27,858 | 39,836 | 1,970 | 10,796 | 11,978 | 13.1 | 63.3 | 43.0 | 12.4 | 12.4 | 18.1 | 23.9 | 1.2 | 5.0 | 3.6 |
| 55 to $64 \ldots$. | 11,808 | 13,215 | 21,615 | 28,754 | 1,407 | 8,400 | 7,139 | 11.9 | 63.6 | 33.0 | 9.7 | 9.6 | 14.0 | 17.2 | 1.1 | 5.0 | 2.9 |
| 65 to $74 \ldots$.... 75 and | 2,814 | 3,179 | 4,985 | 9,045 | 365 | 1,806 | 4,060 | 13.0 | 56.8 | 81.4 | 2.3 | 2.3 | 3.2 | 5.4 | 1.2 | 4.6 | 6.1 |
| older........ | 471 | 668 | 1,258 | 2,037 | 197 | 590 | 779 | 41.8 | 88.3 | 61.9 | . 4 | . 5 | . 8 | 1.2 | 3.6 | 6.5 | 4.9 |
| Men, 16 years and older .. | 66,927 | 73,959 | 82,520 | 88,682 | 7,032 | 8,561 | 6,162 | 10.5 | 11.6 | 7.5 | 55.0 | 53.7 | 53.5 | 53.1 | 1.0 | 1.1 | . 7 |
| 16 to 24 .... | 11,752 | 11,464 | 11,538 | 10,987 | -288 | 74 | -551 | -2.5 | . 6 | -4.8 | 9.7 | 8.3 | 7.5 | 6.6 | -. 2 | . 1 | -. 5 |
| 16 to 19. | 4,159 | 4,244 | 3,472 | 2,923 | 85 | -772 | -549 | 2.0 | -18.2 | -15.8 | 3.4 | 3.1 | 2.3 | 1.8 | . 2 | -. 0 | -1.7 |
| 20 to 24. | 7,594 | 7,221 | 8,065 | 8,064 | -373 | 844 | -1 | -4.9 | 11.7 | . 0 | 6.2 | 5.2 | 5.2 | 4.8 | -. 5 | 1.1 | . 0 |
| 25 to 54....... | 46,382 | 53,002 | 56,202 | 57,309 | 6,620 | 3,200 | 1,107 | 14.3 | 6.0 | 2.0 | 38.1 | 38.5 | 36.4 | 34.3 | 1.3 | . 6 | . 2 |
| 25 to 34 .... | 19,742 | 17,796 | 18,302 | 20,173 | -1,946 | 506 | 1,871 | -9.9 | 2.8 | 10.2 | 16.2 | 12.9 | 11.9 | 12.1 | -1.0 | . 3 | 1.0 |
| 35 to $44 \ldots$ | 16,074 | 20,242 | 18,972 | 19,109 | 4,168 | -1,270 | 137 | 25.9 | -6.3 | 0.7 | 13.2 | 14.7 | 12.3 | 11.4 | 2.3 | -. 6 | . 1 |
| 45 to $54 . . .$. | 10,566 | 14,963 | 18,928 | 18,027 | 4,397 | 3,965 | -901 | 41.6 | 26.5 | -4.8 | 8.7 | 10.9 | 12.3 | 10.8 | 3.5 | 2.4 | -. 5 |
| 55 and older.......... | 8,793 | 9,493 | 14,780 | 20,386 | 700 | 5,287 | 5,606 | 8.0 | 55.7 | 37.9 | 7.2 | 6.9 | 9.6 | 12.2 | . 8 | 4.5 | 3.3 |
| 55 to $64 \ldots . .$. | 6,831 | 7,253 | 11,345 | 14,479 | 422 | 4,092 | 3,134 | 6.2 | 56.4 | 27.6 | 5.6 | 5.3 | 7.4 | 8.7 | . 6 | 4.6 | 2.5 |
| 65 to $74 \ldots$ | 1,657 | 1,826 | 2,724 | 4,753 | 169 | 898 | 2,029 | 10.2 | 49.2 | 74.5 | 1.4 | 1.3 | 1.8 | 2.8 | 1.0 | 4.1 | 5.7 |
| $\begin{aligned} & 75 \text { and } \\ & \text { older ...... } \end{aligned}$ | 304 | 413 | 711 | 1,154 | 109 | 298 | 443 | 35.9 | 72.2 | 62.3 | . 2 | . 3 | . 5 | . 7 | 3.1 | 5.6 | 5.0 |
| Women, 16 years and older. $\qquad$ | 54,742 | 63,714 | 71,767 | 78,229 | 8,972 | 8,053 | 6,462 | 16.4 | 12.6 | 9.0 | 45.0 | 46.3 | 46.5 | 46.9 | 1.5 | 1.2 | . 9 |
| 16 to $24 \ldots$. | 10,783 | 10,430 | 10,494 | 10,144 | -353 | 64 | -350 | -3.3 | . 6 | -3.3 | 8.9 | 7.6 | 6.8 | 6.1 | -. 3 | . 1 | -. 3 |
| 16 to 19. | 3,872 | 4,012 | 3,385 | 2,946 | 140 | -627 | -439 | 3.6 | -15.6 | -13.0 | 3.2 | 2.9 | 2.2 | 1.8 | . 4 | -1.7 | -1.4 |
| 20 to 24. | 6,910 | 6,418 | 7,109 | 7,198 | -492 | 691 | 89 | -7.1 | 10.8 | 1.3 | 5.7 | 4.7 | 4.6 | 4.3 | -. 7 | 1.0 | . 1 |
| 25 to $54 \ldots$. | 37,659 | 45,716 | 48,195 | 48,635 | 8,057 | 2,479 | 440 | 21.4 | 5.4 | . 9 | 31.0 | 33.2 | 31.2 | 29.1 | 2.0 | . 5 | . 1 |
| 25 to 34. | 15,761 | 15,017 | 15,030 | 16,641 | -744 | 13 | 1,611 | -4.7 | . 1 | 10.7 | 13.0 | 10.9 | 9.7 | 10.0 | -. 5 | . 0 | 1.0 |
| 35 to 44. | 13,361 | 17,294 | 16,089 | 15,678 | 3,933 | -1,205 | -411 | 29.4 | -7.0 | -2.6 | 11.0 | 12.6 | 10.4 | 9.4 | 2.6 | -. 7 | -. 3 |
| 45 to 54. | 8,537 | 13,405 | 17,075 | 16,316 | 4,868 | 3,670 | -759 | 57.0 | 27.4 | -4.4 | 7.0 | 9.7 | 11.1 | 9.8 | 4.6 | 2.4 | -. 5 |
| 55 and older ...... | 6,301 | 7,569 | 13,078 | 19,449 | 1,268 | 5,509 | 6,371 | 20.1 | 72.8 | 48.7 | 5.2 | 5.5 | 8.5 | 11.7 | 1.9 | 5.6 | 4.0 |
| 55 to 64. | 4,977 | 5,962 | 10,270 | 14,275 | 985 | 4,308 | 4,005 | 19.8 | 72.3 | 39.0 | 4.1 | 4.3 | 6.7 | 8.6 | 1.8 | 5.6 | 3.3 |
| 65 to 74. | 1,157 | 1,352 | 2,261 | 4,291 | 195 | 909 | 2,030 | 16.9 | 67.2 | 89.8 | 1.0 | 1.0 | 1.5 | 2.6 | 1.6 | 5.3 | 6.6 |
| 75 and older ... | 167 | 255 | 547 | 883 | 88 | 292 | 336 | 52.7 | 114.5 | 61.4 | . 1 | . 2 | . 4 | . 5 | 4.3 | 7.9 | 4.9 |
| White........... | 104,756 | 115,415 | 125,635 | 132,490 | 10,659 | 10,220 | 6,855 | 10.2 | 8.9 | 5.5 | 86.1 | 83.8 | 81.4 | 79.4 | 1.0 | . 9 | . 5 |
| Men............ | 58,317 | 63,034 | 68,351 | 71,731 | 4,717 | 5,317 | 3,380 | 8.1 | 8.4 | 4.9 | 47.9 | 45.8 | 44.3 | 43.0 | . 8 | . 8 | . 5 |
| Women..... | 46,439 | 52,380 | 57,284 | 60,759 | 5,941 | 4,904 | 3,475 | 12.8 | 9.4 | 6.1 | 38.2 | 38.0 | 37.1 | 36.4 | 1.2 | . 9 | . 6 |
| Black ............ | 13,205 | 15,982 | 17,740 | 20,244 | 2,777 | 1,758 | 2,504 | 21.0 | 11.0 | 14.1 | 10.9 | 11.6 | 11.5 | 12.1 | 1.9 | 1.0 | 1.3 |
| Men............ | 6,596 | 7,542 | 8,347 | 9,579 | 946 | 805 | 1,232 | 14.3 | 10.7 | 14.8 | 5.4 | 5.5 | 5.4 | 5.7 | 1.3 | 1.0 | 1.4 |
| Women..... | 6,609 | 8,441 | 9,393 | 10,665 | 1,832 | 952 | 1,272 | 27.7 | 11.3 | 13.5 | 5.4 | 6.1 | 6.1 | 6.4 | 2.5 | 1.1 | 1.3 |
| Asian........... | 3,718 | 6,278 | 7,202 | 9,345 | 2,560 | 924 | 2,143 | 68.9 | 14.7 | 29.8 | 3.1 | 4.6 | 4.7 | 5.6 | 5.4 | 1.4 | 2.6 |
| Men............ | 2,017 | 3,383 | 3,852 | 4,895 | 1,366 | 469 | 1,043 | 67.7 | 13.9 | 27.1 | 1.7 | 2.5 | 2.5 | 2.9 | 5.3 | 1.3 | 2.4 |
| Women..... | 1,701 | 2,895 | 3,350 | 4,450 | 1,194 | 455 | 1,100 | 70.2 | 15.7 | 32.8 | 1.4 | 2.1 | 2.2 | 2.7 | 5.5 | 1.5 | 2.9 |


crease from 53.5 percent to 53.1 percent, during the next decade.

In contrast to both prime age workers and the older labor force, the labor force of 16 -to-24-year-old men had an annual decrease of 0.2 percent, and women of the same age group had an annual decrease of 0.3 percent, over the 1988-98 period. Both groups had a negligible positive growth rate of 0.1 percent the next decade. From 2008 to 2018, the growth rate is projected to become negative for both once again: an annual decrease of 0.5 percent for men and a 0.3 -percent annual decline for women. As regards the prime age group, men had a growth rate of 1.3 percent and women experienced a growth rate of 2.0 percent between 1988 and 1998. In the next decade, the men's and women's growth rates converged at around 0.6 percent and 0.5 percent, respectively. The BLS expects that the growth rate of the prime age group of men and women will increase by negligible amounts during 200818.

The men's 55 -years-and-older labor force had a growth rate of 0.8 percent in 1988-98 and a much stronger growth of 4.5 percent in 1998-2008. The BLS projects that over the 2008-18 period, the growth rate of the older men's
labor force will be about 3.3 percent. Women in the 55-and-older age group had a stronger growth rate- 1.9 per-cent-than their male counterparts over the 1988-98 timeframe and then experienced an even stronger growth rate of 5.6 percent from 1998 to 2008. The BLS expects that, over the next 10 years, older women's labor force participation will grow by 4.0 percent.

Race and Hispanic origin. White non-Hispanics were the largest group in the labor force in 1988, accounting for 79 percent of the total. However, this group had the lowest growth rate of all race and ethnic groups- 0.6 per-cent-in 1988-98 and then fell to half of that rate- 0.3 percent-in 1998-2008. The BLS projects that, in the next decade, the growth rate of this group will continue to decline, to 0.2 percent. The slower growth rate of the white non-Hispanic labor force, which has led the group to an increasingly smaller share in the total labor force over the last several decades, is a reflection of a variety of factors. First, the white non-Hispanic share of immigrants to the United States has declined considerably during the past two decades. Second, white non-Hispanic birthrates have been on the decline compared with those of other popula-
tion groups. Finally, white non-Hispanic men make up a significant share of the aging and retiring labor force each year. As a result of all three of the preceding factors, the white non-Hispanic share of the labor force decreased to 73.9 percent in 1998 and to 68.2 percent in 2008.

Asians, who make up the smallest share of the labor force, increased their share from 3.1 percent to 4.6 percent from 1988 to 1998 and then to 4.7 percent in 2008. The Asian labor force, which is projected to reach more than 9 million in 2018, will remain the smallest group in the labor force. Still, it is expected that Asians will have the second-highest annual rate of labor force growth of all the race and ethnic groups, 2.6 percent, increasing their share to 5.6 percent of the labor force. The highest labor force growth rate over the 2008-18 period will be that of Hispanics, projected at 2.9 percent annually. Hispanics increased their share of the total labor force from 7.4 percent to 10.4 percent over the 1988-98 period, and then to an even greater 14.3 percent in 2008. The BLS projects that the Hispanic share will increase yet further, to 17.6 percent of the total labor force by 2018. Blacks increased their share from 10.9 percent in 1988 to 11.6 percent in 1998 and to 11.5 percent over the next decade. The black labor force is projected to total more than 20 million and compose 12.1 percent of the labor force in 2018.

By 2018, because of Hispanics' younger population, higher fertility rates, and increased immigration, the Hispanic labor force is expected to reach 29 million. As a result of their divergent rates of growth of both population and labor force participation over the past several decades, the racial and ethnic groups that make up the U.S. labor force are projected to continue to show widely varying rates of growth.

## Dynamic changes in the labor force

The labor force is projected to increase by 12.6 million during the 2008-18 timeframe. This growth is based on the dynamic changes that underlie the movement of workers into and out of the labor force. (See table 5.) From 2008-2018, changes are projected to emerge from three dynamic groups:

- Entrants-those who were not in the labor force in 2008, but will enter during the 2008-18 period and continue to be part of the labor force in 2018.
- Leavers-those who were in the labor force in 2008, but will leave during the 2008-18 period and will not be in the labor force in 2018.
- Stayers-those who were in the labor force in 2008 and will remain in it through 2018. ${ }^{13}$
The 2018 labor force will be different from today's labor force to the extent that the demographic composition of labor force entrants between 2008 and 2018 is different from the composition of those now in the labor force. During the 2008-18 period, the labor force will be affected by the demographic composition of those leaving, those entering, and those staying in the labor force.

The BLS projects that, between 2008 and 2018,37.6 million workers will enter the labor force and 25 million will leave. (See chart 7.) These figures compare with 36 million entrants and 19.4 million leavers over the 1998-2008 period. The number of entrants into the labor force is anticipated to be around 1.6 million more than in the previous decade. However, 5.6 million more people are expected to leave the labor force, mainly as a result of aging and retirement. (See chart 8.) Continuing the trends of the previous decade, the entrants are projected to be mostly men. During the 2008-18 timeframe, more than 20 million men are expected to enter the labor force, compared with 17 million women. The leavers also are more likely to be men because the male labor force-especially white non-Hispanic men-has greater number of older workers than the women's labor force. According to BLS projections, 14.3 million men are projected to leave the labor force by 2018, resulting in a labor force of 88.7 million men. Similarly, 10.7 million women are projected to leave the workforce by 2018. Because relatively fewer women are expected to leave the labor force in 2008-18, the share of women in the overall labor force is projected to increase to 46.9 percent in 2018.

Race and Hispanic origin. The BLS projects that there will be nearly 28 million white entrants to the labor force between 2008 and 2018. The largest share is expected to be from the white non-Hispanic group, with 20.8 million entrants. However, the white non-Hispanic share of entrants is much smaller than the group's share of the labor force, reflecting the group's lower population growth, as a result of both lower birthrates and very little migration of white non-Hispanics into the United States. The result is relatively fewer labor force entrants and relatively more labor force leavers, a reflection of the aging of the white non-Hispanic men in the labor force. About 19 million white non-Hispanic workers are projected to leave over the 2008-18 period, resulting in the share of white non-Hispanics in the labor force falling to 64 percent in 2018-a drop of 4.2 percentage points from the 2008 share and

Table 5. Civilian labor force, entrants, leavers, and stayers, 1998, 2008, and projected 2018
[Numbers in thousands]

| Group | 1998 | 1998-2008 |  |  | 2008 | 2008-18 |  |  | 2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Entrants | Leavers | Stayers |  | Entrants | Leavers | Stayers |  |
| Number, 16 years and older |  |  |  |  |  |  |  |  |  |
| Total..................................................... | 137,673 | 36,036 | 19,422 | 118,251 | 154,287 | 37,632 | 25,008 | 129,279 | 166,911 |
| Men .................................................... | 73,959 | 19,551 | 10,990 | 62,969 | 82,520 | 20,429 | 14,267 | 68,253 | 88,682 |
| Women .............................................. | 63,714 | 16,485 | 8,432 | 55,282 | 71,767 | 17,203 | 10,741 | 61,026 | 78,229 |
| White .................................................. | 115,414 | 27,211 | 16,990 | 98,424 | 125,635 | 27,990 | 21,135 | 104,500 | 132,490 |
| Men .................................................... | 63,034 | 15,100 | 9,783 | 53,251 | 68,351 | 15,554 | 12,174 | 56,177 | 71,731 |
| Women ......................................... | 52,380 | 12,111 | 7,207 | 45,173 | 57,284 | 12,436 | 8,961 | 48,323 | 60,759 |
| Black .................................................... | 15,983 | 4,347 | 2,590 | 13,393 | 17,740 | 5,403 | 2,899 | 14,841 | 20,244 |
| Men .................................................... | 7,542 | 2,125 | 1,320 | 6,222 | 8,347 | 2,673 | 1,441 | 6,906 | 9,579 |
| Women .............................................. | 8,441 | 2,222 | 1,270 | 7,171 | 9,393 | 2,730 | 1,458 | 7,935 | 10,665 |
| Asian ... | 6,278 | 1,908 | 984 | 5,294 | 7,202 | 2,837 | 694 | 6,508 | 9,345 |
| Men.................................................... | 3,383 | 1,033 | 564 | 2,819 | 3,852 | 1,493 | 450 | 3,402 | 4,895 |
| Women ............................................... | 2,895 | 875 | 420 | 2,475 | 3,350 | 1,344 | 244 | 3,106 | 4,450 |
| All other groups ................................... | - | - | - | - | 3,710 | 1,402 | 280 | 3,430 | 4,832 |
| Men.................................................... | - | - | - |  | 1,970 | 709 | 202 | 1,768 | 2,477 |
| Women ............................................... | - | - | - | - | 1,740 | 693 | 78 | 1,662 | 2,355 |
| Hispanic origin..................................... | 14,317 | 8,743 | 1,036 | 13,281 | 22,024 | 9,237 | 1,957 | 20,067 | 29,304 |
| Men .................................................... | 8,571 | 5,274 | 590 | 7,981 | 13,255 | 5,078 | 1,282 | 11,973 | 17,051 |
| Women ............................................ | 5,746 | 3,469 | 446 | 5,300 | 8,769 | 4,159 | 675 | 8,094 | 12,253 |
| Other than Hispanic ............................ | 123,356 | 27,293 | 18,386 | 104,970 | 132,263 | 28,395 | 23,051 | 109,212 | 137,607 |
| Men.................................................... | 65,388 | 14,277 | 10,400 | 54,988 | 69,265 | 15,351 | 12,985 | 56,280 | 71,631 |
| Women ............................................... | 57,968 | 13,016 | 7,986 | 49,982 | 62,998 | 13,044 | 10,066 | 52,932 | 65,976 |
| White Non-Hispanic............................. | 101,768 | 19,598 | 16,157 | 85,611 | 105,209 | 20,847 | 19,222 | 85,987 | 106,834 |
| Men... | 54,833 | 10,361 | 9,223 | 45,610 | 55,971 | 11,907 | 10,803 | 45,168 | 57,075 |
| Women ............................................... | 46,935 | 9,237 | 6,934 | 40,001 | 49,238 | 8,940 | 8,419 | 40,819 | 49,759 |
| Share (percent),16 years and older |  |  |  |  |  |  |  |  |  |
| Total..................................................... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Men.................................................... | 53.7 | 54.3 | 56.6 | 53.3 | 53.5 | 54.3 | 57.0 | 52.8 | 53.1 |
| Women .............................................. | 46.3 | 45.7 | 43.4 | 46.7 | 46.5 | 45.7 | 43.0 | 47.2 | 46.9 |
| White | 83.8 | 75.5 | 87.5 | 83.2 | 81.4 | 74.4 | 84.5 | 80.8 | 79.4 |
| Men .................................................... | 45.8 | 41.9 | 50.4 | 45.0 | 44.3 | 41.3 | 48.7 | 43.5 | 43.0 |
| Women .............................................. | 38.0 | 33.6 | 37.1 | 38.2 | 37.1 | 33.0 | 35.8 | 37.4 | 36.4 |
| Black ................................................... | 11.6 | 12.1 | 13.3 | 11.3 | 11.5 | 14.4 | 11.6 | 11.5 | 12.1 |
| Men.................................................... | 5.5 | 5.9 | 6.8 | 5.3 | 5.4 | 7.1 | 5.8 | 5.3 | 5.7 |
| Women .............................................. | 6.1 | 6.2 | 6.5 | 6.1 | 6.1 | 7.3 | 5.8 | 6.1 | 6.4 |
| Asian.................................................... | 4.6 | 5.3 | 5.1 | 4.5 | 4.7 | 7.5 | 2.8 | 5.0 | 5.6 |
| Men .................................................... | 2.5 | 2.9 | 2.9 | 2.4 | 2.5 | 4.0 | 1.8 | 2.6 | 2.9 |
| Women ............................................... | 2.1 | 2.4 | 2.2 | 2.1 | 2.2 | 3.6 | 1.0 | 2.4 | 2.7 |
| All other groups ................................... | - | - | - | - | 2.4 | 3.7 | 1.1 | 2.7 | 2.9 |
| Men ..................................................... | - | - | - | - | 1.3 | 1.9 | 0.8 | 1.4 | 1.5 |
| Women ............................................... | - | - | - | - | 1.1 | 1.8 | 0.3 | 1.3 | 1.4 |
| Hispanic origin..................................... | 10.4 | 24.3 | 5.3 | 11.2 | 14.3 | 24.5 | 7.8 | 15.5 | 17.6 |
| Men ..................................................... | 6.2 | 14.6 | 3.0 | 6.7 | 8.6 | 13.5 | 5.1 | 9.3 | 10.2 |
| Women .............................................. | 4.2 | 9.6 | 2.3 | 4.5 | 5.7 | 11.1 | 2.7 | 6.3 | 7.3 |
| Other than Hispanic ............................ | 89.6 | 75.7 | 94.7 | 88.8 | 85.7 | 75.5 | 92.2 | 84.5 | 82.4 |
| Men .................................................... | 47.5 | 39.6 | 53.5 | 46.5 | 44.9 | 40.8 | 51.9 | 43.5 | 42.9 |
| Women ............................................... | 42.1 | 36.1 | 41.1 | 42.3 | 40.8 | 34.7 | 40.3 | 40.9 | 39.5 |
| White Non-Hispanic............................. | 73.9 | 54.4 | 83.2 | 72.4 | 68.2 | 55.4 | 76.9 | 66.5 | 64.0 |
| Men .................................................... | 39.8 | 28.8 | 47.5 | 38.6 | 36.3 | 31.6 | 43.2 | 34.9 | 34.2 |
| Women ................................................ | 34.1 | 25.6 | 35.7 | 33.8 | 31.9 | 23.8 | 33.7 | 31.6 | 29.8 |

NOTE: The "all other groups" category includes (1) those classified as of multiple racial origin and (2) the race categories of (2a) American Indian and Alaska Native and (2b) Native Hawaiian and Other Pacific Islanders.

Dash indicates no data collected for category. Details may not sum to totals because of rounding.

Chart 7. Labor force entrants, 1998-2008 and projected 2008-18


Chart 8. Labor force leavers, 1998-2008 and projected 2008-18

nearly 10 percentage points from the group's 1998 share. In the 1998-2008 period, white non-Hispanic men also had supplied the most entrants: 28.8 percent of all entrants. White non-Hispanic men made up 47.5 percent of job leavers.

Blacks are projected to add 2.5 million workers to the labor force between 2008 and 2018. The BLS expects that among new entrants during this period, 14.4 percent will be black, compared to 12.1 percent of the entrants during the 1998-2008 period. The black labor force is projected to grow slightly faster than the overall labor force because of higher-than-average birthrates and immigration.

In 1998, the Hispanics labor force made up 10.4 percent of the total labor force, with 14.3 million participants. Because of higher levels of immigration, some 8.7 million Hispanics entered the labor force during the 1998-2008 period. Over the same time span, just slightly more than one million Hispanics left the labor force, reflecting their group's relatively young age composition. By 2008, the Hispanic labor force numbered 22 million, making up 14.3 percent of the labor force. The Hispanic labor force is projected to grow by 7.3 million, increasing to a workforce of 29 million in 2018. Significantly more Hispanic labor force entrants, 9.2 million, and relatively fewer Hispanic labor force leavers, nearly 2 million, are projected during the 2008-18 timeframe. The Hispanic share of the labor force is expected to increase more than that of any other demographic group, because of both overall population growth-from higher births and increased immigra-tion-and significantly higher labor force participation rates.

Currently, Asians have the least numbers of all the race and ethnic groups in the labor force. During the 2008-18 period, about 3 million Asians are projected to enter the labor force and about 694,000 are projected to leave. As a result, the share of Asians in the 2018 labor force is projected to be 5.6 percent. Increases in the number of Asians in the labor force reflect their continued high immigration and very high labor force participation rates.

## The aging labor force

Gary Becker has called the increase in life expectancy over the last hundred years the " $20^{\text {th }}$ century's greatest gift." ${ }^{14}$ As a result of increases in life expectancy, declines in birthrates, and trends toward longer and healthier lives, the U.S. population is getting older. There are different methods for analyzing the age structure of the population and labor force. One way is to compare the relative shares of younger workers (those in the 16 -to- 24 -years age
group) with the shares of older workers in the 55-andolder groups in the labor force. Alternatively, the 16-to-64 age group can be compared with the 65 -and-older age groups. When the labor force share of the 65 -and-older group increases or when the share of those less than 25 years of age decreases, the labor force becomes older. The third method is to calculate the median ages of the population and the labor force. The median age is an index that summarizes the age distribution of the labor force; it is the age such that half of the labor force is above it and half below. All these metrics point to the rapid aging of the U.S. population. This aging has a considerable effect on labor market behavior and its measures, such as the participation rate and unemployment. ${ }^{15}$ As the baby-boom generation entered the labor force, the median age of the labor force decreased steadily until 1980. Since then, as the baby boomers have aged, so has the labor force. As a result, the median age of the labor force has been increasing. In 1962, it was 40.5 years, the highest level attained before the baby boomers entered the labor force. After that event, it dropped steadily until 1980, and it has been rising steadily since then, all in tandem with the aging of the baby boomers. With the population projected to continue aging as rapidly as in the past, the median age of the labor force in 2018 is expected to exceed the level reached in 1962. (See table 6.)

For much of the past six decades, the men's labor force has been older than the women's labor force. In 1998, however, the median age of the men's labor force was 38.8 years, and the median age of the women's was a very close 38.7 years. In 2008, the median age of the women's labor force, at 41.4 years, surpassed that of the men's, which stood at 41.0 years. The trend is expected to continue over the 2008-18 timeframe, with the median age of the women's labor force increasing by much more than that of the men's, reflecting not only the higher level of participation of older women, and the withdrawal of older men from the labor force.

Historically, white participants have been older than the rest of the labor force, and they will continue to be older in 2018. Compared with whites, blacks and Hispanics are younger, reflecting their higher birthrates and larger shares of young workers in the labor force. Hispanics are projected to continue to have a lower median age than the overall labor force, but their median age of 34.5 years in 1998 is expected to increase to 38.3 years in 2018, reflecting the aging of earlier immigrants.

Black participants have been about 1.5 to 2.5 years younger than the overall labor force, and this age gap is projected to continue through 2018. Asian labor force

Table 6. Median age of the labor force, by sex, race, and ethnicity, 1978, 1988, 1998, 2008, and projected 2018

| Group | 1978 | 1988 | 1998 | 2008 | 2018 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 34.8 | 35.9 | 38.8 | 41.2 | 42.3 |
| Men................................................. | 35.5 | 36.2 | 38.8 | 41.0 | 41.9 |
| Women........................................... | 34.0 | 35.6 | 38.7 | 41.4 | 42.9 |
| White......................................... | 34.9 | 35.6 | 38.6 | 41.7 | 43.0 |
| Black............................................... | 33.4 | 33.3 | 36.4 | 39.1 | 39.9 |
| Asian............................................. | 33.6 | 35.3 | 37.0 | 40.6 | 42.8 |
| Hispanic origin ................................. | 31.1 | 31.3 | 34.5 | 36.2 | 38.3 |
| White non-Hispanic........................... | 35.2 | 35.9 | 39.1 | 43.0 | 44.2 |

Table 7. Economic dependency ratio, by age ,1978-2008 and projected 2018

| Group | 1978 | 1988 | 1998 | 2008 | 2018 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total population. $\qquad$ Under 16 years. $\qquad$ 16 to 64 years. $\qquad$ 65 years and older.. $\qquad$ | $\begin{array}{r} 126.3 \\ 61.4 \\ 44.2 \\ 20.7 \end{array}$ | $\begin{aligned} & 99.1 \\ & 45.2 \\ & 33.6 \\ & 22.1 \end{aligned}$ | $\begin{aligned} & 65.2 \\ & 43.3 \\ & 30.8 \\ & 22.2 \end{aligned}$ | $\begin{aligned} & 96.4 \\ & 43.1 \\ & 31.0 \\ & 22.3 \end{aligned}$ | $\begin{array}{r} 103.3 \\ 43.5 \\ 35.3 \\ 25.1 \end{array}$ |

participants have been slightly younger than the overall labor force, but this trend is expected to change by 2018.

## Economic dependency

The economic dependency ratio is a measure of the number of persons in the total population (including the Armed Forces overseas and children) who are not in the labor force, per hundred of those who are. (See table 7.) In 2008, for every 100 persons in the labor force, 96 were not. Of those not in the labor force, about 43 were children, 31 were 16 to 64 years of age, and 22 were older than 64 years.

The economic dependency ratio for various age groups shows that the decrease in the overall rate from 1975 to 2008 is attributable to the change in the number of children. Since the 1970s, as the number of births diminished and the baby boomers aged beyond 16 years, the overall economic dependency ratio declined. Most of the 30-percentage-point drop in the ratio between 1975 and 2008 was due to the decline in the number of births.

The projected economic dependency ratios have several implications. That the portion of the ratio attributed to children is expected to continue decreasing implies that there will be fewer children per labor force participant in the future. The dependency ratio for the 16-to-64 age
group dropped 13.2 percentage points, from 44.2 in 1975 to 31.0 in 2008. This ratio is projected to decrease, reflecting an expected decrease in participation among men and women between 16 and 64 years old.

The one part of the dependency ratio that has been steadily increasing is the portion attributable to older persons. In 1975, this was by far the smallest part of the dependency ratio, and it is still expected to be the smallest proportion by 2018. However, between 1975 and 2008, the older persons' dependency ratio grew, and it is projected to continue increasing, to 25 persons in 2018.

The growth of the U.S. labor force is projected to slow down in the next 10 years. With the aging of the overall U.S. population and the baby boomers, the share of older workers in the labor force is expected to increase. Because labor force participation rates decline significantly for the older age groups, the overall labor force participation rate and the growth of the labor force will decline. In contrast, the labor force participation rate of older workers has been increasing and is projected to continue to do so in the future. The growing labor force shares of Asians, blacks, and especially Hispanics have been an important development of the past several decades. Consequently, the 2018 labor force is projected to become much more diverse. Between 2008 and 2018, 37.6 mil-
lion workers are expected to enter the labor force, 25 million are anticipated to leave, and 129.3 million workers are expected to remain in the labor force. As a result, the labor force of 2018 is projected to be nearly 167 million,
an increase of 12.6 million workers over the 2008 level. This increase represents a rate of growth of 0.8 percent, the same growth rate that was projected for the 2006-16 period.

## Notes

${ }^{1}$ The projections presented supersede those described by Mitra Toossi in "Labor Force projections to 2016: more workers in their golden years," Monthly Labor Review, November 2007, pp. 33-52. The bls carries out labor force projections every 2 years based on the most recent demographic data.
${ }^{2}$ The civilian noninstitutional labor force consists of all employed and unemployed persons actively looking for a job. This group excludes inmates of mental and penal institutions and homes for the aged and persons who are on active duty in the Armed Forces. Historical data for this series are from the Current Population Survey (CPS), conducted by the Census Bureau for the Bureau of Labor Statistics.
${ }^{3}$ See Jessica R. Sincavage, "The labor force and unemployment: three generations of change," Monthly Labor Review, June 2004, pp. 34-41.
${ }^{4}$ Information about the Census Bureau's population projections is from the agency's Population Projections Program home page on the Internet at www.census.gov/population/www/projections/ 2008projections.html (visited November 24, 2009).
${ }^{5}$ The projections of the Armed Forces and institutional population according to age, sex, race, and ethnicity for 2008-18 are based on bls assumptions.
${ }^{6}$ The CPS is a program of personal interviews conducted monthly by the Census Bureau for the bls. The sample consists of about 60,000 households selected to represent the U.S. population 16 years and older.
${ }^{7}$ See David Brauer, CBO's Projections of the Labor Force (Congressional Budget Office, September 2004), pp. 3-17.
${ }^{8}$ See Edward W. Frees, Summary of Social Security Administration Projections of the OASDI System Working Paper for the 2008 Technical Panel on Assumptions and Methods. (Social Security Advisory Board, December 2008); see also J. Patrick Skirvin, "Accuracy of Social Security Administration labor force projections." 2007 Technical Panel on Assumptions and Methods (Social Security Advisory Board,
2007). Available on the Internet at www.ssab.gov/documents/2007_ TPAM_Report_Final_copy.pdf (visited November 24, 2009).
${ }^{9}$ See Richard W. Johnson, What Happens to Health Benefits after Retirement? An Issue in Brief. (Boston, Center for Retirement Research at Boston College, February 2007).
${ }^{10}$ See Abraham Mosisa and Steven Hipple, "Trends in labor force participation in the United States," Monthly Labor Review, October 2006, pp. 35-57.
${ }^{11}$ Seasonally adjusted labor force participation rates from National labor force statistics (CPS) data are available on the Internet at www. bls.gov/cps (visited November 24, 2009).
${ }^{12}$ National labor force statistics (CPS) data are available on the Internet at www.bls.gov/cps (visited November 24, 2009).
${ }^{13}$ The numbers of entrants and leavers are computed by comparing the labor force numbers for birth cohorts at two points in time. If the labor force numbers at the second point are larger, the difference is termed the number of entrants. If the labor force numbers at the second point are smaller, the difference is said to be the number of leavers. These concepts understate the actual numbers likely to enter and leave the labor force over the period covered by the two points in time, but are still a valid comparison. For a further discussion of the methods, see Howard N Fullerton, Jr., "Measuring Rates of Labor Force Dynamics," Proceedings of the Social Statistics Section, American Statistical Association, 1993.
${ }^{14}$ Gary Becker, "Longer Life Was the Century's Greatest Gift," Businessweek, Jan. 31, 2000. Available on the Internet at www. businessweek.com/archives/2000/b3666076.arc.htm (visited November 24, 2009).
${ }^{15}$ Bruce Fallick, Charles Fleischman, and Jonathan Pringle, "The effect of population aging on the aggregate labor market," Labor in the New Economy, NBER, 2007. Available on the Internet at www. bos.frb.org/economic/conf/conf52/conf52b.pdf (visited November 24,2009 ).

