Employment outlook: 2000–10

Labor force projections to 2010: steady growth and changing composition

*The labor force will grow steadily
as the population and labor force ages;
diversity will continue to increase*

Howard N Fullerton, Jr.
and
Mitra Toossi

Howard N Fullerton, Jr.
is a senior
demographic
statistician and
Mitra Toossi is an
economist in the
Office of
Occupational
Statistics and
Employment
Projections, Bureau of
Labor Statistics.

The civilian labor force is projected to increase by 17 million over the 2000–10 period, reaching 158 million in 2010.[1] This 12.0-percent increase is slightly greater than the 11.9-percent increase over the previous 10-year period, 1990–2000, when the labor force grew by 15 million.

The projected labor force growth will be affected by the aging of the baby-boom generation, persons born between 1946 and 1964. In 2010, the baby-boom cohort will be ages 46 to 64, and this age group will show significant growth over the 2000–10 period. The median age of the labor force will continue to rise, even though the youth labor force (aged 16 to 24) is expected to grow more rapidly than the overall labor force for the first time in 25 years.

A closer view of the 2000–10 labor force reveals that certain demographic groups are projected to grow more rapidly than others. For women, the rate of growth in the labor force is expected to slow, but it will still increase at a faster rate than that of men. (See table 1.) As a result, the share of women in the labor force is projected to increase from 47 percent in 2000 to 48 percent in 2010. The number of men in the labor force is projected to grow more rapidly even though the aggregate labor force participation rate for men is projected to continue declining (from 74.7 percent in 2000 to a projected 73.2 percent in 2010).

Race or Hispanic origin groups have shown and are projected to continue to show——widely varied growth rates because of divergent rates of population growth in the past. Among race and ethnic groups, the Asian and other labor force is projected to increase most rapidly. By 2010, the Hispanic labor force is projected to be larger than the black labor force, primarily because of faster population growth. Despite slower-than-average growth and a declining share of the total labor force, white non-Hispanics will continue to make up more than two-thirds of the work force.

This article describes the labor force projections, made by the Bureau of Labor Statistics for 136 age, sex, race, or Hispanic origin groups.[2] First, it discusses changes in the labor force that are attributed to changes in labor force participation rates or to population changes. It includes a historical perspective, comparing two past decades with the projected decade. Then, it examines changes in the labor force based on the dynamics resulting from persons entering, leaving, or staying in the labor force. Finally, it reviews the demographic implications of projected changes in the age composition of the labor force and population.

The labor force projections are prepared by combining projections of the population produced by the Bureau of the Census with labor force participation rate projections made by the Bureau of Labor Statistics.[3] Consequently, the resulting labor force reflects changes in both projections. Changes in the labor force are better understood if they are decomposed into the two components and, therefore, each of these subjects is discussed separately.

Table 1. Civilian labor force by sex, age, race, and Hispanic origin, 1980, 1990, 2000, and projected 2010

[Numbers in thousands]

Group	Level				Change			Percent change			Percent distribution				Annual growth rate (percent)		
	1980	1990	2000	2010	1980–90	1990–2000	2000–10	1980–90	1990–2000	2000–10	1980	1990	2000	2010	1980–90	1990–2000	2000–10
Total, 16 years and older	106,940	125,840	140,863	157,721	18,900	15,023	16,858	17.7	11.9	12.0	100.0	100.0	100.0	100.0	1.6	1.1	1.1
16 to 24	25,300	22,492	22,715	26,081	–2,808	223	3,366	–11.1	1.0	14.8	23.7	17.9	16.1	16.5	–1.2	.1	1.4
25 to 54	66,600	88,322	99,974	104,994	21,722	11,652	5,020	32.6	13.2	5.0	62.3	70.2	71.0	66.6	2.9	1.2	.5
55 and older	15,039	15,026	18,175	26,646	–13	3,149	8,471	–0.1	21.0	46.6	14.1	11.9	12.9	16.9	.0	1.9	.9
Men	61,453	69,011	75,247	82,221	7,558	6,236	6,974	12.3	9.0	9.3	57.5	54.8	53.4	52.1	1.2	.9	.9
Women	45,487	56,829	65,616	75,500	11,342	8,787	9,884	24.9	15.5	15.1	42.5	45.2	46.6	47.9	2.3	1.4	1.4
White	93,600	107,447	117,574	128,043	13,847	10,127	10,470	14.8	9.4	8.9	87.5	85.4	83.5	81.2	1.4	.9	.9
Black	10,865	13,740	16,603	20,041	2,875	2,863	3,439	26.5	20.8	20.7	10.2	10.9	11.8	12.7	2.4	1.9	1.9
Asian and other[1]	2,476	4,653	6,687	9,636	2,177	2,034	2,950	87.9	43.7	44.1	2.3	3.7	4.7	6.1	6.5	3.7	3.7
Hispanic origin	6,146	10,720	15,368	20,947	4,574	4,648	5,579	74.4	43.4	36.3	5.7	8.5	10.9	13.3	5.7	3.7	3.1
Other than Hispanic origin	100,794	115,120	125,495	136,774	14,326	10,375	11,279	14.2	9.0	9.0	94.3	91.5	89.1	86.7	1.3	.9	.9
White non-Hispanic	87,633	97,818	102,963	109,118	10,185	5,144	6,155	11.6	5.3	6.0	81.9	77.7	73.1	69.2	1.1	.5	.6

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

Population projections

Population growth trends and changes in the demographic composition of the population reflect births, deaths, and migration to and from the United States. Table 2 provides four snapshots of the population at 10-year intervals over the 1980–2010 period. The four population pyramids in chart 1 also illustrate the changing composition of the population. The civilian noninstitutional population will continue to increase over the 2000–10 period, at a slightly faster rate of growth than the previous 10 years. This analysis of changes

BLS projections and the 2000 census

The 2000–10 projections in this issue of the *Monthly Labor Review* are not based on the recently completed 2000 census because the Current Population Survey (CPS) the source of the historical data on the labor force for these articles and the basis of the BLS labor force projections does not reflect the 2000 census and because a population projection based on the 2000 census is not available. Labor force participation rates at the detailed level are not expected to change significantly. The overall level of the labor force, however may go up as much as a million or more. Neither change would be expected to have a substantial impact on the analysis presented here. BLS and the Census Bureau expect to introduce estimates based on the 2000 census starting with the January 2003 CPS. The Census Bureau plans to release a population projection based on the 2000 census in late 2002.

in the civilian noninstitutional population is based on the Census Bureau's middle population projection scenario.[4] (For information about the 2000 census and these projections, see the box.)

Minority groups that have grown the fastest in the past—Asians and others and Hispanics—are projected to continue to grow much faster than white non-Hispanics.

The 16- to 24-age group will grow more rapidly than the overall population—a turn-around that began in the mid-1990s. The 55- to 64-age group will increase by 11 million persons over the 2000–10 period—more than any other group. Those ages 35 to 44 will be the only group to decrease in size; this is the baby bust following the baby boom.

Four demographic events have had a significant impact on shaping the changes in growth rates of the population and its composition by age, sex, race, and Hispanic origin over the 1980–2000 period, and for the most part, will affect the labor force in 2010:

- The birth dearth of the late 1920s and early 1930s
- The baby boom of the late 1940s through the early 1960s
- The modest increase in births from the late 1970s through the early 1990s
- The massive migration to the United States that started in the 1970s and at present, continues

The effect of the birth dearth is reflected in the declining number of persons aged 55 to 64 from 1980 to 1990 and the

Table 2. Civilian noninstitutional population by sex, age, race, and Hispanic origin, 1980, 1990, 2000, and projected 2010

[Numbers in thousands]

Group	Level				Change			Annual growth rate			Percent distribution			
	1980	1990	2000	2010	1980–90	1990–2000	2000–10	1980–90	1990–2000	2000–10	1980	1990	2000	2010
Total, 16 years and older	167,745	189,164	209,699	233,658	21,419	20,535	23,959	1.2	1.0	1.1	100.0	100.0	100.0	100.0
16 to 24	37,178	33,421	34,453	39,201	–3,757	1,032	4,749	–1.1	.3	1.3	22.2	17.7	16.4	16.8
16 to 19	16,543	14,520	16,042	17,851	–2,023	1,522	1,809	–1.3	1.0	1.1	9.9	7.7	7.6	7.6
20 to 24	20,635	18,902	18,411	21,351	–1,733	–491	2,940	–.9	–.3	1.5	12.3	10.0	8.8	9.1
25 to 54	84,698	105,777	118,927	122,716	21,079	13,150	3,789	2.2	1.2	.3	50.5	55.9	56.7	52.5
25 to 34	36,558	42,976	37,417	39,287	6,418	–5,559	1,870	1.6	–1.4	.5	21.8	22.7	17.8	16.8
35 to 44	25,578	37,719	44,605	39,535	12,141	6,886	–5,070	4.0	1.7	–1.2	15.2	19.9	21.3	16.9
45 to 54	22,563	25,081	36,905	43,894	2,518	11,824	6,989	1.1	3.9	1.7	13.5	13.3	17.6	18.8
55 and older	45,870	49,966	56,320	71,740	4,096	6,354	15,420	.9	1.2	2.4	27.3	26.4	26.9	30.7
55 to 64	21,520	20,720	23,615	34,846	–800	2,895	11,231	–.4	1.3	4.0	12.8	11.0	11.3	14.9
65 and older	24,350	29,247	32,705	36,895	4,897	3,458	4,190	1.8	1.1	1.2	14.5	15.5	15.6	15.8
65 to 74	15,365	17,648	17,809	20,591	2,283	161	2,781	1.4	.1	1.5	9.2	9.3	8.5	8.8
75 and older .	8,988	11,598	14,896	16,304	2,610	3,298	1,408	2.6	2.5	.9	5.4	6.1	7.1	7.0
Men, total	79,398	90,377	100,731	112,319	10,979	10,354	11,588	1.3	1.1	1.1	47.3	47.8	48.0	48.1
16 to 24	18,282	16,667	17,305	19,716	–1,615	638	2,411	–.9	.4	1.3	10.9	8.8	8.3	8.4
16 to 19	8,260	7,347	8,151	9,064	–913	804	913	–1.2	1.0	1.1	4.9	3.9	3.9	3.9
20 to 24	10,023	9,320	9,154	10,652	–703	–166	1,499	–.7	–.2	1.5	6.0	4.9	4.4	4.6
25 to 54	41,095	51,884	58,244	60,008	10,789	6,360	1,764	2.4	1.2	.3	24.5	27.4	27.8	25.7
25 to 34	17,833	21,117	18,289	19,231	3,284	–2,828	941	1.7	–1.4	.5	10.6	11.2	8.7	8.2
35 to 44	12,400	18,529	21,951	19,298	6,129	3,422	–2,652	4.1	1.7	–1.3	7.4	9.8	10.5	8.3
45 to 54	10,861	12,238	18,004	21,479	1,377	5,766	3,475	1.2	3.9	1.8	6.5	6.5	8.6	9.2
55 and older	20,021	21,826	25,182	32,595	1,805	3,356	7,413	.9	1.4	2.6	11.9	11.5	12.0	13.9
55 to 64	10,042	9,778	11,257	16,642	–264	1,479	5,384	–.3	1.4	4.0	6.0	5.2	5.4	7.1
65 and older	9,979	12,049	13,925	15,953	2,070	1,876	2,028	1.9	1.5	1.4	5.9	6.4	6.6	6.8
65 to 74	6,660	7,776	8,075	9,406	1,116	299	1,331	1.6	.4	1.5	4.0	4.1	3.9	4.0
75 and older .	3,319	4,273	5,850	6,548	954	1,577	697	2.6	3.2	1.1	2.0	2.3	2.8	2.8
Women, total ...	88,348	98,787	108,968	121,338	10,439	10,181	12,370	1.1	1.0	1.1	52.7	52.2	52.0	51.9
16 to 24	18,895	16,754	17,147	19,485	–2,141	393	2,338	–1.2	.2	1.3	11.3	8.9	8.2	8.3
16 to 19	8,283	7,173	7,890	8,787	–1,110	717	897	–1.4	1.0	1.1	4.9	3.8	3.8	3.8
20 to 24	10,612	9,582	9,257	10,698	–1,030	–325	1,442	–1.0	–.3	1.5	6.3	5.1	4.4	4.6
25 to 54	43,603	53,893	60,683	62,708	10,290	6,790	2,025	2.1	1.2	.3	26.0	28.5	28.9	26.8
25 to 34	18,725	21,859	19,127	20,056	3,134	–2,732	929	1.6	–1.3	.5	11.2	11.6	9.1	8.6
35 to 44	13,177	19,190	22,655	20,237	6,013	3,465	–2,418	3.8	1.7	–1.1	7.9	10.1	10.8	8.7
45 to 54	11,701	12,843	18,901	22,415	1,142	6,058	3,514	.9	3.9	1.7	7.0	6.8	9.0	9.6
55 and older	25,850	28,139	31,138	39,145	2,289	2,999	8,007	.9	1.0	2.3	15.4	14.9	14.8	16.8
55 to 64	11,478	10,942	12,358	18,204	–536	1,416	5,846	–.5	1.2	3.9	6.8	5.8	5.9	7.8
65 and older	14,372	17,198	18,780	20,941	2,826	1,582	2,161	1.8	.9	1.1	8.6	9.1	9.0	9.0
65 to 74	8,705	9,872	9,734	11,185	1,167	–138	1,451	1.3	–.1	1.4	5.2	5.2	4.6	4.8
75 and older .	5,668	7,325	9,045	9,756	1,657	1,720	711	2.6	2.1	.8	3.4	3.9	4.3	4.2
White, total	146,122	160,625	174,428	189,512	14,503	13,803	15,083	1.0	.8	.8	87.1	84.9	83.2	81.1
Men	69,634	77,369	84,647	92,361	7,735	7,278	7,714	1.1	.9	.9	41.5	40.9	40.4	39.5
Women	76,489	83,256	89,781	97,150	6,767	6,525	7,369	.9	.8	.8	45.6	44.0	42.8	41.6
Black, total	17,824	21,477	25,218	29,877	3,653	3,741	4,659	1.9	1.6	1.7	10.6	11.4	12.0	12.8
Men	7,944	9,573	11,320	13,184	1,629	1,747	1,864	1.9	1.7	1.5	4.7	5.1	5.4	5.6
Women	9,880	11,904	13,898	16,693	2,024	1,994	2,796	1.9	1.6	1.8	5.9	6.3	6.6	7.1
Asian and other[1], total ...	3,838	7,061	10,054	14,269	3,223	2,993	4,215	6.3	3.6	3.6	2.3	3.7	4.8	6.1
Men	1,842	3,434	4,764	6,775	1,592	1,330	2,010	6.4	3.3	3.6	1.1	1.8	2.3	2.9
Women	1,996	3,627	5,290	7,495	1,631	1,663	2,205	6.2	3.8	3.5	1.2	1.9	2.5	3.2
Hispanic origin, total	9,598	15,904	22,393	30,359	6,306	6,489	7,966	5.2	3.5	3.1	5.7	8.4	10.7	13.0
Men	4,689	8,041	11,064	14,837	3,352	3,023	3,772	5.5	3.2	3.0	2.8	4.3	5.3	6.3
Women	4,909	7,863	11,329	15,523	2,954	3,466	4,194	4.8	3.7	3.2	2.9	4.2	5.4	6.6
Other than Hispanic origin	158,147	173,260	187,306	203,298	15,113	14,046	15,993	.9	.8	.8	94.3	91.6	89.3	87.0
Men	74,709	82,336	89,667	97,483	7,627	7,331	7,816	1.0	.9	.8	44.5	43.5	42.8	41.7
Women	83,439	90,924	97,639	105,816	7,485	6,715	8,176	.9	.7	.8	49.7	48.1	46.6	45.3

| Table 2. | Continued—Civilian noninstitutional population by sex, age, race, and Hispanic origin, 1980, 1990, 2000, and projected 2010 |

[Numbers in thousands]

Group	Level				Change			Annual growth rate			Percent distribution			
	1980	1990	2000	2010	1980–90	1990–2000	2000–10	1980–90	1990–2000	2000–10	1980	1990	2000	2010
White non-Hispanic	136,847	146,535	153,111	162,064	9,687	6,576	8,953	.7	.4	.6	81.6	77.5	73.0	69.4
Men	65,095	70,220	74,104	78,901	5,125	3,884	4,797	.8	.5	.6	38.8	37.1	35.3	33.8
Women	71,753	76,315	79,007	83,163	4,562	2,692	4,156	.6	.3	.5	42.8	40.3	37.7	35.6
Age of baby-boomers	16 to 34	26 to 44	36 to 54	46 to 64	...	...	...	...	...	...	...	...	...	...

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

small increase for those aged 65 to 74 from 1990 to 2000, and the slow the growth of the 75 and older group in the 2000–10 period. (See also chart1.) The second event can be traced by following the movements of the baby-boom generation through age groups with the greatest increase in each period. For example, the 35- to 44-age group increased most significantly over the 1980–90 period and the 45- to 54-age group had the greatest increase over the 1990–2000 period. For the projected period, 2000–10, persons aged 55 to 64 are expected to have the greatest growth. The population in the age groups that are younger than the baby-boomers (those aged 16 to 24 in 1980–90, 25 to 34 in 1990 to 2000, and 35 to 44 in the projection, 2000–2010) shows declining numbers. From 2000 to 2010, the number of persons aged 35 to 44 is expected to decline by 5.1 million. This same age group increased by 12.1 million during the 1980–90 period, when the baby-boomers were concentrated in that age group.

The third demographic event will be reflected in growth of the population aged 16 to 24 from 2000 to 2010—reversing the trend of declining numbers in this age group over the 1980–90 period. This group may be followed in table 2.

The fourth event, immigration, has had a significant impact on population growth over the 1980–2000 period and is expected to continue to do so from 2000 to 2010. Immigration is assumed to increase slightly between 1999 and 2002 before declining through 2010. To project foreign-born emigration from the United States, the Census Bureau held detailed demographic rates constant from the 1980s. Therefore, the level of emigration will rise as the number of older foreign-born persons, who are most likely to return to their native land, increases due to earlier migration. The effect of a relatively constant immigration trend and increased emigration levels is decreased projected net migration over the period. The decline is expected to be modest; from a net migration of 980,000 in 2002, to 720,000 in 2010. However, overall net migration still would account for a sizable proportion of the net population growth over the projected 2000–10 period.

The effects of migration on the demographic composition of the population can be seen in two ways in table 2. The first is reflected in the very rapid growth rate of the Asian and other and Hispanic populations. The projected growth rates of these groups are expected to be greater than their rates in the 1990–2000 period and much faster than the rates for other groups. The second way migration affects the composition of the population is by age distribution. For example, persons aged 25 to 34 numbered 36.6 million in 1980. Ten years later, this same cohort was even larger, 37.7 million. Similarly, the number of persons aged 25 to 34 in 1990 grew from 43.0 million to 44.6 million 10 years later. The only way these cohorts could increase is through net migration. Because the overwhelming reason for migration is the opportunity to work, the population at these ages is affected significantly by migration.[1]

In addition to those four demographic events, the general effect that mortality has on the composition of the population is significant. Moreover, the longevity of women compared with men is noteworthy. (See table 2 and chart 1.) In 2000, men and women aged 16 to 24 were each 8 percent of the population. However, for persons 75 years of age and older, women made up 4.3 percent of the population and men, 2.8 percent, reflecting the longer life span of women.

Labor force participation rates

The labor force participation rate—a measure of the proportion of a population group in the labor force—differs by age, sex, race, and Hispanic origin as shown in table 3. Although labor force participation rates for specific groups change over time, the general overall pattern is fairly consistent across age groups, between the sexes, and among race and Hispanic origin groups.

Chart 1. Population and labor force, by age 1980, 1990, 2000 and projected, 2010

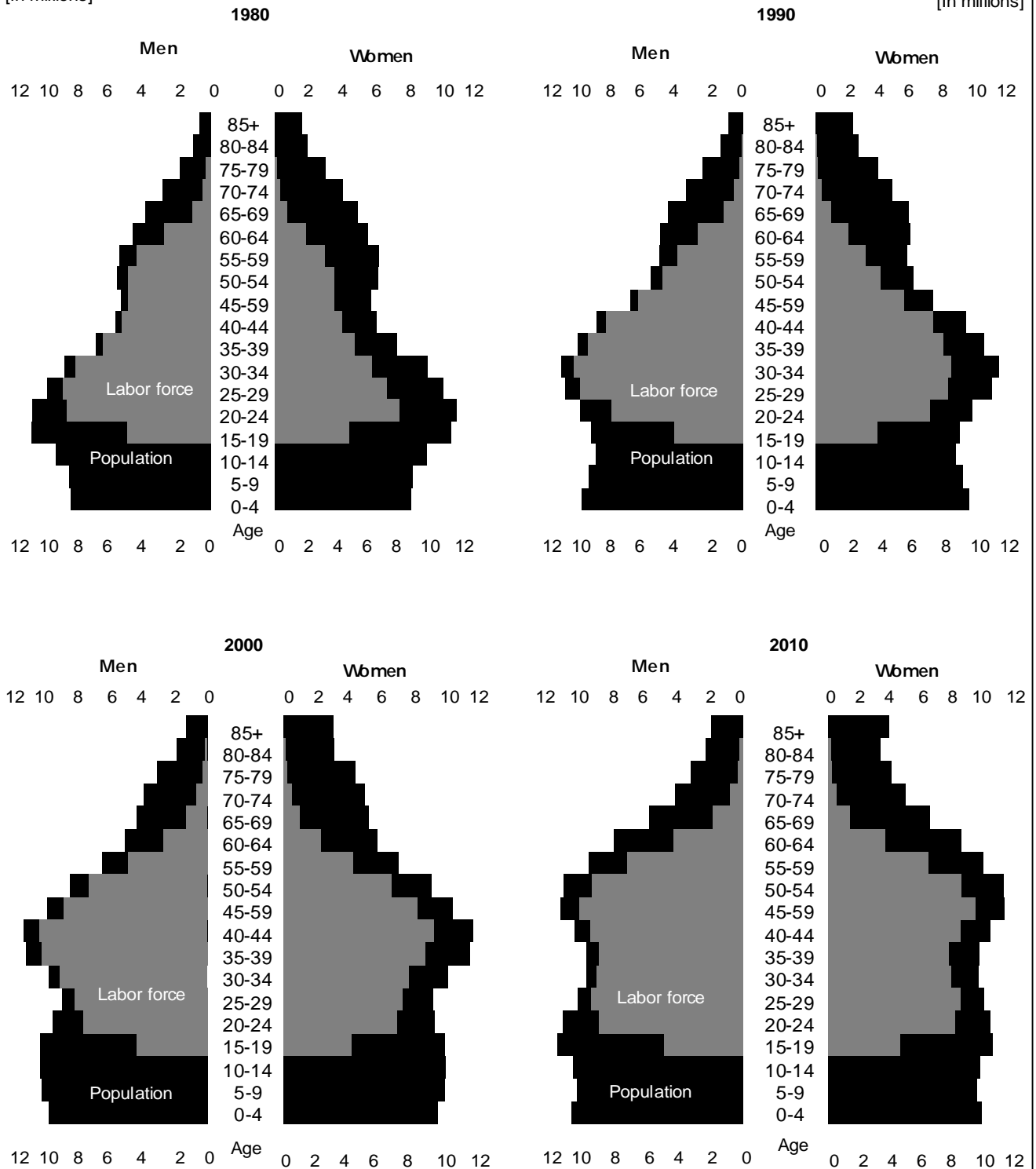[In millions]   [In millions]

1980

Men   Women

12 10 8 6 4 2 0   0 2 4 6 8 10 12

85+
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-59
40-44
35-39
30-34
Labor force   25-29
20-24
15-19
Population   10-14
5-9
0-4

12 10 8 6 4 2 0   Age   0 2 4 6 8 10 12

1990

Men   Women

12 10 8 6 4 2 0   0 2 4 6 8 10 12

85+
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-59
40-44
35-39
30-34
Labor force   25-29
20-24
15-19
Population   10-14
5-9
0-4

12 10 8 6 4 2 0   Age   0 2 4 6 8 10 12

2000

Men   Women

12 10 8 6 4 2 0   0 2 4 6 8 10 12

85+
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-59
40-44
35-39
30-34
Labor force   25-29
20-24
15-19
Population   10-14
5-9
0-4

12 10 8 6 4 2 0   Age   0 2 4 6 8 10 12

2010

Men   Women

12 10 8 6 4 2 0   0 2 4 6 8 10 12

85+
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-59
40-44
35-39
30-34
Labor force   25-29
20-24
15-19
Population   10-14
5-9
0-4

12 10 8 6 4 2 0   Age   0 2 4 6 8 10 12

| Table 3. | Civilian labor force participation rates by sex, age, race, and Hispanic origin, 1980, 1990, 2000, and projected 2010 |

Group	Participation rate (percent)				Percentage point change (percent)		
	1980	1990	2000	2010	1980–90	1990–2000	2000–10
Total, 16 years and older	63.8	66.5	67.2	67.5	2.8	.6	.3
16 to 24	68.1	67.3	65.9	66.5	−.8	−1.4	.6
16 to 19	56.7	53.7	52.2	52.3	−3.0	−1.5	.1
20 to 24	77.2	77.8	77.9	78.5	.6	.2	.5
25 to 54	.6	83.5	84.1	85.6	4.9	.6	1.5
25 to 34	79.9	83.6	84.6	87.1	3.7	1.0	2.5
35 to 44	80.0	85.2	84.8	86.0	5.2	−.4	1.1
45 to 54	74.9	80.7	82.6	83.8	5.8	1.8	1.2
55 and older	32.8	30.1	32.3	37.1	−2.7	2.2	4.9
55 to 64	55.7	55.9	59.2	60.9	.2	3.3	1.7
65 and older	12.5	11.8	12.8	14.8	−.7	1.0	1.9
65 to 74	17.0	16.7	19.1	22.1	−.2	2.4	2.9
75 and older	4.8	4.3	5.3	5.5	−.5	1.0	.2
Men	77.4	76.4	74.7	73.2	−1.0	−1.7	−1.5
16 to 24	74.4	71.8	68.6	67.9	−2.7	−3.1	−.7
16 to 19	60.5	55.7	53.0	52.3	−4.8	−2.8	−.7
20 to 24	85.9	84.4	82.6	81.2	−1.5	−1.8	−1.4
25 to 54	94.2	93.4	91.6	90.9	−.8	−1.8	−.7
25 to 34	95.2	94.1	93.4	93.1	−1.1	−.8	−.3
35 to 44	95.5	94.3	92.6	92.3	−1.1	−1.7	−.3
45 to 54	91.2	90.7	88.6	87.8	−.5	-2.1	−.8
55 and older	45.6	39.4	39.8	43.8	−6.3	.4	4.0
55 to 64	72.1	67.8	67.3	67.0	−4.3	−.5	−.3
65 and older	19.0	16.3	17.5	19.5	−2.6	1.2	2.0
65 to 74	24.0	21.4	24.4	27.7	−2.6	3.0	3.4
75 and older	8.8	7.1	8.0	7.7	−1.7	.9	−.3
Women	51.5	57.5	60.2	62.2	6.0	2.7	2.0
16 to 24	61.9	62.9	63.2	65.1	1.0	.4	1.9
16 to 19	52.9	51.6	51.3	52.2	−1.3	−.2	.9
20 to 24	68.9	71.3	73.3	75.7	2.4	2.0	2.4
25 to 54	64.0	74.0	76.8	80.4	10.0	2.8	3.6
25 to 34	65.5	73.5	76.3	81.4	8.0	2.8	5.1
35 to 44	65.5	76.4	77.3	80.0	10.9	0.9	2.7
45 to 54	59.9	71.2	76.8	80.0	11.3	5.6	3.2
55 and older	22.8	22.9	26.2	31.6	.0	3.4	5.4
55 to 64	41.3	45.2	51.8	55.2	3.9	6.6	3.5
65 and older	8.1	8.6	9.4	11.1	.5	.8	1.7
65 to 74	11.6	13.0	14.8	17.3	1.4	1.8	2.5
75 and older	2.5	2.7	3.6	4.0	.2	.9	.5
White	64.1	66.9	67.4	67.6	2.8	.5	.2
Men	78.2	77.1	75.4	73.8	−1.1	−1.6	−1.6
Women	51.2	57.4	59.8	61.6	6.3	2.4	1.8
Black	61.0	64.0	65.8	67.1	3.0	1.9	1.2
Men	70.6	71.1	69.0	68.2	.4	−2.0	−.8
Women	53.2	58.3	63.2	66.2	5.1	4.9	3.0
Asian and other[1]	64.6	65.9	66.5	67.5	1.3	.6	1.0
Men	74.5	74.9	74.9	74.8	.4	.0	−.1
Women	55.4	57.4	58.9	60.9	2.0	1.5	2.0
Hispanic origin	64.0	67.4	68.6	69.0	3.4	1.2	.4
Men	81.4	81.4	80.6	79.0	.0	−.8	−1.6
Women	47.4	53.1	56.9	59.4	5.7	3.8	2.5
Other than Hispanic origin	63.7	66.4	67.0	67.3	2.7	.6	.3
Men	77.1	75.9	74.0	72.3	−1.3	−1.9	−1.7
Women	51.7	57.9	60.6	62.6	6.2	2.7	2.0
White non-Hispanic	64.0	66.8	67.2	67.3	2.7	.5	.1
Men	78.0	76.5	74.7	72.9	−1.5	−1.8	−1.8
Women	51.3	57.8	60.3	62.0	6.4	2.5	1.8

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

Age. Labor force participation is relatively low for young persons (aged 16 to 24) because they often have school or child care responsibilities. It rises during the peak working years, ages 25 to 44, and then declines as workers retire. For example, in 2000, the participation rate for persons aged 16 to 19 was 52 percent; for ages 35 to 44, the rate was 85 percent; and for ages 75 and older, the rate dropped to 5 percent.

Sex. The labor force participation rates for men have been higher than those of women not only at the aggregate level, but also for every age group. (See table 4.) The trend in the rates for men and women are also different. In general, the rates for women have been rising. In contrast, the rates for men have been declining, except at the older ages. The difference in rates by sex also holds across race and Hispanic origin groups, as a later section shows.

Rates by age and sex. Changes over time in the aggregate labor force participation rates of men have been consistently down. (See chart 2.) The age-specific activity rates of men have been dropping across age groups with few exceptions. Labor force participation rates for men 65 and older have increased, starting in 1985. The rates for men, 65 to 74 increased by 3.0 percentage points from 1990 to 2000, reversing a trend that dates back to at least 1890.

Prior to 1980, the decreases in the labor force participation rates of older men reflect the increased availability of pensions and disability awards.[6] The decrease in participation over the 1950–80 period for men 65 and older was 26.8 percentage points, with most of the decrease occurring in the 1950s. During the 1970s, the Social Security payments were over-adjusted for inflation and the decrease in labor force participation for men 65 and older was greater than that in the 1960s. The decrease in participation was much lower in the 1980s, after the inflation adjustment procedure was changed. By the 1990s, participation increased for this group of older men. For men 55 to 64, labor force participation rates started to decrease in the 1960s.[7] Some of the 20-percentage point decrease since 1960 for men in this age group has to be attributed to the availability of Social Security to men 62 years of age. By 1994, only half the men age 62 were in the labor force; a decrease from 75 percent in 1970. Since 1994, however, the rate has increased modestly.

During the 1950–80 period, defined benefit pension coverage became more widespread. A worker realizes the greatest return on such a pension by retiring as soon as eligible. During the 1980s, employment-downsizing plans frequently included early pensions and lump-sum payments to older workers.[8] Since then, fewer defined benefit pension programs have been initiated; new pension plans are based on defined contributions. These plans are not as likely as defined benefit plans to induce early retirement. However, some workers are cov-
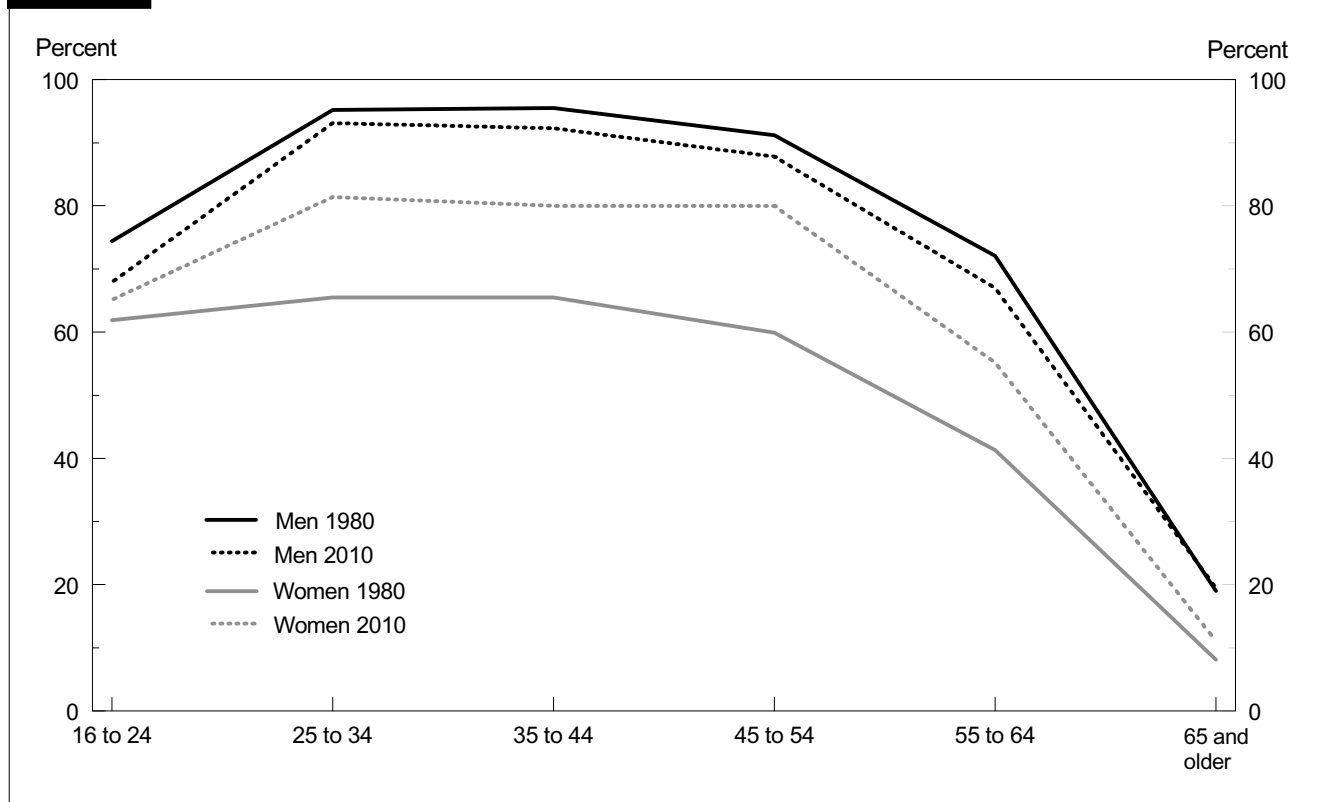
Table 4.	Differences in the labor force participation rates of men and women, by age, 1980, 1990, 2000, and projected 2010			
Age	Percentage point difference			
	1980	1990	2000	2010
Total, 16 years and older	25.9	18.8	14.5	11.0
16 to 24	12.5	8.9	5.4	2.8
16 to 19	7.6	4.2	1.6	.1
20 to 24	16.9	13.1	9.2	5.5
25 to 54	30.2	19.4	14.8	10.5
25 to 34	29.7	20.6	17.0	11.7
35 to 44	30.0	17.9	15.4	12.3
45 to 54	31.3	19.5	11.8	7.8
55 and older	22.8	16.5	13.5	12.1
55 to 64	30.8	22.6	15.5	11.7
65 and older	10.9	7.7	8.1	8.4
65 to 74	12.4	8.4	9.6	10.5
75 and older	6.3	4.4	4.5	3.7

Reductions in the differences between men and women	Percentage point change		
	1980–90	1990–2000	2000–10
Total, 16 years and older	−7.1	−4.3	−3.5
16 to 24	−3.6	−3.5	−2.6
16 to 19	−3.5	−2.5	−1.5
20 to 24	−3.9	−3.8	−3.8
25 to 54	−10.8	−4.6	−4.3
25 to 34	−9.1	−3.6	−5.3
35 to 44	−12.0	−2.6	−3.0
45 to 54	−11.8	−7.7	−4.0
55 and older	−6.3	−3.0	−1.4
55 to 64	−8.2	−7.1	−3.7
65 and older	−3.2	.4	.3
65 to 74	−4.0	1.2	.9
75 and older	−1.9	.1	−.8

ered by both types of pension plans.

We are now in a period of transition from retirement decisions based on defined benefit pensions to those based on defined contribution pensions. However, once the transition is completed, workers might have to work longer.[9] The issue of how much longer people will continue to work is clouded by two issues: manual labor and longer life spans. A small proportion of workers do physically demanding work and may not be able to work more than 30 years, while some portion of the population live longer than others, but work for them would be difficult, if not impossible.

In 2000, the normal retirement age for Social Security benefits began its scheduled increase.[10] Because the size of the benefit is lowered for each month a recipient is younger than the normal retirement age, some workers might be induced to continue working. However, for those receiving pensions that are significantly larger than their Social Security benefit, there is likely to be no response to the change in the normal retirement age requirement. For those workers dependent on Social Security, the lower benefits will require them to work longer or they will have to make do with lower benefits. Table 5 panel a indicates the reductions for early retirement, scheduled over the 2000–22 period and panel b, the inducements to work later,

Chart 2. Labor force participation rates for men and women, 1980 and 2000

Percent

Percent

	Men 1980
	Men 2010
	Women 1980
	Women 2010

16 to 24   25 to 34   35 to 44   45 to 54   55 to 64   65 and older

scheduled over the 2000–16 period. To illustrate, a person born in 1957 who retires at age 62 in 2019 will receive 72.5 percent of the primary insurance amount. However, if retirement were delayed to age 66 and 6 months, that person would receive 100 percent of the primary insurance amount and if that person worked until 67 and 6 months, (table 5 panel b), then he or she would receive 8 percent more. With the repeal in 2000 of the earnings penalty or tax on workers ages 65 to 70, another disincentive to working is gone.[11]

For most age groups of men under 55, the drop in participation was greater in the 1990–2000 period than that in the 1980–90 period. There continues to be little research on the long-term decrease in participation rates of men aged 25 to 54, a group that our society views as strongly attached to the labor force.

Unlike men, the labor force participation rates of women have been increasing across age groups. Women in the 45- to 54-age group increased their participation the most during the 1980–90 period; an increase of almost 11 percentage points. The same cohort of women displayed the greatest increase in participation in the 1990–2000 period, when they were aged 55 to 64. However, for the 2000–10 period, when this cohort will be 65 to 74, they will yield this ranking to a group of younger women, those aged 25 to 34. Interestingly, men 65 to 74 are

expected to increase their participation more than women in these ages.

Generally, the labor force participation of women and men have been converging, as the lower panel of table 4 and chart 2 indicate. The difference in the aggregate rate is expected to decrease by 15 percentage points over the 1980–2010 period, as the difference drops from more than 25 percentage points in 1980 to 11 points in 2010. In 1980, each of the four age groups of women between ages 25 to 64 had labor force participation rates that were 30 percentage points lower than those of men the same age. By 2000, these differences at least halved and by 2010, they are projected to be no more than a third of the 1980 differences. For teenagers, there was little difference between the sexes in 2000, and by 2010, the participation rates are projected to converge. For older men and women, the differences in participation measured by percentage points were smaller, reflecting the significantly lower participation at older ages.

Race and Hispanic origin. Differences in labor force participation by race and Hispanic origin are usually not as great as that observed for age and sex. However, changes in labor force rates over time differ among the groups. When participation rate changes are combined with different patterns of

Table 5.	Normal retirement age for social security and the effects of early or delayed retirement

5a. The normal retirement age, by year of birth and year of attaining age 62, with the reduction from the primary insurance amount, 1999 to 2022

Year of birth	Normal retirement age	Year cohort becomes 62	Age 62 benefits as percent of primary insurance amount
1937 or earlier ...	65 years	1999 or earlier	80.0
1938	65 and 2 months	2000	79.2
1939	65 and 4 months	2001	78.3
1940	65 and 6 months	2002	77.5
1941	65 and 8 months	2003	76.7
1942	65 and 10 months	2004	75.8
1943–54	66 years	2005–2016	75.0
1955	66 and 2 months	2017	74.2
1956	66 and 4 months	2018	73.3
1957	66 and 6 months	2019	72.5
1958	66 and 8 months	2020	71.7
1959	66 and 10 months	2021	70.8
1960 and later ...	67 years	2022 and after	70.0

5b. Delayed retirement credit, by year of birth

Year of Birth	Credit per year (percent)
1924	3.0
1925–26	3.5
1927–28	4.0
1929–30	4.5
1931–32	5.0
1933–34	5.5
1935–36	6.0
1937–38	6.5
1939–40	7.0
1941–42	7.5
1943 or later	8.0

SOURCE: Normal Retirement Age (Social Security Administration, December 4, 2000), on the Internet at http://www.ssa.gov/OACT/ProgData/nra.html (visited December 20, 2000).

population growth, substantial differences in the future labor force result.

The data shown in the lower part of table 3 indicate the variation in labor force participation by race. The following illustration ranks those groups in terms of their labor force participation rates in 2000 (1 is highest labor force participation; 4 is lowest):

Total	Men	Women	Rank
Hispanic	Hispanic	Black	1
White non-Hispanic	Asian and other	White non-Hispanic	2
Asian and other	White non-Hispanic	Asian and other	3
Black	Black	Hispanic	4

The rankings by race differ by sex. Hispanic men have the highest labor force participation rates, Hispanic women the lowest. For blacks, the situation by gender is reversed, as men have the lowest participation rate and women, the highest.

The high labor force participation rate for Hispanic males, in part, reflects their age structure. Hispanics have a younger population with a greater proportion at the ages of higher labor force participation. As table 6 shows, the rates for non-Hispanic white men are higher at ages 16 to 19 and 25 to 54. The table also shows that Hispanic men have proportionally more young men than the white non-Hispanic population. The aggregate labor force participation rate is the weighted sum of the age-specific rates, in which the weights are the population distribution. If Hispanic men had the age distribution of white non-Hispanic men in 2000, while retaining the labor force participation rates shown in table 6, their aggregate rate would have been 74.1 percent, slightly lower than the rate for non-Hispanic white men that year. If white non-Hispanic men, on the other hand, had had the population distribution of Hispanic men in 2000, their overall participation rate would have been 81.2 percent, higher than their actual rate and above the rate for Hispanic men (80.6 percent). Thus, age distribution, as well as labor force participation rates determine the aggregate labor force rate.

Over the 2000–10 period, overall labor force participation is projected to change the rankings for the various age, sex, and race and Hispanic groups:

Total	Men	Women	Rank
Hispanic	Hispanic	Black	1
Asian and other	Asian and other	White non-Hispanic	2
White non-Hispanic	White non-Hispanic	Asian and other	3
Black	Black	Hispanic	4

For the totals by group, the Asians and others exchange places with white non-Hispanics while Hispanics and blacks retained their places. The rankings for women and men did not change from 2000. Blacks are projected to have the greatest increase in labor force participation—1.2 percentage points—reflecting the expected 3.0-point gains expected by black women. Labor force rates for all groups of men are expected to continue decreasing, though the decrease of Asian and other men is not significant. The labor force participation of white non-Hispanics is not expected to change, reflecting offsetting increases and decreases by women and men.

Projected labor force participation rates

The labor force participation rate is projected to rise by 0.3 percentage point between 2000 and 2010. Increases in the participation rates are expected to be greatest for the 65- to 74-age group, made up of the pre-baby-boom generation. Unlike the age group in 2000, however, the ages of peak labor force participation should be 25 to 34. Thus, the baby-boom generation's

aging by itself will act to slow overall participation growth because they will be older than the age of highest participation. For both sexes combined, labor force rates are projected to increase for all age groups.

The overall labor force participation rate of men is projected to drop by 1.5 percentage points, slightly less than the decline in the last decade. The overall male rate is a summary of the changes in the age composition of the population and changes in labor force participation for each age as well as the increased race and Hispanic diversity of the male population. For men in the peak ages of labor force participation, 25 to 54, the rates by 5-year groups are projected to decrease slightly over the 2000–10 period. Because of changes in age composition, however, the rates for the 10-year-age group, presented in table 3, show a greater decline. Older men are expected to continue to have increasing participation (from a 0.4-percentage point change in the 1990–2000 period to a 4.0-percentage point gain in the 2000–10 period for men 55 and older) .

The increase in the labor force participation rate of women over the past two decades (1980–90 and 1990–2000) has displayed a pattern of slower growth in each successive period. For most age groups, labor force participation growth is projected to be greater in the 2000–10 period than in the earlier decade. With the aging of the population, aggregate labor force participation for women should slow, but each of the major groups, 16 to 24, 25 to 54, and 55 and older, is projected to increase their participation more quickly than over the most recent decade.

For the 1980–90 and 1990–2000 periods, women aged 20 to 24 show decreases in participation, but in the 2000–10 period, participation for this group is projected to increase. The participation decreases in the earlier decades probably reflect the increasing enrollment of young women in school.[12] However, over the 2000–10 period, with labor force participation of women enrolled in school rising even as enrollment increases (table 7) and women not enrolled in school also increasing their participation as well, this group is projected to further increase their participation.

The results of the greater school enrollment of young women is reflected in the projections for women 25 to 34, whose labor force participation is projected to increase most strongly over the period. The group expected to have the next greatest increase in participation is aged 55 to 64; members of a cohort who have long experienced sharp increases in labor force participation.

Historical changes in the labor force

Labor force growth over the 1990–2000 period was significantly slower than the rate of growth over the 1980–90 period, when larger numbers of the younger baby-boomers caused high rates of labor force growth and large absolute growth. The labor force grew by 19 million between 1980 and 1990, compared with 17 million over the 1990–2000 period. (See table 8.) The male labor force, because of the entry of the baby-boom generation, grew by 12 percent over the earlier period, then by 9 percent between 1990 and 2000. Women increased their numbers by 25 percent over the 1980–90 period, compared with 16 percent over the latter period.

Age.   Labor force changes by age over the 1980–90 period were influenced by the baby-boomers and the birth dearth group of the 1930s (chart 1). Between 1980 and 1990, the baby-boomers were in the age groups that grew rapidly. Those aged

Table 6.	Comparison of labor force participation rates and age composition of Hispanic and white non-Hispanic men, 2000					
[Percent]						
	Labor force participation rate			Population composition by age		
Age	Hispanic	White, non-Hispanic	Difference (white, non-Hispanic less Hispanic)	Hispanic	White, non-Hispanic	Difference (white, non-Hispanic less Hispanic)
16 and 17	31.8	46.9	15.2	5.2	3.6	−1.5
18 and 19	68.3	69.1	.8	5.7	3.6	−2.1
20 and 21	86.0	78.8	−7.2	5.2	3.3	−1.9
22 to 24	91.3	87.7	−3.6	7.9	4.8	−3.1
25 to 29	93.5	94.0	.5	12.1	7.8	−4.3
30 to 34	94.5	95.0	.5	13.4	8.6	−4.8
35 to 39	93.8	94.3	.5	11.1	10.6	−.6
40 to 44	92.8	93.3	.5	11.5	10.9	−.6
45 to 49	89.1	91.6	2.5	7.2	10.1	2.9
50 to 54	85.6	88.0	2.4	6.3	8.7	2.5
55 to 59	79.4	78.0	−1.4	4.2	6.8	2.6
60 and 61	68.2	66.9	−1.3	1.4	2.2	.9
62 to 64	48.5	47.6	−.9	1.9	3.2	1.2
65 to 69	31.8	30.8	−1.0	2.1	4.7	2.7
70 to 74	18.8	18.3	−.6	1.9	4.3	2.4
75 and older	8.4	8.2	−.2	2.9	6.7	3.8

Table 7.

Table 7. Enrollment of women 16 to 24 in school and labor force participation rate by enrollment status, 1995 and 2000

Group	Proportion enrolled in school			Labor force participation rate of women 16 to 24 enrolled in school											
				1995				2000				Changes, 1995–2000			
	1995	2000	Change	Total	Enrolled in school	Not enrolled in school	Differ-ence	Total	Enrolled in school	Not enrolled in school	Differ-ence	Total	Enrolled in school	Not enrolled in school	Change in difference
Total, 16 to 24	44.3	47.8	3.5	62.3	50.6	71.6	20.9	63.2	50.6	74.8	24.2	.9	–.1	3.2	3.2
16 to 19	65.3	68.7	3.5	52.2	45.3	65.1	19.8	51.3	44.1	67.2	23.1	–.9	–1.2	2.1	3.3
20 to 24	27.8	30.0	2.2	70.3	60.6	74.1	13.5	73.3	63.2	77.6	14.4	3.0	2.7	3.6	.9
20 to 21	38.4	41.7	3.2	65.5	58.2	70.0	11.8	70.4	62.4	76.1	13.7	4.9	4.2	6.1	1.9
22 to 24	21.3	21.9	.7	73.3	63.2	76.0	12.8	75.3	64.3	78.4	14.1	2.1	1.1	2.4	1.3
White women															
Total, 16 to 24 ...	44.0	47.3	3.3	64.9	54.2	73.4	19.3	65.5	54.1	75.7	21.5	.6	.0	2.3	2.3
16 to 19	64.9	68.1	3.2	55.5	49.0	67.5	18.5	54.7	47.9	69.1	21.2	–.9	–1.1	1.5	2.7
20 to 24	27.6	29.6	1.9	72.3	63.6	75.7	12.1	74.7	66.4	78.2	11.8	2.4	2.8	2.6	–.2
20 to 21	38.6	42.0	3.5	68.0	61.3	72.2	10.9	72.0	65.4	76.7	11.4	4.0	4.1	4.6	.5
22 to 24	20.9	21.0	.1	75.0	66.2	77.3	11.1	76.6	67.7	78.9	11.2	1.6	1.5	1.6	.1
Black women															
Total, 16 to 24 ...	44.0	47.3	3.3	52.8	37.0	65.2	28.2	56.1	38.2	72.1	34.0	3.3	1.2	6.9	5.7
16 to 19	66.2	69.7	3.5	39.7	31.5	55.9	24.4	39.4	30.3	60.3	29.9	–.3	–1.1	4.4	5.5
20 to 24	25.6	28.0	2.4	63.7	48.9	68.8	19.9	70.5	55.0	76.5	21.4	6.8	6.2	7.7	1.5
20 to 21	34.3	36.1	1.8	56.8	46.2	62.4	16.2	67.1	52.8	75.1	22.4	10.3	6.6	12.8	6.2
22 to 24	20.2	22.2	2.0	67.9	51.7	72.0	20.3	72.9	57.7	77.2	19.6	5.0	5.9	5.2	–.7
Asian and other women															
Total, 16 to 24 ...	50.3	57.3	6.9	51.4	40.5	62.5	22.0	50.6	37.7	67.9	30.3	–.8	–2.8	5.5	8.3
16 to 19	68.2	75.4	7.2	40.6	33.5	55.8	22.4	37.8	31.5	57.1	25.7	–2.8	–2.0	1.3	3.3
20 to 24	36.6	41.9	5.4	59.8	50.6	65.0	14.5	61.5	47.1	71.8	24.7	1.7	–3.4	6.8	10.2
20 to 21	48.6	53.1	4.5	53.1	46.5	59.3	12.8	57.1	47.1	68.5	21.4	4.0	.6	9.1	8.5
22 to 24	29.7	34.8	5.1	63.5	54.3	67.4	13.1	64.3	47.2	73.4	26.2	.7	–7.2	5.9	13.1
Hispanic women															
Total, 16 to 24 ...	35.9	38.4	2.5	49.2	40.2	54.2	14.1	54.0	41.4	61.9	20.6	4.9	1.2	7.7	6.5
16 to 19	58.1	60.9	2.8	40.4	33.6	49.9	16.3	41.4	32.9	54.7	21.9	1.0	–.7	4.9	5.6
20 to 24	18.8	19.1	.3	55.9	55.8	55.9	.1	64.9	64.7	64.9	.3	9.0	8.9	9.0	.1
20 to 21	23.1	26.6	3.5	52.1	51.4	52.3	.9	64.7	62.9	65.4	2.5	12.6	11.4	13.1	1.7
22 to 24	16.2	14.1	-2.0	58.3	59.7	58.0	–1.6	65.0	67.0	64.7	–2.3	6.7	7.3	6.7	–.6

25 to 34 increased by 6.7 million and those 35 to 44, by 12 million. For the next decade, the two groups with the greatest change were aged 35 to 44 and 45 to 54, with 5.7 million and 10 million additional workers. Growth of the labor force by the baby boomers was affected not just by population growth, but also by growth in the labor force participation rate for women. By contrast, the age group 45 to 54 grew by 3.3 million during the 1980–90 period; over the next 10 years, the same group, but in the 55- to 64-age group, increased by 2.4 million.

The "baby bust," a much smaller cohort than the baby-boom, caused a drop in the labor force of those aged 16 to 24 in the 1980–90 period and that of those 25 to 34 in 1990–2000, and should cause a drop in the labor force of those 35 to 44 in the 2000–10 period.

Sex. Labor force growth for men was less than that for women in both the 1980–90 and 1990–2000 periods, whether measured by numbers of persons or rates of change. Although population growth for both sexes was similar, labor force participation rates for men declined, and increased for women.

The population and labor force of both men and women 16 to 24 years of age decreased in the 1980–90 period, as it did for young men. For this period, the labor force of young men dropped more than that for young women (12 percent, versus 10 percent). The decrease for men was less in the 1990–2000 period, while the labor force of women increased.

The labor force of women 25 to 54 increased more rapidly than that of young women or older women between 1980 and 1990. By 1990, when all of the baby-boom generation was in this age group, labor force growth over the 1990–2000 period was markedly lower than the growth over the 1980–90 period. Women in the 25- to 54-age group also increased their labor force participation rates over the 1990–2000 period. For men in the baby-boom generation, participation rates dropped, but the population in this age group increased their labor force, though at a much less rapid rate than the rate for women.

Men 55 and older also decreased their labor force participation. The age group with the highest labor force participation rates, 55 to 64, decreased in population as well; as a consequence, the 55 and older labor force dropped between 1980 and 1990. Although women 55 to 64 and women 65 and older were subject to the same population dynamics as men, their labor force participation rates increased between 1980 and 1990 and so did their labor force. The overall 55 and older

Table 8. Civilian labor force by sex, age, race, and Hispanic origin, 1980, 1990, 2000, and projected 2010

[Numbers in thousands]

Group	Level				Change			Percent change			Percent distribution				Annual growth rate (percent)		
	1980	1990	2000	2010	1980–90	1990–2000	2000–10	1980–90	1990–2000	2000–10	1980	1990	2000	2010	1980–90	1990–2000	2000–10
Total, 16 years and older ...	106,940	125,840	140,863	157,721	18,900	15,023	16,858	17.7	11.9	12.0	100.0	100.0	100.0	100.0	1.8	1.1	1.1
16 to 24	25,300	22,492	22,715	26,081	−2,808	223	3,366	−11.1	1.0	14.8	23.7	17.9	16.1	16.5	−1.0	.1	1.4
16 to 19	9,378	7,792	8,369	9,329	−1,586	577	960	−16.9	7.4	11.5	8.8	6.2	5.9	5.9	−1.8	.7	1.1
20 to 24	15,922	14,700	14,346	16,752	−1,222	−354	2,406	−7.7	−2.4	16.8	14.9	11.7	10.2	10.6	−.6	−.2	1.6
25 to 54	66,600	88,322	99,974	104,994	21,722	11,652	5,020	32.6	13.2	5.0	62.3	70.2	71.0	66.6	3.0	1.2	.5
25 to 34	29,227	35,929	31,669	34,222	6,702	−4,260	2,553	22.9	−11.9	8.1	27.3	28.6	22.5	21.7	2.9	−1.3	.8
35 to 44	20,463	32,145	37,838	33,990	11,682	5,693	−3,849	57.1	17.7	−10.2	19.1	25.5	26.9	21.6	4.6	1.6	−1.1
45 to 54	16,910	20,248	30,467	36,783	3,338	10,219	6,316	19.7	50.5	20.7	15.8	16.1	21.6	23.3	1.2	4.2	1.9
55 and older	15,039	15,026	18,175	26,646	−13	3,149	8,471	−.1	21.0	46.6	14.1	11.9	12.9	16.9	.2	1.9	3.9
55 to 64	11,985	11,575	13,974	21,204	−410	2,399	7,230	−3.4	20.7	51.7	11.2	9.2	9.9	13.4	.1	1.9	4.3
65 and older	3,054	3,451	4,200	5,442	397	749	1,242	13.0	21.7	29.6	2.9	2.7	3.0	3.5	.7	2.0	2.6
65 to 74	2,619	2,952	3,410	4,543	333	458	1,133	12.7	15.5	33.2	2.4	2.3	2.4	2.9	.7	1.5	2.9
75 and older	435	498	790	899	63	292	109	14.5	58.6	13.8	.4	.4	.6	.6	.6	4.7	1.3
Men	61,453	69,011	75,247	82,221	7,558	6,236	6,974	12.3	9.0	9.3	57.5	54.8	53.4	52.1	1.2	.9	.9
16 to 24	13,606	11,960	11,876	13,391	−1,646	−84	1,516	−12.1	−.7	12.8	12.7	9.5	8.4	8.5	−1.4	−.1	1.2
16 to 19	4,999	4,094	4,317	4,741	−905	223	424	−18.1	5.5	9.8	4.7	3.3	3.1	3.0	−2.1	.5	.9
20 to 24	8,607	7,866	7,558	8,650	−741	−308	1,092	−8.6	−3.9	14.4	8.0	6.3	5.4	5.5	−.9	−.4	1.4
25 to 54	38,712	48,456	53,359	54,566	9,744	4,903	1,208	25.2	10.1	2.3	36.2	38.5	37.9	34.6	2.3	1.0	.2
25 to 34	16,971	19,872	17,073	17,902	2,901	−2,799	829	17.1	−14.1	4.9	15.9	15.8	12.1	11.4	2.2	−1.5	.5
35 to 44	11,836	17,481	20,334	17,809	5,645	2,853	−2,524	47.7	16.3	−12.4	11.1	13.9	14.4	11.3	3.7	1.5	−1.3
45 to 54	9,905	11,103	15,951	18,855	1,198	4,848	2,903	12.1	43.7	18.2	9.3	8.8	11.3	12.0	.5	3.7	1.7
55 and older	9,135	8,594	10,013	14,263	−541	1,419	4,251	−5.9	16.5	42.5	8.5	6.8	7.1	9.0	−.3	1.5	3.6
55 to 64	7,242	6,627	7,574	11,148	−615	947	3,574	−8.5	14.3	47.2	6.8	5.3	5.4	7.1	−.5	1.3	3.9
65 and older	1,893	1,967	2,439	3,115	74	472	677	3.9	24.0	27.8	1.8	1.6	1.7	2.0	.1	2.2	2.5
65 to 74	1,601	1,664	1,970	2,610	63	306	640	3.9	18.4	32.5	1.5	1.3	1.4	1.7	.1	1.7	2.9
75 and older	293	303	469	506	10	166	37	3.4	54.7	7.9	.3	.2	.3	.3	.1	4.5	.8
Women	45,487	56,829	65,616	75,500	11,342	8,787	9,884	24.9	15.5	15.1	42.5	45.2	46.6	47.9	2.5	1.4	1.4
16 to 24	11,696	10,532	10,839	12,690	−1,164	307	1,851	−10.0	2.9	17.1	10.9	8.4	7.7	8.0	−.7	.3	1.6
16 to 19	4,381	3,698	4,051	4,588	−683	353	537	−15.6	9.6	13.2	4.1	2.9	2.9	2.9	−1.5	.9	1.3
20 to 24	7,315	6,834	6,788	8,102	−481	−46	1,314	−6.6	−0.7	19.4	6.8	5.4	4.8	5.1	−.2	−.1	1.8
25 to 54	27,888	39,866	46,615	50,428	11,978	6,749	3,813	43.0	16.9	8.2	26.1	31.7	33.1	32.0	4.0	1.6	.8
25 to 34	12,257	16,058	14,596	16,320	3,801	−1,462	1,724	31.0	−9.1	11.8	11.5	12.8	10.4	10.3	3.8	−1.0	1.1
35 to 44	8,627	14,663	17,504	16,180	6,036	2,841	−1,324	70.0	19.4	−7.6	8.1	11.7	12.4	10.3	5.7	1.8	−.8
45 to 54	7,004	9,145	14,515	17,928	2,141	5,370	3,413	30.6	58.7	23.5	6.5	7.3	10.3	11.4	2.3	4.7	2.1
55 and older	5,904	6,431	8,162	12,383	527	1,731	4,221	8.9	26.9	51.7	5.5	5.1	5.8	7.9	1.0	2.4	4.3
55 to 64	4,742	4,948	6,400	10,056	206	1,452	3,656	4.3	29.3	57.1	4.4	3.9	4.5	6.4	.8	2.6	4.6
65 and older	1,161	1,483	1,762	2,327	322	279	565	27.7	18.8	32.1	1.1	1.2	1.3	1.5	1.6	1.7	2.8
65 to 74	1,019	1,288	1,441	1,933	269	153	493	26.4	11.8	34.2	1.0	1.0	1.0	1.2	1.5	1.1	3.0
75 and older	142	195	321	393	53	126	72	37.3	64.7	22.4	.1	.2	.2	.2	1.7	5.1	2.0
White	93,600	107,447	117,574	128,043	13,847	10,127	10,470	14.8	9.4	8.9	87.5	85.4	83.5	81.2	1.6	.9	.9
Men	54,473	59,638	63,861	68,159	5,165	4,223	4,298	9.5	7.1	6.7	50.9	47.4	45.3	43.2	1.0	.7	.7
Women	39,127	47,809	53,714	59,884	8,682	5,905	6,171	22.2	12.4	11.5	36.6	38.0	38.1	38.0	2.4	1.2	1.1
Black	10,865	13,740	16,603	20,041	2,875	2,863	3,439	26.5	20.8	20.7	10.2	10.9	11.8	12.7	2.4	1.9	1.9
Men	5,612	6,802	7,816	8,991	1,190	1,014	1,175	21.2	14.9	15.0	5.2	5.4	5.5	5.7	2.0	1.4	1.4
Women	5,253	6,938	8,787	11,050	1,685	1,849	2,263	32.1	26.7	25.8	4.9	5.5	6.2	7.0	2.8	2.4	2.3
Asian and other[1]	2,476	4,653	6,687	9,636	2,177	2,034	2,950	87.9	3.7	44.1	2.3	3.7	4.7	6.1	5.4	3.7	3.7
Men	1,371	2,572	3,570	5,070	1,201	999	1,500	87.1	38.9	42.0	1.3	2.0	2.5	3.2	5.0	3.3	3.6
Women	1,105	2,081	3,116	4,566	971	1,033	1,449	88.3	49.3	46.5	1.0	1.7	2.2	2.9	6.0	4.1	3.9

Table 8.

Table 8.	Continued—Civilian labor force by sex, age, race, and Hispanic origin, 1980, 1990, 2000, and projected 2010

[Numbers in thousands]

Group	Level				Change			Percent change			Percent distribution				Annual growth rate (percent)		
	1980	1990	2000	2010	1980–90	1990–2000	2000–10	1980–90	1990–2000	2000–10	1980	1990	2000	2010	1980–90	1990–2000	2000–10
Hispanic origin, ...	6,146	10,720	15,368	20,947	4,574	4,648	5,579	74.4	43.4	36.3	5.7	8.5	10.9	13.3	5.7	3.7	3.1
Men	3,817	6,546	8,919	11,723	2,729	2,373	2,804	71.5	36.3	31.4	3.6	5.2	6.3	7.4	5.5	3.1	2.8
Women	2,326	4,174	6,449	9,224	1,848	2,275	2,775	79.4	54.5	43.0	2.2	3.3	4.6	5.8	6.0	4.4	3.6
Other than Hispanic origin	100,794	115,120	125,495	136,774	14,326	10,375	11,279	14.2	9.0	9.0	94.3	91.5	89.1	86.7	1.3	.9	.9
Men	57,636	62,465	66,328	70,498	4,829	3,863	4,170	8.4	6.2	6.3	53.9	49.6	47.1	44.7	.8	.6	.6
Women	43,161	52,655	59,167	66,276	9,494	6,512	7,109	22.0	12.4	12.0	40.4	41.8	42.0	42.0	2.0	1.2	1.1
White non-Hispanic ..	87,633	97,818	102,963	109,118	10,185	5,144	6,155	11.6	5.3	6.0	81.9	77.7	73.1	69.2	1.1	.5	.6
Men	50,762	53,731	55,359	57,538	2,969	1,627	2,179	5.8	3.0	3.9	47.5	42.7	39.3	36.5	.6	.3	.4
Women	36,871	44,087	47,604	51,580	7,216	3,517	3,976	19.6	8.0	8.4	34.5	35.0	33.8	32.7	1.8	.8	.8

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

group decreased slightly over the period. During the 1990–2000 period, the population numbers for the 55- to 64-group increased. Even though labor force participation rates for men continued to decrease, the much greater weight the younger group had resulted in an increase in both the number of men in the labor force and their labor force and participation rate. For women, who continued to experience rising labor force participation for all age groups along with an increase in the younger age group, labor force growth more than doubled.

Another way to look at the age and sex composition of the labor force is with population pyramids, so-called because for a population with high mortality and fertility, the resulting graphic (chart 1) is shaped like a pyramid. A comparison of the population and labor force pyramids for the 1980 to 2000 period clearly shows some important trends. As the baby boom ages, so does the population and the labor force. This is true for both men and women. By age 30, there are more women in the population than there are men. By 2010, the total population of women will outnumber that of men by roughly 9 million.

Race and Hispanic origin.   White non-Hispanics were the largest group in the labor force in 1980, accounting for 82 percent of the total. However, over the 1980–90 and 1990–2000 periods, this group had the lowest growth rates—1.1 and 0.5 percent a year—among the groups analyzed. The smallest group, Asians and others had the fastest growth rate over those periods. Indeed, growth rates were inversely related to ranking by size, and the rankings were the same for men and

women. Asian and other women and men each were the fastest growing labor force group over the 1980–2000 period. Moreover, all minority groups increased their share of the labor force during this time. Hispanics increased their share from 5.7 percent to 10.9 percent, Asian and others increased their share from 2.3 percent to 4.7 percent, and blacks increased their share from 10.2 percent to 11.8 percent. By contrast, white non-Hispanics, decreased their share of the labor force from 82 percent to 73 percent. The pattern of labor force growth rates is more reflective of changes in the population than of changes in labor force participation rates, which grew more rapidly at 5-year-intervals for white non-Hispanics than for other groups (table 6).

Projected changes in the labor force

Although labor force participation is expected to continue increasing at a slower rate, the labor force, like the population, is projected to grow slightly more rapidly over the 2000–10 period than it did over the 1990–2000 period. The labor force, however, will change in composition, as various age, race or Hispanic groups, and men and women will experience change at different rates.

Age.   The youth labor force (aged 16 to 24) is projected to increase by 3.4 million, more than 10 times the increase of the 1980–90 period. The 2010 youth labor force is projected to be larger than that in 1980, 1990, and 2000. For the labor force

aged 25 to 54, the story is different. The projected increase of 5.0 million is less than a quarter of the increase for the 1980–90 period. Persons aged 25 to 34, whose number decreased over the 1990–2000 period by 4.3 million, are projected to increase by 2.6 million. The 35- to 44-age group, which increased by 5.7 million over the 1990–2000 period, is projected to drop by 3.8 million. The 45- to 54-age group is expected to increase in size; but even this group, made up of the younger members of the baby-boom generation, is expected to increase at a slower rate than earlier. The smaller, younger age groups are those following the baby-boom generation.

The labor force of workers 55 and older—identified as having the fastest rates of population growth and the greatest increases in labor force participation—is expected to grow by 8.5 million. Within that group, the 55- to 64-group is expected to increase by 7.2 million.

As can be seen in the population pyramids (chart 1), by 2010, the population is beginning to assume the shape of a rectangle, with notches for the "baby bust." The baby-boom generation will not have as impressive effect on the labor force in 2010 as they had earlier; their share of the labor force will decrease from 49 percent in 2000 to 38 percent in 2010. Also, the relative number of older women projected is striking.

Sex. The labor force of men is projected to grow by 0.9 percent annually, while that of women is expected to grow by 1.4 percent. Because of the differential growth rates, women's *share* of the labor force is projected to increase from 47 percent to 48 percent.

Race and Hispanic origin. As mentioned earlier, the Hispanic male labor force exceeded that of black men in 2000 and the black female labor force greatly exceeded that of Hispanic women. Also, as the Hispanic population continues to grow at a faster than the black population, it will be larger than the black population by 2010 and its labor force will be larger than that of blacks, as well. (Given that projections have errors and the possibility that the method for enumerating race and Hispanic origin could change, the specificity of the year should be viewed with caution.[13])

The Asian and other group's population also is growing rapidly. However, they are expected to remain the smallest of the four labor force groups well beyond 2010. Similarly, the white non-Hispanic group, which is growing slowly, will remain the largest group. Their share of the 2010 labor force is expected to be 69 percent and would be 6.2 million larger than their level in 2000. The remaining three groups are expected to add 10.7 million persons to the labor force over the same period. White non-Hispanics will remain by far the largest group of the labor force for years after 2010.

Dynamics

From 2000 through 2010, the dynamics of labor force change emerge from three distinct groups: entrants—those who will be in the labor force in 2010, but who were not in it in 2000; leavers—those who will exit the labor force after 2000 and before 2010; and stayers—those who were in the labor force in 2000 and will remain through 2010.[14] To the extent that the demographic composition of labor force entrants between 2000 and 2010 is different from the composition of those now in the labor force, the 2010 labor force will be different from today's labor force. The projected labor force also will be affected by the demographic composition of those leaving. Thus, the labor force of 2010 may be regarded as consisting of the labor force of 2000, plus the entrants, less the leavers.

BLS projects that between 2000 and 2010, 41 million workers will enter the labor force and 24 million will leave. (See table 9.) These figures compare with 34 million entrants and 20 million leavers over the 1990–2000 period. During the earlier period, entrants were more likely to be men. Leavers also were more likely to be men, because the male labor force was and is older than that of women. However, the vast difference in share exhibited for the 1990–2000 period is projected to narrow somewhat, resulting in an almost equal share of women and men entering the labor force.

According to these projections, by 2010, 20 million men will have joined the 2000 labor force of 75 million, and 13 million men will have left the labor force, resulting in a labor force of 82 million men in 2010. Similarly, 21 million women are expected to enter the labor force over the period 2000–10, while 11 million women are projected to leave.

The largest share of the 2000 labor force—73 percent—was made up of non-Hispanic whites. Three-fifths of the population expected to enter the labor force between 2000 and 2010 are projected to be non-Hispanic whites, less than their share over the 1990–2000 period. These proportions are smaller than their share of the work force, reflecting this group's lower population growth. As a result of the 25 million non-Hispanic whites entering the labor force, and the 19 million leaving over the 2000–10 period, the share of non-Hispanic whites in the labor force is projected to be 69 percent in 2010—a drop of 4 percentage points and down 8 percentage points from 1990. In the 1990–2000 period, most of the entrants were white non-Hispanic men—32 percent, but more striking, most of the leavers were also white non-Hispanic men—49 percent.

The labor force of white non-Hispanics is projected to grow 0.6 percent per year, slower than the overall labor force. The slower growth reflects little immigration of this demographic group to the United States and lower birth rates in the past, compared with other population groups. This results in relatively fewer labor force entrants and relatively more labor force

Table 9.
Civilian labor force 16 and older, 1990 and 2000, and projected 2010, and entrants and leavers, actual 1990–2000 and projected, 2000–10

Group	1990	1990–2000			2000	2000–10			2010
		Entrants	Leavers	Stayers		Entrants	Leavers	Stayers	
Numbers [thousands]									
Total	125,840	34,669	19,646	106,194	140,864	41,048	24,191	116,673	157,721
Men	69,011	17,783	11,547	57,464	75,247	20,379	13,406	61,842	82,221
Women	56,829	16,886	8,098	48,730	65,617	20,669	10,785	54,831	75,500
White non-Hispanic	97,818	21,363	16,219	81,599	102,962	24,873	18,717	84,245	109,118
Men	53,731	11,214	9,587	44,145	55,359	12,583	10,404	44,955	57,538
Women	44,087	10,149	6,632	37,455	47,604	12,290	8,314	39,290	51,580
Black non-Hispanic	13,566	4,694	2,131	11,435	16,129	5,627	2,843	13,286	18,913
Men	6,727	2,004	1,163	5,564	7,568	2,463	1,525	6,043	8,507
Women	6,839	2,689	967	5,872	8,561	3,164	1,318	7,243	10,407
Hispanic origin	10,720	5,667	1,020	9,700	15,368	7,331	1,752	13,617	20,947
Men	6,546	3,026	653	5,893	8,919	3,820	1,016	7,903	11,723
Women	4,174	2,641	367	3,807	6,449	3,511	736	5,713	9,224
Asian and other, non-Hispanic	3,735	2,946	277	3,459	6,404	3,218	879	5,526	8,743
Men	2,007	1,539	145	1,862	3,401	1,513	461	2,940	4,453
Women	1,728	1,406	132	1,597	3,003	1,705	417	2,586	4,290
Share [percent]									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men	54.8	51.3	58.8	54.1	53.4	49.6	55.4	53.0	52.1
Women	45.2	48.7	41.2	45.9	46.6	50.4	44.6	47.0	47.9
White non-Hispanic	77.7	61.6	82.6	76.8	73.1	60.6	77.4	72.2	69.2
Men	42.7	32.3	48.8	41.6	39.3	30.7	43.0	38.5	36.5
Women	35.0	29.3	33.8	35.3	33.8	29.9	34.4	33.7	32.7
Black non-Hispanic	10.8	13.5	10.8	10.8	11.5	13.7	11.8	11.4	12.0
Men	5.3	5.8	5.9	5.2	5.4	6.0	6.3	5.2	5.4
Women	5.4	7.8	4.9	5.5	6.1	7.7	5.4	6.2	6.6
Hispanic origin	8.5	16.3	5.2	9.1	10.9	17.9	7.2	11.7	13.3
Men	5.2	8.7	3.3	5.5	6.3	9.3	4.2	6.8	7.4
Women	3.3	7.6	1.9	3.6	4.6	8.6	3.0	4.9	5.8
Asian and other, non-Hispanic	3.0	8.5	1.4	3.3	4.5	7.8	3.6	4.7	5.5
Men	1.6	4.4	.7	1.8	2.4	3.7	1.9	2.5	2.8
Women	1.4	4.1	.7	1.5	2.1	4.2	1.7	3.7	2.7

NOTE: The four race, Hispanic origin groups add to the total. Hispanics may be of any race. The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives.

leavers—a reflection of the aging white male labor force. White non-Hispanic women are projected to increase their participation more than any other group, but this faster growth rate will not be enough to offset the slow growth in the non-Hispanic population of only 0.6 percent yearly.

Blacks, the second largest group in the 2000 labor force, made up 11.5 percent of the labor force or a total of 16.1 million. (In this section, unlike, the rest of the article, Hispanic blacks are included only with Hispanics rather than with both.) Blacks are projected to add 5.6 million workers to the labor force between 2000 and 2010—14 percent of all new entrants during the period. This is more than the number that entered between 1990 and 2000. With the 2.8-million blacks projected to leave the labor force over the period, the group will increase in number, and by 2010, their share of the labor force is expected to be 12.0 percent, up 0.5 percentage points from 2000. The black labor force is projected to grow faster than the overall labor force because of their higher-than-average population growth resulting from higher-than-average birth rates and immigration.

In 2000, Hispanics (of all races) were the third largest labor force group, with 15.4 million workers representing 10.9 percent of the labor force. Because of their higher levels of migration, some 7.3 million Hispanics are projected to enter the labor force during the 2000–10 period. Only 1.8 million Hispanics are projected to leave the labor force (reflecting their relatively young age composition), so the number of Hispanics in the labor force is projected to grow by more than 5.5 million, increasing to 20.9 million persons in 2010. The Hispanic share of the labor force is

expected to grow because of overall population growth—from higher birth levels and increased migration—and because of increases in the participation rate of Hispanic women.

In 2000, the smallest racial group in the labor force was Asian and other. About 3.2 million members of this group will enter the labor force during the 2000–10 period, which is a notable amount, considering that its 1990 labor force was only a half million larger. Because relatively fewer workers of this group are projected to leave the labor force over the period, the group is projected to increase by 44 percent. Increases in the number of Asians and others in the labor force reflect their continued high immigration.

Aspects of the aging labor force

Median age. The age of the labor force can be measured in various ways; one is median age. As the baby-boom generation entered the labor force, the median age of the labor force decreased; once in the labor force, this large group can only age. The median age of the labor force, at 40.5 years in 1962 (the highest level attained before the baby-boomers entered the labor force), dropped steadily until 1980, and since then, it has been rising. With the population projected to continue aging as rapidly as in the past, the median age of the labor force in 2010 is projected to just exceed the level reached in 1962. (See table 10.) The following tabulation provides median ages for the civilian noninstitutional population and labor force ages 16 and older:

	1990	2000	2010
Population	41.1	44.2	44.7
Labor force	36.6	39.3	40.6
Difference	4.5	4.9	4.1

The median age of both groups is increasing, but the median age of the population is increasing more than the labor force. The median age of the labor force is less than the median age of the population because the labor force participation rates of older persons are much lower than the rates of young workers. The growth of the older population, combined with the increase in their participation rates, results in the median age of the 2010 projected labor force exceeding the level of the highest median that was recorded in 1962.

Historically, white non-Hispanic participants have had a higher median age than the rest of the labor force. This is projected to continue, with the difference reaching 1.6 years in 2010. Compared with white non-Hispanic groups, the black and Hispanic groups have a lower median age, reflecting their higher birth rates. As a result, black and Hispanic youth are projected to claim a somewhat larger share of their respective populations. Black participants in the labor force have been about 1.5 years to 3.1 years younger than the overall labor force; this age gap is projected to continue through 2010. In 2000, the median age of Asians and other participants in the labor force was 1.5 years less than the overall labor force. This difference is expected to increase to 2.0 years by 2010. Hispanic participants generally have been younger, due to their higher fertility rate. This group is projected to continue having a lower median age than the overall labor force, but it is projected to age from a median of 34.9 years in 2000 to 36.4 years in 2010, reflecting the aging of earlier immigrants. The median age of all race and Hispanic groups is expected to increase during the 2000–10 period.

Age composition. There are other ways to look at the age structure of the labor force. For example, one scenario for an aging labor force would be an increase in the proportion of those 65 and older and a decrease in the proportion of those under 25. Table 11 presents distribution of the population and labor force aged 16 and older, by age group and sex.

From 1980 to 2000, the proportion of those 65 and older in the population increased. This proportion is expected to increase slightly through 2010. By contrast, the proportion of persons 16 to 24 decreased over the 1980–2000 period, however, it is expected to increase by 2010. The population is getting older, based on the median age, and younger, based on proportions! Since 1990, the proportion of 25- to 39-year olds has decreased and it is expected to continue decreasing through 2010.

Table 10. Median ages of the labor force, by sex, race, and Hispanic origin, selected historical years and projected 2010

Group	1962	1980	1990	2000	2010
Total	40.5	34.6	36.6	39.3	40.6
Men	40.5	35.1	36.7	39.3	40.6
Women	40.4	33.9	36.4	39.3	40.6
White	40.9	34.8	36.8	39.7	41.3
Black	(1)	33.3	34.9	37.3	37.7
Asian and other[2]	(1)	33.8	36.5	37.8	38.7
Hispanic origin[3]	(4)	30.7	33.2	34.9	36.4
White non-Hispanic	(4)	35.0	37.0	40.4	42.2

[1] Data not available before 1972.
[2] The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives. The historic data are derived by subtracting "black" and "white" from the total; projections are made directly.
[3] Persons of Hispanic origin may be of any race.
[4] Data not available before 1980.

Table 11. Distribution of the population and labor force by age and sex, 1980, 1990, 2000, and projected 2010

[Percent]

Group	Population				Labor force			
	1980	1990	2000	2010	1980	1990	2000	2010
Total, 16 years and older	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
16 to 24	22.2	17.7	16.4	16.8	23.7	17.9	16.1	16.5
25 to 39	30.1	33.3	28.4	25.0	37.8	42.0	35.7	32.1
40 and older	47.7	49.1	55.2	58.2	38.6	40.1	48.2	51.4
65 and older	14.5	15.5	15.6	15.8	2.4	2.3	2.4	2.9
75 and older	5.4	6.1	7.1	7.0	.4	.4	.6	.6
Men, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
16 to 24	23.0	18.4	17.2	17.6	22.1	17.3	15.8	16.3
25 to 39	31.0	34.2	28.9	25.4	38.2	42.2	36.1	32.3
40 and older	46.0	47.4	53.9	57.1	39.7	40.4	48.1	51.4
65 and older	12.6	13.3	13.8	14.2	3.1	2.9	3.2	3.8
75 and older	4.2	4.7	5.8	5.8	.5	.4	.6	.6
Women, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
16 to 24	21.4	17.0	15.7	16.1	25.7	18.5	16.5	16.8
25 to 39	29.3	32.4	27.8	24.6	37.2	41.7	35.2	31.8
40 and older	49.3	50.7	56.4	59.3	37.1	39.8	48.3	51.4
65 and older	16.3	17.4	17.2	17.3	2.6	2.6	2.7	3.1
75 and older	6.4	7.4	8.3	8.0	.3	.3	.5	.5

Looking at the composition of the population by sex, the same general patterns hold. However, the male population has proportionately more youth than the female population, reflecting their higher proportion of births, slightly higher current migration, and higher mortality. (Compared with the overall male population relatively more women are in the older ages. Although table 11 does not show the relative sizes of the female and male population groups (as does table 2) it does indicate that the female population has a greater share of their population in the older ages.)

The age structure of the *labor force*, 16 and older is different from that of the *population*, 16 and older. A smaller share of the labor force is 65 and older. Youth aged 16 to 24 also make up a smaller share of the labor force than of the population. However, between 2000 and 2010, the youth share of the labor force is projected to increase. The baby-boom generation can be followed within the labor force by observing that in 1980, it was in the youth group. By 1990, the share of the labor force aged 25 to 39 had increased, indicating that the baby-boomers moved into this age group. By 2010, this age group's share of the labor force is projected to be less than it was in 1980, as the baby-boom generation will have aged. In 2000, 48.2 percent of the labor force was age 40 or older; by 2010, more than half the labor force will be in this age category.

Economic dependency. Since 1987, there were more Americans in the labor force than those who were not. This phenomenon is projected to prevail throughout the entire projection period, with the ratio of those not working to those who are working reaching 90 per 100 workers in 2010. This measure, known as the economic dependency ratio, is the number of persons in the total population (including Armed Forces overseas and children) who are not in the labor force per 100 of those who are in the labor force. (See table 12.) For every 100 persons in the 2000 labor force, about 94 persons were not. Of this group, about 44 were children, 29 were 16 to 64 years of age, and 21 were older than 64.

Upon examining these ratios, for various age groups, one can see that the decrease in the overall ratio is attributable to the change in the number of children. As the number of births diminished and the baby boom moved to ages older than 16, the total economic dependency ratio dropped. Most of the 32-percentage point drop for the total population between 1975 and 2000 was attributable to the decline in the number of births. The portion of the ratio attributed to children is projected to continue dropping, despite somewhat higher births. The remainder of the historical drop in the dependency ratio is attributable to higher labor force participation for women aged 16 to 64. As a result, the ratio for the 16- to 64-age group dropped 16 points, from 44.2 in 1975 to 28.3 in 2000. This ratio is projected to resume decreasing, reflecting the projected increase in participation of men and of young women aged 16 to 24.

Table 12. Economic dependency ratio, 1975–2000 and projected 2010, by age

[Per hundred in the labor force]

Group	1975	1980	1985	1990	1995	2000	2010
Total population ...	126.3	108.9	103.3	98.3	96.6	93.9	90.3
Under 16	61.4	50.7	47.3	45.8	48.6	44.1	40.1
16 to 64	44.2	37.4	34.2	30.5	25.7	28.3	28.9
65 and older	20.7	20.8	21.8	22.1	22.3	21.6	21.3

The part of the dependency ratio that had been steadily increasing is the portion attributable to older persons. In 1975, this was by far the smallest part of the dependency ratio, and by 2010, it is expected to still be the smallest proportion. However, between 1975 and 1990, the older persons' dependency ratio grew 1.4 percentage points; it then fell to 21.6 per hundred and it is projected to remain at that level. The decrease represented the entry of the birth dearth of the 1930s into the 65 and older group. With what we now believe to be the composition of the population after 2010, it is clear that the overall dependency ratio will rise some time after 2010; but it may never reach the level of 1975.

THE 2010 LABOR FORCE is expected to have a greater proportion of women and Hispanics than the 2000 labor force. As the baby-boom generation ages, the work force is expected to grow older. Between 2000 and 2010, 116 million workers are expected to remain in the labor force, 41 million workers are projected to enter the labor force, and 24 million are expected to leave. As a result, the labor force in 2010 would be 158 million—up 17 million from the 2000 level. This represents a continuation of the 1990–2000 growth rate. □

Notes

[1] The civilian labor force consists of employed and unemployed persons actively seeking work, but does not include any Armed Forces personnel. Historical data for this series are from the Current Population Survey, conducted by the Bureau of the Census for the Bureau of Labor Statistics.

The projections in this issue were completed prior to the tragic events of September 11, 2001. BLS will continue to review its projections and as long-term consequences of September 11 become clearer will incorporate these effects in subsequent releases of the labor force outlook.

[2] This projection replaces that described in Howard N Fullerton, Jr., "The labor force: steady growth, changing composition," *Monthly Labor Review*, November 1999, pp. 19–32. For further labor force projection data, see **http://stats.bls.gov/emplab1.htm.**

[3] Projections of labor force participation rates for each group are developed by first estimating a trend rate of change, usually based on participation rate behavior during the prior 8-year period. Second, the rate is modified when the time-series projections for the specific group appear inconsistent with the results of cross-sectional and cohort analyses. This second step ensures consistency in the projections across the various demographic groups. For further information, see *Handbook of Methods*, "Employment Projections" (Washington, Bureau of Labor Statistics, 1999), Chapter 13, available on the Internet at http://stats.bls.gov/opub/hom/homch13_a.htm.

[4] Frederick W. Hollmann, Tammany J. Mulder, and Jeffrey E. Kallan, "Population Projections of the United States, 1999 to 2100: Methodology and Assumptions" Working Paper No. 38 (U.S. Department of Commerce, Bureau of the Census, 1999).

[5] For a discussion of migration theories, see Douglass S. Massey, Joaquin Arango, Graeme Hugo, Ali Kouaouci, Adela Pellegrino, and J. Edward Taylor, "Theories of International Migration: A Review and Appraisal," *Population and Development Review*, September 1993, pp. 431–66.

[6] See Richard A. Ippolito, "Toward Explaining Early Retirement After 1970," *Industrial and Labor Relations Review*, July 1990, pp. 556–69. Also, see the discussion and tables in Howard N Fullerton, Jr., "Labor force participation: 75 years of change, 1950–98 and 1998–2025," *Monthly Labor Review*, December 1999, pp. 3–12; Arlene Dohm, "Gauging the labor force effects of retiring baby-boomers," *Monthly Labor Review*, July 2000; pp. 17–25, and William J. Wiatrowski, "Changing retirement age: ups and downs," *Monthly Labor Review*, April 2001, pp. 3–12.

[7] The analysis is complicated by the redesign of the Current Population Survey implemented in 1994. The survey is now counting more older women and men in the labor force due to the improved questionnaire design.

[8] See Diane E. Herz, "Work after early retirement: An increasing trend among men," *Monthly Labor Review*, April 1995, pp. 13–20.

[9] While it is impossible for everyone to experience higher rates of return than average all the time, some workers do experience above average rates of return on their defined contribution benefit pensions. Some of these workers retire early, and others decide to continue working to add more funds to their account and further increase their retirement income.

[10] *Normal Retirement Age*, Social Security Administration, December 4, 2000, on the Internet at **http://www.ssa.gov/OACT/ProgData/nra.html** (visited Dec. 20, 2000).

[11] See "The President Signs the 'Senior Citizens' Freedom to Work Act of 2000,' " Social Security Legislative Bulletin number 106-20, April 7, 2000, on the Social Security Internet site at **http://www.ssa.gov/legislation/legis_bulletin_040700.html** (visited Nov. 13, 2001).

[12] See Howard V. Hayghe, "Are women leaving the labor force?" *Monthly Labor Review*, July 1994, pp. 37–39.

[13] For the most recent evaluation of BLS labor force projections, see Howard N Fullerton, Jr., "An evaluation of labor force projections to 1995," *Monthly Labor Review*, September 1997, pp. 5–9.

[14] 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 entrants." If the labor force numbers at the second point are smaller, the difference is the leavers. These concepts understate the 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. As with measures of geographic mobility, which also do not measure all the changes over a period, we do not call these net entrants and leavers. 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.