Employment outlook: 1994–2005

The 2005 labor force: growing, but slowly

The labor force is projected to grow at a slower rate than the pace in 1994; however, labor force participation growth varies widely by race and Hispanic origin group

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By 2005, the number of persons working or looking for work, is expected to reach 147 million, an increase of 16 million from 1994, according to the latest projections of the labor force made by the Bureau of Labor Statistics.[1] This 12-percent rate of increase is slower than the 16-percent increase over the previous 11-year period, 1982 to 1993, when the labor force grew by 18 million. BLS projections show that the labor force increase in *numerical* terms also will be much smaller in the projected period than in the corresponding historic period.

The rate of growth in the women's labor force is expected to slow down, but it will still increase at a faster rate than that of men. (See table 1.) This slower rate of projected labor force growth is most prominent among young women. Women, as a result of a faster rate of growth than men, are projected to represent a slightly greater portion of the labor force in 2005 than in 1994–increasing from 46 to 48 percent. The number of men in the labor force is projected to grow, but at a slower rate than in the past as labor force participation for men in most age groups is projected to continue declining. The projected labor force growth will be affected by the aging of the baby-boom generation, those born between 1946 and 1964: at ages 45 to 64, this cohort is expected to show the most labor force growth. The different 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.

Making projections is not an exact science; consequently, to indicate the range of uncertainty, BLS prepares alternative—low, moderate, and high—projections.[2] Under these alternatives, the work force in 2005 varies from 144 million to 153 million. This range reflects different assumptions about changes in labor force participation rates and in the likely level of immigration. This article focuses primarily on the middle or moderate projection—in which the labor force is expected to total 147 million—and represents a third look at the 2005 labor force by BLS.[3] The BLS projections are based on Bureau of Census projections of the population and BLS projections of labor force participation.[4]

This article describes the demographic labor force projections, made by BLS for 136 age, sex, race, or Hispanic origin groups composing the future labor force.[5] Changes in the labor force are explored because of labor force participation rate or population changes. This article also examines dynamics of the changes resulting from persons entering, leaving, or staying in the labor force; factors leading to changes in the

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Table 1. Civilian labor force by sex, age, race, and Hispanic origin, 1982, 1993, and 1994, and moderate growth projection to 2005

[Numbers in thousands]

Group	Level				Change		Percent change		Percent distribution			Annual growth rate (percent)	
	1982	1993	1994	2005	1982–93	1994–2005	1982–93	1994–2005	1982	1994	2005	1982–93	1994–2005
Total, 16 years and over	110,204	128,040	131,056	147,106	17,836	16,050	16.2	12.2	100.0	100.0	100.0	1.4	1.1
Men, 16 years and over	62,450	69,633	70,817	76,842	7,183	6,025	11.5	8.5	56.7	54.0	52.2	1.0	.7
Women, 16 years and over	47,755	58,407	60,239	70,263	10,652	10,024	22.3	16.6	43.3	46.0	47.8	1.8	1.4
16 to 24	24,608	20,383	21,612	23,984	−4,225	2,372	−17.2	11.0	22.3	16.5	16.3	−1.7	1.0
25 to 54	70,506	92,271	93,898	101,017	21,765	7,119	30.9	7.6	64.0	71.6	68.7	2.5	.7
55 and over	15,092	15,386	15,547	22,105	294	6,558	1.9	42.2	13.7	11.9	15.0	.2	3.3
White, 16 years and over	96,143	109,359	111,082	122,867	13,216	11,785	13.7	10.6	87.2	84.8	83.5	1.2	0.9
Black, 16 years and over	11,331	13,943	14,502	16,619	2,612	2,116	23.1	14.6	10.3	11.1	11.3	1.9	1.2
Asian and other, 16 years and over[1]	2,729	4,742	5,474	7,632	2,013	2,158	73.8	39.4	2.5	4.2	5.2	5.0	3.1
Hispanic, 16 years and over	6,734	10,377	11,975	16,330	3,643	4,355	54.1	36.4	6.1	9.1	11.1	4.0	2.9
Other than Hispanic, 16 years and over	103,470	117,663	119,081	130,775	14,193	11,694	13.7	9.8	93.9	90.9	88.9	1.2	.9
White, non-Hispanic	89,630	99,499	100,462	108,345	9,869	7,883	11.0	7.8	81.3	76.7	73.7	1.0	.7

NOTE: Data for 1994 are not directly comparable with data for 1993 and 1982 because of the introduction of a major redesign of the Current Population Survey questionaire and collection methodology and the introduction of 1990 census-based population controls, adjusted for the estimated undercount.

[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" from the "black and other" group; projections are made directly, not by subtraction.

Table 2. Current and past projections of the civilian labor force by growth path, sex, age, race, and Hispanic origin, 2005

Group	Participation rate (percent)			Level (thousands)		
	Previous (1993)		Current moderate	Previous (1993)		Current moderate
	Moderate	Low		Moderate	Low	
Total	68.8	67.3	67.1	150,516	147,252	147,106
Men	74.7	73.6	72.9	78,718	77,558	76,842
Women	63.2	61.4	61.7	71,798	70,263	
16 to 24	67.5	65.6	64.9	24,127	23,436	23,984
25 to 54	87.8	86.4	84.5	105,054	103,348	101,017
55 years and over	33.6	32.3	35.2	21,335	20,469	22,105
White, 16 years and over	69.5	68.0	67.7	124,847	122,478	122,867
Black, 16 years and over	66.2	64.0	61.9	17,395	16,820	16,619
Asian and other, 16 years and over	66.6	64.0	64.0	8,274	7,954	7,632
Hispanic, 16 years and over	68.4	66.0	64.7	16,581	16,006	16,330
Other than Hispanic, 16 years and over	68.8	61.5	67.4	133,935	119,632	130,775
White, non-Hispanic	69.4	68.3	68.6	109,753	107,906	108,345

[1] The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives.

composition of the labor force. Finally, this article reviews the demographic consequences of projected changes in the composition of the labor force.

The revised labor force projections represent a significant change in the projected size of the labor force, but not much change in the composition by sex, race, or Hispanic origin (table 2). The recently prepared moderate scenario is not only at a lower level than the moderate alternative projected in 1993, but it is also lower than the low growth path projected in 1993. What is true for the total is also true for men—namely the revised labor force projection is lower than the previous low scenario. The current projection for women in the labor force, however, is between the 1993 projected moderate and low. For blacks and Asians and others, the current labor force projection from the moderate growth path is below the low growth path projected in 1993. For whites, the current moderate level projection is 2 million lower than the previous moderate projection, but just above the previous low scenario. The Hispanic labor force is also projected to be lower than that previously prepared, but the reduction is not as great as that for the other groups.

The lower projection for 2005 in this set of projections for various demographic groups is the result of the review of trends over the late 1980's and early 1990's. The earlier projections of the male labor force participation rates assumed that the drop in participation in the early 1990's was part of a cyclical response to the 1990–92 cyclical period. By 1994, as the projections were being prepared, it was apparent that the drop in participation was not cyclical, but part of a longer trend. This pattern was true for men in most age groups, 25 to 54. For women aged 25 to 45, the projected increases in labor force participation were expected to resume, and they have, but at a lower rate. For older labor force participants (55 and over), this set of projections is actually higher. This reflects the redesigned CPS, which now measures more older women and men in the labor force, as well as changes in composition that raise the labor force participation of the group as a whole. (See box.)

Labor force changes: recent history

To understand future labor force changes, it is helpful to begin with a brief review of recent trends. As noted earlier, the focus would have to be for the 1982–93 period because the 1994 labor force data from the CPS are not strictly comparable with earlier years. However, for the overall labor force, information from the 1971–83 period will help provide an understanding of the changes. (Data by race for the 1971–83 period is available by groups of whites.)

Labor force growth over the 1982–93 period was characterized by a significant slowing in the rate of growth from the 1971–82 period, which included the years with both the most rapid rates of labor force growth and the greatest absolute growth. The labor force grew by 26 million between 1971 and 1982, compared with 18 million over the 1982–93 period (table 3). The number of men in the labor force grew by 20 percent over the earlier period because of the entry of the baby-boom generation. This dropped to 11 percent between 1982 and 1993. However, women continued to enter the labor force rapidly: their numbers increased by almost one-half over the 11-year period 1971–82. This growth rate was cut in half over the latter period.

These changes in the labor force may be better understood if they are decomposed into two components: population and la-

The redesigned CPS

The Current Population Survey (CPS) is the basis of the historical data used to develop the labor force projections. Beginning in 1994, the CPS data are not directly comparable with data for 1993 and earlier years because of the introduction of a major redesign of the Current Population Survey questionnaire and collection methodology and the introduction of 1990 census-based population controls, adjusted for the estimated undercount. Including 1994 as part of the 11-year change period for historical comparison would introduce the change caused by the effects of the new design and the new population controls. Thus, to provide a comparable period to the 11-year 1994–2005 projection, the historical reference period of 1982 to 1993 is used in the tables and the discussion.

The labor force projections are consistent with the new CPS design and the new population controls, and have been adjusted for the undercount. For additional information on the redesign, see "Revisions in the Current Population Survey Effective January 1994," in the February 1994 issue of *Employment and Earnings*. Also, see Anne E. Polivka and Stephen M. Miller, "The CPS after the redesign: refocusing the economic lens." Paper presented at the Conference on Research in Income and Wealth (CRIW), Labor Statistics Measurement Issues Conference, Washington, DC, December, 1994.

Table 3. Civilian labor force by sex and age, 1971, 1982 and 1993

(Numbers in thousands)

Group	Level			Change		Percent change		Percent distribution		
	1971	1982	1993	1971–82	1982–93	1971–82	1982–93	1971	1982	1993
Total, 16 years and over	84,382	110,204	128,040	25,822	17,836	30.6	16.2	100.0	100.0	100.0
Men, 16 years and over	52,180	62,450	69,633	10,270	7,183	19.7	11.5	61.8	56.7	54.4
Women, 16 years and over	32,202	47,755	58,407	15,553	10,652	48.3	22.3	38.2	43.3	45.6
16 to 24	18,800	24,608	20,383	5,808	–4,225	30.9	–17.2	22.3	22.3	15.9
25 to 54	51,043	70,506	92,271	19,463	121,765	38.1	30.9	60.5	64.0	72.1
55 and over	14,539	15,092	15,386	553	294	3.8	1.9	17.2	13.7	12.0

Table 4. Civilian noninstitutional population by age, 1971, 1982, and 1993

(Numbers in thousands)

Group	Level			Change		Annual growth rate	
	1971	1982	1993	1971–82	1982–93	1971–82	1982–93
Total, 16 years and over	140,216	172,271	193,550	32,055	21,279	1.9	1.1
16 to 24	31,366	36,608	30,840	5,242	–5,768	1.4	–1.5
25 to 54	70,855	88,367	110,508	17,512	22,141	2.0	2.1
55 and over	37,987	47,297	52,202	9,310	4,905	2.0	0.9

bor force participation rate changes. The movements of the baby-boom generation first into ages of labor force entry with their associated lower participation and then into ages with higher labor force participation are population related changes. However, the large increase in the number of women in the labor force reflects both population factors (the baby boom) and participation rate changes.

Population changes. The population, an important component of labor force change, had about the same changes for men and women of the same age. For the working-age population then, a review of changes by age is sufficient. The growth of the population aged 16 and older dropped markedly between 1971–82 and 1982–93. (See table 4.) The number of youth, after increasing by 5 million, 1971–82, dropped by 6 million, leaving the 1993 population aged 16 to 24 with a half million fewer persons in 1993 than in 1971. These changes reflected the aging of the baby-boom generation and the smaller population cohort following the baby boomers. The population aged 25 to 54 increased more rapidly in the 1982–93 period, again showing the effect of the aging baby boom. Given that persons 25 to 54 years old have higher labor force participation rates than those 16 to 24, this population change alone would raise the overall participation rates.

After growing rapidly the during the 1971–82 period, the rate of growth for those in the age 55 and older group slowed by one-half during the 1982–93 period. This cohort, born in the late 1920's and early 1930's affected the growth and composition of the older population, as they progressed into the older age groups. The movement of this smaller demographic group into the "younger" portion of the older population (ages 55 to 64) lowered the labor force rate of the older population. This is because a larger share of the birth dearth cohort was composed of persons with lower labor force participation. On the other hand, for the population as a whole, having proportionally fewer older persons tends to raise the overall labor force participation rate.

Participation rate changes. Overall labor force participation, the other important component of labor force change, increased over both the 1971–82 and 1982–93 periods. However, the rate of growth was cut in half in the latter period. (See table 5.) The participation of men has declined over both of these periods, while that of women has increased substantially. This caused an overall increase in labor force participation. In the 1971–82 period, unlike other periods, participation of young men increased, while that of older women decreased. In the 1982–93 period, labor force participation decreased for men in all age groups. For men 45 and older, labor force participation dropped quite sharply in the 1971–82 period as earlier retirement became more prominent. While their rate of decrease was considerably less in the 1982–93 period, it was still greater than any other men's age group. What is also striking is the continued decrease in the participation rates of men ages 25 to 54 in the labor force. Although the decrease in labor force participation was modest, it has continued over the entire 22-year period. For most groups of men, labor force participation did not drop as rapidly over the

Table 5. **Civilian labor force participation rates by sex and age, 1971, 1982, and 1993**

Group	Participation rate (percent)			Changes	
				Percentage point	
	1971	1982	1993	1971–82	1982–93
Total, 16 years and over	60.2	64.0	66.2	3.8	2.2
Men, 16 years and over	79.1	76.6	75.2	–2.5	–1.4
16 to 19	56.2	56.7	53.1	0.6	–3.6
20 to 24	83.0	84.9	83.1	1.9	–1.7
25 to 34	95.9	94.7	93.5	–1.2	–1.2
35 to 44	96.5	95.3	93.5	–1.2	–1.8
45 to 54	93.9	91.2	90.1	–2.7	–1.1
55 to 64	82.1	70.2	66.5	–11.9	–3.7
65 and over	25.5	17.8	15.6	–7.7	–2.2
Women, 16 years and over	43.4	52.6	57.9	9.3	5.2
16 to 19	43.4	51.4	49.8	8.0	–1.6
20 to 24	57.7	69.8	71.3	12.1	1.5
25 to 34	45.6	68.0	73.6	22.3	5.7
35 to 44	51.6	68.0	76.7	16.4	8.7
45 to 54	54.3	61.6	73.5	7.3	12.0
55 to 64	42.9	41.8	47.3	–1.1	5.5
65 and over	9.5	7.9	8.2	–1.6	0.3

1982–93 period as it did during 1971–82. The participation of women ages 25 to 54 increased sharply over the 1971–82 period. This rate of growth slackened considerably in the 1982–93 period, especially for younger women.

A closer look

Before moving to the projections of the labor force, a more careful description of labor force participation changes for the three groups with significant revisions in their projected labor force would prove helpful. These three groups are men ages 25 to 54 and those 55 and older, and women ages 20 to 45.

Men 25 to 54. Looking in detail at the changes in labor force participation, one is struck by the continuous drop in labor force participation rates among men aged 25 to 54. (See table 6 for detailed age groups.) For men ages 25 to 29 and 30 to 34, the period of greatest drop in their labor force participation was 1978–83—the years following the most rapid increase in the labor force. This may reflect the difficulties of the baby-boom generation getting jobs. It also reflects the extension of the number of years of education as more high school graduates attend college and as it has taken more years for many to complete college.

The detailed labor force participation rate data by race indicate that participation for black men dropped the most sharply. The decreases were greatest for men in the age groups 40 to 59. Labor force participation rates dropped by 4 to 6 percentage points over the 1983–93 decade. The pattern of having greater decreases in participation in the 1988–93 period was characteristic of Hispanic men. Age groups from 25 to 54 all experienced drops in labor force activity. These decreases were not as severe as for black men. White, non-Hispanic men's labor force participation rates also dropped more rapidly in the 1988–93 period, but the changes were generally less than those for Hispanic men. Asian and other men, unlike the other race, Hispanic origin groups, experienced their greatest drop in labor force participation over the 1983–88 period.

As described earlier, the rates of prime age men have been declining steadily for the past 22 years. If the 1971 male labor force participation rates prevailed in 1993, there would have been 734,000 more men ages 25 to 54 in the labor force. The detailed labor force participation rate data by race indicate that participation for black men dropped the most sharply. An important element in projecting future labor force growth is to have a better understanding of why men's labor force rates are declining. For young men, one reason for having declining participation rates, has been their increasing college enrollment. However, for men 25 to 49, that cannot be a significant factor in their labor force participation rate decline. To pursue this issue further, data from the CPS were tabulated from the initial question on the respondent's primary activity during the reference week. Among possible reasons for not participating in the labor force, one response was "unable to work."[6] (See table 7.) Overall, the number of men 25 to 49 grew by 2 percent annually between 1983 and 1993, while the number of men in these age groups reporting themselves unable to work grew by 9 percent a year or four times as fast. The absolute level tripled between 1983 and 1993. One percent of men in these age groups was unable to work in 1983; the proportion doubled to 1.9 percent by 1993. The proportion of men describing themselves as "unable to work" varied by race and Hispanic origin, by educational attainment, and by marital status.

A lower proportion of white, non-Hispanics reported being unable to work; however, the number of persons being unable to work grew five times as fast as the population of men the same age. That poorly educated men have a higher proportion of persons reporting themselves as unable to work is not surprising. They are more likely to work in dangerous occupations and more likely to work in occupations where physical factors such as strength are important. The number of men in the population with less than 12 years of schooling dropped between 1983 and 1993, accounting for the drop in the share of such men unable to work.

To search for some corroboration of the increase in prime-age men responding as unable to work, a look at Social Secu-

rity disability awards should be helpful. The Board of Trustees of the various Social Security trust funds report the disability incidence rate:

> "has fluctuated substantially in past years and the causes for the variation have not been precisely determined. Incidence rates increased during 1970–75, declined during 1976–82, increased again during 1983–85, remained steady in 1986–89. During 1990–92 the incidence rate resumed. In 1993–94, the observed incidence rate declined slightly."[7]

Patricia Katz, trends in labor force participation of the disabled varied by age and sex the same ways that participation of those free of disabilities. This study does not explain why more are reporting themselves as not able to work, but does suggest that disability itself is not the cause of lower labor force participation of men.[8]

Other important factors which could explain the drop in prime-age male labor force participation are that these men, particularly those with the least education, experienced increasing difficulty in finding jobs consistent with their education and training—at least in the geographic area in which they are living. Also, the likely continuation of the shift from goods-producing jobs to jobs in the service-producing sector is projected to continue.[9] BLS also projects the relatively faster rate of growth of jobs requiring a college degree.[10]

Accumulating evidence indicates that the decline in labor force activity among prime working-age men (at all ages) is greatest among men with fewer years of educational attainment and among men with low rates of pay. Chinhui Juhn documents:

> . . . "the substantial decline in labor market activity among men as measured by the fall in the employment to population ratio. The decline occurs at all ages but is particularly severe among less-educated and low-wage men. The fall in employment is largely accounted for by a rise in the number of men who experience long spells of labor market inactivity. The paper also documents that the decline in real wages can account for the vast majority of the decline in employment from the early 1970s through the late 1980s. . ."[11]

Men 55 to 74. Older men have become less likely to work; for men 65 and older, the trend now extends over a century. With the availability of early retirement, offered when many corporations downsize, and benefits under Social Security, men have been leaving the labor force at younger ages. (See table 6.) During the 1973–78 period, men 60 to 64 years of age had the most rapid decrease in labor force participation. This age group continued to experience the greatest drop in participation through 1988. Starting around 1985, participation for men 65 and older started to rise, but as the data indicate, this reversal was short lived. For the 1988–93 period, men 55 to 59 had the sharpest rate of decrease in labor force participation.[12]

Labor force participation rates for white, non-Hispanic men and black men dropped for each age group in the 55-to-74-year range. The 55 to 59 age group had the greatest decrease in labor force participation. Labor force participation for ages 60 to 64 then dropped sharply for Hispanic men, by 13 percentage points. After a review of all the changes in labor force participation rates, the data show that white, non-Hispanic men have the highest participation rates, followed by Hispanic men, Asian and other men, and then black men. This was the order in 1983 as well.

Women 20 to 44. Labor force participation of women has been rising since the early 1970's. However, recently it has been increasing at an ever slower rate. (See table 8.) This has caused speculation that the increases might stop or even reverse. A useful way to understand the increased participation for women is the cohort approach. Women born in the 1940's have had a much higher participation rate than their "older sisters." Women born in the 1950's and later, on the other hand, have had participation rates equal to, or greater than their older sisters. As a result, when graphing the time series, a pattern of sharply rising participation is followed by much lower participation rate changes for successive age groups. For each consecutive historical period displayed in table 8, participation change has been lower. For women ages 20 to 24, participation dropped in the 1988–93 period. Women in this age group have gone from having the highest labor force participation of any age group of women to having the lowest of these groups. This may reflect the increased likelihood of women attending college and the longer period of advanced education women are taking.[13] Childbearing at ages 20 to 24 peaked in 1990 and has been drifting down, so it cannot be considered a factor in the decreasing participation.

The view of labor force participation by race shows some consistent patterns. In 1983, black women had the highest

Table 6. Change in labor force participation rates for men ages 25 to 74, 1973–93

[In percent]

Age	1973–78	1978–83	1983–88	1988–93
25 to 29	–0.1	–0.9	0.1	–0.7
30 to 34	–.8	–1.2	–.1	–1.0
35 to 39	–.4	–.7	–.8	–1.0
40 to 44	–.8	–.1	–.6	–1.1
45 to 49	–1.4	.4	–.3	–1.3
50 to 54	–2.0	–.6	–.6	–.4
55 to 59	–3.3	–2.1	–1.4	–1.2
60 to 64	–7.1	–4.8	–2.6	–.2
65 to 69	–4.1	–3.9	–.3	–.4
70 to 74	–2.4	–2.5	–1.8	–.5

Table 7. **Men ages 25 to 49, unable to work by race and Hispanic origin and by educational attainment, 1983 and 1993**

[Numbers in thousands]

Group	Population		Unable to work					Share of men—				
			Number		As a percent of the population			In the population		Unable to work		
	1983	1993	1983	1993	1983	1993	Change	1983	1993	1983	1993	Change
All men 25 to 49	38,581	47,990	390	935	1.0	1.9	0.9	100.0	100.0	100.0	100.0	.....
White, non-Hispanic	31,170	36,637	265	594	.9	1.6	.8	80.8	76.3	67.9	63.5	-4.4
Black non-Hispanic	3,872	5,117	77	208	2.0	4.1	2.1	10.0	10.7	19.7	22.2	2.5
Asian and other, non-Hispanic[1]	1,133	1,714	10	28	.9	1.6	.8	2.9	3.6	2.6	3.0	.4
Hispanic	2,406	4,522	37	104	1.5	2.3	.8	6.2	9.4	9.5	11.1	1.6
Educational attainment level												
Less than 12 years	6,350	6,005	208	361	3.3	6.0	2.7	16.5	12.5	53.3	38.6	-14.7
12 years	14,256	16,387	125	356	.9	2.2	1.3	37.0	34.1	32.1	38.1	6.0
13 to 15 years	7,584	12,530	38	167	.5	1.3	.8	19.7	26.1	9.7	17.9	8.1
16 years or more	10,391	13,067	19	50	.2	.4	.2	26.9	27.2	4.9	5.3	.5

SOURCE: Current Population Survey.

[1] The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives.

participation rates for ages 30 to 44, as they had for years. By 1993, white, non-Hispanic women's labor force participation rates, having grown faster, exceeded those for black women. In 1983, white, non-Hispanic women's labor force rates were highest for ages 20 to 29, and they continued to be highest. Black women's labor force participation at these ages increased by 3.5 points over the 1983–93 period, which was more than the 2.7-point increase of white, non-Hispanic women aged 20 to 24. Labor force participation for black women 25 to 34 actually dropped over then 1983–93 decade.

Hispanic women have the lowest labor force participation rates for age groups 20 to 44 and, despite rapid increases in labor force participation for ages 25 to 44 over the 1983–93 period, they had the lowest participation rates in 1993. In 1983, Asian and other women had labor force participation rates above Hispanic women, but less than either white or black women.

Although women ages 45 and older are not discussed in detail, it is not because they are not an important group; it is because the labor force participation rates of women 45 to 64 have been steadily rising and show little evidence of slowing. (They are the age groups of women into which the cohorts with much higher rates are moving.) There is little evidence to indicate that any slowing in the 1994–2005 time horizon is likely for these age groups of women. Activity rates of women ages 65 and older have been moving up slowly.

Future trends and the redesigned CPS

The descriptions of changes in labor force participation have focused on the 1982–93 period because the redesign of the CPS complicates the analysis.[14] However, the "new" CPS may measure different trends in labor force participation. It is too soon to discover new trends, which makes the uncertainty in these projections greater. However, these projections start from the new CPS and reflect the levels in labor force participation from that survey. Some of the difference in the projected labor force participation rates reflects these different levels. In most cases, the changes appear small. Research by Anne Polivka and Stephen Miller of the Bureau indicate that the new CPS may have increased the overall labor force participation rate for women, by 0.2 percentage points. Labor force participation rates of teenagers may be higher and that of persons aged 65 and over (for both men and women). The labor force participation rates of women 25 to 54 were increased by 0.1 percentage point and women 55 to 64, by 0.4 point.

The study did not examine the effects of re-weighing and the adjustment for undercount, but the Hispanic male labor force exceeded the black male labor force in 1994 for the first time. The Hispanic labor force has been growing faster than the black labor force for some time, but it is difficult to establish how much of the 1993–94 change is due to growth and how much to changes in survey weights.

Projected population changes

Having looked at the components of past labor force changes, we are prepared to review the first factor having an impact on the future labor force—future population changes. Although the rate of growth of the civilian noninstitutional population is not projected to be significantly different over the 1994–2005 period than for the 1982–93 period, different population groups are projected to have vastly different rates of

change. (Though as noted earlier, the numbers of men and women are projected to grow at about the same rate for ages 16 to 54.) The numbers of young people, ages 16 to 24, dropped during the 1982–93 period. However, that drop is over, as the number of teenagers ages 16 to 18 should continue to grow, raising the population level of this group throughout the period. (See table 9.) By contrast, the number of 20- to 24-year-olds is expected to drop for the next 2 years (1994 and 1995) and then begin a steady rise. Consequently, the youth population is expected to grow more rapidly than the overall population.

The four race-Hispanic origin groups, for which the Bureau of Labor Statistics makes labor force projections, also exhibit differential rates of population growth. Most striking, although the white, non-Hispanic population 16 and older is almost 10 times as large as the comparable Hispanic population, the two groups are expected to add almost the same numbers to the civilian noninstitutional population of working age over the 1994–2005 period, 8.5 million for white, non-Hispanics and 7.1 million for Hispanics. This represents vastly different rates of growth, 3.1 percent per year for Hispanics, and 0.5 percent per year for white non-Hispanics. Because of the differential rates of growth, the Hispanic share of the population is expected to grow to 12 percent and the white, non-Hispanic share, to drop to 72 percent.

The black civilian noninstitutional population aged 16 and older, is projected to grow more rapidly than the overall population, adding 3.9 million to the population over the 1994–2005 period, similar to the 3.5 million expected to be added by the Asian and other population. (The Asian and other population group contains the Asian and Pacific Islander group and the American Indian and Alaska Native group. The CPS does not provide estimates for these two groups separately.) Both the black and the Asian and other groups are projected to increase their share of the population; blacks' share growing by 0.6 percentage points, Asians and others', by 0.9 points. The Asian and other group is projected to grow at the same rate as the Hispanic population.

To prepare underlying population projections, the Bureau of the Census assumes three principal population projections; fertility, mortality, and net immigration. The two population projections the Bureau of Labor Statistics has chosen for the labor force projections differ only in the level of net immigration. The assumed total fertility rate for the year 2005 is 2,087 births per 1,000 women, just below replacement, but up from the 2,055 estimated for 1995. The fertility rates vary by race and Hispanic origin groups, with white, non-Hispanic fertility being below replacement; Asian and Pacific Islander and non-Hispanic being at replacement; and black, American Indian, and Hispanic above replacement. Life expectancy would be 76.8 years by 2005 and like fertility, this varies by race. These factors are more important in the long run than in the 1995–2005 period.

For the three labor force alternatives, BLS chose two net immigration alternatives, the middle and high net immigration population projection series. The Census Bureau assumes 820,000 net immigrants yearly under the middle series, slightly lower than in their most recent projection, and 1,370,000 net immigrants in the higher alternative. This assumption is unchanged from the previous projection.[15]

As a consequence of these assumptions, the population will continue growing slowly, with net immigration being more than a third of net growth in the population in the middle series and more than two-fifths of the high net immigration series. The white, non-Hispanic population is projected to increase in size, but will steadily decrease as a share of the population. The American Indian and Alaska Native population is expected to maintain its share of the population. The other race, Hispanic origin groups, are projected to increase in size and share of the population.

Table 8. **Change in labor force participation rates for women ages 20 to 44, 1973–93**

[In percent]

Age	1973–78	1978–83	1983–88	1988–93
20 to 24	7.1	1.6	2.8	−1.4
25 to 29	12.3	5.5	3.7	.3
30 to 34	11.5	8.1	3.8	1.5
35 to 39	8.4	7.3	6.3	.9
40 to 44	8.3	6.8	6.6	2.2

Labor force participation rate projections

Overall changes. The participation rate—the percent of the population in the labor force—is the second factor crucial to labor force growth. BLS projects labor force participation rates for 136 separate demographic groups. When those are aggregated, the overall labor force participation rate is projected to continue to increase, but at a slower rate than that during the 1982–93 period. That rate, of course, masks many differences among the groups that make up the labor force. The following tabulation shows rates of growth in labor force participation rates over the 1982–93 and 1994–2005 periods:

	Labor force participation growth rates	
	1982–93	*1994–2005*
Total	0.3	0.1
Men	−.2	−.3
Women	.9	.4

Between 1982 and 1993, labor force participation rates increased from 64.0 percent to 66.2 percent or an annual growth rate of 0.3 percent. Over the next 11 years, the rate of growth is projected to grow at a 0.1-percent annual rate. The

Table 9. Civilian noninstitutional population by sex, age, race, and Hispanic origin, 1982, 1993 and 1994, and middle projection to 2005

(Numbers in thousands)

Group	Level				Change		Annual growth rate		Percent distribution		
	1982	1993	1994	2005	1982-93	1994-2005	1982-93	1994-2005	1982	1994	2005
Total, 16 years and over	172,271	193,550	196,814	219,185	21,279	22,371	1.1	1.0	100.0	100.0	100.0
16 to 24	36,608	30,840	32,549	36,956	-5,768	4,407	-1.5	1.2	21.3	16.5	16.9
25 to 54	88,367	110,508	112,618	119,494	22,141	6,876	2.1	.5	51.3	57.2	54.5
55 and over	47,297	52,202	51,648	62,735	4,905	11,087	.9	1.8	27.5	26.2	28.6
Men, 16 years and over	81,523	92,620	94,355	105,389	11,097	11,034	1.2	1.0	47.3	47.9	48.1
16 to 24	18,015	15,329	16,277	18,540	-2,686	2,263	-1.5	1.2	10.5	8.3	8.5
25 to 54	42,923	54,232	55,349	58,420	11,309	3,071	2.1	.5	24.9	28.1	26.7
55 and over	20,586	23,059	22,728	28,430	2,473	5,702	1.0	2.1	11.9	11.5	13.0
Women, 16 years and over	90,748	100,930	102,460	113,796	10,182	11,336	1.0	1.0	52.7	52.1	51.9
16 to 24	18,593	15,511	16,272	18,417	-3,082	2,145	-1.6	1.1	10.8	8.3	8.4
25 to 54	45,444	56,276	57,269	61,074	10,832	3,805	2.0	.6	26.4	29.1	27.9
55 and over	26,711	29,143	28,919	34,305	2,432	5,386	.8	1.6	15.5	14.7	15.7
White, 16 years and over	149,441	163,921	165,555	180,437	14,480	14,882	.8	.8	86.7	84.1	82.3
Black, 16 years and over	18,584	22,329	22,879	26,831	3,745	3,951	1.7	1.5	10.8	11.6	12.2
Asian and other, 16 years and over [1]	4,211	7,300	8,383	11,917	3,089	3,534	5.1	3.2	2.4	4.3	5.4
Hispanic, 16 years and over	10,580	15,753	18,117	25,240	5,173	7,123	3.7	3.1	6.1	9.2	11.5
Other than Hispanic, 16 years and over	161,691	177,797	178,697	193,945	16,106	15,248	.9	.7	93.9	90.8	88.5
White, non-Hispanic	139,201	148,432	149,473	157,980	9,231	8,507	.6	.5	80.8	75.9	72.1

NOTE: Data for 1994 are not directly comparable with data for 1993 and 1982 because of the introduction of a major redesign of the Current Population Survey questionaire and collection methodology and the introduction of 1990 census-based population controls, adjusted for the estimated undercount.

[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" from the "black and other" group; projections are made directly, not by subtraction.

much slower increase in labor force participation reflects two important developments: the aging of the population, with their lower labor force participation, and the expected slower projected increases in labor force participation of younger women.

BLS also projects that the participation rates of young people will continue to decline. Between 1982 and 1993, labor force participation of those aged 16 to 24 dropped 1.1 percentage points, and is projected to drop by 1.5 points. Participation rates for teenagers and 20- to 24-year-olds are projected to decline for both women and men.

Women and men. The overall labor force participation is projected to increase at a much lower rate between 1994 and 2005 than it did in the 1982–93 period. Labor force participation growth in the 1982–93 period reflected the increasing participation of women, moreover the effect of the aging of the baby boomers, moving to age groups with typically higher participation rates. Greater stability in baby boomers' participation rates is expected to occur in the 1994–2005 period.

Labor force participation of women increased 5 percentage points over the 1982–93 period, from 53 percent in 1982 to 58 percent in 1994. However, their participation increased more rapidly in the earlier subperiod—for example, by 3.7 percentage points in 1983–88, compared with 1.3 percentage points over the 1988–93 period. The projected increase—2.9 percentage points over the 1994–2005 period—reflects a slowdown in the rate at which women's labor force participation is projected to increase, particularly among young women, and and the life cycle in which the baby-boom generation now finds itself. Women in the age group 25 and older have higher labor force participation rates in 2005 than in 1994. (See table 10.) The labor force participation rates of younger women (ages 16 to 24) are expected to drop, in part because of the continued effect of increased schooling.

The labor force participation rate for men dropped 1.4 percentage points in the 1982–93 period. For the 1994–2005 period, participation is projected to drop 2.2 percentage points. BLS projects that for the last part of the 1990's, participation of men will drop by 0.9 percentage point. During the latter part of the projection period, labor force participation rates are expected to fall by 1.3 percentage points, as the oldest of the baby-boom generation approaches retirement age. However, men are expected to have lower labor force participation rates in 2005 than in 1994, except the group aged 55 to 64, which are projected to have unchanged rates. (See table 10.)

Race and Hispanic origin. The labor force participation rates of three racial groups—black, Hispanic (of all races), and Asian and other (including American Indians and Alaskan Natives)—are projected to decrease over the 1994–2005 period, each by 0.2 percent a year. The participation rates of white, non-Hispanics are projected to increase by 0.3 percent a year because of the projected increases for white, non-Hispanic women.

The growth and level of labor force participation of a racial group reflect changes in labor force participation by age and sex, and also changes in the composition of their population. If one group has a significantly younger or older population than another, its overall participation rate may be lower, although their age-specific participation rates may be higher. The Hispanic population is concentrated in the working years (ages 25 to 54), making the overall labor force participation rate highest for men. Participation rates for women also varied significantly. For example, Hispanic women had the lowest overall participation rate in 1994. Their participation rates are projected to increase significantly by 2005, but will still be the lowest of all racial or Hispanic origin groups. In 1982, Asian and other women had the highest participation rates among women; by 1994, non-Hispanic women, black and white, had higher rates, although rates had increased for all three groups. By 2005, white non-Hispanic women are projected to have the highest labor force participation rates.

Labor force dynamics

The dynamics of the labor force change from 1994 to 2005 emerge from three groups: entrants, or those who will be in the labor force in 2005, but who were not in it in 1994; leavers, those who will exit the labor force after 1994 and before 2005; and stayers, those who were in the labor force in 1994 and will remain through 2005.[16] To the extent that the demographic composition of labor force entrants between 1994 and 2005 is different from the composition of those now in the labor force, the 2005 labor force will be different from today's labor force. But the labor force also is affected by the demographic composition of those leaving. Thus, the labor force of 2005 may be regarded as consisting of the labor force of 1994, plus the entrants, less the leavers.

BLS projects that between 1994 and 2005, 39 million workers will enter the labor force and 23 million will leave. (See table 11.) These figures compare with 37.3 million entrants and 19.4 million leavers over the 1982–93 period. In the earlier period, labor force entrants were more likely to be men and the leavers were more likely to be men, but the vast difference in share exhibited for the 1982–93 period is projected to narrow somewhat during the 1994–2005 period.

According to these projections, by 2005, 19.7 million men will have joined the 1994 labor force of 70.8 million, and 13.7 million men will have left the labor force, resulting in a labor force in 2005 of 76.8 million men. Similarly, 19.6 million women are expected to enter the labor force over the 1994–2005 period, while 9.6 million women are projected to leave. The relatively fewer women leaving the labor force would raise their share of the labor force from 46.0 percent in 1994 to 47.8 percent in 2005.

BLS is projecting that the number of entrants over the 1994–2005 period will be larger than the 37.3 million who entered during the 1982–93 period. The number projected to leave the labor force is expected to increase by 20 percent. Slightly more men (52 percent) than women (48 percent) entered the labor force, in the 1982–93 period. In the 1994–2005 period, women and men are expected to enter the labor force in nearly equal numbers.

Race and Hispanic origin. The largest share of the 1994 labor force—77 percent—was made up of non-Hispanic whites. Two-thirds of the population entering the labor force between 1994 and 2005 are projected to be non-Hispanic whites, less than the share over the 1982–93 period. These proportions are smaller than their share of the work force, reflecting this group's lower population growth. As a result of the 26.0 million non-Hispanic whites entering the labor force, and the 18.2

Making the population projections comparable with the CPS

The Bureau of the Census does not adjust its current population estimates for the undercount of the 1990 census, however, the Current Population Survey does, as of January 1994. The Census Bureau makes the adjustments to the CPS as part of the estimation process, but has been directed not to release the adjustment factors (Federal Register 58, no. 1, Monday, January 4, 1983). However, it does release monthly estimates of the civilian noninstitutional population and so does BLS, but only the BLS release adjusts for the undercount. Because the adjusted numbers will not change until the next census, it is a straighforward process to compare the two civilian noninstitutional population annual average estimates and derive an approximate adjustment, but only for those ages 16 and older. This adjustment amounts to about half the approximately 4 million estimated undercount for the total population. Further, it is an estimate of the adjustment factors, not the actual factors used by the Census Bureau. The civilian noninstitutional population displayed in this article reflects these estimates, as well as those reflecting CPS redesign and re-weighting for the 1990 census.

Table 10. Civilian labor force and participation rates by sex, age, race, and Hispanic origin, 1982, 1993 and 1994, and growth projection to 2005

Group	Participation rate (percent)				Level (thousands)				Change (thousands)		Percent change		Annual growth rate (percent)	
	1982	1993	1994	2005	1982	1993	1994	2005	1982–93	1994–2005	1982–93	1994–2005	1982–93	1994–2005
Total, 16 years and older	64.0	66.2	66.6	67.1	110,204	128,040	131,056	147,106	17,836	16,050	16.2	12.2	1.4	1.1
Men, 16 years and older	76.6	75.2	75.1	72.9	62,450	69,633	70,817	76,842	7,183	6,025	11.5	8.5	1.0	.7
16 to 19	56.7	53.1	54.1	52.0	4,470	3,564	3,896	4,457	-906	561	-20.3	14.4	-2.0	1.2
20 to 24	84.9	83.1	83.1	81.9	8,604	7,164	7,540	8,167	-1,440	627	-16.7	8.3	-1.7	.7
25 to 34	94.7	93.5	92.6	91.5	17,793	19,053	18,854	16,279	1,260	-2,575	7.1	-13.7	.6	-1.3
35 to 44	95.3	93.5	92.8	91.4	12,781	18,537	18,966	18,787	5,756	-179	45.0	-.9	3.4	-0.1
45 to 54	91.2	90.1	89.1	87.7	9,784	12,634	12,962	17,616	2,850	4,654	29.1	35.9	2.4	2.8
55 to 64	70.2	66.5	65.5	65.6	7,174	6,639	6,423	9,150	-535	2,727	-7.5	42.5	-.7	3.3
65 and older	17.8	15.6	16.9	16.5	1,845	2,041	2,177	2,386	196	209	10.6	9.6	.9	.8
Women, 16 years and older	52.6	57.9	58.8	61.7	47,755	58,407	60,239	70,263	10,652	10,024	22.3	16.6	1.8	1.4
16 to 19	51.4	49.8	51.3	50.7	4,056	3,261	3,585	4,211	-795	626	-19.6	17.5	-2.0	1.5
20 to 24	69.8	71.3	71.0	70.7	7,477	6,393	6,592	7,149	-1,084	557	-14.5	8.5	-1.4	.7
25 to 34	68.0	73.6	74.0	76.4	13,393	15,412	15,499	14,186	2,019	-1,313	15.1	-8.5	1.3	-.8
35 to 44	68.0	76.7	77.1	80.0	9,651	15,727	16,259	17,078	6,076	819	63.0	5.0	4.5	.4
45 to 54	61.6	73.5	74.6	80.7	7,105	10,907	11,357	17,070	3,802	5,713	53.5	50.3	4.0	3.8
55 to 64	41.8	47.3	48.9	56.6	4,888	5,228	5,289	8,613	340	3,324	7.0	62.8	.6	4.5
65 and older	7.9	8.2	9.2	10.2	1,185	1,479	1,658	1,956	294	298	24.8	18.0	2.0	1.5
White	64.3	66.7	67.1	67.7	96,143	109,359	111,082	122,867	13,216	11,785	13.7	10.6	1.2	.9
Men	77.4	76.1	75.9	73.9	55,133	60,150	60,727	64,884	5,017	4,157	9.1	6.8	.8	.6
Women	52.4	58.0	58.9	62.6	41,010	49,208	50,356	57,971	8,198	7,615	20.0	15.1	1.7	1.3
Black, 16 years and older	61.0	62.4	63.4	61.9	11,331	13,943	14,502	16,619	2,612	2,116	23.1	14.6	1.9	1.2
Men	70.1	68.6	69.1	65.8	5,804	6,911	7,089	7,904	1,107	815	19.1	11.5	1.6	1.0
Women	53.7	57.4	58.7	58.8	5,527	7,031	7,413	8,714	1,504	1,301	27.2	17.5	2.2	1.5
Asian and older, 16 years and older[1]	64.8	65.0	65.3	64.0	2,770	4,742	5,474	7,632	1,972	2,158	71.2	39.4	5.0	3.1
Men	76.0	74.3	74.3	72.3	1,513	2,573	3,002	4,054	1,060	1,052	70.1	35.1	4.9	2.8
Women	54.8	56.6	56.9	56.7	1,257	2,169	2,471	3,578	912	1,107	72.6	44.8	5.1	3.4
Hispanic, 16 years and older	63.6	65.9	66.1	64.7	6,734	10,377	11,975	16,330	3,643	4,355	54.1	36.4	4.0	2.9
Men	79.5	79.9	79.2	76.1	4,148	6,256	7,210	9,492	2,108	2,282	50.8	31.6	3.8	2.5
Women	48.2	52.0	52.9	53.6	2,586	4,120	4,765	6,838	1,534	2,073	59.3	43.5	4.3	3.3
Other than Hispanic, 16 years and older	64.0	66.2	66.6	67.4	103,470	117,663	119,081	130,775	14,193	11,694	13.7	9.8	1.2	.9
Men	76.4	74.7	74.6	72.5	58,302	63,377	63,607	67,350	5,075	3,744	8.7	5.9	.8	.5
Women	52.9	58.4	59.4	62.8	45,169	54,287	55,474	63,425	9,118	7,951	20.2	14.3	1.7	1.2
White, non-Hispanic, 16 and older	64.4	67.0	67.2	68.6	89,630	99,501	100,462	108,345	9,872	7,883	11.0	7.8	1.0	.7
Men	77.2	76.1	75.5	73.6	51,121	54,245	54,306	56,429	3,124	2,123	6.1	3.9	.5	.3
Women	52.7	58.6	59.5	63.8	38,508	45,256	46,157	51,916	6,748	5,759	17.5	12.5	1.5	1.1

NOTE: Data for 1994 are not directly comparable with data for 1993 and 1982 because of the introduction of a major redesign of the Current Population Survey questionaire and collection methodology and the introduction of 1990 census-based population controls adjusted for the estimated undercount.

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" from the "black and other" group; projections are made directly, not by subtraction.

million leaving over the 1994–2005 period, the share of non-Hispanic whites in the labor force is projected to be 74 percent in 2005, a drop of 3 percentage points from 1994 and down 8 percentage points from 1982. White, non-Hispanic men supplied the most entrants, 36 percent. More striking, they supplied most of those leaving, 53 percent.

The labor force of white, non-Hispanics is projected to grow 0.7 percent per year, more slowly than the overall labor force. The slower growth reflects little migration 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 leavers, a reflection of the aging of the white male labor force. White, non-Hispanic women are projected to in-

crease their participation more than any other group, but this faster growth rate is not enough to offset the slow growth in the non-Hispanic population of only 0.5 percent yearly. White non-Hispanic men are projected to have the least drop in labor force participation of any group of men.

Blacks, the second largest group in the 1994 labor force, made up 10.5 percent of the labor force. (This number reflects an adjustment to place Hispanic blacks with Hispanics rather than with non-Hispanic blacks.) Blacks are projected to add 4.9 million workers to the labor force between 1994 and 2005—12 percent of all new entrants during the period. This is the same number that entered between 1983 and 1994. With the 2.8 million black non-Hispanics projected to leave the labor force over the period, the group will increase in number, and by 2005, their share of the labor force is expected to reach 11.1 percent. The black labor force is projected to grow at the same rate as the overall labor force. Labor force growth among blacks is attributable to growth in their population, resulting from higher birth rates and from immigration. A closer look reveals that the drop in labor force participation projected for black men is not enough to offset the significant increase in participation for black women.

In 1994, Hispanics (of all races) were the third largest labor force group, with 12.0 million workers representing 9.1 percent of the labor force. Because of their higher levels of immigration, some 6.1 million Hispanics are projected to enter the labor force during the 1994–2005 period, a number greater than that for black entrants for the same period. Only 1.8 million Hispanics are projected to leave the labor force (reflecting their younger age composition), so the number of Hispanics in the labor force is projected to grow by more than 4 million. By 2005, the Hispanic labor force is projected to be nearly the same size as the black, non-Hispanic labor force.[17] The Hispanic labor force is projected to grow 2.9 percent annually, increasing to 16.3 million persons in 2005. The Hispanic share of the labor force is expected to increase more than that of any other demographic group because of overall population growth—from higher births and increased immigration—and by increases in the participation rate of Hispanic women.

Currently, the smallest racial group in the labor force is Asian and other. About 2.3 million members of this group will enter the labor force during the 1994–2005 period, about the size of its 1983 labor force. Because relatively fewer workers of this group are projected to leave the labor force over the period, the group is projected to increase by 39 percent. The number of Asians and others in the labor force is projected to grow 3.1 percent annually. Increases in the number of Asians and others in the labor force reflect their continued high immigration. Decreases in labor force participation (by both men and women) offset a portion of the increase.

Implications of the labor force projections

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 completely in the labor force, this large group can only age, so the median age has been rising. To illustrate, the median age of the labor force was 40.5 years in 1962, (the highest level attained before the baby-boomers entered the labor force), it dropped steadily until 1980, and since then, it has been rising. With the labor force participation rates of older men projected to continue dropping as rapidly as in the past, the median age of the labor force in 2005 is projected to just exceed the level reached in 1962. (See table 12.)

For much of the 1962–90 period, the male labor force has been older than the female labor force. This age difference reflected a pattern of women entering the labor force, then leaving for a period after childbirth. The ages of the male and female labor force are projected to converge, reflecting the higher participation of older women, the slowing in participation of younger women, and the withdrawal of older men from the labor force.

Historically, white participants in the labor force have been older than the rest of the labor force. This trend is projected to continue, with the difference reaching 0.7 year in 2005. Compared with the whites, black and Hispanic groups are younger, reflecting their higher birth rates, and as a result, claiming a somewhat larger share of their respective populations. Black participants in the labor force have been about 1.5 to 2.5 years younger than the overall labor force; this age gap is projected to continue to 2005. The group of Asians and other participants in the labor force have been slightly younger than the overall labor force, but this group is expected to become 2 years younger by 2005. 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 33.6 years in 1994 to 36.2 years in 2005, reflecting the aging of earlier immigrants.

Age composition of the population. One theme of this article is that the composition of the population affects the structure of the labor force. We can examine the effect of the changing age structure of the population by holding it constant, that is, using a standard population and applying various rates of labor force participation. An analysis of these data indicates that between 1979 and 1994, population changes did not significantly affect the overall labor force participation rates. However, the projected changes in the age structure of the population result in lower labor force participation. This is true for men and women. The projected age structure of non-

Table 11. **Civilian labor force, 1982, 1993, and 1994, and projected to 2005, and entrants and leavers, actual 1982-93 and projected, 1994-2005**

Group	1982	1982–93			1993	1994	1994–2005			2005
		Entrants	Stayers	Leavers			Entrants	Stayers	Leavers	
Numbers (thousands)										
Total	110,215	37,309	19,485	90,730	128,039	131,051	39,343	23,289	107,762	147,106
Men	62,460	19,275	12,104	50,356	69,632	70,814	19,720	13,691	57,123	76,842
Women	47,755	18,034	7,381	40,374	58,407	60,238	19,624	9,598	50,640	70,263
White, non-Hispanic	89,536	26,405	16,440	73,096	99,502	100,463	26,058	18,177	82,286	108,345
Men	51,086	13,447	10,288	40,798	54,246	54,306	12,937	10,814	43,492	56,429
Women	38,450	12,958	6,152	32,298	45,256	46,157	13,122	7,363	38,794	51,916
Black, non-Hispanic	11,230	4,952	1,905	9,325	14,277	14,304	4,871	2,783	11,521	16,392
Men	5,744	2,403	1,079	4,665	7,068	6,981	2,314	1,512	5,469	7,783
Women	5,486	2,549	826	4,660	7,209	7,323	2,557	1,271	6,052	8,609
Hispanic origin	6,734	4,437	794	5,940	10,377	11,974	6,085	1,729	10,245	16,330
Men	4,148	2,654	545	3,603	6,257	7,210	3,321	1,039	6,171	9,492
Women	2,586	1,784	250	2,336	4,120	4,764	2,765	690	4,074	6,838
Asian and other, non-Hispanic	12,714	1,515	345	2,369	3,883	4,310	2,329	600	3,710	6,039
Men	1,481	772	192	1,289	2,061	2,317	1,148	326	1,991	3,139
Women	1,233	743	153	1,079	1,822	1,994	1,180	274	1,720	2,900
Share (percent)										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men	56.7	51.7	62.1	55.5	54.4	54.0	50.1	58.8	53.0	52.2
Women	43.3	48.3	37.9	44.5	45.6	46.0	49.9	41.2	47.0	47.8
White, non-Hispanic	81.2	70.8	84.4	80.6	77.7	76.7	66.2	78.0	76.4	37.3
Men	46.4	36.0	52.8	45.0	42.4	41.4	32.9	46.4	40.4	38.4
Women	34.9	34.7	31.6	35.6	35.3	35.2	33.4	31.6	36.0	35.3
Black, non-Hispanic	10.2	13.3	9.8	10.3	11.2	10.9	12.4	12.0	10.7	11.1
Men	5.2	6.4	5.5	5.1	5.5	5.3	5.9	6.5	5.1	5.3
Women	5.0	6.8	4.2	5.1	5.6	5.6	6.5	5.5	5.6	5.9
Hispanic origin	6.1	11.9	4.1	6.5	8.1	9.1	15.5	7.4	9.5	11.1
Men	3.8	7.1	2.8	4.0	4.9	5.5	8.4	4.5	5.7	6.5
Women	2.3	4.8	1.3	2.6	3.2	3.6	7.0	3.0	3.8	4.6
Asian and other, non-Hispanic[1]	2.5	4.1	1.8	2.6	3.0	3.3	5.9	2.6	3.4	4.1
Men	1.3	2.1	1.0	1.4	1.6	1.8	2.9	1.4	1.8	2.1
Women	1.1	2.0	0.8	1.2	1.4	1.5	3.0	1.2	1.6	2.0

NOTE: Data for 1994 are not directly comparable with data for 1993 and 1982 because of the introduction of a major redesign of the Current Population Survey questionaire and collection methodology and the introduction of 1990 census-based population controls. The components of this table are mutually exclusive. Entrants and leavers are calculated by comparing cohort labor force size at two points in time.

[1] The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives.

Hispanic whites and Asians and others leads to lower overall labor force participation in 2005 than in 1979 or 1994. The projected age structures of Hispanics and blacks in 2005 are more conducive to higher labor force participation than they were in 1994.

Economic dependency. A measure of dependency is the number of those in the total population (including Armed Forces overseas and children), not in the labor force per 100 of those in the labor force, by broad age group. (See table 13.) For every 100 persons in the 1994 labor force, about 96 were not, of which about 46 were children, 28 were 16 to 64 years of age, and 22 were older than 64.

In 1987, for the first time ever, more Americans were in the labor force than those who were not. This status is projected to prevail throughout the entire projection period, with the proportion of those not working to those who are working reaching a low of 94.4 per 100 workers in 2005. Upon examining this ratio (the economic dependency ratio), for various age groups, what first becomes apparent is that this drop is attributable to 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 30 percentage-point drop for the total popula-

tion between 1975 and 1994 was because of the decline in the number of births. The portion of the ratio attributed to children is projected to continue dropping, despite somewhat higher fertility. The remainder of the historical drop is attributable to higher labor force participation for women aged 16- to 64. The ratio for the 16 to 64-age-group dropped 16 points, from 44.2 in 1975 to 27.9 in 1990. This ratio is projected to increase, reflecting the projected decrease in participation of men and young women aged 16 to 24.

The 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 by 2005, is expected to still be the smallest proportion. However, between 1975 and 1990, the older persons' dependency ratio grew 1.4 percentage points; it is projected to fall again to 21.2 older, retired persons per 100 workers in 2005, a level below that of 1985. With what we now believe to be the composition of the population after 2005, it is clear that the dependency ratio will rise some time after 2010; but it may never reach the levels of 1975.

Alternative projections

The world of 2005 may be significantly different from that described in the moderate projections. Therefore, BLS has developed two alternative projections of the labor force in 2005—a high-growth scenario and a low-growth scenario. (See table 14.) The range in the labor force between the low and high projections is 10 million. The range is greater for women than for men, 5.6 million, versus 4.2 million, reflecting greater uncertainty about women's labor force participation. Labor force participation rates differ by growth scenario. In addition, the high growth alternative assumes that population growth will follow the Census Bureau high net immigration growth path; the low growth uses the middle immigration path used for the moderate projections.

In the high growth alternative, the labor force is projected to be 153 million by 2005, 6 million more than in the moderate scenario. In this alternative, 86 percent of the population aged 16 and older would be in the labor force, 90 percent of those aged 25 to 54 would be in the labor force, as would 67 percent of youth. This higher growth of the labor force reflects not only increased participation rates, but also higher net immigration, 1.2 million annually.

Under the assumptions used to develop the low-growth projection, the labor force would total 144 million persons in 2005, 3 million fewer than in the moderate-growth projection. Only 65 percent of the population would be in the labor force. The slower growth in population would yield proportionately fewer people in the peak working years age group, which would depress the labor force participation rate.

Table 12. Median ages of the labor force, by sex, race, and Hispanic origin, selected historical years, and projected years, 2000, and 2005

Group	1962	1970	1980	1990	1994	2000	2005
Total[1]	40.5	39.0	34.6	36.6	37.6	39.4	40.6
Men	40.5	39.4	35.1	36.7	37.6	39.2	40.3
Women	40.4	38.3	33.9	36.4	37.6	39.6	41.0
White	40.9	39.3	34.8	36.8	37.9	39.8	41.1
Black	38.3	36.6	33.3	34.9	35.9	37.4	38.2
Asian and other[2]	([3])	([3])	34.1	36.5	36.5	37.9	38.6
Hispanic origin[4]	([5])	([5])	32.0	33.2	33.6	35.2	36.2

[1] For 1962 and 1970: black and other.
[2] The "Asian and other" group includes Asians and Pacific Islanders and American Indians and Alaskan Natives. The historic data are derived by subtracting "Black" from the "Black and other" group; projections are made directly.
[3] Data not available before 1972.
[4] Persons of Hispanic origin may be of any race.
[5] Data not available before 1980.

Table 13. Economic dependency ratio, 1975–90 and projected 1994–2005, by age

[Per hundred in the labor force]

Group	1975	1980	1985	1990	1994	2000	2005
Total population	126.3	108.9	103.3	98.3	96.0	94.6	94.4
Under 16	61.4	50.7	47.3	45.8	45.9	43.0	42.9
16 to 64	44.2	37.4	34.2	30.5	27.9	30.2	30.3
65 and over	20.7	20.8	21.8	22.1	22.2	21.4	21.2

Table 14. **Three projections of the civilian labor force by sex, age, race and Hispanic origin, 2005**

Group	Participation rate (percent)			Level (thousands)		
	High	Moderate	Low	High	Moderate	Low
Total	68.7	67.1	65.5	153,390	147,106	143,642
Men	74.4	72.9	71.8	79,801	76,842	75,645
Women	63.5	61.7	59.8	73,589	70,263	67,996
16 to 24	67.0	64.9	62.2	25,376	23,984	22,977
25 to 54	85.9	84.5	83.2	104,770	101,017	99,440
55 years and over	36.7	35.2	33.8	23,244	22,105	21,224
White, 16 years and over	69.6	67.7	66.5	127,301	122,867	120,065
Black, 16 years and over	64.3	61.9	60.2	17,476	16,619	16,151
Asian and other, 16 years and over[1]	66.1	64.0	62.3	8,613	7,632	7,426
Hispanic, 16 years and over	66.4	64.7	63.1	17,724	16,330	15,931
Other than Hispanic, 16 years and over	69.0	67.4	65.8	135,667	130,775	127,711
White, non-Hispanic	70.1	68.6	67.0	111,548	108,345	105,897

[1] The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaska Natives.

FOR MANY YEARS, the summary of projected labor force participation rate changes has been, "the rates of women are projected to increase, those of men decrease, the effect across both sexes is a modest increase in participation." That description still holds for this projection, but a closer look into the projections for some race groups reveals that the summary does not necessarily hold. The labor force participation rates of black women and of Asian and other women are not projected to change; coupled with the projected drop in participation for their male counterparts, the overall participation for these groups is projected to drop. Nevertheless, the general summary statement is true of Hispanics and white, non-Hispanics.

Between 1994 and 2005, the moderate growth scenario indicates that, 39 million persons are projected to enter the labor force, 23 million are expected to leave, and 108 million workers are espected to remain the labor force after 2005. The labor force in 2005 would amount to 147 million persons, up 16 million from the 1994 level. This represents a rate of growth as slow as the growth experienced in the 1950's. Women and Hispanics are expected to have a greater proportion of the 2005 labor force than they did in 1994. □

Footnotes

ACKNOWLEDGMENT: Theresa Cosa, an economist in the Office of Employment Projections, Bureau of Labor Statistics, provided the calculations on "men unable to work."

[1] The civilian labor force consists of employed and unemployed persons actively seeking work, but does not include any Armed Forces personnel. Data for this series are from the Current Population Survey, conducted by the Bureau of the Census for the Bureau of Labor Statistics. Estimates from the Current Population Survey before 1994 reflect the demographic composition of the 1980 Census of Population, and it is these trends upon which the labor force projections are based.

[2] For the most recent evaluation of BLS labor force projections, see Howard N Fullerton, Jr., "An evaluation of labor force projections to 1990," *Monthly Labor Review*, August 1992, pp. 3–14.

[3] The projections presented here replace those described by Howard N Fullerton, Jr., in "Another look at the labor force," *Monthly Labor Review*, November 1993, pp. 31–40. BLS routinely reviews and revises its economic and employment projections every 2 years.

[4] "Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1995 to 2050," *Current Population Reports*, Series P-25, No. 1130 (U.S. Department of Commerce, Bureau of the Census, 1995). The population projections are based on estimates derived from the 1990 Census of Population and reflect findings from the 1990 Census of Population. They are not adjusted for the undercount.

[5] The race and Hispanic origin categories correspond to those promulgated the U.S. Office of Management and Budget, Directive No. 15, 1978. For a discussion of these categories, see Juanita Tamayo Lott, "Do United States Racial/Ethnic Categories Still Fit?" *Population Today*, January 1993, pp. 6–7, 9.

[6] "Unable to work" is one of the responses to the initial labor force question, "What was . . . doing last week?" For a fourth of the CPS sample, this response is queried further.

[7] See, *1995 Annual Report of the Board of Trustees of the Federal Old Age and Survivors Insurance and Disability Trust Funds*, House Document 104–57 (Washington, Government Printing Office, 1995), p. 80. To some extent, the fluctuations in the incidence rate depend on the ease with which disability insurance is granted and the number of persons applying.

[8] Edward H. Yelin and Patricia P. Katz, "Labor force trends of persons with and without disabilities, *Monthly Labor Review*, October 1994, pp. 36–42.

[9] For a discussion of the shifts in demand, see the article by Norman C. Saunders in this issue; for a discussion of how this affects employment by industry, see the article by James C. Franklin in this issue.

[10] See the article by George T. Silvestri on the shifts in occupational employment in this issue and the article by Daniel Hecker in the December 1995 *Monthly Labor Review* for developments in employment of college graduates.

[11] Chinhui Juhn, "Decline of male labor market participation: the role of declining market opportunities," *The Quarterly Journal of Economics*, February 1992, p. 115. See also "Labor market developments: Key long-term trends, the likely future," *Report on the American Workforce* (U.S. Depart-

ment of Labor, 1994), pp. 3–48; and Chinhui Juhn, Kevin M. Murphy, and Robert H. Topel, "Why has the natural rate of unemployment increased over time?" (with discussion) *Brookings Papers on Economic Activity*, 1993, No. 1, pp. 75–142; Valerie Kincade Oppenheimer, "Women's rising employment and the future of the family in industrial societies," *Population and Development Review*, June 1994, pp. 293–342; and Jennifer M. Gardner, "Worker displacement: a decade of change," *Monthly Labor Review*, April 1995, pp. 45–57.

[12] For further discussion of the participation of older men, see "A Market-level analysis of trends in the older male labor force participation rate over the 1970's and 1980's," and "Trends in male labor force participation and retirement: some evidence on the role of pensions and social security in the 1970's and 1980's," by Patricia M. Anderson, Alan L. Gustman, and Thomas L. Steinmeier (Dartmouth College, August 1994); Diane E. Herz, "Work after early retirement: an increasing trend among men," *Monthly Labor Review*, April 1995, pp. 13–20; and Natalie Kramer, "Employee benefits for older workers," *Monthly Labor Review*, April 1995, pp. 21–27.

[13] The pattern of job recovery in the most recent recession varied significantly for women and men, see William Goodman, "Women and jobs in recoveries: 1970–93," *Monthly Labor Review*, July 1994, pp. 28–36. For a summary of the factors affecting the labor force participation rates of young women, see Howard V. Hayghe, "Are women leaving the labor force?" *Monthly Labor Review*, July 1994, pp. 37–39; and Howard V. Hayghe and Suzanne M. Bianchi, "Married mothers' work patterns," *Monthly Labor Review*, June 1994, pp. 24–30.

[14] Anne E. Polivka and Stephen M. Miller, "The CPS after the redesign: refocusing the economic lens." Paper presented at the Labor Statistics Measurement Issues Conference, Conference on Research in Income and Wealth (CRIW), Washington, DC, December, 1994.

[15] The distribution of projected net immigration by race and Hispanic origin varies from that of the current or even projected population (compare table 9 and the following text tabulation). Thus, Hispanics are projected to be 12 percent of the 2005 population, but 43 percent of net immigrants over the 1995–2005 period. Blacks are expected to have about the same share of net immigration as their population share. White, non-Hispanics are projected to have a much smaller share of projected net immigration than their share of the population in 2005. (Note: the "Asian and other" group includes 1) Asians and Pacific Islanders and 2) American indians and Alaska Natives.

Group	*Middle*		*High net immigration*	
	Thousands	*Percent*	*Thousands*	*Percent*
Total	820	100.0	1,370	100.0
White	491	59.8	843	61.5
Black	90	11.0	142	10.4
Asian and other	239	29.1	384	28.1
Hispanic	350	42.7	558	40.7
White, non-Hispanic	186	22.7	355	25.9

[16] 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., "Labor-Force Change Exaggerated," Population Today, May 1993, pp. 6–7, 9.

[17] In table 11, all racial and Hispanic origin groups have been adjusted to place Hispanics together. This is different than how numbers are presented in the other tables, specifically table 1.