

## U.S. labor market in 2008: economy in recession

*CPS data show that the labor market weakness that began during the second half of 2007 worsened during 2008 as the U.S. economy entered a recession; unemployment rose sharply, both employment and the employment–population ratio declined, and median weekly earnings grew at about the same rate as inflation in 2008*

James Marschall Borbely

**T**urmoil in the housing, credit, and financial markets plagued the U.S. economy in 2008, and the National Bureau of Economic Research (NBER) identified December 2007 as the beginning of a recession.<sup>1</sup> The labor market started to slide during the second half of 2007 and continued sliding throughout 2008. In the fourth quarter of 2008, the unemployment rate rose to 6.9 percent and the unemployment level reached 10.6 million, an increase of 2.1 percentage points and 3.3 million persons, respectively, over the fourth quarter of 2007. The current recession has hit the labor market particularly hard. The increase in the unemployment rate in 2008 was larger than that experienced during the 2001 recession and was the largest fourth-quarter-to-fourth-quarter increase since 1982. (See chart 1.)

The number of employed persons aged 16 years and older, as measured by the Current Population Survey (CPS), was 144.0 million in the fourth quarter of 2008, 2.2 million lower than a year earlier.<sup>2</sup> This over-the-year decrease more than offset the 654,000 increase in 2007. The last time employment declined over the year was in 2001, also a recessionary period.

(For a comparison of the employment measures available from the household and establishment surveys, see the box on page 5.) Reflecting the employment decline in 2008, the employment–population ratio also fell during the year, from 62.8 percent in the fourth quarter of 2007 to a fourth-quarter 2008 figure of 61.3 percent, the lowest ratio since the first quarter of 1987, when it was 61.1 percent. (Chart 2 shows the employment–population ratio from 1998 to 2008.) The 1.5-percentage-point over-the-year decline was the largest fourth-quarter-to-fourth-quarter decline in the history of the series, which dates back to 1948.

While unemployment increased and employment contracted in 2008, the labor force participation rate was essentially unchanged, indicating that much of the downturn in the labor market resulted from individuals losing jobs.

*In 2008, individuals in the prime working age group (25 to 54 years) experienced sharp increases in unemployment; men in the age group experienced greater increases in unemployment, and larger declines in employment, than did women.* In the fourth quarter of 2008, the unemployment rate for persons of prime working age (25 to 54 years) was 5.9 percent, the highest rate since the second quarter of 1993 and up from 3.9 percent in the fourth quarter of 2007.

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The number of unemployed persons aged 25 to 54 years, 6.1 million in the fourth quarter of 2008, increased by 2.1 million over the year. The unemployment rate for prime-working-age men rose by 2.4 percentage points, to 6.2 percent, in the fourth quarter of 2008, while the unemployment rate for women aged 25 to 54 years increased from 4.0 percent to 5.5 percent that same quarter.

During 2008, the overall employment level for individuals aged 25 to 54 years fell by 2.2 million, to 98.3 million, in the fourth quarter. The significant increase in the number of unemployed men in this age group coincided with a large decrease in the number of such employed men and a decline in their employment-population ratio. Employment among men in the 25-to-54-year-old age group decreased by 1.6 million, accounting for about three-quarters of the decline in employment of prime-working-age individuals in 2008, and the men's employment-population ratio fell by 2.6 percentage points, to 84.6 percent. By comparison, the number of employed prime-working-age women was down by 528,000 in the fourth quarter of 2008, and their employment-population ratio fell by 0.7 percentage point, to 71.7 percent. (See table 1.) One reason men made up the majority of the employment decline in 2008 is that employment in historically male-dominated occupations, such as construc-

tion and extraction, fell sharply over the year.

*In 2008, young workers were affected by poor labor market conditions more than workers aged 55 years and older were.* In general, age helps explain variations in the labor market success of individuals, because, as older workers gain more experience and accumulate more skills, their marketability rises, resulting in longer job tenure and, ultimately, lower unemployment rates than those of young workers. In 2008, labor force participation and employment continued to trend upward for workers aged 55 years and older, but labor market conditions weakened for workers aged 16 to 19 years, as the group's unemployment rose sharply and labor force participation and employment declined.

In the fourth quarter of 2008, the labor force participation rate for teenagers 16 to 19 years was 38.7 percent, 2.4 percentage points lower than a year earlier. This group's rate has been on a downward trend since its most recent high of 52.6 percent in the second quarter of 2000 and is currently the lowest rate in the history of the series, which began in 1948. Teenagers may be participating in the labor force at a lower rate in recent years for a number of reasons; for example, they may be facing greater pressure to do well in school, and they are attending college at higher rates.<sup>3</sup> By contrast, the participation rate for adults

## Differences between employment estimates from the establishment and household surveys

The Bureau of Labor Statistics produces two monthly employment series that are independently obtained: the estimate of total nonfarm jobs, derived from the Current Employment Statistics (CES) program, also called the establishment or payroll survey; and the estimate of total civilian employment, based on the Current Population Survey (CPS), also called the household survey. The two surveys use different definitions of employment, as well as different survey and estimation methodologies. The CES survey is a survey of employers that provides a measure of the number of payroll jobs in nonfarm industries. The CPS is a survey of households that provides a measure of employed persons aged 16 years and older in the civilian non-institutional population. Employment estimates from the CPS give information about workers in both the agricultural and nonagricultural sectors and in any type of work arrangement: wage and salary jobs (including employment in a private household), self-employment, and unpaid work of at least 15 hours a week in a business or farm operated by a family member. CES payroll employment estimates are restricted to nonagricultural wage and salary jobs and exclude private household workers. As a result, employment estimates from the CPS are higher than those from the CES survey. In the CPS, however, employed persons are counted only once, regardless of whether they hold more than one job during the survey reference period. By contrast, because the CES survey counts the number of jobs rather than persons, multiple jobholders are counted once for each nonfarm job they hold.

The reference periods for the surveys also differ. In the CPS, the reference period is the calendar week that includes the 12th day of the month. In the CES survey, employers report the number of workers on their payrolls for the pay period that includes the 12th of the month. Because pay periods vary in length among employers and may be longer than 1 week, the CES employment estimates can reflect a longer reference period.

For purposes of comparison, however, some adjustments can be made to CPS employment estimates to make them more similar in definitional scope to CES employment figures. The BLS routinely carries out these adjustments to evaluate how the two employment series are tracking. The long-term trends in the two surveys' employment measures are quite comparable. Nonetheless, throughout the history of the surveys, there have been periods when the short-term trends diverged or when growth in one series significantly outpaced growth in the other. For example, following the end of the 2001 recession, CPS employment began to trend upward while CES employment continued to decline for a number of months.

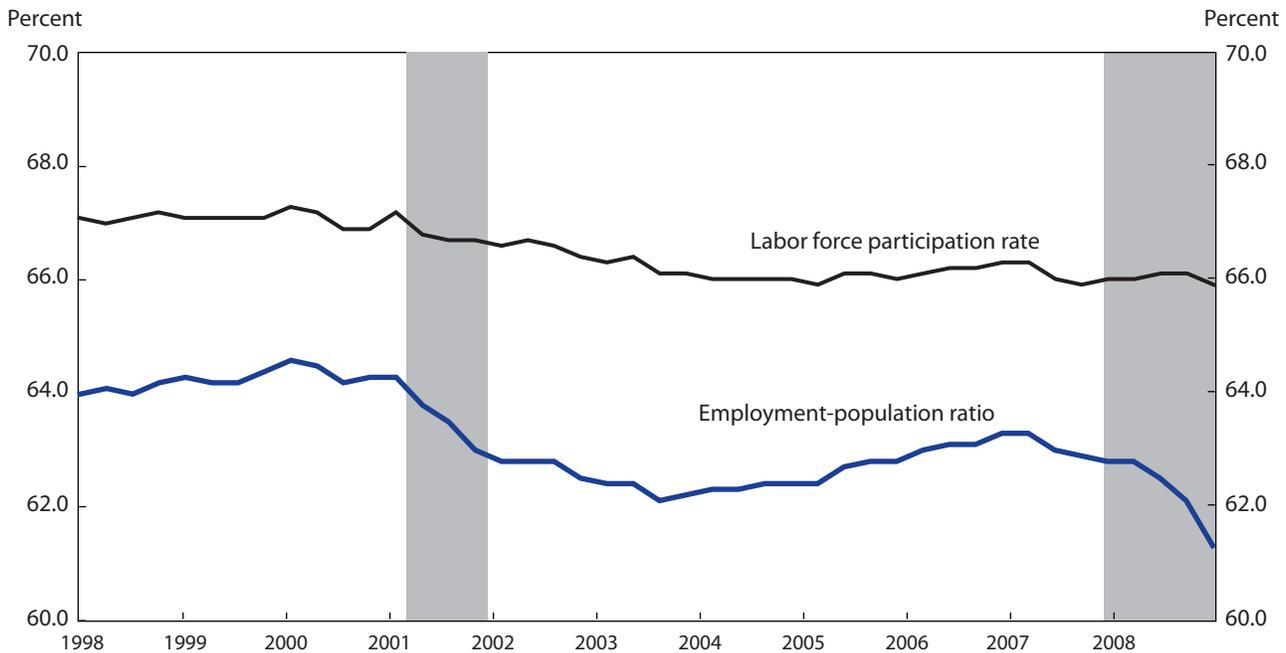
The BLS publishes a monthly report with the latest trends and comparisons of CES and CPS employment. (See "Employment from the BLS household and payroll surveys: summary of recent trends" (Bureau of Labor Statistics, Feb. 6, 2009), on the Internet at [www.bls.gov/web/ces\\_cps\\_trends.pdf](http://www.bls.gov/web/ces_cps_trends.pdf).) This report includes a summary of possible causes of differences in the surveys' employment trends, as well as links to additional research on the topic.

aged 55 years and older continued to trend upward in 2008, increasing by 1.0 percentage point, to 39.8 percent. The participation rate for older adults has been climbing since the second quarter of 1995. Several factors may have contributed to this rise, including a gradual increase in the usual retirement age for receiving Social Security benefits, a decline in the number of individuals covered by defined-benefit plans, and the decreased availability of

employer-provided retiree health benefits.<sup>4</sup>

The jobless rate among teenagers (16 to 19 years) was 20.7 percent in the fourth quarter of 2008, 4.4 percentage points higher than a year earlier and the highest rate since the second quarter of 1992. The unemployment rate for young adults (20 to 24 years) also rose during 2008, increasing by 2.7 percentage points, to 11.3 percent. The unemployment rate for individuals aged 55 years and older

**Chart 2. Labor force participation rate and employment-population ratio, seasonally adjusted, quarterly averages, 1998–2008**



NOTE: Shaded areas represent recessions as designated by the National Bureau of Economic Research (NBER). The NBER has not yet determined an end point for the recession that began in December 2007.

SOURCE: Bureau of Labor Statistics, Current Population Survey.

increased by 1.7 percentage points, to 4.8 percent, in the fourth quarter of 2008.

Employment among teens dropped again in 2008, falling by 606,000, after declining by 322,000 in 2007. The teen employment-population ratio continued to trend downward and stood at 30.7 percent in the fourth quarter, 3.7 percentage points lower than a year earlier. Young adults' (20 to 24 years) employment also declined in 2008, falling by 404,000, and their employment-population ratio fell by 2.0 percentage points, to 65.7 percent. In contrast, employment among workers aged 55 years and older increased by 937,000 in the fourth quarter of 2008. The employment-population ratio for older workers rose to 37.9 percent from the 37.6-percent rate posted a year earlier. (See table 1.)

*The major racial and ethnic groups were also adversely affected by weakness in the labor market.* In 2008, unemployment rates were higher over the year for the major racial and ethnic groups. The percentage-point increase was greatest for Blacks and Hispanics, whose unemployment rates rose by 2.9 and 3.1 percentage points, to 11.5 percent and 8.9 percent, respectively, in the fourth quarter. The unemploy-

ment rate for Whites increased by 2.1 percentage points over the year, to 6.3 percent. The unemployment rate for Asians, 4.6 percent (not seasonally adjusted), was 0.9 percentage point higher than a year earlier.

In 2008, employment among the major racial and ethnic groups was lower than a year earlier. In the fourth quarter, the number of employed Whites was 118.1 million, 1.9 million lower than in the fourth quarter of 2007. The employment decline in 2008 followed a year of slowing employment growth. In 2007, employment among Whites grew by only 349,000, after increasing by 2.1 million in 2006. During 2008, employment among Hispanics or Latinos fell by 389,000, to 20.2 million, in contrast to an increase of 583,000 in 2007 and nearly 1.0 million in 2006. After experiencing virtually no employment growth in 2007 and a gain of about a half million in 2006, employment among Blacks fell by 294,000 in 2008, to 15.7 million. Employment among Asians stood at 6.8 million (not seasonally adjusted) in the fourth quarter of 2008, practically unchanged from the 6.9 million figure posted a year earlier.

Reflecting the declines in employment among the racial and ethnic groups, the employment-population ratios

**Table 1. Employment status of the civilian noninstitutional population 16 years and older, by age and selected characteristics, quarterly averages, seasonally adjusted, 2007–08**

[In thousands]

Characteristic	Quarter IV, 2007	2008				Change, quarter IV, 2007, to quarter IV, 2008
		Quarter I	Quarter II	Quarter III	Quarter IV	
<b>Total, 16 years and older</b>						
Civilian labor force .....	153,625	153,738	154,281	154,650	154,648	1,023
Participation rate.....	66.0	66.0	66.1	66.1	65.9	–.1
Employed .....	146,276	146,138	145,989	145,299	144,046	–2,230
Employment-population ratio.....	62.8	62.8	62.5	62.1	61.3	–1.5
Unemployed .....	7,349	7,599	8,291	9,350	10,602	3,253
Unemployment rate.....	4.8	4.9	5.4	6.0	6.9	2.1
<b>Both sexes, 16 to 19 years</b>						
Civilian labor force .....	7,012	6,867	7,049	6,880	6,629	–383
Participation rate.....	41.1	40.3	41.3	40.3	38.7	–2.4
Employed .....	5,866	5,720	5,801	5,524	5,260	–606
Employment-population ratio.....	34.4	33.6	34.0	32.3	30.7	–3.7
Unemployed .....	1,146	1,147	1,249	1,356	1,369	223
Unemployment rate.....	16.3	16.7	17.7	19.7	20.7	4.4
<b>Both sexes, 20 to 24 years</b>						
Civilian labor force .....	15,158	15,056	15,213	15,278	15,161	3
Participation rate.....	74.1	74.0	74.6	74.8	74.1	.0
Employed .....	13,852	13,695	13,718	13,657	13,448	–404
Employment-population ratio.....	67.7	67.3	67.3	66.8	65.7	–2.0
Unemployed .....	1,306	1,361	1,494	1,621	1,713	407
Unemployment rate.....	8.6	9.0	9.8	10.6	11.3	2.7
<b>Both sexes, 25 to 54 years</b>						
Civilian labor force .....	104,503	104,265	104,430	104,603	104,407	–96
Participation rate.....	83.0	83.1	83.2	83.2	83.0	.0
Employed .....	100,453	100,070	99,814	99,314	98,276	–2,177
Employment-population ratio.....	79.7	79.8	79.5	79.0	78.1	–1.6
Unemployed .....	4,050	4,195	4,616	5,288	6,131	2,081
Unemployment rate.....	3.9	4.0	4.4	5.1	5.9	2.0
<b>Men, 25 to 54 years</b>						
Civilian labor force .....	56,451	56,219	56,156	56,402	56,147	–304
Participation rate.....	90.7	90.7	90.6	90.8	90.2	–.5
Employed .....	54,302	53,959	53,634	53,370	52,653	–1,649
Employment-population ratio.....	87.2	87.1	86.5	85.9	84.6	–2.6
Unemployed .....	2,149	2,260	2,523	3,032	3,494	1,345
Unemployment rate.....	3.8	4.0	4.5	5.4	6.2	2.4
<b>Women, 25 to 54 years</b>						
Civilian labor force .....	48,052	48,046	48,274	48,201	48,260	208
Participation rate.....	75.4	75.7	76.0	75.8	75.8	.4
Employed .....	46,151	46,111	46,181	45,945	45,623	–528
Employment-population ratio.....	72.4	72.6	72.7	72.2	71.7	–.7
Unemployed .....	1,901	1,935	2,093	2,256	2,637	736
Unemployment rate.....	4.0	4.0	4.3	4.7	5.5	1.5
<b>Both sexes, 55 years and older</b>						
Civilian labor force .....	26,948	27,452	27,563	28,021	28,408	1,460
Participation rate.....	38.8	39.2	39.2	39.6	39.8	1.0
Employed .....	26,121	26,553	26,662	26,891	27,058	937
Employment-population ratio.....	37.6	37.9	37.9	38.0	37.9	.3
Unemployed .....	826	899	901	1,130	1,350	524
Unemployment rate.....	3.1	3.3	3.3	4.0	4.8	1.7

See notes at end of table.

**Table 1. Continued—Employment status of the civilian noninstitutional population 16 years and older, by age and selected characteristics, quarterly averages, seasonally adjusted, 2007–08**

[In thousands]

Characteristic	Quarter IV, 2007	2008				Change, quarter IV, 2007, to quarter IV, 2008
		Quarter I	Quarter II	Quarter III	Quarter IV	
<b>White</b>						
Civilian labor force .....	125,292	125,206	125,556	125,937	125,987	695
Participation rate.....	66.3	66.3	66.3	66.4	66.2	-.1
Employed .....	119,977	119,692	119,557	119,160	118,101	-1,876
Employment-population ratio.....	63.5	63.4	63.2	62.8	62.1	-1.4
Unemployed .....	5,315	5,514	5,999	6,777	7,885	2,570
Unemployment rate.....	4.2	4.4	4.8	5.4	6.3	2.1
<b>Black or African-American</b>						
Civilian labor force .....	17,513	17,683	17,733	17,809	17,757	244
Participation rate.....	63.3	63.9	63.8	63.8	63.4	.1
Employed .....	16,007	16,116	16,083	15,908	15,713	-294
Employment-population ratio.....	57.9	58.2	57.9	57.0	56.1	-1.8
Unemployed .....	1,506	1,566	1,650	1,901	2,044	538
Unemployment rate.....	8.6	8.9	9.3	10.7	11.5	2.9
<b>Asian<sup>1</sup></b>						
Civilian labor force .....	7,172	7,170	7,202	7,269	7,166	-6
Participation rate.....	66.7	67.2	67.4	67.2	66.2	-.5
Employed .....	6,908	6,935	6,923	6,971	6,839	-69
Employment-population ratio.....	64.3	65.0	64.8	64.4	63.2	-1.1
Unemployed .....	264	235	279	298	326	62
Unemployment rate.....	3.7	3.3	3.9	4.1	4.6	.9
<b>Hispanic or Latino</b>						
Civilian labor force .....	21,829	21,761	22,049	22,174	22,132	303
Participation rate.....	68.6	68.6	68.9	68.7	68.0	-.6
Employed .....	20,554	20,333	20,450	20,436	20,165	-389
Employment-population ratio.....	64.6	64.1	63.9	63.3	61.9	-2.7
Unemployed .....	1,274	1,428	1,599	1,738	1,967	693
Unemployment rate.....	5.8	6.6	7.3	7.8	8.9	3.1

<sup>1</sup> Data for Asians are not seasonally adjusted.

NOTE: Beginning in 2007, data reflect revised population controls. Estimates for race and Hispanic ethnicity do not sum to totals because

data are not presented for all races and because persons of Hispanic ethnicity may be of any race and also are included in the racial groups.

SOURCE: Bureau of Labor Statistics, Current Population Survey.

for these groups fell sharply during 2008. The Hispanic or Latino employment-population ratio declined by 2.7 percentage points, to 61.9 percent, in the fourth quarter of 2008. The ratio for Blacks fell by 1.8 percentage points, to 56.1 percent, and the ratio for Whites declined by 1.4 percentage points, to 62.1 percent. The employment-population ratio for Asians was 63.2 percent (not seasonally adjusted) in the fourth quarter of 2008, 1.1 percentage points lower than a year earlier. (See table 1.)

During 2008, labor force participation for the major racial and ethnic groups remained relatively flat or edged lower. The participation rates for both Blacks and Whites were about unchanged, at 63.4 percent and 66.2 percent,

respectively, in the fourth quarter of 2008. The rate for Hispanics or Latinos fell by 0.6 percentage point, to 68.0 percent. The labor force participation rate for Asians was 66.2 percent (not seasonally adjusted).

*Individuals at each level of educational attainment were affected by the weak labor market in 2008, but those with less education experienced greater percentage-point increases in their unemployment rates.* Education is a major determinant of success and activity in the labor market. Individuals with more education tend to have lower unemployment rates. Indeed, in 2008, individuals with less education experienced greater percentage-point increases

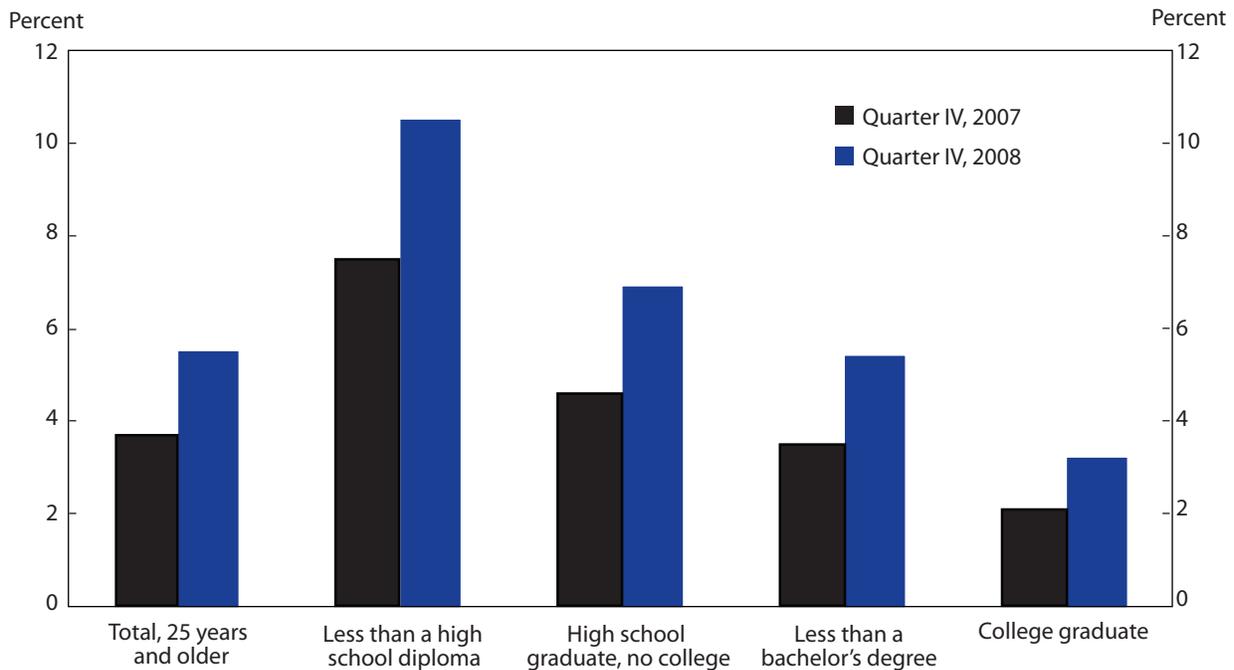
in their unemployment rates than their more educated counterparts did. The unemployment rate for individuals 25 years and older with less than a high school diploma increased from 7.5 percent to 10.6 percent in the fourth quarter of 2008. The jobless rate for high school graduates with no college rose by 2.4 percentage points, to 7.0 percent, the highest quarterly rate since the series began in 1992. The unemployment rate for those with some college or an associate's degree increased by 2.0 percentage points, to 5.5 percent. Among college graduates, the unemployment rate increased by 1.2 percentage points, to 3.3 percent, equal to the previous peak in the fourth quarter of 1992. (See chart 3.)

In 2008, the employment-population ratio decreased for all levels of educational attainment. The ratio for individuals with less than a high school diploma fell by 1.0 percentage point, to 42.3 percent. For high school graduates with no college, the ratio fell by 1.6 percentage points, to 58.1 percent. At 67.8 percent, the employment-population ratio for individuals with some college or an associate's degree was 1.5 percentage points lower than a year earlier. Finally, in the fourth quarter of 2008, the ratio

for college graduates decreased by 0.9 percentage point, to 75.2 percent.

*During 2008, the number of persons who were unemployed due to job loss rose sharply, as did the number of long-term unemployed.* Most of the increase in total unemployment in 2008 was among job losers, as opposed to individuals leaving their jobs voluntarily or those entering or reentering the labor force. Unemployed job losers are those who lost their jobs involuntarily; they include persons on temporary layoff (awaiting recall) and those not on layoff: permanent job losers and persons who completed temporary jobs. Over the year, the number of persons who were unemployed due to job loss rose by about 2.4 million, to 6.1 million, in the fourth quarter of 2008; persons who did not expect to be recalled to work accounted for most of the increase in job losers. Since the fourth quarter of 2006, the number of unemployed job losers has been on an upward trend, increasing by nearly 3.0 million. During 2008, the number of unemployed reentrants to the labor force also trended upward, increasing by 511,000, to 2.7 million, in the fourth quarter of 2008. The number of job

**Chart 3. Unemployment rate, by educational attainment, for persons 25 years and older, seasonally adjusted, quarter IV, 2007, and quarter IV, 2008**



SOURCE: Bureau of Labor Statistics, Current Population Survey.

leavers (persons who quit or otherwise terminated their employment voluntarily and immediately began looking for work) rose by 178,000, to 964,000, and the number of unemployed new entrants to the labor force increased by 115,000, to 805,000. (See chart 4 and table 2.)

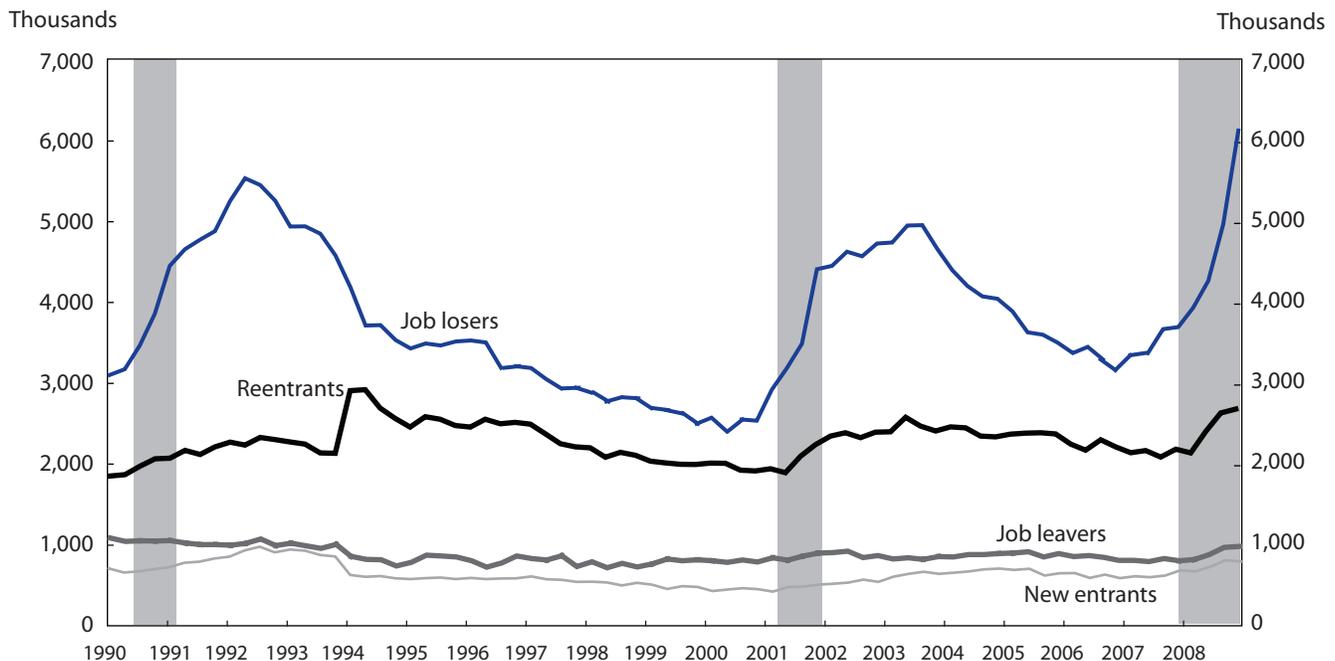
About 2.4 million unemployed persons had been jobless for at least 27 weeks at the end of 2008, an increase of approximately 1.0 million from a year earlier. (See table 2.) These long-term unemployed individuals made up a larger proportion of the total unemployed than they did the previous year: 22.2 percent in the fourth quarter of 2008, up from 18.1 percent a year earlier and well above a recent low of 10.7 percent in the second quarter of 2001. (See chart 5.) At the end of 2008, the number of unemployed persons who had been looking for work for less than 5 weeks was 3.2 million, up by 599,000 from the fourth quarter of 2007. The average (mean) duration of unemployment in the fourth quarter of 2008, 19.5 weeks, was higher than a year earlier, as was the median duration, 10.4 weeks.

*The number of persons employed part time for economic reasons rose dramatically during 2008. Those employed part time for economic reasons, also referred to as involuntary*

part-time workers, are persons who would have preferred to work full time, but could not because of slack work or because they were unable to find full-time work. The number of persons who were employed part time for economic reasons rose by 2.9 million over the year, to 7.4 million in the fourth quarter of 2008. Involuntary part-time employment was on an increasingly upward trend during 2008, rising by 487,000 in the second quarter, 653,000 in the third quarter, and 1.4 million in the fourth quarter. (Chart 6 shows trends in involuntary part-time employment from 1969 to 2008.) As is typical during labor market downturns, nearly all of the increase occurred among those who cited slack work or business conditions as their reason for working part time. A rise in economic part-time employment due to slack work generally occurs before a rise in unemployment, because, faced with a decline in demand for their goods and services, many employers tend to reduce workers' hours rather than lay off workers.<sup>5</sup>

*Both the number of persons who wanted a job but were not in the labor force and the subset of persons who were marginally attached to the labor force increased in 2008. The category "not in the labor force" consists of persons who are neither*

**Chart 4. Reasons for unemployment, seasonally adjusted, quarterly averages, 1990–2008**



NOTE: Shaded areas represent recessions as designated by the National Bureau of Economic Research (NBER). The NBER has not yet determined an end point for the recession that began in December 2007.

SOURCE: Bureau of Labor Statistics, Current Population Survey.

**Table 2. Unemployed persons, by reason and duration of unemployment, quarterly averages, seasonally adjusted, 2007–08**

[Levels in thousands]

Reason and duration	Quarter IV, 2007	2008				Change, quarter IV, 2007, to quarter IV, 2008
		Quarter I	Quarter II	Quarter III	Quarter IV	
<b>Reason for unemployment</b>						
Job losers and person who completed temporary jobs .....	3,697	3,939	4,275	4,979	6,146	2,449
On temporary layoff .....	1,008	1,028	1,110	1,239	1,435	427
Not on temporary layoff .....	2,689	2,912	3,165	3,740	4,711	2,022
Job leavers .....	786	800	863	952	964	178
Reentrants .....	2,183	2,135	2,409	2,644	2,694	511
New entrants .....	690	675	739	823	805	115
Percent distribution:						
Job losers and persons who completed temporary jobs.....	50.3	52.2	51.6	53.0	57.9	7.6
On temporary layoff.....	13.7	13.6	13.4	13.2	13.5	-.2
Not on temporary layoff.....	36.6	38.6	38.2	39.8	44.4	7.8
Job leavers .....	10.7	10.6	10.4	10.1	9.1	-1.6
Reentrants.....	29.7	28.3	29.1	28.1	25.4	-4.3
New entrants.....	9.4	8.9	8.9	8.8	7.6	-1.8
<b>Duration of unemployment</b>						
Less than 5 weeks .....	2,611	2,704	2,829	2,997	3,210	599
5 to 14 weeks .....	2,325	2,449	2,673	2,937	3,198	873
15 weeks or more.....	2,406	2,440	2,809	3,425	4,197	1,791
15 to 26 weeks.....	1,078	1,120	1,287	1,546	1,839	761
27 weeks or more .....	1,328	1,320	1,522	1,879	2,358	1,030
Average (mean) duration, in weeks.....	16.9	16.8	17.1	17.9	19.5	2.6
Median duration, in weeks .....	8.5	8.4	9.2	9.8	10.4	1.9
Percent distribution:						
Less than 5 weeks .....	35.6	35.6	34.0	32.0	30.3	-5.3
5 to 14 weeks .....	31.7	32.3	32.2	31.4	30.2	-1.5
15 weeks or more .....	32.8	32.1	33.8	36.6	39.6	6.8
15 to 26 weeks.....	14.7	14.8	15.5	16.5	17.3	2.6
27 weeks or more .....	18.1	17.4	18.3	20.1	22.2	4.1

SOURCE: Bureau of Labor Statistics, Current Population Survey.

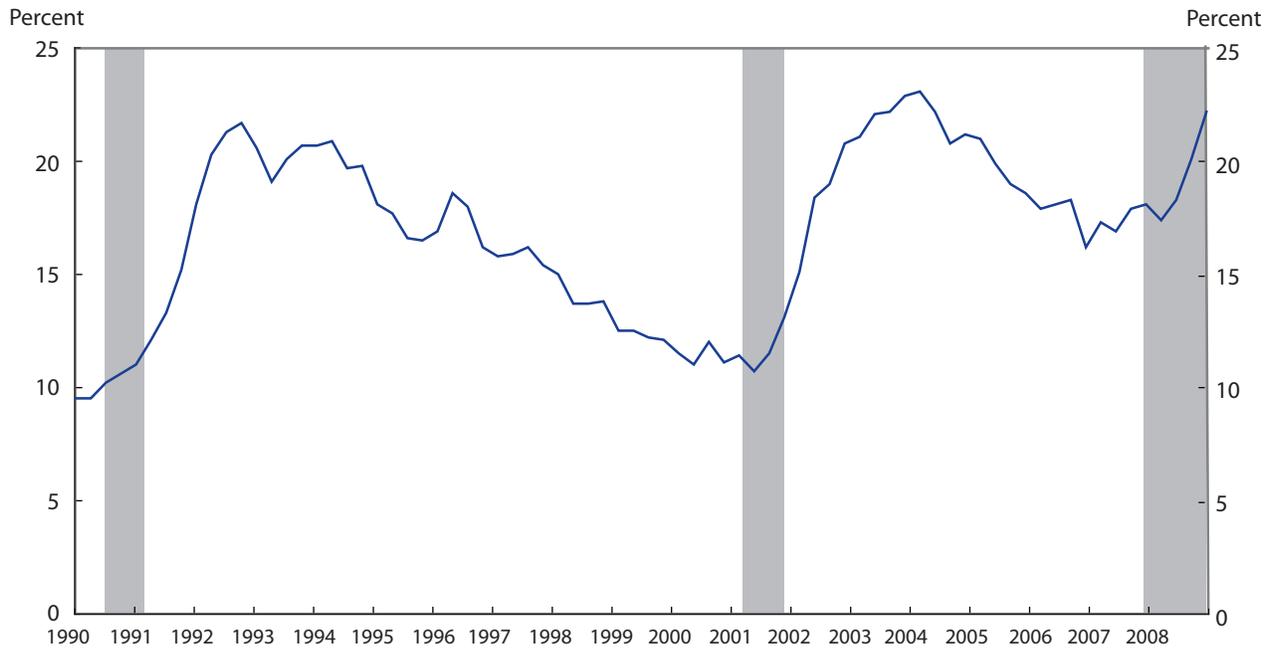
employed nor unemployed. In the fourth quarter of 2008, there were 80.2 million persons who were not in the labor force (not seasonally adjusted). Of those who were not in the labor force, slightly more than half were 55 years and older.

The number of persons who were not in the labor force and wanted a job was 5.0 million in the fourth quarter of 2008 (not seasonally adjusted), an increase of 730,000 from a year earlier. Among this group, some had looked for a job sometime during the previous year and would have been available to work had they been offered a job. These individuals who were “marginally attached to the labor force” numbered 1.8 million in the fourth quarter of 2008, up by 474,000 from a year earlier. Some persons

who were marginally attached to the labor force were not currently looking for a job because they felt that no jobs were available to them; such “discouraged workers” numbered 578,000 in the fourth quarter of 2008, or 234,000 more than a year earlier. (See table 3.)

*Paralleling the unemployment rate, the five alternative measures of labor underutilization increased in 2008.* Alternative measures of labor underutilization are constructed by the Bureau of Labor Statistics (BLS) with the use of CPS data. Labeled U-1 through U-6 (U-3 is the official unemployment rate), the measures—which tend to show similar cyclical patterns—provide additional insight into the degree to which labor resources are underutilized.<sup>6</sup>

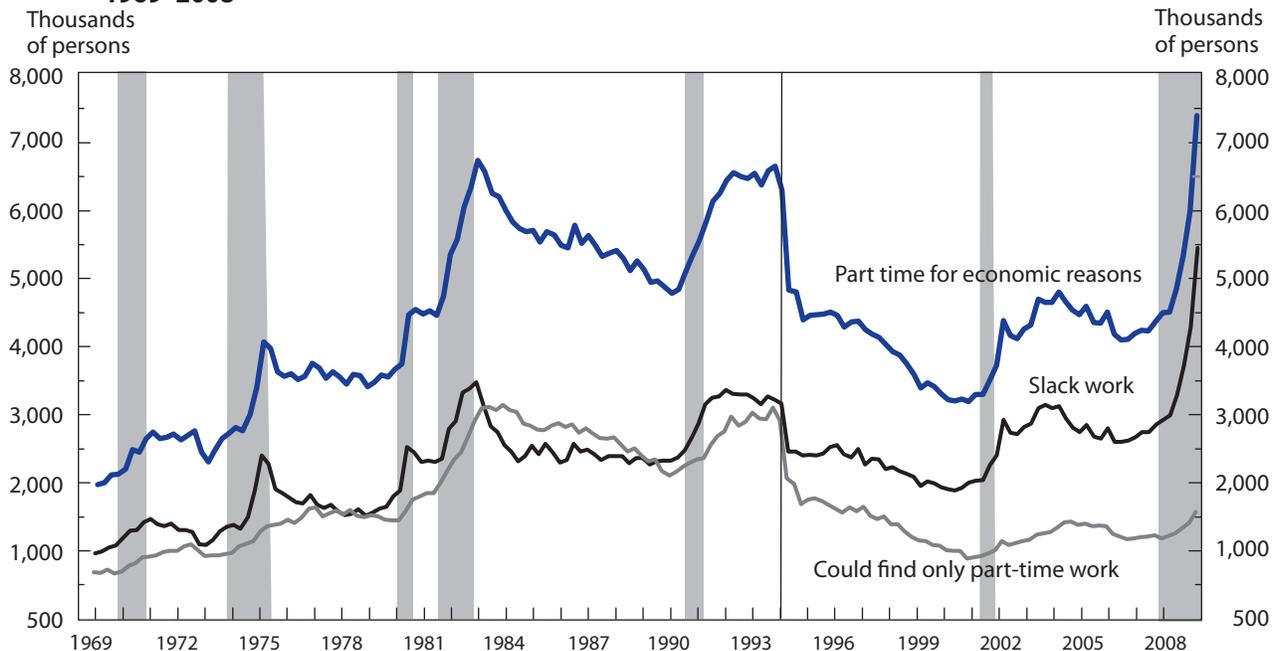
**Chart 5. Long-term unemployed as a percent of total unemployed, seasonally adjusted, quarterly averages, 1990–2008**



NOTE: Shaded areas represent recessions as designated by the National Bureau of Economic Research (NBER). The NBER has not yet determined an end point for the recession that began in December 2007.

SOURCE: Bureau of Labor Statistics, Current Population Survey.

**Chart 6. Persons employed part time for economic reasons, seasonally adjusted, quarterly averages, 1969–2008**



NOTE: Shaded areas represent recessions as designated by the National Bureau of Economic Research (NBER). The NBER has not yet determined an end point for the recession that began in December 2007. Beginning in 1994, data are affected by the redesign of the Current Population Survey (denoted by vertical black line) and are not strictly comparable with data for previous years.

SOURCE: Bureau of Labor Statistics, Current Population Survey.

**Table 3. Persons not in the labor force, quarterly averages, not seasonally adjusted, 2007–08**

[In thousands]						
Category	Quarter IV, 2007	2008				Change, quarter IV, 2007, to quarter IV, 2008
		Quarter I	Quarter II	Quarter III	Quarter IV	
Total not in the labor force .....	79,185	79,985	79,146	78,711	80,164	979
Persons who currently want a job.....	4,289	4,719	5,148	5,044	5,019	730
Marginally attached to the labor force <sup>1</sup> .....	1,357	1,555	1,463	1,606	1,831	474
Reasons not currently looking:						
Discouragement over job prospects <sup>2</sup> .....	344	421	411	436	578	234
Reasons other than discouragement <sup>3</sup> .....	1,013	1,134	1,052	1,170	1,253	240

<sup>1</sup> Persons who have searched for work during the previous 12 months and who were available to take a job during the reference week.  
<sup>2</sup> Reasons for discouragement include "thinks no work available," "could not find work," "lacks schooling or training," "employer thinks person is too young or too old," and other types of discrimination.  
<sup>3</sup> Includes those respondents who did not actively look for work in the previous 4 weeks for such reasons as childcare and transportation problems, as well as a small number for which reason for nonparticipation was not determined.  
SOURCE: Bureau of Labor Statistics, Current Population Survey.

U-4 through U-6 include the following broader groups in addition to the unemployed persons in U-3: discouraged workers (U-4); all marginally attached workers (U-5); and the marginally attached plus persons employed part time for economic reasons (U-6). In 2008, U-4 rose to 7.2 percent and U-5 to 7.9 percent. U-6 increased by 4.2 percentage points, to 12.7 percent. Most of the rise in U-6 was due to the increase in overall unemployment and in those employed part time for economic reasons, rather than a rise in those marginally attached to the labor force.<sup>7</sup> (See table 4.)

*In 2008, employment rose in management, professional, and related occupations and in service occupations, while it fell sharply in construction occupations. Employment also declined in sales and office occupations, production occupations, and transportation occupations. During 2008, the number of people employed in management, professional, and related occupations rose by 836,000, after increasing by 608,000 in 2007. (The data presented in this section are not seasonally adjusted.) Service occupations, which include health care support, protective service, and food preparation and serving related occupations, experienced another year of employment growth, rising by 723,000 in the fourth quarter of 2008 after a smaller increase in 2007.*

In the fourth quarter of 2008, employment in construction and extraction occupations declined by 1.2 million, after remaining about unchanged in 2007 and following an increase of 1.5 million over the 4-year period from

the fourth quarter of 2002 to the fourth quarter of 2006. During 2008, sales and office occupations employment fell by about 1.1 million, after a decline of 300,000 in 2007. Office and administrative support occupations accounted for nearly the entire decline in sales and office occupations in 2008. Production occupations saw no job growth in 2007, and employment fell by 939,000 in 2008. Employment in transportation and material moving occupations declined by 446,000 in the fourth quarter of 2008. (See table 5.)

Employment gains among men and women in management, business, and related occupations were about equal in 2008. Men made up approximately 98 percent of construction and extraction occupation employment in 2008 and accounted for a proportionate share of the job loss in those occupations. Women accounted for the majority of the employment increase in service occupations and for nearly the entire decline in office occupations and administrative support occupations.

*Median weekly earnings for full-time wage and salary workers increased in 2008 at about the same rate as inflation, as measured by the Consumer Price Index (CPI-U). Median usual weekly earnings rose to \$722 in 2008, an increase of 3.9 percent, about the same as the increase in the Consumer Price Index (CPI-U). (See table 6 and chart 7; the data presented in this section are annual averages.) Workers with usual weekly earnings in the tenth decile (top 10 percent of workers) experienced an increase of 5.7 percent, to \$1,693, in 2008, while workers with earnings*

**Table 4. Alternative measures of labor underutilization, quarterly averages, seasonally adjusted, 2007–08**

[In percent]						
Measure	Quarter IV, 2007	2008				Change, quarter IV, 2007, to quarter IV, 2008
		Quarter I	Quarter II	Quarter III	Quarter IV	
U-1 Persons unemployed 15 weeks or longer, as a percent of the civilian labor force .....	1.6	1.6	1.8	2.2	2.7	1.1
U-2 Job losers and persons who completed temporary jobs, as a percent of the civilian labor force .....	2.4	2.6	2.8	3.2	4.0	1.6
U-3 Total unemployed, as a percent of the civilian labor force (official unemployment rate) .....	4.8	4.9	5.4	6.0	6.9	2.1
U-4 Total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers .....	5.0	5.2	5.6	6.3	7.2	2.2
U-5 Total unemployed, plus discouraged workers, plus all other marginally attached workers, as a percent of the civilian labor force plus all marginally attached workers .....	5.6	5.9	6.3	7.0	7.9	2.3
U-6 Total unemployed, plus all marginally attached workers, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers .....	8.5	9.0	9.7	10.8	12.7	4.2

NOTE: Marginally attached workers are persons who currently are neither working nor looking for work, but who indicate that they want and are available for a job and have looked for work sometime in the past 12 months. Discouraged workers, a subset of the marginally attached, have given a job-market-related reason for not currently looking for a job.

Persons employed part time for economic reasons are those who want and are available for full-time work, but have had to settle for a part-time schedule.

SOURCE: Bureau of Labor Statistics, Current Population Survey.

in the first decile (bottom 10 percent of workers) experienced an increase of 4.8 percent, to \$346. In 2008, median weekly earnings for both men and women grew at about the same rate (4.2 percent and 3.9 percent, respectively.) The ratio of women's earnings to men's was 79.9 percent. Over time, the earnings gap between the sexes has narrowed considerably: in 1979, women's earnings were 62.5 percent of men's.<sup>8</sup> (See chart 8.)

Among the major racial and ethnic groups, Hispanics saw the largest percent increase in median earnings in 2008: 5.2 percent. The earnings increases for Asians (3.7 percent), Whites (3.6 percent), and Blacks (3.5 percent) were about the same.

Among the major occupation groups, workers in farming, fishing, and forestry occupations saw the largest over-the-year percent increase in earnings; although earnings for this occupation group remained the lowest overall, they were up 12.9 percent, to \$420 per week. The earnings increases for workers in sales and related occupations and in production occupations were the lowest among the major occupation groups, at 2.0 percent and 2.4 percent, respectively, in 2008. Median weekly earnings for

management, business, and financial operations occupations remained the highest among the major occupation groups, increasing to \$1,128.

Educational attainment is a major determinant of earnings. Workers 25 years and older with at least a bachelor's degree continued to have the highest median weekly earnings among the major education groups: \$1,115 in 2008, with an over-the-year percentage increase of 4.0 percent. Workers with some college or an associate's degree earned \$722, and high school graduates with no college earned \$618 in 2008, both up slightly from a year earlier. Earnings of workers with less than a high school diploma remained the lowest among the major education groups, \$453 in 2008, but this group experienced the largest over-the-year percentage increase, 5.8 percent. (See table 6.)

*The overall increase in unemployment—most notably, the rise in the number of job losers—reflects the changes in labor force status flow data.* Each month, millions of individuals move between employment and unemployment, and millions of others enter or leave the labor market. In addition, people move into and out of the survey universe of

**Table 5. Employment, by major occupation and sex, quarterly averages, not seasonally adjusted, 2007–08**

[In thousands]

Occupation	Total			Men			Women		
	Quarter IV, 2007	Quarter IV, 2008	Change, quarter IV, 2007, to quarter IV, 2008	Quarter IV, 2007	Quarter IV, 2008	Change, quarter IV, 2007, to quarter IV, 2008	Quarter IV, 2007	Quarter IV, 2008	Change, quarter IV, 2007, to quarter IV, 2008
Total, 16 years and older.....	146,731	144,500	-2,231	78,409	76,555	-1,854	68,322	67,945	-377
Management, professional, and related occupations.....	52,266	53,102	836	25,520	25,899	379	26,746	27,203	457
Management, business, and financial operations occupations.....	21,690	22,180	490	12,428	12,742	314	9,262	9,438	176
Professional and related occupations.....	30,576	30,922	346	13,092	13,157	65	17,485	17,766	281
Service occupations.....	23,831	24,554	723	10,298	10,424	126	13,533	14,131	598
Health care support occupations.....	3,087	3,312	225	331	364	33	2,757	2,948	191
Protective service occupations.....	2,981	3,104	123	2,316	2,366	50	665	738	73
Food preparation and serving related occupations.....	7,719	7,882	163	3,391	3,477	86	4,327	4,405	78
Building and grounds cleaning and maintenance occupations.....	5,354	5,431	77	3,305	3,240	-65	2,049	2,191	142
Personal care and service occupations.....	4,690	4,826	136	955	977	22	3,734	3,849	115
Sales and office occupations.....	36,253	35,187	-1,066	13,195	12,995	-200	23,059	22,192	-867
Sales and related occupations.....	16,511	16,355	-156	8,267	8,070	-197	8,245	8,284	39
Office and administrative support occupations.....	19,742	18,833	-909	4,928	4,925	-3	14,814	13,908	-906
Natural resources, construction, and maintenance occupations.....	15,854	14,514	-1,340	15,153	13,901	-1,252	701	613	-88
Farming, fishing, and forestry occupations.....	934	932	-2	744	713	-31	190	219	29
Construction and extraction occupations.....	9,561	8,349	-1,212	9,269	8,143	-1,126	292	206	-86
Installation, maintenance, and repair occupations.....	5,359	5,234	-125	5,140	5,046	-94	219	188	-31
Production, transportation, and material moving occupations.....	18,527	17,143	-1,384	14,244	13,336	-908	4,283	3,806	-477
Production occupations.....	9,520	8,581	-939	6,608	6,074	-534	2,911	2,507	-404
Transportation and material moving occupations.....	9,007	8,561	-446	7,636	7,262	-374	1,372	1,299	-73

NOTE: Data may not sum to totals due to rounding.

the civilian noninstitutional population aged 16 years and older. The flow of individuals between labor force states illustrates the fluid nature of the U.S. labor market and can be used to analyze changes in employment and unemployment.<sup>9</sup>

As stated earlier, from the fourth quarter of 2007 to the fourth quarter of 2008, the number of unemployed persons aged 16 years and older increased by 3.3 million and the number of unemployed job losers increased by 2.4 million. The rise in the number of job losers corresponds with the sharp increase in the number of employed persons who became unemployed (represented as EU in chart 9) from the fourth quarter of 2007 to the fourth quarter of 2008. In addition, the share of individuals from outside

the labor force who became unemployed increased sharply, contributing to the rise in unemployment. Thus, the flow data show that the likelihood of employed persons becoming unemployed and the likelihood of new and returning entrants becoming unemployed both grew substantially over the period.

A greater understanding of the rise in unemployment in 2008 also can be gleaned by examining the flows from unemployment. Chart 10 shows the proportion of unemployed individuals who found employment (UE), the proportion remaining unemployed (UU), and the proportion who left the labor force (UN). The data indicate that, from the fourth quarter of 2007 to the fourth quarter of 2008, unemployed individuals became less likely to find

**Table 6. Median usual weekly earnings of full-time wage and salary workers, by selected characteristics, annual averages, 2007–08**

Characteristic	2007	2008	Percent change, 2007–08
Total, 16 years and older.....	\$695	\$722	3.9
CPI-U (1982–84 = 100) .....	207.3	215.3	3.8
Men.....	\$766	\$798	4.2
Women.....	614	638	3.9
White.....	716	742	3.6
Men .....	788	825	4.7
Women.....	626	654	4.5
Black or African-American.....	569	589	3.5
Men .....	600	620	3.3
Women.....	533	554	3.9
Asian.....	830	861	3.7
Men .....	936	966	3.2
Women.....	731	753	3.0
Hispanic or Latino ethnicity.....	503	529	5.2
Men .....	520	559	7.5
Women.....	473	501	5.9
Management, business, and financial operations occupations.....	1,080	1,128	4.4
Professional and related occupations.....	951	980	3.0
Service occupations .....	454	475	4.6
Sales and related occupations.....	643	656	2.0
Office and administrative support occupations.....	581	601	3.4
Farming, fishing, and forestry occupations.....	372	420	12.9
Construction and extraction occupations.....	646	688	6.5
Installation, maintenance, and repair occupations.....	749	774	3.3
Production occupations .....	581	595	2.4
Transportation and material moving occupations.....	570	593	4.0
Total, 25 years and older.....	738	761	3.1
Less than a high school diploma .....	428	453	5.8
High school graduate, no college .....	604	618	2.3
Some college or associate's degree.....	704	722	2.6
Bachelor's degree or higher, total .....	1,072	1,115	4.0

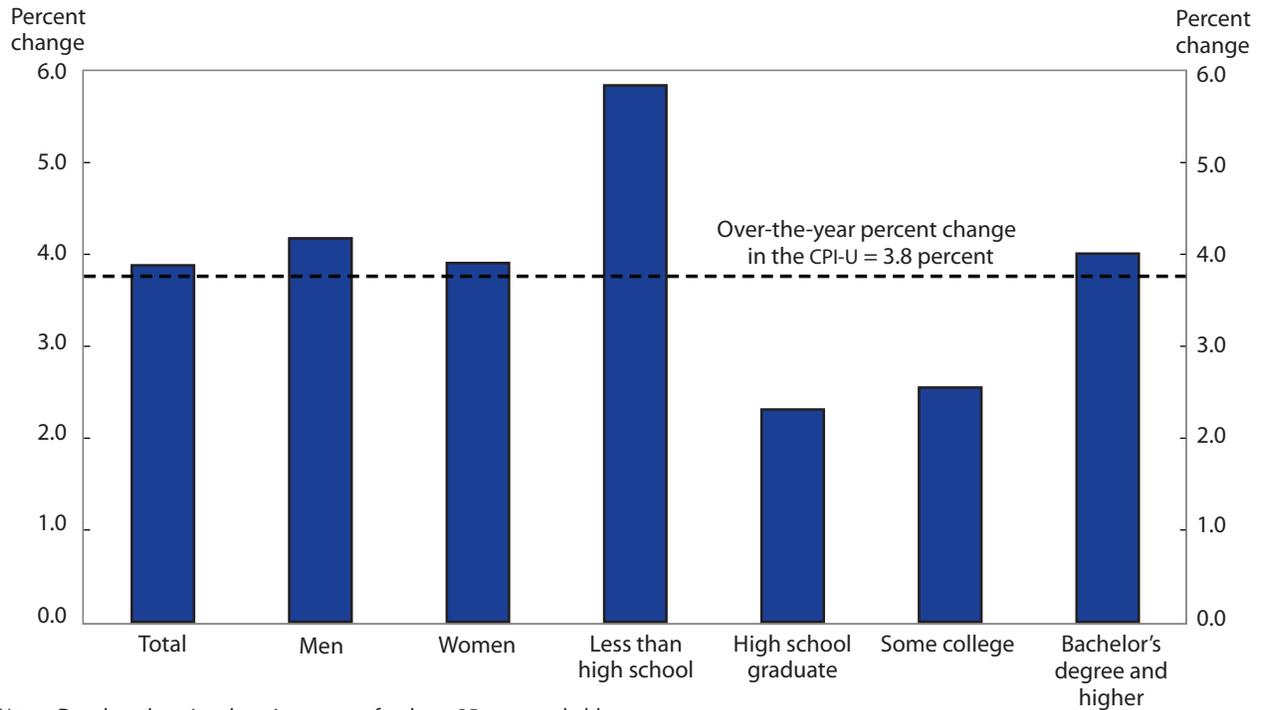
SOURCE: Bureau of Labor Statistics, Current Population Survey and Consumer Price Index.

employment and much more likely to remain unemployed. In fact, the likelihood that an unemployed person would find employment was at a series low in the fourth quarter of 2008, dating back to February 1990. The percentage of unemployed individuals who remained unemployed rose from 51 percent in the fourth quarter of 2007 to 58 percent in the fourth quarter of 2008. Historically, the unemployed remain unemployed far longer during periods of labor market weakness.<sup>10</sup>

*New CPS data on the employment status of persons with a disability were collected in 2008.* In June 2008, questions were added to the CPS to identify persons with a disability in the civilian noninstitutional population aged 16 years and older. The collection of these data is sponsored by the Department of Labor's Office of Disability Employment Policy. The new questions allowed the BLS to begin releasing monthly CPS labor force data on persons with a disability. In the fourth quarter of 2008, these individuals had a labor force participation rate of 23.1 percent, compared with a rate of 71.4 percent for persons with no disabilities. The unemployment rate for persons with a disability was 11.5 percent in the fourth quarter of 2008, while the rate for persons with no disability was 6.4 percent. There also was a large difference in the employment-population ratios between persons with a disability and those with no disability in the fourth quarter of 2008, at 20.4 percent and 66.9 percent, respectively.<sup>11</sup>

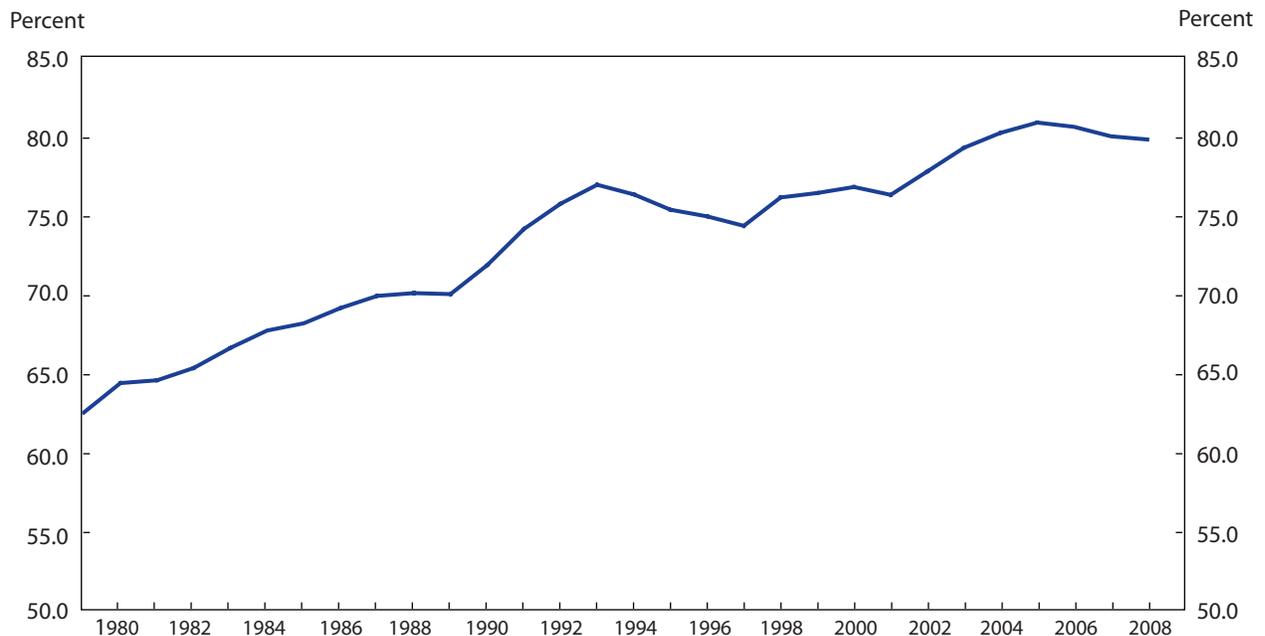
IN SUM, DATA FROM THE HOUSEHOLD SURVEY indicate that the labor market continued to deteriorate in 2008, reflecting the onset of a recession. Unemployment rates increased gradually in the beginning of the year and accelerated after the first quarter of 2008. Employment declined for nearly all major worker groups, with men accounting for a much larger proportion of the decline than women. The employment-population ratio fell over the year, but labor force participation remained relatively flat. Also, more individuals were unemployed due to job loss, a greater number were unemployed for 27 weeks or longer, and the number of persons employed part time for economic reasons increased dramatically. Median weekly earnings for full-time wage and salary workers increased at about the same rate as inflation. □

**Chart 7. Over-the-year percent change in median usual weekly earnings of full-time wage and salary workers, not seasonally adjusted, annual averages, 2007-08**



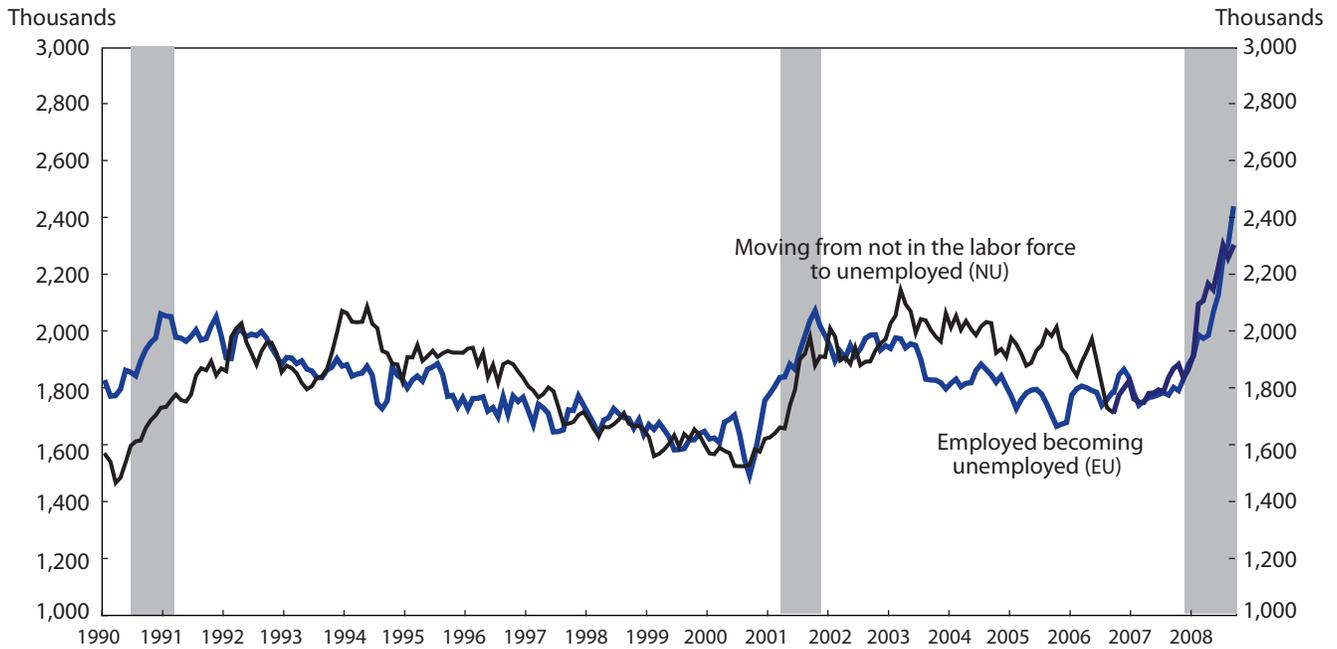
NOTE: Data by educational attainment are for those 25 years and older.  
 SOURCE: Bureau of Labor Statistics, Current Population Survey and Consumer Price Index.

**Chart 8. Women's median usual weekly earnings as a percent of men's, full-time wage and salary workers, annual averages, 1979-2008**



SOURCE: Bureau of Labor Statistics, Current Population Survey.

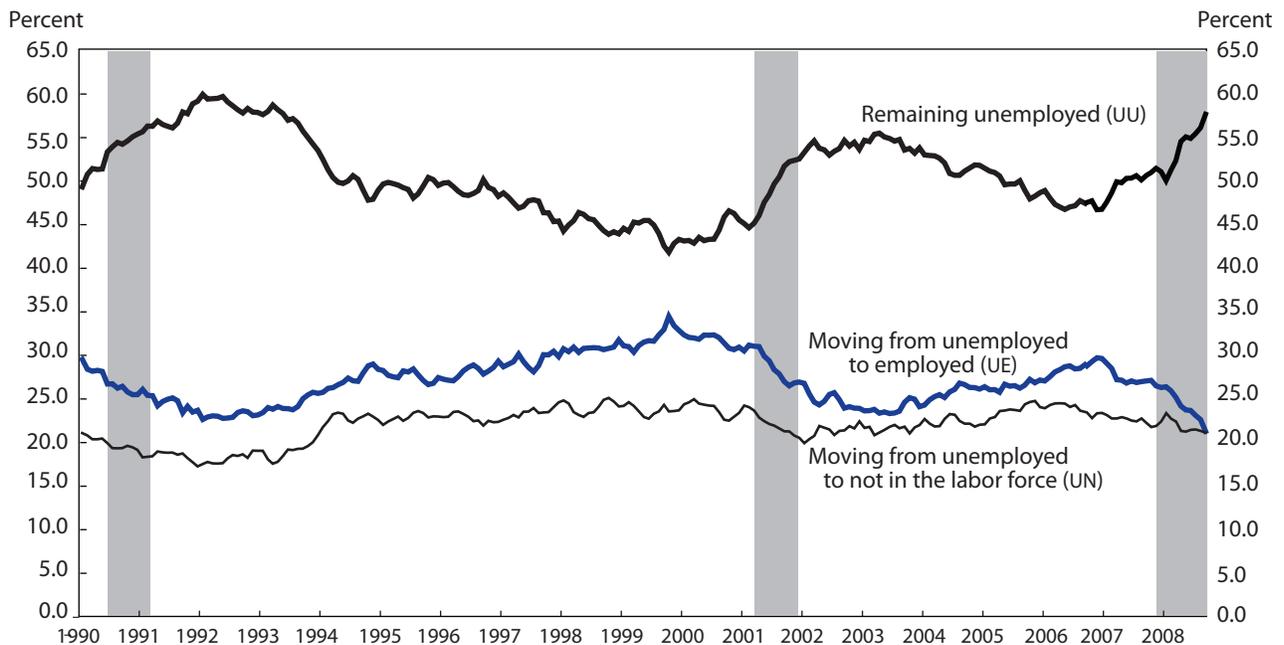
**Chart 9. Inflows to unemployment, seasonally adjusted, 3-month moving average, February 1990–December 2008**



NOTE: Shaded areas represent recessions as designated by the National Bureau of Economic Research (NBER). The NBER has not yet determined an end point for the recession that began in December 2007.

SOURCE: Bureau of Labor Statistics, Current Population Survey.

**Chart 10. Percent of the unemployed finding employment, remaining unemployed, or leaving the labor force, seasonally adjusted, 3-month moving average, February 1990–December 2008**



NOTE: Shaded areas represent recessions as designated by the National Bureau of Economic Research (NBER). The NBER has not yet determined an end point for the recession that began in December 2007.

SOURCE: Bureau of Labor Statistics, Current Population Survey.

## Notes

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<sup>1</sup> NBER is generally recognized as the official arbiter of recessions in the United States. The organization determined that the recession prior to the current one lasted from March 2001 to November 2001. The NBER has not yet determined an end point for the recession that began in December 2007.

<sup>2</sup> The data in this article are based on information collected in the CPS, also called the household survey, a sample survey of about 60,000 households nationwide sponsored jointly by the Bureau of Labor Statistics and the Census Bureau. (For more information about the household survey, see the box on page 5.) Although the CPS is a monthly survey, the data analyzed throughout this article are seasonally adjusted quarterly averages, unless otherwise noted. All over-the-year changes are comparisons of fourth-quarter data from 2007 to 2008.

<sup>3</sup> For further information on teen school enrollment and employment, see Teresa L. Morisi, "Youth enrollment and employment during the school year," *Monthly Labor Review*, February 2008, pp. 51–63; on the Internet at [www.bls.gov/opub/mlr/2008/02/art3full.pdf](http://www.bls.gov/opub/mlr/2008/02/art3full.pdf) (visited Mar. 9, 2009).

<sup>4</sup> For additional information on trends in labor force participation, see Abraham Mosisa and Steven Hipple, "Trends in labor force participation in the United States," *Monthly Labor Review*, October 2006, pp. 35–57; on the Internet at [www.bls.gov/opub/mlr/2006/10/art3full.pdf](http://www.bls.gov/opub/mlr/2006/10/art3full.pdf) (visited Mar. 9, 2009).

<sup>5</sup> For additional information on persons working part time for economic reasons, see Emy Sok, "Involuntary part-time work on the rise," *Issues in Labor Statistics*, December 2008; on the Internet at [www.bls.gov/opub/ils/pdf/opbils71.pdf](http://www.bls.gov/opub/ils/pdf/opbils71.pdf) (visited Mar. 9, 2009).

<sup>6</sup> For further information about the alternative measures of unemployment, see John E. Bregger and Steven E. Haugen, "BLS introduces new range of alternative unemployment measures," *Monthly Labor Review*, October 1995, pp. 19–26; on the Internet at [www.bls.gov/opub/mlr/1995/10/art3full.pdf](http://www.bls.gov/opub/mlr/1995/10/art3full.pdf) (visited Mar. 9, 2009).

<sup>7</sup> For an additional analysis of labor force underutilization, see Sharon Co-hany, "The Unemployment Rate and Beyond: Alternative Measures of Labor Underutilization," *Issues in Labor Statistics*, June 2008; on the Internet at [www.bls.gov/opub/ils/pdf/opbils67.pdf](http://www.bls.gov/opub/ils/pdf/opbils67.pdf) (visited Mar. 9, 2009).

<sup>8</sup> The CPS first began collecting weekly earnings data each month in 1979.

<sup>9</sup> For further background information about labor force status flows, see Randy Ilg, "Analyzing CPS data using gross flows," *Monthly Labor Review*, September 2005, pp. 10–18; on the Internet at [www.bls.gov/opub/mlr/2005/09/art2full.pdf](http://www.bls.gov/opub/mlr/2005/09/art2full.pdf) (visited Mar. 9, 2009).

<sup>10</sup> For an additional analysis of labor force status flows, see Randy Ilg, "Why Has Unemployment Risen? Insights From Labor Force Flows," *Issues in Labor Statistics*, June 2008; on the Internet at [www.bls.gov/opub/ils/pdf/opbils66.pdf](http://www.bls.gov/opub/ils/pdf/opbils66.pdf) (visited Mar. 9, 2009).

<sup>11</sup> For additional information on monthly disability data, see "New monthly data series on the employment status of people with a disability," *Labor Force Statistics from the Current Population Survey* (Bureau of Labor Statistics, Feb. 6, 2009), on the Internet at [www.bls.gov/cps/cpsdisability.htm](http://www.bls.gov/cps/cpsdisability.htm) (visited Mar. 9, 2009).