

The composition of the unemployed and long-term unemployed in tough labor markets

The share of unemployment accounted for by long-term unemployment has risen higher following the 2007–09 recession than following any other recent recession, and the makeup of the labor force, the unemployed, and the long-term unemployed has changed substantially since 1983

Sylvia Allegretto
and
Devon Lynch

The most widely tracked and discussed statistic from the Bureau of Labor Statistics monthly release of *The Employment Situation* is the unemployment rate—especially during economic downturns. Another measure that has garnered much attention because of the severity of the recent recession has been the incidence of long-term unemployment (LTU). The share of unemployment accounted for by “long-termers”—those out of work for at least 27 weeks—is indicative of the capacity of the economy to get people back to work. The recession that began in 2007 led to the highest unemployment rates in almost three decades, along with record-breaking rates of long-term unemployment. Almost 3 years after the onset of the recession, unemployment remains high, at 9.6 percent, and more than two fifths (41.7 percent) of unemployed workers are long-termers.¹

As informative as these aggregate statistics are, in the absence of other data, they mask much of the nuanced nature of those who make up the ranks of the unemployed—especially because the U.S. workforce has changed considerably over the last three decades. In order to craft ef-

fective government policy and create targeted safety nets, it is important to identify those who are disproportionately affected by economic downturns and the demographic characteristics of those who experience long bouts of unemployment. This article documents changes in the demographic makeup of the labor force, the unemployed, and the long-term unemployed over recent recessions.

The article first examines the overall unemployment rate and the share of unemployment accounted for by long-term unemployment—henceforth, “the LTU share”—over time and in the context of recessions. The movements of the two series relative to each other, which have varied considerably over time, are discussed as well. Also, the changing trends in long-term unemployment during and after recessions are presented.

Next, a detailed analysis of 2009 is presented; it is composed of two parts. The first reports unemployment rates and LTU shares by demographic and reveals the substantial variance in rates among demographic groups. Secondly, the article presents an analysis of the shares of the labor force, the unemployed, and the long-term unemployed accounted for by different demographic groups, industries, and occupational groups.²

Sylvia Allegretto is an economist at the Institute for Research on Labor and Employment at the University of California, Berkeley. Email: allegretto@berkeley.edu. Devon Lynch is an assistant professor of economics at the University of Massachusetts, Dartmouth. Email: dlynch@umassd.edu.

Lastly, a historical assessment of recent recessions is presented through the lens of annual data for 1983, 1992, 2003, and 2009.³ The years 1983, 1992, and 2003 were postrecessionary peaks in the LTU share, and 2009 is the most recent full year for which data are available to examine the effects of the 2007–09 recession; thus, data from these years arguably characterize the toughest labor markets over the last three decades.⁴

There are many pertinent points of analysis in this investigation. For instance, what groups disproportionately bear the brunt of recessions, and has intensity changed over time? As the average level of educational attainment has increased, have economic downturns affected the employment outcomes of workers with different educational backgrounds in new ways? How have men and women fared, relative to each other, during recent recessions, given the increase of women workers? How has the racial composition of the labor force changed, and what effect has it had on the racial composition of unemployment? These are a few of the questions answered in this article, which documents the evolution of the labor force and contemporaneous changes in unemployment.

Unemployment and long-term unemployment

As an economy falls into recession, it intuitively makes sense for unemployment rates to increase and for the length of unemployment spells to increase as well. The unemployment rate and the share of unemployment accounted for by LTU are depicted in chart 1. Several important features of the data are evident. First, excluding the most recent recession, peak unemployment rates fell for each successive recession beginning with the recession of the early 1980s (that is, the double-dip recession). The peak rate fell from 10.8 percent, to 7.8 percent, to 6.3 percent. However, the corresponding peak LTU shares remained high—26.0 percent, 23.1 percent, and 23.6 percent. The relatively low unemployment rates that followed the 2001 recession had corresponding LTU shares of at least 20 percent for 32 consecutive months (October 2002–May 2005)—an unprecedented stretch. Thus, even though unemployment rates were relatively low following the early 1990s and 2001 recessions, large shares of unemployed workers experienced long bouts of unemployment.

A starkly different pattern emerged with the onset of the recession that began in December 2007—when both series rose precipitously for an extended period. In September 2010, the unemployment rate, 9.6 percent,

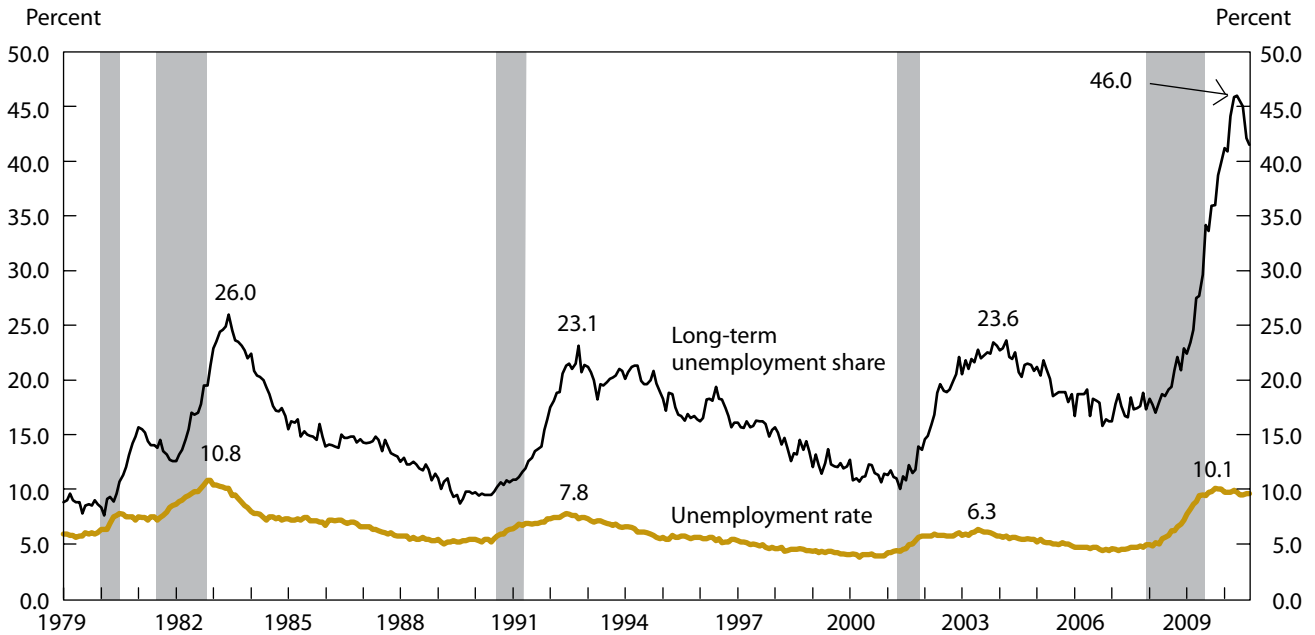
was down slightly from 10.1 percent (October 2009), which thus far is the peak unemployment rate following the 2007–09 recession, and the LTU share was just off a recent record high of 46.0 percent (May 2010). The most recent recession has been dubbed the “Great Recession” by some pundits, and chart 1 clearly illustrates the degree of economic woe in the labor market: the unemployment rate recently approached its historic high of 10.8 percent, reached in 1983, and the LTU share far surpassed the previous peak of 26.0, which also was reached in 1983.⁵

If recent trends are any indication, it may be that these series have yet to attain their true highs following the most recent recession. Between 1948 and 1985 it took, on average, 1.6 months into an economic recovery for the unemployment rate to peak, and 8.3 months for the LTU share to peak. A different pattern emerged following the 1990–91 and 2001 recessions, when the peaks of these series were much delayed. The recoveries from these recessions were deemed “jobless recoveries” because the economy was officially in recovery and expanding but the labor market continued to shed jobs. Following the 1990–91 recession, it took 15 months for the unemployment rate to peak and 19 months for the LTU share to peak. The lag was even longer following the 2001 recession, when it took 19 months and 29 months, respectively, for the unemployment rate and LTU share to peak. Whether the trend of later and later peaks in these two series persists will depend on the movement of the two series over the next several months.

Chart 2 delves further into the progression of the LTU share starting at the peaks of the last six cycles and going to 30 months out. As depicted, the most recent recession is a clear break from the norm. The LTU share at the onset of recession in 2007 was uncharacteristically high (17.3 percent), and a steep increase began about a year into the recession. Of course, the length of the recession that ran from December 2007 to June 2009, which was the longest on record in the post-Depression era (the length of each recession is in parentheses in chart 2), certainly contributed to the increased LTU share.⁶

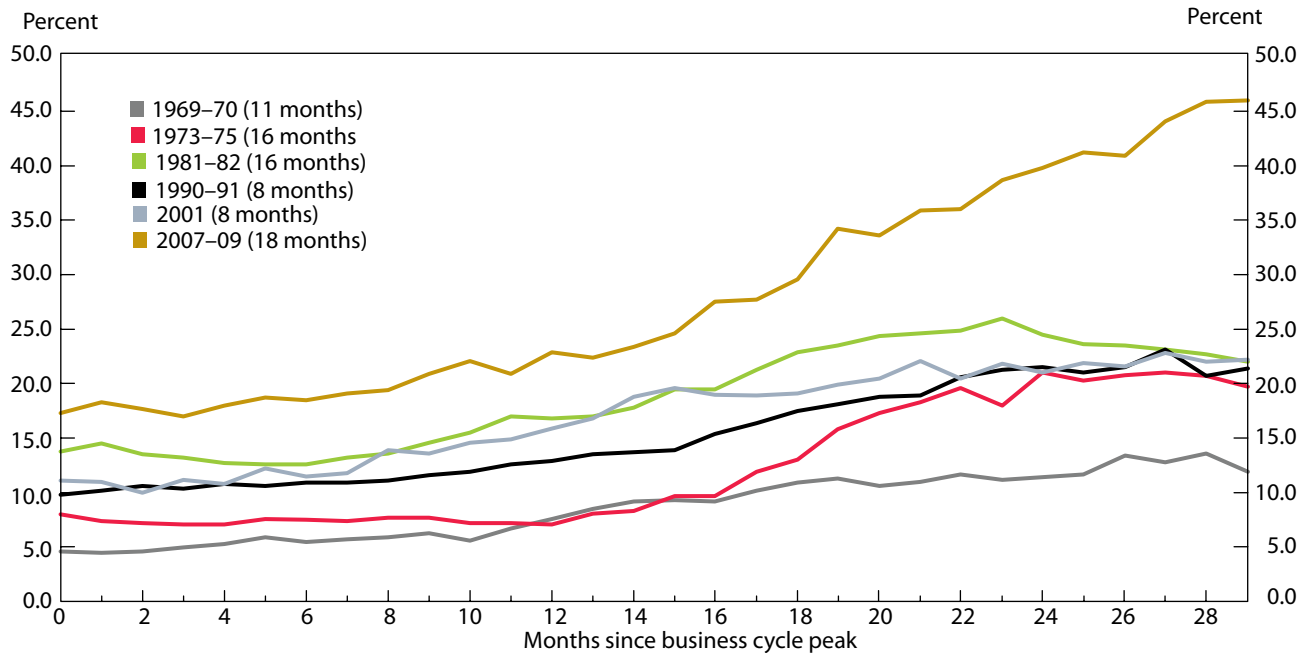
The recessions referenced in chart 2 have varying lengths; thus, direct comparisons among them are difficult. The lines in chart 3 show the progression of the LTU share from the onset of recovery to 3 years later, which enables a direct comparison of LTU share trajectories during recoveries. The line for the 2007–09 recession is not as long as the other lines, because it has not yet been 3 years since the most recently declared trough in the business cycle. Following the 1981 recession, the LTU share increased for 7 consecutive months into recovery, to a then record high of 26 percent. However, after that peak, the LTU share declined relatively quickly. The fairly pronounced turnaround in the LTU share was driven by

Chart 1. The unemployment rate and the share of unemployment accounted for by those unemployed for 27 or more weeks (the long-term unemployed), January 1979–September 2010



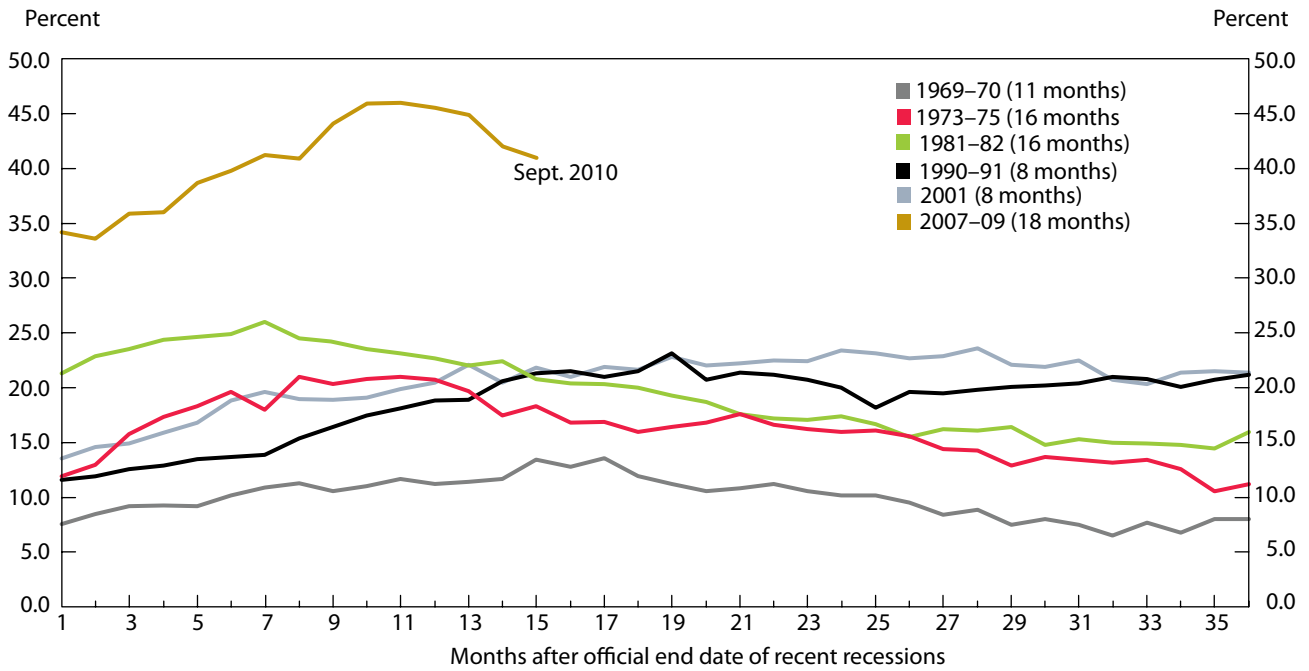
NOTE: The shaded bars denote National Bureau of Economic Research (NBER)-designated recessions.
SOURCE: Current Population Survey.

Chart 2. The share of unemployment accounted for by long-term unemployment, from the onset of each of the last six recessions¹ forward



¹ The 1980 recession is not included because the 1981–82 recession began very soon after it ended.
NOTE: The numbers in parentheses denote the official length of each recession.
SOURCE: Current Population Survey.

Chart 3. The share of unemployment accounted for by long-term unemployment, from the onset of recovery from each of the last six recessions¹ forward



¹ The 1980 recession is not included because the 1981-82 recession began very soon after it ended.
 NOTE: The numbers in parentheses denote the official length of each recession.
 SOURCE: Current Population Survey.

the strong rebound in jobs: 3.1 million were created in the first 12 months of recovery (a 1-percent increase).⁷

With the exception of the 2007-09 recession, the most persistent postrecession increases in LTU share were those which followed the 1990-91 and 2001 recessions. After the 1990-91 recession, the LTU share trended upward for 19 months, to 23.1 percent, and generally remained high throughout the 3-year period following the end of the recession. During the first 12 months of recovery, employment fell by 239,000 (or 0.22 percent).⁸ The LTU share remained relatively high for a prolonged period following the 1990-91 recession, and the cyclical low reached just before the 2001 recession was higher than the previous cyclical low. (See chart 1.)

As illustrated in chart 3, during the first 12 months of expansion after the 2001 recession, there was a decline of 562,000 jobs (an employment decrease of 0.43 percent). During the recovery, the LTU share steadily increased for 28 months, to a business cycle high of 23.6 percent, and remained high well into the fourth year of recovery. Again, the low in the LTU share reached just before the next recession (the recession that began in December 2007) was higher than the previous low.

As seen in the chart, the starting point for the LTU share at the onset of the recent recovery was very high, and it remains so even though it has come down slightly during the past few months. At this point, it is unknown what path the LTU share will take once net job creation increases. The high LTU share is in part due to anemic employment growth that has been, on average, positive so far in 2010 but far too weak (averaging 68,000 jobs per month) to effectively chip away at overall unemployment or LTU. If a weak labor market persists, the rates of both unemployment and LTU could remain elevated for many years to come.

Another indicator that historically has served as a measure of the degree of labor market stress is the rate of long-term unemployment (chart 4). In September 2010, workers who were long-term unemployed accounted for 4.0 percent of the *total labor force*; this series previously had peaked at 2.6 percent, in 1983.⁹ Thus, of all people in the labor force, approximately 1 in 25 was long-term unemployed in September 2010. With regard to the labor market, the downturn that began in 2007 is by all indications much worse than those of recent history and can even be considered one of the worst ever.

Chart 4. The long-term unemployment rate,¹ January 1979–September 2010



¹ This rate is calculated as the number of long-term unemployed people divided by the number of people in the labor force.
NOTE: The shaded bars denote National Bureau of Economic Research (NBER)-designated recessions
SOURCE: Current Population Survey.

2009 demographic analyses

The unemployment rate and the LTU share. A demographic assessment of the labor market in 2009—the most recent year for which annual data are available—is presented in table 1. The year was plagued by ever-increasing monthly rates of unemployment (from 7.7 percent to 10.1 percent) and LTU share (from 22.4 percent to 39.8 percent).

The annual unemployment rate in 2009 was 9.3 percent, and the average LTU share was 31.5 percent. The first two columns of table 1 show that the unemployment rate and LTU share vary by demographic group. There was more variation in the unemployment rate than in the LTU share, and the pattern of variation between the two was not consistent. For example, those without a high school diploma had a rate of unemployment that was almost twice the overall rate and three-and-a-half times the rate of those with at least a bachelor's degree. But the lowest LTU share of any educational attainment category was for those with the least amount of education, and the second-lowest LTU share was for those with the highest level of education.

Unemployment rates by sex, industry, and occupational group provide insight as to why some pundits have dubbed the most recent recession the “mancession”: there has been

a disproportionate loss of jobs in male-dominated sectors associated with that recession. In 2009, unemployment rates were very high for those working in construction (17.0 percent for the construction industry and 19.7 percent for the construction and extraction major occupational group), the manufacturing industry (11.9 percent), and production occupations (14.7 percent). The education and health services industry had a low (4.5 percent) unemployment rate, and it bucked the job-loss trend in 2009.¹⁰

In sum, those with less education, men, Blacks and Hispanics, teenagers, and workers in construction and manufacturing had the highest rates of unemployment. The groups with the highest LTU shares include those with only a high school degree and those with some college coursework but no degree; Blacks; those 55 and older; workers in management, business and financial occupations; and workers in the financial activities industry.

It is important to keep in mind that there are decision processes that affect rates of unemployment and LTU shares. One factor that may lower (raise) rates for certain groups is the propensity to leave (stay in) the labor force after having been unemployed for a given length of time; the decision to remain in the labor force or leave it affects both unemployment rates and LTU shares and likely is not

Category	Unemployment rate, in percent	Percent of unemployment accounted for by LTU	Distribution		
			Labor force	Unemployment	Long-term unemployment
All	9.3	31.5	1.0	1.0	1.0
Education					
Less than a high school diploma.....	18.2	28.6	.11	.21	.19
High school diploma.....	11.3	32.8	.29	.35	.37
Some college but no degree.....	8.6	32.2	.29	.27	.28
At least a bachelor's degree	4.8	31.4	.31	.16	.16
Sex					
Male.....	10.3	31.7	.54	.59	.60
Female.....	8.1	31.2	.47	.41	.40
Race/ethnicity¹					
White	7.8	30.2	.68	.57	.55
Black.....	14.7	39.0	.11	.18	.22
Hispanic.....	12.1	28.2	.15	.19	.17
Asian	7.4	34.5	.05	.04	.04
Other.....	13.2	28.7	.02	.02	.02
Age					
16–19	24.3	19.4	.04	.11	.07
20–24	14.7	26.0	.10	.15	.13
25–34	9.9	30.4	.22	.23	.22
35–44	7.9	33.1	.22	.19	.20
45–54	7.2	37.5	.23	.18	.22
55 and older.....	6.6	39.4	.19	.13	.17
Occupational group					
Farming, fishing, and forestry, and installation, maintenance, and repair ²	8.6	31.8	.04	.04	.04
Management, business and financial	4.9	36.6	.15	.08	.09
Professional and related	4.4	30.5	.21	.10	.10
Service.....	9.6	28.8	.18	.18	.17
Sales and related	8.8	33.1	.11	.11	.11
Office and administrative support..	8.3	34.7	.13	.12	.13
Construction and extraction	19.7	28.9	.06	.13	.12
Production	14.7	34.7	.06	.09	.10
Transportation and material moving.....	12.0	31.4	.06	.08	.08
Industry					
Natural resources and mining	10.0	23.6	.02	.02	.02
Construction	17.0	30.1	.08	.14	.13
Manufacturing	11.9	34.5	.11	.14	.15
Wholesale and retail trade.....	8.9	32.5	.14	.13	.14
Transportation and utilities.....	7.5	31.7	.05	.04	.04
Information	8.9	37.1	.02	.02	.03
Financial activities.....	6.2	38.3	.07	.04	.05
Professional and business services..	10.0	33.0	.11	.12	.12
Educational and health services.....	4.5	29.8	.22	.11	.10
Leisure and hospitality	11.4	27.9	.09	.11	.10
Other services.....	6.8	33.4	.05	.04	.04
Public administration	2.9	32.2	.05	.01	.01

¹ Hispanic is classified as an ethnicity; Hispanics may be of any race. People in the race categories in this table (White, Black, Asian, and other) all are non-Hispanic.

² These two major occupational groups have been combined for the purposes of this table.

NOTE: Data on people for whom there is no occupation or industry reported are not included in this table. This causes the last three columns in the table not to sum to 100 for the *industry* and *occupational group* sections of the table.

SOURCE: Current Population Survey.

made in the same way across groups. For example, in 2010 Randy Ilg looked at flows of unemployed workers and found that younger unemployed workers were more likely than older unemployed workers to leave the labor force.¹¹ When discouraged workers drop out of the labor force, it depresses the rate of LTU (and thus unemployment) for any group of workers. By contrast, it is well known that unemployed workers with more means, such as the ability to collect unemployment insurance, tap into savings, and access credit, are able to stay unemployed and search for a job that is a good match for their skill set more easily than those with lesser means, which can lengthen unemployment spells for those who are able to remain unemployed for longer.

Distribution of long-term unemployment shares by demographic group. Among the unemployed, 31.5 percent were long-term unemployed in 2009. At the time, it was the highest annual LTU share on record and represented 4.5 million long termers. The last three columns in table 1 report the shares of the labor force, of unemployment, and of LTU held by various groups of people. A share analysis of a demographic variable (sex, race, level of education, or age) consists of an examination of the distribution of shares across demographic groups encompassed by the variable. For example, a share analysis of unemployment by sex consists of determining what proportion of the unemployed was men and what proportion was women.¹²

The results of an analysis to calculate shares of the labor force, of unemployment, and of LTU are presented for six variables: education, sex, race and ethnicity, age, occupational group, and industry. Each group's share of the labor force is included to assess whether each demographic is relatively overrepresented or underrepresented among the unemployed and long-term unemployed. It is also informative to compare data on the two unemployment measures with each other.

There are four demographic groups based on education. The proportion of the labor force that had less than a high school degree was 11 percent; however, this group accounted for a disproportionately high 21 percent of those who were unemployed and 19 percent of those who were long-term unemployed. At the other end of the educational spectrum, those with at least a bachelor's degree made up 31 percent of the labor force but represented just 16 percent of both unemployment and LTU.

As measured by their share of the labor force, other groups that were underrepresented in the ranks of the unemployed and the long-term unemployed in 2009 were women, Whites, workers in professional and related oc-

cupations, and those who worked in the education and health services industry. Conversely, demographic groups that had relatively high representation in the ranks of the unemployed and long-term unemployed were people with a high school degree or less, men, Blacks, younger workers, and those who worked in construction and manufacturing.

Are the results of table 1 typical of difficult labor markets? For instance, is it always the case that those with less education bear the brunt of economic downturns? Do women typically fare better than men? The next section compares labor market outcomes across the toughest labor markets of the past three decades.

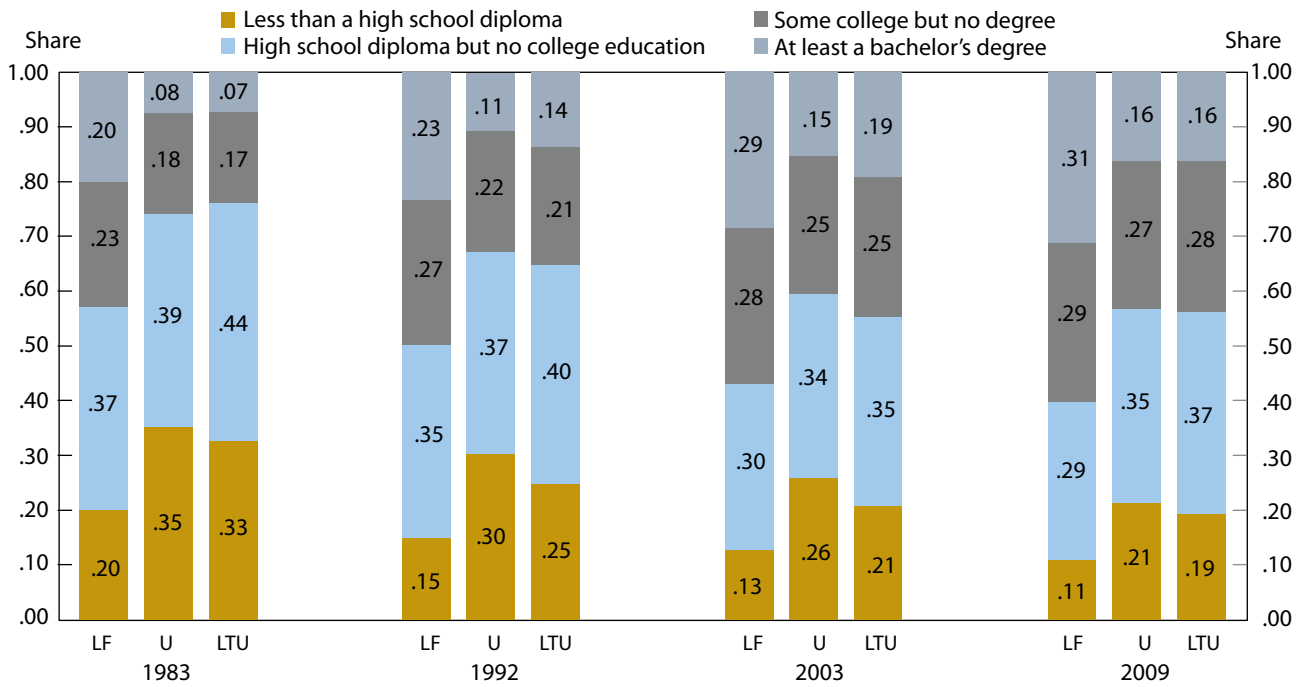
Historical comparisons of tough labor markets

As stated earlier, this analysis focuses on four years: 1983, 1992, 2003, and 2009. The years 1983, 1992, and 2003 were annual peaks in long-term unemployment that followed the recessions of 1980–81 (double dip), 1990–91, and 2001. The year 2009 is the most recent full year for which data are available to examine the effects of the 2007–09 recession. Each chart displays data for a different demographic variable and functions as a share analysis for the labor force as a whole, for the unemployed, and for the long-term unemployed for each year (1983, 1992, 2003, and 2009). Charts 5, 6, 7, and 8 show data by educational attainment, sex, race and ethnicity, and age, respectively.¹³ Each demographic group's share of the labor force is included for two reasons: firstly, to assess whether each group is relatively overrepresented or underrepresented in terms of the unemployment measures, and secondly, to show demographic shifts in the labor force over time.

In addition to presenting the data in the charts, this article discusses two measures of changes from 1983 to 2009. Firstly, the *percentage-point* changes in the shares, and secondly, the *percentage* changes in raw counts. An analysis of shares at different points in time (for example, the share of unemployment in 1983 and in 2009) shows shifts across groups (for instance, from men to women) encompassed by a given demographic variable (for example, sex), but does not measure *growth*—that is, the increase in the total number of unemployed over time. Thus, both percentage-point changes in shares and percentage changes in levels are reported.

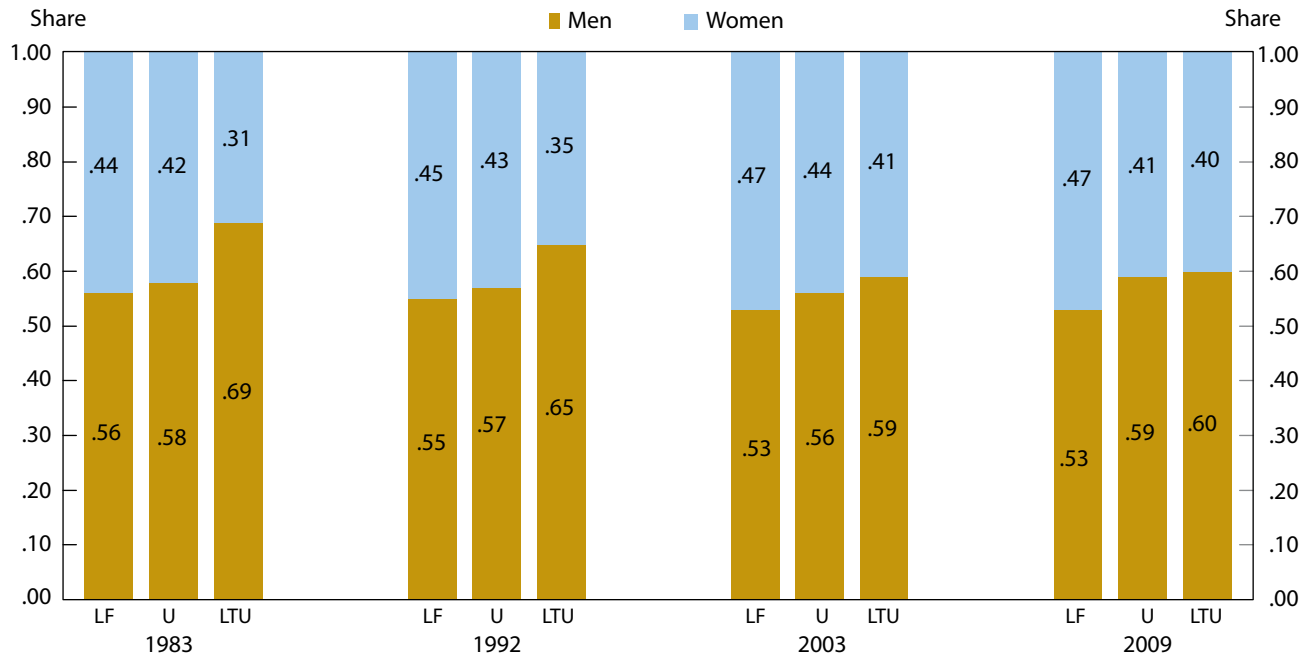
Education. In 1983, the annual unemployment rate was 9.6 percent and the LTU share was 23.9 percent—meaning that just shy of one quarter of the unemployed were out of work for 27 weeks or longer. Although chart 5 has data by level of education for all four years (1983, 1992, 2003, and

Chart 5. Shares of the labor force (LF), unemployment (U), and long-term unemployment (LTU) accounted for by people of various levels of educational attainment; 1983, 1992, 2003, and 2009



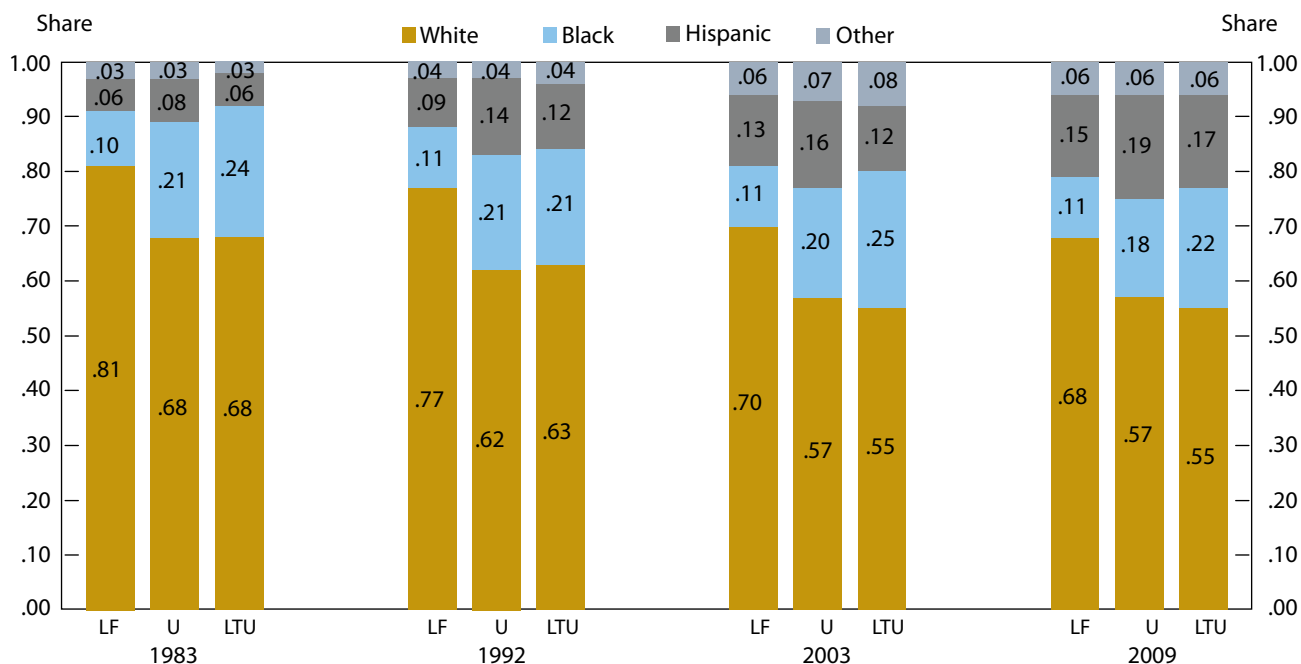
SOURCE: Current Population Survey.

Chart 6. Shares of the labor force (LF), unemployment (U), and long-term unemployment (LTU) accounted for by men and women; 1983, 1992, 2003, and 2009



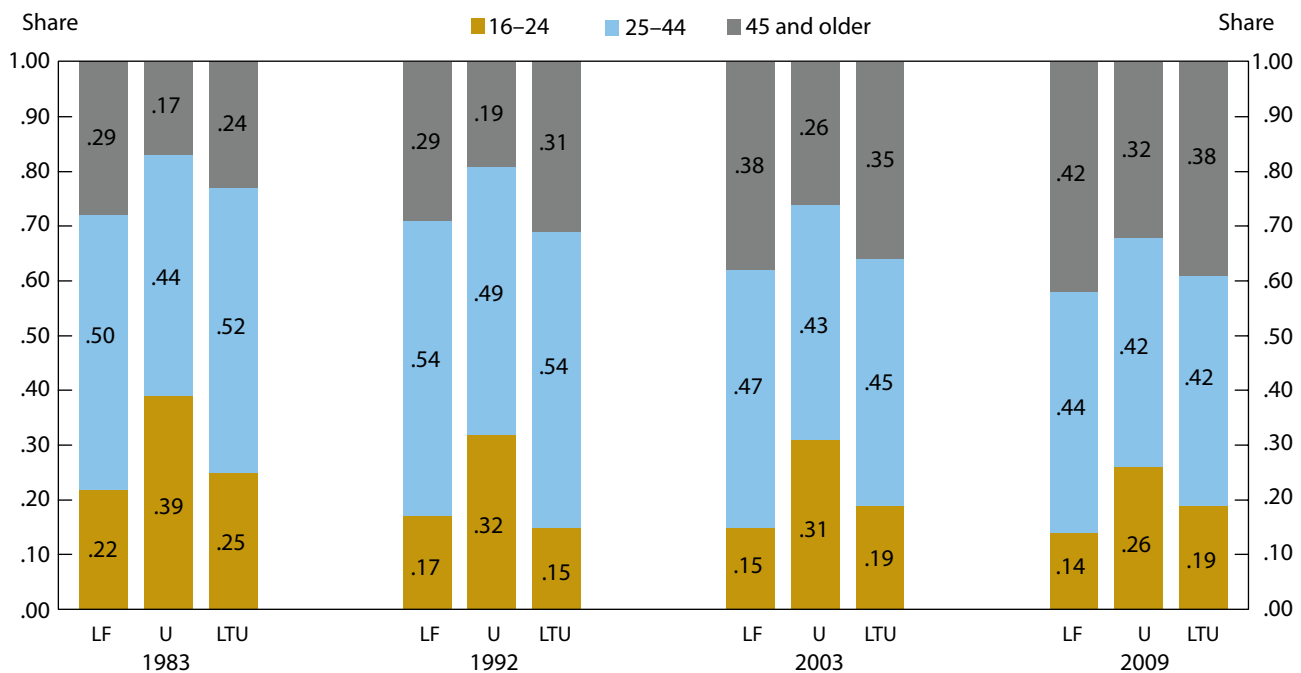
SOURCE: Current Population Survey.

Chart 7. Shares of the labor force (LF), unemployment (U), and long-term unemployment (LTU) accounted for by Whites, Blacks, Hispanics, and others; 1983, 1992, 2003, and 2009



NOTE: In this analysis, the race groups White, Black, and other all are non-Hispanic. Hispanics may be of any race.
SOURCE: Current Population Survey.

Chart 8. Shares of the labor force (LF), unemployment (U), and long-term unemployment (LTU) accounted for by people ages 16–24, 25–44, and 45 and older; 1983, 1992, 2003, and 2009



SOURCE: Current Population Survey.

2009), for the sake of brevity, most discussion of this chart is geared toward the first and last years.

In 1983, 20 percent of the labor force had less than a high school degree, 37 percent had a high school degree but no further education, 23 percent had attended some college but had not received a bachelor's degree, and 20 percent had at least a bachelor's degree.¹⁴ Those with less education were relatively overrepresented in the ranks of the unemployed. For example, although they made up 20 percent of the labor force, those with less than a high school degree were 35 percent of the unemployed and 33 percent of the long-term unemployed. At the other end of the educational spectrum, those with at least a bachelor's degree (20 percent of the labor force), were underrepresented in the ranks of both the unemployed (accounting for 8 percent) and the long-term unemployed (accounting for 7 percent).

In 2009, the annual unemployment rate was 9.3 percent (not far from the 9.6-percent rate of 1983) but the LTU share was 31.5 percent (much higher than the 23.7-percent share from 1983). As seen in chart 5, the labor force was, on the whole, more highly educated in 2009 than in 1983. The share of those with less than a high school degree declined, from 20 percent in 1983 to 11 percent in 2009, and the share of those with at least a bachelor's degree increased, from 20 percent in 1983 to 31 percent in 2009. Even with the shifting of educational shares, those with less than a high school degree in 2009 (11 percent of the labor force) still were disproportionately represented in the ranks of the unemployed (accounting for 21 percent of unemployment) and the long-term unemployed (accounting for 19 percent of LTU).

The share analysis illustrates that, as the labor force attained more education, the trend of the less educated being disproportionately represented in the ranks of the unemployed and the LTU held across the four years examined in the chart.¹⁵ Although each recession has been different,¹⁶ the composition of the unemployed and that of the long-term unemployed have not changed in a substantive, fundamental way. The question is, was the degree of overrepresentation or underrepresentation for a given demographic group as strong in 2009 as it was in 1983? The answer is hard to determine from a quick glance at chart 5, because each demographic group's share of the labor force has changed along with its share of unemployment and long-term unemployment.

Two measures of changes from 1983 to 2009 are documented in table 2. The left half of the table presents percentage-point changes in share. For example, the shares of the labor force, unemployment, and long-term unemploy-

ment accounted for by those with less than a high school degree were, respectively, 9.2 percentage points, 13.8 percentage points, and 13.2 percentage points smaller in 2009 than in 1983. For context, it is helpful to know that the unemployment rate was 0.4 percentage point lower in 2009 than in 1983 but that the LTU share was 7.8 percentage points above the 1983 rate.

In terms of raw counts (right side of table 2), the size of the labor force increased by 37.8 percent, unemployment increased by 32.3 percent, and LTU increased by 75.8 percent, or approximately twice the rate of increase of the labor force from 1983 to 2009. (See table A-1 of the appendix for the raw counts.) As expected, the labor force grew considerably over this period, which is why, even though the unemployment rate decreased slightly, there was still a large increase in the *number* of unemployed.

On the right half of table 2, the percentage changes for each demographic can be compared with the overall percentage change (top row).¹⁷ Additionally, for each demographic group, it is useful to view percentage-point changes in share of unemployment and share of LTU in relation to the corresponding changes in the labor force, and to view percentage changes in raw counts of unemployment and LTU in the same way.

Relative to the overall percentage-point changes in the unemployment rate (-0.4) and the percent of unemployment accounted for by LTU (7.8), the percentage-point decline for each of the two groups with relatively less education (a high school degree but no further education, and less than a high school degree) was significant. The share of the labor force accounted for by those with less than a high school degree declined by 9.2 percentage points, and this demographic group experienced 13.8-percentages-point and 13.2-percentages-point declines in their shares of overall unemployment and overall LTU, respectively. This can be seen in chart 5 and table 2. Thus, for the cohort without a high school degree, the declines in their share of unemployment and their share of LTU were greater than the decrease in their share of the labor force. On the other end of the educational spectrum, there was an 11.0-percentages-point increase in the share of workers with at least a bachelor's degree from 1983 to 2009, and this cohort had its share of unemployment rise by 8.7 percentage points and its share of LTU rise by 8.9 percentage points.

The growth rates for these two groups provide further insight into a changing labor market. (See the right side of table 2.) While the overall labor force grew by 37.8 percent, there was a 25.4-percent *decline* in the number of those in the labor force with less than a high school degree and a 113.5-percent increase in the size of the cohort in

Table 2. Changes in the labor force, unemployment, and long-term unemployment, by level of education, sex, race/ethnicity, and age, 1983–2009

Demographic group	Percentage-point change in the share of:			Percentage change in raw counts		
	The labor force	Unemployment	Long-term unemployment	Labor force	Unemployment	Long-term unemployment
All.....	37.8	32.3	75.8
Education						
Less than a high school diploma	-9.2	-13.8	-13.2	-25.4	-19.6	4.7
High school diploma	-8.2	-3.6	-6.7	7.3	20.0	48.7
Some college but no degree	6.4	8.7	11.0	76.7	95.4	193.1
At least a bachelor's degree	11.0	8.7	8.9	113.5	185.8	289.2
Sex						
Male	-3.2	1.3	-8.9	30.1	35.4	52.9
Female	3.2	-1.3	8.9	47.8	28.1	125.7
Race/ethnicity¹						
White	-13.3	-10.5	-12.9	15.2	11.8	42.5
Black.....	.6	-3.7	-1.9	46.4	9.5	61.7
Hispanic.....	8.8	10.9	10.9	247.8	209.9	393.5
Other.....	3.9	3.3	3.8	251.9	186.4	339.8
Age						
16–24.....	-7.9	-12.7	-5.1	-12.4	-10.8	39.4
25–44.....	-5.8	1.9	-9.6	21.6	26.6	43.2
45 and older.....	13.8	14.6	14.7	104.3	146.6	184.9

¹ Hispanic is classified as an ethnicity; Hispanics may be of any race. People in the race categories in this table (White, Black, and other) all are non-Hispanic.

NOTE: To better understand the data in this table, it is useful to

know that the unemployment rate was -0.4 percentage point lower in 2009 than in 1983 and that the share of unemployment accounted for by long-term unemployment was 7.8 percentage points higher in 2009 than in 1983.

SOURCE: Current Population Survey.

the labor force with at least a bachelor's degree. The overall 32.3-percent increase in the number of unemployed was due mostly to the increase in the number of unemployed workers with higher levels of education: the increase was 185.8 percent for those with at least a bachelor's degree, while there was a 19.6-percent decline in the number of unemployed workers without a high school diploma.

There was a dramatic 75.8-percent increase in the overall number of long-term unemployed people, and each educational cohort experienced increases. The degree of increase was lowest for those without a high school degree (4.7 percent), and the increase for those with at least a bachelor's degree was almost threefold (289.2 percent).

There were notable differences among changes in the labor force, unemployment, and long-term unemployment within cohorts. For example, for those with a bachelor's degree or more, there was an increase of 113.5 percent in the number in the labor force, of 185.8 percent in the number of unemployed, and of 289.2 percent in the number of long-term unemployed.¹⁸ Thus, both the number

of unemployed with a bachelor's degree and the number of long-term unemployed with a bachelor's degree grew faster than the total number of people from this cohort in the labor force.

In sum, the analysis by educational attainment shows that, during the past three decades or so, the workforce has become much more educated. Those with less education consistently and disproportionately bore the brunt of economic downturns; however, this was less the case in 2009 than in 1983, because during 2009, those with higher levels of education had very large absolute and relative increases in unemployment and LTU.

Sex. Historically, the labor force has had a greater number of men than of women. Although this phenomenon persisted from 1983 to 2009, the share of women in the labor force has steadily increased. (See chart 6.) In 1983, women's share of the labor force was 44 percent, and they accounted for 42 percent of the unemployed but a much lower 31 percent of the long-term unemployed. Hence,

although men represented 56 percent of the labor force and 58 percent of the unemployed, they were significantly overrepresented in the ranks of the long-term unemployed, at 69 percent.

It is hard to know exactly why men were so overrepresented in the ranks of the long-term unemployed in 1983. One fact to bear in mind is that, to be counted as unemployed (or as long-term unemployed), one must have actively searched for work in the 4 weeks prior to the survey. It may have been that women were quicker to drop out of the labor force during periods of unemployment in 1983 than they were in 2009, or that structural shifts in employment (such as the decline in manufacturing, a sector traditionally dominated by men) made it more difficult for men to find work. Most likely, it was a combination of both.

In 2009, women's share of the labor force grew to 47 percent, but their share of unemployment was about the same as in 1983 (changing from 42 percent to 41 percent) and even as their share of LTU increased substantially, from 31 percent to 40 percent, they were still underrepresented among the long-term unemployed in relation to their share of the labor force.

Table 2 shows the changes from 1983 to 2009 by sex. Given that there are only two categories, the percentage-point changes are symmetrical: an increase for one sex implies a decrease of an equal absolute value for the other. As expected, the increase in the number of women in the labor force was above the average, at 47.8 percent (the overall average was 37.8 percent)—reflecting a share increase of 3.2 percentage points. The number of unemployed women increased by 28.1 percent (below the overall average of 32.3 percent)—which resulted in a share decrease of 1.3 percentage points. However, the number of long-term unemployed women increased by 125.7 percent, which was well above the average of 75.8 percent, and women's share of LTU increased by 8.9 percentage points.

Women are now close to parity with men in terms of labor force share. While the share and number of women in the labor force increased over the period, their share of LTU grew substantially—even though they are still underrepresented among the long-term unemployed compared with men. The growth in women's LTU was well over twice the rate of their labor force growth and far above the overall rate of increase in LTU.

Race and ethnicity. Over the past three decades there have been significant changes in the racial makeup of the workforce. The race and ethnicity groups examined in this article are the following: White (non-Hispanic); Black (non-Hispanic); other (non-Hispanic) and Hispanic (may

be of any race). In 1983 minorities accounted for just one in five members of the labor force; by 2009 the proportion was one in three. As illustrated in chart 7, Blacks were significantly overrepresented in the ranks of the unemployed (21 percent) and long-term unemployed (24 percent), while Whites were underrepresented in the ranks of both the unemployed (68 percent) and long-term unemployed (68 percent). Hispanics' shares of the unemployed (8 percent) and long-term unemployed (6 percent) were similar to their share of the labor force (6 percent). The shares of unemployment and LTU accounted for by the "other" category also were in proportion with the category's share of the labor force.

The labor force experienced a major racial and ethnic shift from 1983 to 2009: the share of Whites declined from 81 percent to 68 percent and that of Hispanics more than doubled, increasing from 6 percent to 15 percent. The share of Blacks in the labor force remained relatively constant from 1983 to 2009 (shifting from 10 percent to 11 percent). In 2009, the general pattern of unemployment and LTU by race/ethnicity relative to the labor force was the same as it had been in 2003, 1992, and 1983. In other words, Whites were underrepresented, Blacks and Hispanics were overrepresented, and those in the "other" category were represented among the unemployed and long-term unemployed approximately in proportion to their representation in the labor force.

Again, table 2 provides further insight into the changes depicted in chart 7. The 13.3-percentage-point decline in Whites' share of the labor force did not match the decline in Whites' shares of unemployment—a decline of 10.5 percentage points—but the decline in their share of LTU was 12.9 percentage points, which was similar to the decline in their share of the labor force. As stated, despite these changes, in 2009 Whites still were relatively underrepresented among both the unemployed and the long-term unemployed.

On the right side of table 2, it is shown that the number of Whites in the labor force increased by 15.2 percent, well below the overall increase of 37.8 percent. Whites also had below-average increases in unemployment and LTU. Importantly, the increase in the number of long-term unemployed Whites, 42.5 percent, though below the overall increase in LTU, was almost 3 times the percentage increase in the number of Whites in the labor force.

The share of Blacks in the labor force changed little over time, while their share of unemployment fell from 21 percent to 18 percent. Blacks' share of LTU seesawed during the 1983–2009 period. The percent growth of Blacks in the labor force (46.4 percent) was just above the overall aver-

age, whereas their percent increase in unemployment was 9.5 percent—which represented a 3.7-percentage-point decline in their share of unemployment. The number of long-term unemployed Blacks grew by 61.7 percent, which was below the average and far below the increases experienced for those in the categories of “other” and Hispanic.

Hispanics had the largest increases across the three measures—in terms of both percentage-point and percent increases. Compared with 1983, in 2009 Hispanics were more likely to be unemployed and long-term unemployed. Their share of the labor force increased by 8.8 percentage points (from 6 percent to 15 percent), and their shares of unemployment and LTU both increased by 10.9 percentage points. These large increases were reflected in Hispanics’ very large and above-average increases in raw numbers. There was a 247.8-percent increase in the number of Hispanics in the labor force, but it did not match the nearly fourfold (393.5 percent) increase in the number of long-term unemployed Hispanics.

The racial category of “other,” which includes everyone not in the three previously discussed groups, while remaining small, increased substantially in both the share and count analyses. For the most part, those in this category were not disproportionately represented among the unemployed or long-term unemployed across the four-year analysis.

The story of changing labor force demographics was largely a Hispanic one. Chart 7 shows that, at some point between 1992 and 2003, Hispanics surpassed Blacks as a share of the workforce. Minority workers continue to be disproportionately represented in the ranks of the unemployed and LTU. In 2009, Hispanics and Blacks together made up about a quarter of the labor force, but they accounted for more than a third of the unemployed and long-term unemployed.

Age cohorts. The aging of the U.S. population is apparent in this article’s analysis by age cohort: along with the general population, the labor force has grown considerably older over the last three decades or so. In 1983, 22 percent of the labor force was workers aged 16 to 24, 50 percent was 25 to 44, and 29 percent was 45 or over. Chart 8 shows the steady progression of the aging of the labor force from 1983 to 2009. A common pattern holds across the four years—younger people were relatively overrepresented in their shares of both unemployment and LTU, but especially of unemployment. The share of unemployment accounted for by workers aged 16–24 was significantly higher than the share of LTU accounted for by this group. The reverse was true for workers 45 and older. As pointed out earlier,

in 2010, Ilg showed that workers 16 to 24 years of age were more likely to drop out of the labor force than workers 25 to 54 years of age.¹⁹ From 2007 through 2009, for the younger of these two groups of people, approximately 30 percent of labor force flows were from unemployed to not in the labor force across all three years. But, during that time frame, when the labor market was deteriorating, people aged 25 to 54 were less likely to go from unemployed to not in the labor force: an average of 20.7 percent of flows for this age group were from unemployed to not in the labor force in 2007, 18.7 percent in 2008, and 15.3 percent in 2009.

In the tough labor market of 2009, workers aged 16–24 went from unemployed to employed at an average rate (16.9 percent) similar to that of workers aged 25–54 (18.0 percent). However, workers aged 25–54 were much more likely to remain unemployed (66.7 percent of the unemployed remained unemployed) compared with workers aged 16–24 (53.7 percent).

The aging of the workforce was considerable by 2009. Workers in the 16–24 age group accounted for just 14 percent of the labor force, and the cohort aged 25–44 also shrank in relative size, from half of the labor force in 1983 to a share of 44 percent in 2009. The share of workers aged 45 and older grew to 42 percent, from 29 percent in 1983. The youngest cohort experienced percentage-point declines in its share of the labor force, of unemployment, and of LTU from 1983 to 2009 (see table 2), but the relative decline in the cohort’s share of unemployment (a decrease of 12.7 percentage points) was larger than the decline in its share of the labor force (a decrease of 7.9 percentage points), and the decline in its share of LTU (a decline of 5.1 percentage points) was smaller. Similarly, the number of 16- to 24-year-olds in the labor force fell by 12.4 percent and the number of the unemployed people from this cohort fell by 10.8 percent; however, the number of long-term unemployed in this group increased, though less than the percent by which the overall number of long-term unemployed increased.

The increases in the share of the labor force, of unemployment, and of LTU accounted for by the 45-and-older group were similar—13.8 percentage points, 14.6 percentage points, and 14.7 percentage points, respectively. In percentage terms, the 45-and-older group grew in numbers considerably more quickly than average for all three outcomes (labor force, unemployment, and LTU). The increase in the number of long-term unemployed people from this cohort was large—184.9 percent—but must be viewed in light of the increase in the number of people from this cohort in the labor force, 104.3 percent. (Again, the per-

cent increase in LTU for all people—75.8 percent—was about twice the rate of the increase in the labor force as a whole—37.8 percent).²⁰

In general, younger workers continue to represent a disproportionate share of both unemployment and LTU, although their share of LTU is not as large. The workforce has aged considerably, but older workers remain underrepresented in the ranks of the unemployed.

IT IS CLEAR THAT THE RECESSION that ran from December 2007 to June 2009 was severe and placed great stress on the labor market. The unemployment rate rose to the highest it has been in over a quarter century, and the share of unemployment accounted for by long-term unemployment reached the highest ever recorded. In 2009, a 9.3-percent unemployment rate represented 14.3 million unemployed workers, of which close to one in three was out of work for at least half of a year. In the first half of 2010, the LTU share climbed to almost one in two.

This article's analysis of 2009 revealed that the most recent recession has affected men more than women; the weakness in male-dominated occupations such as construction and manufacturing was reflected in very high rates of unemployment in those occupations and in the disproportional share of unemployment and share of LTU accounted for by those workers. The consistent story across recent recessions is that those with less education, the young, and minorities were disproportionately affected compared with better educated, more experienced, and White workers. However, the fallout from the 2007–09 recession was felt more broadly across the demographic spectrum in 2009 compared with what happened in the tough labor markets of 2003, 1992, and 1983.

Since the early 1980s there have been enormous changes in the makeup of the workforce. The workforce has become more educated: a third of the labor force had at least a bachelor's degree in 2009, whereas just a fifth did in 1983. Women are now close to half of all workers and may surpass men at some point in the not-so-distant future—especially given that the most recent recession caused a disproportionate number of job losses in male-dominated sectors. Workers have become more diverse racially and ethnically, a change that has been driven primarily by large increases in the number of Hispanic workers. The aging of the population is reflected in the aging of the labor force: in 2009, two out of five workers were at least 45 years of age.

This article documents the changing face of the labor force as a whole and of some of its components. There has been an ever-increasing problem with long-term joblessness in both good times and bad. As a share of total unemployment, long-term unemployment has been high even following relatively mild recessions. Furthermore, during times of economic expansion, low points in LTU share have been higher with each successive business cycle over the past 30 years or so. The nature of unemployment is both cyclical and structural. Many workers are being left behind in an ever-changing economy because of forces such as globalization and changes in technology, and the bursting of bubbles can both effect downturns and make them more severe.

The rapidly shifting portrait of workers is important on many fronts. Aggregate statistics such as the unemployment rate are much needed gauges of labor market trends—but it is important to determine exactly who is negatively affected by economic recessions in order to develop efficient and effective economic policies. □

Notes

ACKNOWLEDGMENTS: The authors graciously thank Jin Dai for data assistance and Jay Liao and Maria Carolina Tomás for research assistance. In addition, the authors are grateful for generous support from the Open Society Institute's Campaign for Black Male Achievement.

¹ As of September 2010.

² This article follows the Standard Occupational Classification system in its analysis of occupations. Management, business and financial occupations; professional and related occupations; and service occupations are aggregations of major occupational groups. The other occupational groups analyzed in this article are all major occupational groups. However, the farming, fishing, and forestry major occupational group and the installation, maintenance, and repair major occupational group were combined. People for whom there is no occupation reported are a small segment of data and are not included in this analysis.

In addition, this article follows the North American Industry Classification System in its analysis of industries. Natural resources and mining, construction, manufacturing, information, financial activities, professional and business services, education and health services, leisure and hospitality, and other services (except public administration) are all supersectors. Wholesale and retail trade comprises the wholesale trade and retail trade sectors, and transportation and utilities comprises the transportation and warehousing sector and the utilities sector. Public administration is treated as a sector. The word "industry" is used in this article as a general term to refer to any of the aforementioned sectors or supersectors. People for whom there is no industry reported are a small segment of data and are not included in this analysis.

³ For the purposes of this assessment, the early 1980s double-dip recession is considered as one event.

⁴ Each peak in LTU occurred in a postrecessionary period, with

varying lags.

⁵ These BLS data series started in 1948.

⁶ See the Web site of the National Bureau of Economic Research for business cycle reference dates: www.nber.org/cycles/cyclesmain.html (visited Oct. 4, 2010).

⁷ Calculated with Current Employment Statistics survey data from November 1982 to November 1983.

⁸ Calculated with Current Employment Statistics survey data from March 1991 to March 1992.

⁹ There is a break in this series caused by the 1994 CPS redesign. However, the break has been accounted for with adjustments to the data. See Anne E. Polivka and Stephen M. Miller, "The CPS After the Redesign: Refocusing the Economic Lens," on the Internet at www.bls.gov/ore/pdf/ec950090.pdf (visited Oct. 21, 2010).

¹⁰ According to Current Employment Statistics data, overall job loss in 2009 was 3 percent, but the construction and manufacturing industries were down 13 percent and 8 percent, respectively; the proportions of workers in each industry who were men were 87 percent and 71 percent, respectively. Conversely, education and health services, 77 percent female, had job growth of 1.5 percent in 2009.

¹¹ See Randy Ilg, "Long-term unemployment experience of the jobless," *Issues in Labor Statistics*, Summary 10-05 (U.S. Bureau of Labor Statistics, June 2010), on the Internet at www.bls.gov/opub/ils/pdf/opbils82.pdf (visited Oct. 5, 2010); see especially table 2.

¹² The terms *share* and *proportion* are used interchangeably in this article.

¹³ Analyses by industry and occupation are not included in this section because of coding changes across years.

¹⁴ Table A-1 of the appendix contains raw counts by demographic group of those in the labor force, the unemployed, and the long-term unemployed in 1983 and 2009.

¹⁵ The trend holds across economic cycles, not just recessions, but not to the same degree.

¹⁶ For example, the early 1980s recession was attributed primarily to monetary policy in reaction to high inflation, whereas the bursting of the information technology bubble was the impetus of the 2001 downturn, and the bursting of the housing bubble was the impetus of the 2007–09 downturn.

¹⁷ To relate the two sides of table 2, if the percent change for any demographic was above (below) the overall percent change, then the share change was positive (negative).

¹⁸ Table A-2 of the appendix gives the distribution of the total change in raw counts for the number in the labor force, the number of unemployed, and the number of long-term unemployed, by demographic group for each demographic variable. For example, the labor force grew by 37.8 percent from 1983 to 2009. Of that change, within the variable of education, 60.4 percent of growth was attributable to those with at least a bachelor's degree.

¹⁹ See endnote 11.

²⁰ Table A-2 of the appendix shows that the 45-and-older cohort was overwhelmingly the largest contributor to the overall increases in the size of the labor force, in unemployment, and in LTU.

Appendix: Tables A-1 and A-2

Table A-1. Number of people in the labor force, unemployed, and long-term unemployed, by demographic group, 1983 and 2009						
(In thousands)						
Demographic group	Labor force		Unemployment		Long-term unemployment	
	1983	2009	1983	2009	1983	2009
All	111,857	154,142	10,782	14,265	2,558	4,496
Education						
Less than a high school diploma..	22,505	16,784	3,797	3,054	834	873
High school diploma.....	41,520	44,568	4,204	5,046	1,114	1,657
Some college but no degree.....	25,333	44,756	1,971	3,851	423	1,240
At least a bachelor's degree	22,498	48,034	809	2,313	187	727
Sex						
Male.....	63,145	82,123	6,245	8,453	1,754	2,682
Female.....	48,711	72,019	4,537	5,811	804	1,814
Race/ethnicity¹						
White.....	90,993	104,859	7,316	8,176	1,735	2,472
Black.....	11,618	17,008	2,286	2,502	603	975
Hispanic.....	6,426	22,352	873	2,706	155	764
Other.....	2,820	9,922	307	880	65	285
Age						
16–24.....	24,385	21,361	4,214	3,760	628	876
25–44.....	55,530	67,537	4,743	6,005	1,325	1,898
45 and older.....	31,942	65,245	1,825	4,500	605	1,722

¹ Hispanic is classified as an ethnicity; Hispanics may be of any race. People in the race categories in this table (White, Black, and other) all are non-Hispanic.

SOURCE: Current Population Survey.

Table A-2. The distribution of the percent change in raw counts for the labor force, unemployment, and long-term unemployment, by demographic group, in percent, 1983 to 2009			
Demographic group	Labor force	Unemployment	Long-term unemployment
Education			
Less than a high school diploma	-13.5	-21.3	2.0
High school diploma	7.2	24.2	28.0
Some college but no degree	45.9	54.0	42.1
At least a bachelor's degree	60.4	43.2	27.9
Sex			
Male	44.9	63.4	47.9
Female	55.1	36.6	52.1
Race/ethnicity			
White	32.8	24.7	38.0
Black	12.7	6.2	19.2
Hispanic	37.7	52.6	31.4
Other	16.8	16.5	11.3
Age			
16-24	-7.2	-13.0	12.8
25-44	28.4	36.2	29.6
45 and older	78.8	76.8	57.7
NOTE: With the exception of differences due to rounding, within each column, the numbers for a given demographic variable sum to 100. For example, for the change in the number of people in the labor force by education category, -13.5, 7.2, and 45.9, and 60.4 sum to 100.			
SOURCE: Current Population Survey.			