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Abstract:

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July 21, 2010

**The Changing Face of the U.S. Labor Force:
The Composition of the
Unemployed and Long-term Unemployed in
Tough Labor Markets**

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ABSTRACT

This paper documents and examines the demographic characteristics of the workforce in the context of unemployment and long-term unemployment with an emphasis on recessions. We first look at the historical tracking of unemployment and long-term unemployment. Long-termers, those out of work for at least six months, have become a relatively larger share of the unemployed in good times and bad. Secondly, annual data from 2009 is presented. We give extensive demographic breakdowns to examine differential rates of unemployment and long-term unemployment across and within groups. Those disproportionately affected by the on going recession that began in December 2007 were those who were the least educated; males; Blacks and Hispanics; teenagers; and young workers. Workers in the construction and production occupations were hit hard as were those in the construction and manufacturing industries. The latter part of this paper compares and contrasts labor market outcomes demographically across the last four recessionary periods. In general, less educated, young and non-whites continue to disproportionately bear the brunt of economic downturns but less so than in the past.

Introduction

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. This foremost gauge offers a quick and historically documented glance at the economy’s health. Another measure that has garnered much attention given the severity of the recent recession has been the incidence of long-term unemployment. Of the unemployed, the share of long-termers—those out of work for at least six months—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. Two and a half years after the onset of recession unemployment remains high at 9.5% and close to half (45.5%) of unemployed workers are long-termers.¹

Informative as these top line statistics are they alone mask much of the nuanced nature of those who comprise the ranks of the unemployed—especially given that the U.S. workforce has change considerably over the last three decades. Those who are disproportionately affected by economic downturns and the makeup of those who experience long bouts of unemployment are important to identify so public policy and safety nets are effectively and efficiently targeted. This analysis takes a closer look at the demographic makeup of the labor force and documents the transformation of the workforce and those that make up the ranks of the unemployed and long-term unemployed over recent recessions.

We first look at the historical trends in the overall unemployment rate and long-term unemployment (LTU) shares starting in 1979. This time period includes four

¹ As of June 2010.

recessions if the ‘double-dip’ recession in the early 1980s is counted as a single event. Unemployment and the subset of long-termers are evaluated over time and in the context of recessions.

Next, a detailed snapshot of 2009 is presented and is comprised of two parts. The first reports detailed unemployment and long-term unemployment rates and reveals the significant variance in rates demographically. Secondly, a share analysis of the labor force, unemployment and long-term unemployment is presented by worker characteristics. This gives the overall makeup of each of the three measures by a representative distribution for several demographic groupings and across occupations and industries.

Lastly, a historical assessment of recent recessions is presented as annual data for 1983, 1992, 2003 and 2009 are analyzed and compared.² These years represent post-recessionary peaks in LTU shares—thereby they arguably characterize the toughest labor markets over the last 30 years.³

Pertinent analytics from this investigation are many. For instance, what groups disproportionately bear the brunt of recessions and has intensity changed over time? Have the effects of economic downturns on worker outcomes with different educational backgrounds changed over time as higher rates of education have been achieved? How have men and women fared, relatively, during recessions over the last couple of decades 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

² In this analysis the early 1980s double-dip recession is analyzed as one event.

³ Each peak in LTU occurred in post-recessionary periods with varying lags.

are a few of the insights gained from this research that documents the evolution of the workforce and subsequent changes in unemployment.

Unemployment and long-term unemployment shares

As an economy falls into recession it makes intuitive sense that unemployment rates increase and the length of unemployment spells would be expected to increase as well. These trends—the unemployment rate and the shares of LTU—are depicted in chart 1. Several important features are immediately evident. First, is the relative coming together of the two series—as depicted by the closing of the gap over time. Not counting the most recent recession, peak unemployment rates were falling for each successive recession from the early 1980s (counting the double-dip as one) through the early 2000s. Peak rates fell from 10.8%, to 7.8% and to 6.2%, respectively. However, at the same time, peak LTU shares remained high—26.0%, 23.1% and 23.6%, respectively. The relatively low unemployment rates that followed the 2001 recession had LTU shares of at least 20% for 32 consecutive months (October 2002-May 2005)—an unprecedented stretch. Thus, even as unemployment rates were relatively subdued following the early 1990s and 2001 recessions, unusually large shares of unemployed workers experienced long bouts of unemployment.

A starkly different pattern emerged with the onset of the most recent recession that began in December 2007—when both series precipitously soared for an extended period of time. As of June 2010, the unemployment rate of 9.5% was slightly down from a thus far 10.1% peak for the cycle (October 2009) and LTU shares were just off a recent record high of 46.0% (May 2010). This recession has been dubbed the “Great Recession” and chart 1 clearly illustrates the degree of economic woe in the labor market given that

the unemployment rate recently approached its historic high of 10.8% reached in 1983 and LTU shares far surpassed the previous peak of 26.0% attained that same year.⁴

If recent trend is any indication it may be that these series have yet to attain their true highs for the current recession. Between 1948 and 1985 it took, on average, 1.6 months into an economic recovery for unemployment rates to peak and 8.3 months for LTU shares to peak. A different pattern emerged following the 1990-91 and 2001 recessions when the peaks of these series were much delayed.⁵ Following the 1990-91 recession it took 15 months for unemployment and 19 months for LTU shares to peak. The lag was even longer following the 2001 recession, when it took 19 and 29 months, respectively, for the unemployment rate and LTU shares to peak. Whether the trend in delayed post-recessionary peaks in these two series persists will depend on the official end date of this recession along with the movement of these two series over the next several months.⁶

Chart 2 delves further into the progression of LTU starting at the peaks of the last six cycles to 30 months out.⁷ As depicted, the current recession is a clear break from the norm. The LTU share at on onset of recession in 2007 was uncharacteristically high (17.3%) and the rate of increase which picked up about half way into the downturn was steep and it continues. Of course the length of the 2007 recession which is the longest (the length of each recession is in parentheses in chart 2) on record in the post-Depression

⁴ These BLS series started in 1948.

⁵ These periods have been deemed 'jobless recoveries' as the economic was officially in recovery and expanding but the labor market continued to shed jobs as if in recession for sometime thereafter.

⁶ The National Bureau of Economic Research, the official dating committee of economic cycles, will at some point post-date the end of the recession. There is always a lag time when dating the beginning or end of a recession, for more information go to: <http://www.nber.org/cycles/main.html>.

⁷ This is the length of the current recession as of this writing.

era certainly contributes to the almost 1 in 2 unemployed who have been so for at least a half of a year.⁸

The recessions illustrated in chart 2 have varying lengths thus a direct comparison is difficult. The graphic in chart 3 gives the progression of LTU at the onset of recovery culminating three years out which enables a direct comparison of LTU trajectories during official recoveries. Since the 2007 recession has yet to be declared over, it is not represented in this chart. The recovery that followed the 1981 recession had LTU shares that increased seven consecutive months into recovery to a then record high of 26%. However, after that peak, LTU declined relatively quickly. The responsiveness of LTU was driven by the strong rebound in jobs as 3.1 million (just over 1%) were created in the first twelve months of recovery.⁹

The most persistent post-recession increases in LTU were those that followed the 1990 and 2001 recessions. These recoveries were deemed ‘jobless recoveries’ as the economy was officially in recovery and expanding but the labor market continued to shed jobs as if in recession for sometime thereafter.

LTU post-1991 trended upward for 19 months to 23.1% then dipped for awhile but remained high throughout the three year period. Employment in the first twelve months of recovery *fell* by 239,000 (or -0.22%).¹⁰ The changes in LTU remained relatively high for a prolonged period following this recession and the cyclical low reached just prior to the 2001 recession was higher than the previous low rate (see chart 1).

⁸ See NBER for cycle dates at: <http://www.nber.org/cycles/cyclesmain.html>

⁹ Using Current Employment Statistics: November 1982 to November 1983.

¹⁰ Using Current Employment Statistics: March 1991 to March 1992.

The jobless recovery that followed the 2001 recession saw 562,000 (or -0.43%) *decline* in jobs in the first twelve months of expansion. The recovery was accompanied by LTU rates that steadily increased for 28 months to a business cycle high of 23.6% and continued to be high well into the fourth year of recovery. Again, the LTU low reached just prior to the next recession that began in December 2007 was higher than the previous low.

Another measure that defines the degree of labor market stress historically is the percent of those who are long-term unemployed as a share of the labor force (chart 4). As of June 2010, workers who were among the ranks of the long-term unemployed represented 4.4% of the *total labor force*—this series previously peaked at 2.6% in the tough labor market of 1983. This means that of all employed and unemployed workers approximately 1 in 23 were long-term unemployed. The downturn that began in 2007 is by all indications much worse than those of recent history and one of the worse ever regarding the labor market.

At this point, it is unknown what the progression of LTU will take once the recovery officially begins. Assuredly, the starting point for the long-term unemployment rate when recovery is announced for the current recession will be extremely high. Clearly, rates and persistence of LTU are in part due to employment growth which has been positive in the first half of 2010 but far too weak to effectively bring down rates of unemployment and incidences of long-termers. If a weak labor market persists it may be possible that both rates will remain extremely high for many years to come.

2009 Demographic analyses

Unemployment and long-term unemployment rates

A demographic assessment of the 2009 labor market—the most recent annual data available—and the second full year of recession is presented in table 1. The year was plagued by ever increasing monthly rates of unemployment (from 7.7 to 10.1%) and LTU (from 22.4% to 39.8%).

The annual unemployment rate in 2009 was 9.3% and 31.5% were unemployed at least six months. Those are the top line statistics; however these rates vary by demographic groups as seen in the first two columns of numbers in the table. The first is the unemployment rate and the second is the long-term unemployment rate for each group. Unemployment rates varied much more than did long-term unemployment and the pattern of variation between the two was not consistent. For example, education—those with the least amount of educational attainment had much higher rates of unemployment—almost twice the overall rate and three and a half times the rate of those with at least a BA degree. But, LTU by education is *lowest* for those with the least amount of education and the second highest rate is for those with the highest levels of education.

Unemployment rates by gender, industry and occupation provide insight as to why this recession has been dubbed the ‘mancession’—reflecting the disproportional loss of jobs in male dominated sectors. Unemployment rates were very high for those working in construction (both industry 17% and occupation 19.7%), the manufacturing industry (11.9%) and production occupations (14.7%). The educational and health services

industry had a low 4.5% unemployment rate as this sector was one that bucked job loss trends in 2009.¹¹

In sum, those with less education, males, blacks and Hispanics, teenagers and workers in construction and manufacturing had the highest rates of unemployment. But, this was not necessarily the case for rates of long-term unemployment. Groups with high rates of LTU include: those with a high school degree and some college, blacks, those 55 and older, and workers in management occupations and financial activities industries.

It is important to keep in mind that there are decision processes that affect rates of unemployment and LTU. One example that may depress (lengthen) rates for certain groups is the propensity to leave (stay) in the labor when a worker has been unemployed for a time—this decision affects both measures and is likely not the same across groups. For example, Randy Ilg (2010) looked at flows of unemployed workers and found that younger unemployed workers were more likely, compared to older unemployed workers, to go from unemployment to not in the labor force as opposed to staying in the labor force.¹² This dropping out of the labor force may depress rates of LTU (and thus unemployment) for younger workers and this may be true of other groups as well. On the other hand, 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 better job match than those with lesser means which may lengthen unemployment spells.

¹¹ Current Employment Statistics job loss in 2009 totaled 3%, but the construction and manufacturing industries were down 13% and 8%, respectively: male shares of each were 87% and 71%, respectively. Conversely, Education and Health Services, 77% female, had job growth of 1.5% in 2009.

¹² Randy Ilg 2010. “Long-term unemployment experience of the jobless,” in *Issues in Labor Statistics*, BLS Summary 10-05, June 2010. Relevant table here: http://www.bls.gov/opub/ils/summary_10_05/long_term_unemployment_table2_data.htm.

Distribution of long-term unemployment shares by demographic groupings

As a percent of the unemployed, 31.5% were long-term unemployment in 2009. At the time it was the highest annual rate of LTU on record and represented 4.5 million unemployed workers. The last three columns in table 1 report a share analysis of the labor force, unemployment and LTU. In general, a share analysis of a demographic group consists of the proportion or the distribution of shares across categories within a demographic group. For example, a share analysis of unemployment for the demographic group of ‘gender’ consists of determining what proportion of the unemployed were men and what proportion were women (the categories within the group gender)—by construction they add up to one and represent all those who were unemployed.¹³

A share analysis of each of the three outcomes is presented for six demographic groupings: education, gender, race/ethnicity, age, occupation and industry. Each subgroup’s share of the labor force is included to assess if each demographic is relatively over- or under- represented in terms of the two unemployment measures. The two unemployment measures may also be compared for an additional gauge.

Within the education group there are four levels. Of the labor force, the proportion that had less than a high school degree was .11 or 11% of the workforce; however this group accounted for a disproportionately high 21% and 19% of those who were unemployed and long-term unemployed, respectively. At the other end of the educational spectrum, those with at least a BA degree comprised 31% of the labor force, but represented just 16% of both the unemployment and LTU.

Compared to their representation in the labor force, other under-represented groups in the ranks of the unemployed and LTU in 2009 were females, professional

¹³ The terms share and proportion are used interchangeable.

workers 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 LTU were those that had a high school degree or less, males, blacks, younger workers, and those who worked in construction and manufacturing.

Table 1 gives a detailed snapshot of the labor market in 2009 and reveals what workers have suffered disproportionately during a year when the recession worsened considerably. Are these outcomes typical during 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 over the past three decades.

Historical comparisons of tough labor markets

This analysis focuses on four years: 1983, 1992, 2003 and 2009. These years represent annual peaks in long-term unemployment that followed the recessions of 1980-81 (double-dip), 1990-91, 2001 and 2007.¹⁴ Each chart represents a demographic group and includes a share analysis that consists of break downs of the labor force, unemployment and LTU for each year—similar to table 1 but in the form of bar charts for ease of comparison. Each group's share of the labor force is included for two reasons: first, to assess if each demographic group is relatively over- or under- represented in terms of the unemployment measures, and secondly to show the demographic shifts in the labor force over time. This analysis allows for a snap shot share evaluation of each of the four years and allows for comparative analyses across the years.

¹⁴ We use 2009 with the caveat that it may represent a snap shot within a worsening economy as the complete picture regarding unemployment and especially long-term unemployment has not fully transpired for this lengthy recession.

In addition to the share analysis two measures of changes from 1983 to 2009 are presented. First, the *percentage-point* changes in the shares, and secondly the *percentage* changes in raw counts. An analysis of shares or proportions at different points in time (for example, unemployment) shows the shifting of share allocations across categories (e.g. men and women) within demographic groupings (e.g. gender) but they do not take into account *growth*—for example the increase in the total number of unemployed over time. Thus, both measures of change are reported.

For each measure there are several types of comparisons that may be made—changes within each demographic category and across categories within each demographic grouping. The analyses over time offer insights into the changing face of the U.S. workforce along with absolute and relative changes in unemployment and LTU. The first analysis is based on educational attainment each subsequent analyses on gender, race/ethnicity and age cohorts will follow a similar analytical pattern to this one.¹⁵

Education

In 1983, the annual unemployment rate was 9.6% and shares of LTU were 23.9%—meaning that just shy of one quarter of the unemployed were so for more than six months. This share analysis or proportional breakdown for educational attainment is illustrated in chart 5. The chart offers a quick comparative illustration of all four years but for brevity discussions are generally geared to the first and last years.

In 1983, the labor force consisted of 20% with less than high school degree, 37% with a high school degree, 23% with some college, and 20% with at least a Bachelor's (BA) degree.¹⁶ Those with less education were relatively over-represented in the ranks of

¹⁵ Industry and occupation analyses are not included in this section due to coding changes across years.

¹⁶ Raw counts by demographic groups for 1983 and 2009 are in the appendix, table A-1.

the unemployed. For example, those with less than a high school degree were disproportionately represented in the ranks of the unemployed (35%) and LTU (33%) relative to their labor force share (20%). At the other end of the educational spectrum, those with at least a BA degree (20% of the labor force), were well under-represented in the ranks of both the unemployed (8%) and the unemployed LTU (7%). Similar comparisons for all education levels may be made and are left to the reader.

In 2009, the annual unemployment rate was 9.3% (similar to the 9.6% in 1983) but LTU shares were 31.5% (much higher than the 23.7% in 1983). As seen in chart 5, the overall workforce attained a higher level of education as the share of those with less than a high school degree declined (20% in 1983 down to 11% in 2009) and there was an increased share of those with at least a BA degree (20% in 1983 to 31% in 2009). Even with the shifting of educational shares, it was still the case that those with less than a high school degree (11%) were disproportionately represented in the ranks of unemployment (21%) and LTU (19%) shares.

The share analysis illustrates that as the labor force attained more education, the relative pattern that the less educated were more likely to be disproportionately represented in the ranks of the unemployment and LTU generally held across the four distressed labor markets.¹⁷ It was not the case that those who made up the distribution of the unemployed or the LTU changed in a substantive fundamental way even though the recessions themselves were very different.¹⁸ But, was the degree of over (under) representation as strong in 2009 as it was in 1983? It is hard to determine given the share

¹⁷ The general pattern holds across economic cycles, not just recessions, but to different degrees.

¹⁸ For example, a primary cause of the early 1980s recession was attributed to monetary policy in reaction to high inflation, whereas the bursting of the IT and housing bubbles were impetuses in the 2001 and 2007 downturns, respectively.

analysis. For example, all three outcome shares declined for the two lowest educational cohorts—and vice versa for the two highest cohorts.

Two measures of changes from 1983 to 2009 are documented in table 2. The left half of the table presents the *percentage-point change in shares*. The overall percentage-point changes in shares are found in the ‘All’ category (first row). Comparing the two tough labor markets, the unemployment rates were fairly similar but shares of LTU were much higher in 2009—unemployment was 0.4 percentage-points less but LTU was 7.8 percentage-points above the 1983 rates.¹⁹

In term of growth in the raw counts (right side of table 2), the labor force increased by 37.8%, unemployment increased slightly less at 32.3%, and LTU increased by 75.8% or *twice* the rate of increase of the labor force from 1983 to 2009 (see appendix table A-1 for raw counts). As expected, the labor force grew considerably over this time which is why even though the unemployment rate decreased slightly there was still a large increase in the *number* of unemployed. It is the relative changes that are of interest so these overall changes will help put into perspective the demographic changes.

The changes in table 2, both percentage-point and percentage, for each demographic can be compared to the overall changes (top row).²⁰ Additionally, changes in the unemployment and LTU may be compared relative to the labor forces changes within each demographic category.

Compared to overall changes in unemployment (-0.4) and LTU shares (7.8)—percentage-point *declines* for the two groups with little education (high school and less than high school) were significant for each series. Shares of those in the labor force with

¹⁹ The labor force is our unit of analysis so no percentage-point change is recorded.

²⁰ 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).

less than a high school degree declined by 9.2 percentage-points and they experienced 13.8 and 13.2 percentage-point declines in their shares of the unemployed and LTU, respectively. This can be seen in chart 5 and in the calculated changes in table 2. Thus, for the less than high school cohort, the share declines in unemployment and LTU were greater than their decreased share of the labor force. On the other end of the educational spectrum, there was an increased share of workers with at least a BA degree by 11.0 percentage-points from 1983 to 2009 and this cohort had increased shares of unemployment and LTU by 8.7 and 8.9 percentage-points, respectively.

The growth rates for these two groups provide further insight into a changing labor market (right side table 2). While the overall labor force grew by 37.8% there was a 25.4% *decline* in those with less than a high school degree and a 113.5% increase in the cohort with at least a BA degree. The overall 32.3% increase in the number of unemployed was mostly due to the increase of those at the higher levels of education—185.8% for those with at least a BA while there was a 19.6% decline in the number of unemployed for those with the least amount of education.

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

There were dramatic changes within cohorts. For example, for those with a BA degree or more, this group experienced a 113.5% increase in the labor force with relatively high increases of 185.8% and 289.2% in their ranks of the unemployed and

LTU, respectively.²¹ Thus showing much larger growth in unemployment figures compared to this educational cohorts labor force growth.

In sum, the analysis by educational attainment shows that over almost three decades the workforce has become much more educated. Second, those with less education consistently and disproportionately bore the brunt of economic downturns—however; this was less the case in 2009 than in 1985 as those with higher levels of education had very large absolute and relative increases in unemployment and LTU.

Gender

Historically the labor force has had a greater proportion of males to females. While this phenomenon persisted from 1983 to 2009, the share of females in the labor force has steadily increased (see chart 6). In 1983, the female share of the labor force was 44% and they comprised 42% of the unemployed but a much lower 31% of the LTU. Hence, while men represented 56% of the labor force and 58% of the unemployed they were significantly over represented in the ranks of the long-term unemployed at 69%.

It is hard to know exactly why men were so over represented in the ranks of the LTU. But, recall that to be counted as unemployed (and thus LTU) one must have actively searched for work in the four weeks prior to the survey. It may have been that women were quicker to drop out of the labor force during periods of unemployment or perhaps structural shifts in employment (such as a decline in manufacturing that was dominated by men) made it more difficult for them to find work. Or, it was likely a combination of both.

²¹ Appendix table A-2 gives the distribution of the *total change in raw counts* for the three labor market outcomes by demographic groups. For example, the labor force grew by 37.8% from 1983 to 2009. Of that change, and within the education group, 60.4% was attributable to those with at least a BA degree. Columns within each demographic grouping sum to 100%—thus accounts for the entire change.

In 2009, the share of females in the labor grew to 47% but their share of unemployment was about the same as in 1983 (41% versus 42%) and even as their share of LTU increased substantially from 31% to 40%—they were still under-represented compared to their share of the labor force.

Looking back to table 2 the changes from 1983 to 2009 are recorded by gender. Given that there are only two categories the percentage-point changes are symmetrical—increases for one gender equal decreases for the other. As expected, the increase of females in the labor force was above the average at 47.8% (the overall average was 37.8%)—reflecting a share increase of 3.2 percentage-points. The number of unemployed females increased by 28.1% (below the overall average of 32.3%)—which resulted in a share decrease of 1.3 percentage-points. But, the number of LTU females increased by 125.7% which was well above the average of 75.8% and LTU shares increased by 8.9 percentage-points.

Women are reaching parity with men in terms of the makeup of the workforce. While the share and numbers of females in the labor force increased over the period, their relative increase grew significantly and disproportionately among the ranks of LTU—even though they are still underrepresented in the unemployment measures. The growth in female LTU was well over twice the rate of their labor force growth and well above the overall rate of increase in LTU.

Race/Ethnicity

Over the past three decades there have been significant changes in the racial makeup of the workforce. In 1983 just one in five of the labor force were non-white, by 2009 it was one in three. As illustrated in chart 7, blacks were significantly over-

represented in the ranks of the unemployed (21%) and LTU (24%), while whites were well under-represented in the ranks of both the unemployed (68%) and LTU (68%). Hispanic shares of the unemployed (8%) and the LTU (6%) were similar to their share of the labor force (6%) as was the case for the small shares of the other category.

The labor force experienced a major racial/ethnic shift from 1983 to 2009 typified by the declining share of whites from 81% to 68% and a more than doubling of the Hispanic share from just 6% to 15%. The share of blacks in the labor force remained relatively constant from 1983 to 2009 (10% to 11%). In 2009, the general pattern of unemployment and LTU relative to the labor force was the same as it was for all years. In other words, whites were under-represented, blacks and Hispanics were over-represented and others were equally represented in their shares of unemployment and LTU relative to their labor force representations.

Again, table 2 provides further insight into the changes depicted in chart 7. The 13.3 percentage-point decline in the white share of the labor force was not matched with proportional declines in white shares of unemployment (-10.5 percentage-points) but their share decline in LTU was similar (12.9 percentage-points)—as stated, even with these changes it was still the case in 2009 that whites were relatively under-represented in both unemployment measures.

Turning to the raw counts in the table 2, it is shown that the number of whites in the labor force increased by 15.2% well below the overall increase of 37.8%. Whites also had below average increases in the ranks of the unemployment figures. Importantly, the relative increase in LTU of 42.5% for whites though below the overall increase was almost three fold their increased numbers in the labor force.

For blacks, their share representation in the labor force changed little over time while their shares in unemployment fell from 21% to 18%. LTU shares for blacks seesawed over the four periods. The percent growth of blacks in the labor force (46.4%) was just above the overall average, while the percent increase in unemployment was just 9.5%—which represented a 3.7 percentage-point decline in their unemployment share. Black growth in LTU was 61.7% which was below the average and far below the increases experienced for other non-whites.

Hispanics had the largest increases across the three measures—in terms of both percentage-point and percent increases. Compared to 1983, Hispanics were more likely to be in the ranks of the unemployed and LTU in 2009. Their share of the labor force increased by 8.8 percentage-points (6% to 15%) and Hispanic shares of unemployment and LTU both increased by 10.9 percentage-points. The large Hispanic share increases were reflected in their very large and above average increases in raw numbers. There was a huge 247.8% increase in the number of Hispanics in the labor force, but it didn't match the nearly four fold (393.5%) increase in long-term unemployed Hispanics.

The racial category 'other' that included everyone not in the three previously discussed groups, while remaining small, increased significantly in both the share and count analyses. For the most part, 'other' was not disproportionately represented in the ranks of the unemployed or LTU across the four year analysis.

The story of race/ethnicity was largely a Hispanic one as they surpassed blacks as a share of the workforce. Minority workers continue to be disproportionately represented in the ranks of the unemployed and LTU. In the most recent recession, Hispanics and

blacks together made up over a quarter of the labor force and they were represented over one in three of the unemployment and LTU.

Age cohorts

The aging of the U.S. population is reflected in the age cohort analysis as the labor force grew, as did the population, considerably older over the last three decades. In 1983, the labor force consisted of: 22% of young workers aged 16 to 24, 29% in the middle age group of 25 to 44 year olds, and 29% in the 45 and over cohort. Chart 8 shows the steady progression of the aging of the labor force from 1983 to 2009. Again, a common pattern holds across the four years—*younger (older) folks are relatively over (under) represented in their shares of both unemployment figures but especially for unemployment.* For younger workers, their shares in the ranks of the unemployed are significantly higher than their shares in LTU and this may be indicative of a relatively weaker attachment to the labor force. Younger workers may be quicker to drop out of the labor force in tough economic times rather than continue to search long-term for employment or they make accept employment even if it is not a good match.

The aging of the workforce was considerable by 2009. Young workers comprised just 14% of the labor force and the middle cohort also shrunk from half to a share of 44%. The share of workers aged 45 and above grew to 42% from just 29% in 1983. The young cohort experienced percentage-points declines (see table 2) in each of the three indices from 1983 to 2009—but the relative decline in unemployment (-12.7 percentage-points) was larger and the decline LTU (-5.5 percentage-points) was smaller than the overall decline in the labor force (-7.9 percentage-points). This is reflected in the percentage declines as the number of young in the labor force fell by 12.4% and their

numbers of the unemployed fell similarly by 10.8%, however, LTU numbers for this group increased but less than the overall increase.

Increased shares in the three outcomes for the 45+ group were similar—13.8, 14.6 and 14.7 percentage-points, respectively, in the labor force, unemployment and LTU. In percentage terms, the 45+ group grew considerably above the averages for all three outcomes—increased LTU numbers were large at 184.9% but not out of line given the increase in the labor force of 104.3% (again the overall percent increase in LTU—75.8%—was about twice the rate of increase in the labor force—37.8%).²²

In general, younger workers continue to be disproportionately represented in terms of unemployment and less so as long-termers. The workforce has aged considerably but older workers remain under-represented in the ranks of the unemployed.

Conclusion

It is clear that the recession that began at the end of 2007 was severe and the stress on the labor market immense. Unemployment rates were the highest they have been in over a quarter century and accompanying long-term unemployment shares were the highest ever recorded at the time. In 2009, a 9.3% unemployment rate represented 14.3 million unemployed workers, of which close to one in three were out of work for at least a half of a year.

Our analysis of 2009 revealed that the ‘mancession’ nomenclature had substance as the weakness in the male dominated occupations such as construction and manufacturing was reflected in very high rates of unemployment and disproportional share representation in the ranks of the unemployment and LTU for those workers.

²² Appendix table A-2 shows that the 45+ cohort overwhelming contributed to the increases of all three outcomes.

The consistent story across recent recessions is that those with less education, the young, and minorities were disproportionately affected compared to better educated, more experienced and white workers. However, since the early 1980s and including the most recent recession, the down turn was felt more broadly across the shifting demographic spectrum.

Since the early 1980s there have been enormous changes in the makeup of the workforce. The workforce has become more education as a third had at least a BA degree in 2009 when just one in five did in 1983. Women are close to half of all workers and may surpass men at some date in the not so distant future—especially given that this current recession experienced disproportions job losses in male dominated sectors. Workers have become more diverse racially and ethnically driven by large increases of Hispanic workers. The aging of the population is reflected in the aging of the labor force as two out of five workers are at least 45 years of age.

This paper documents the changing face of workers and the unemployed. There has been an ever increasing problem with long-term joblessness in good times and bad. Cyclically long-term unemployment has been high even during relatively mild recessions and during expansions low points have increased. The nature of unemployment is both cyclical as well as structural as many workers are being left behind in an ever changing economy driven by globalization, technical change and the booms and busts of bubbles.

The rapidly shifting portrait of workers is important on many fronts. Top line statistics such as the unemployment rate are a much needed historical gauge of labor market trends and strains—but it is important to determine just who is stressed by economic recessions so economic policies will efficiently and effectively help those who

need it the most. Central are retraining programs for the unemployed and safety net policies such as unemployment insurance eligibility requirements and triggers that are often out of date and ineffective.

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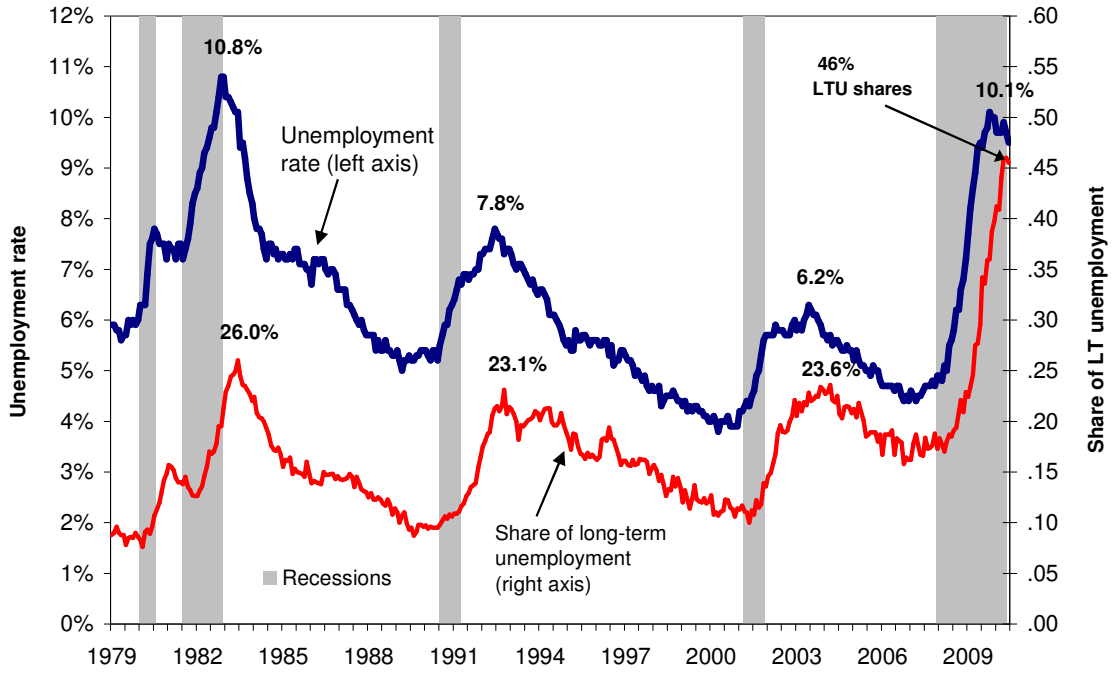
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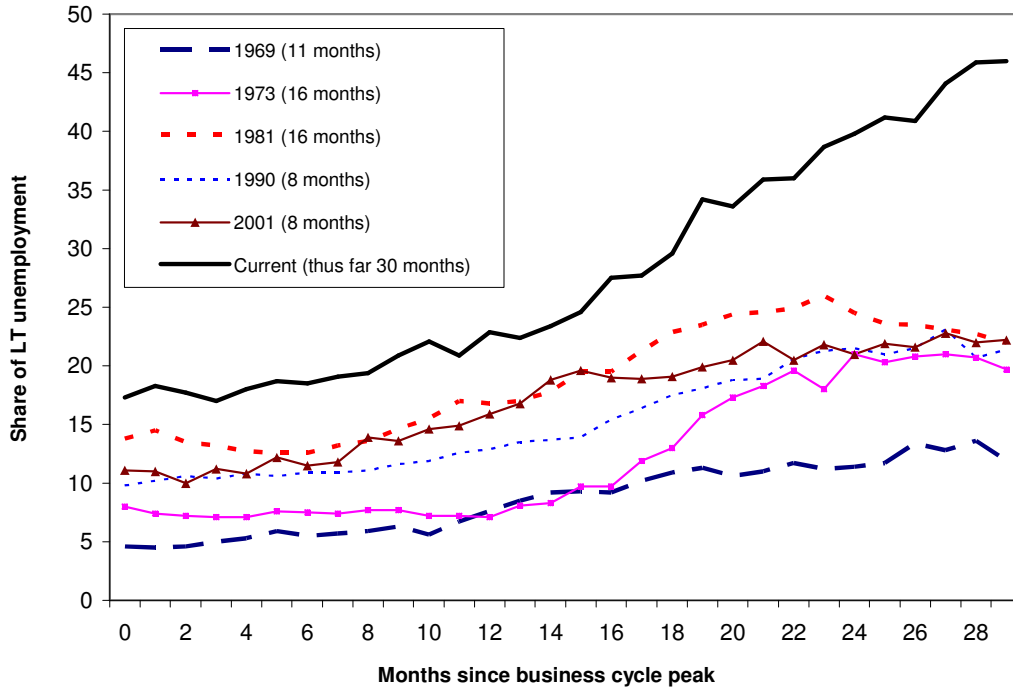
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Chart 1. Of total unemployment, the share unemployed for 27 or more weeks and the unemployment rate



Source: Current Population Survey.

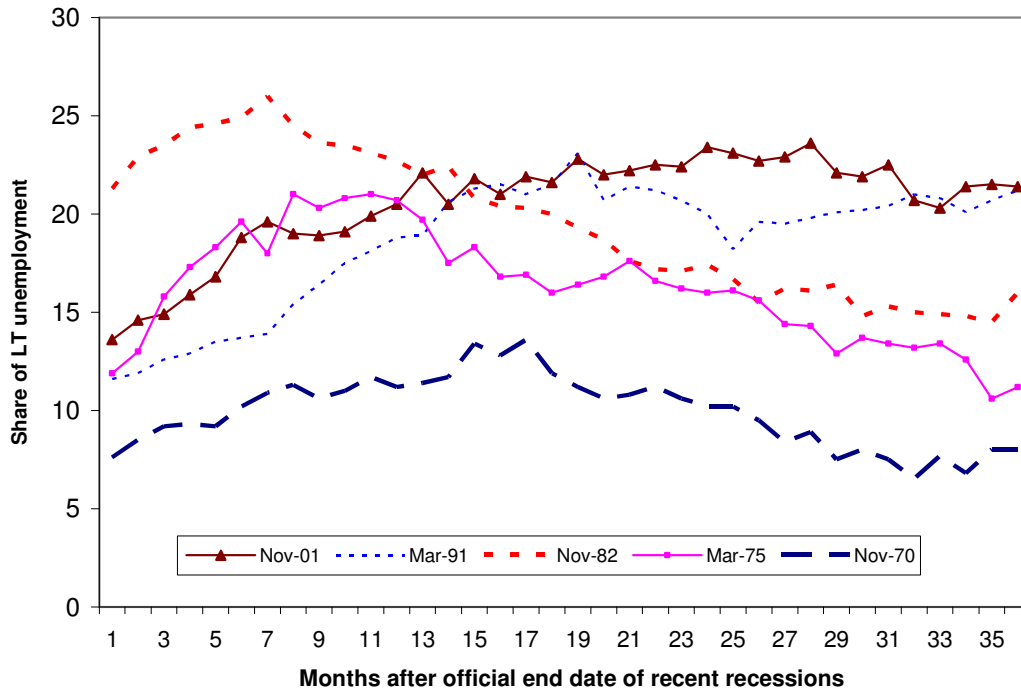
Chart 2. Progression of long-term unemployment rates in the last six recessions



Note: The number in parentheses denotes the official length of each recession.

Source: Current Population Survey.

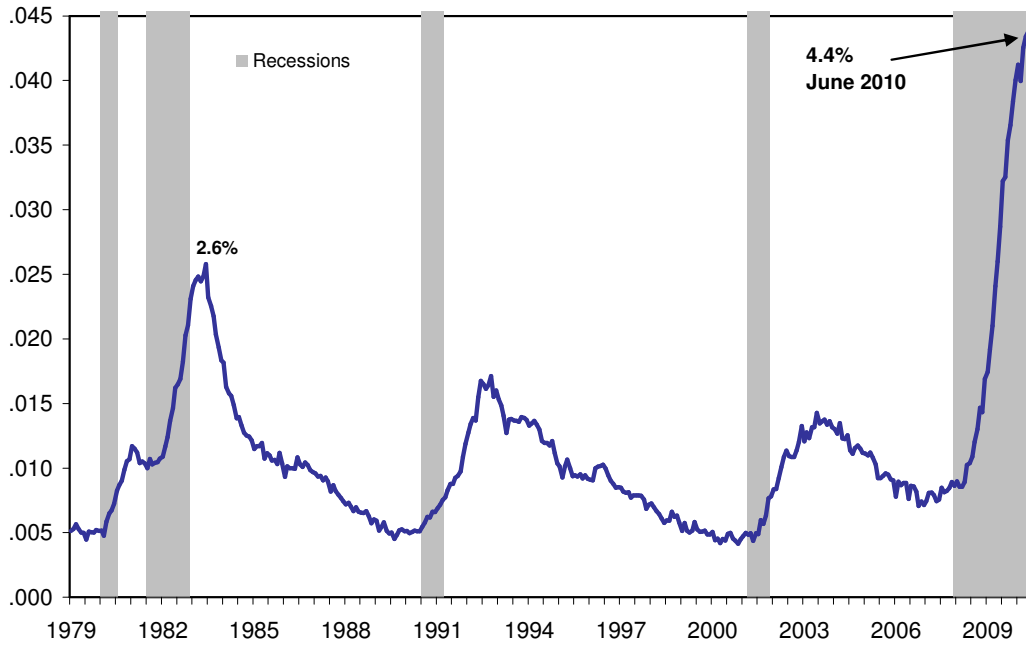
Chart 3. Long-term unemployment at the onset of recovery to three years out



Note: Dates in legend represent NBER recession end dates.

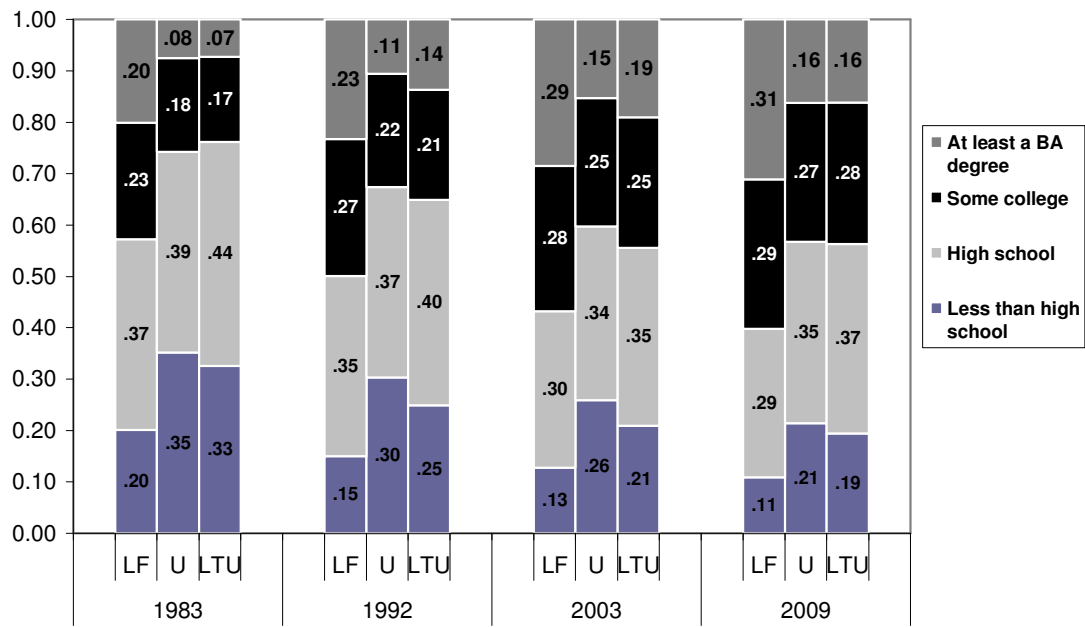
Source: Current Population Survey.

Chart 4. Long-term unemployment as a share of the total labor force



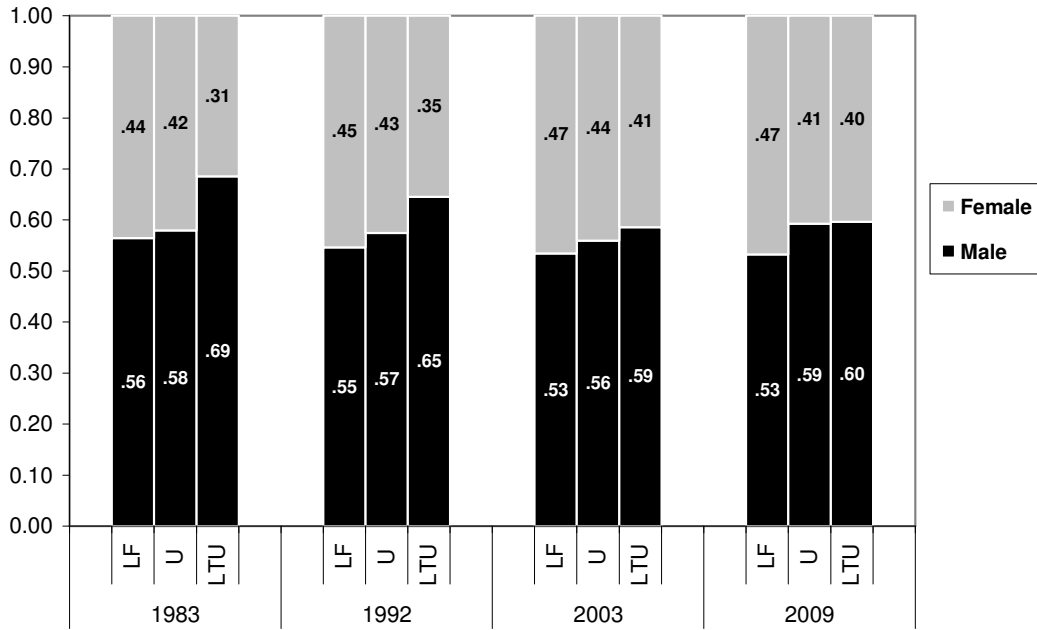
Source: Current Population Survey.

Chart 5. Labor force, unemployment and long-term unemployment share analysis by education



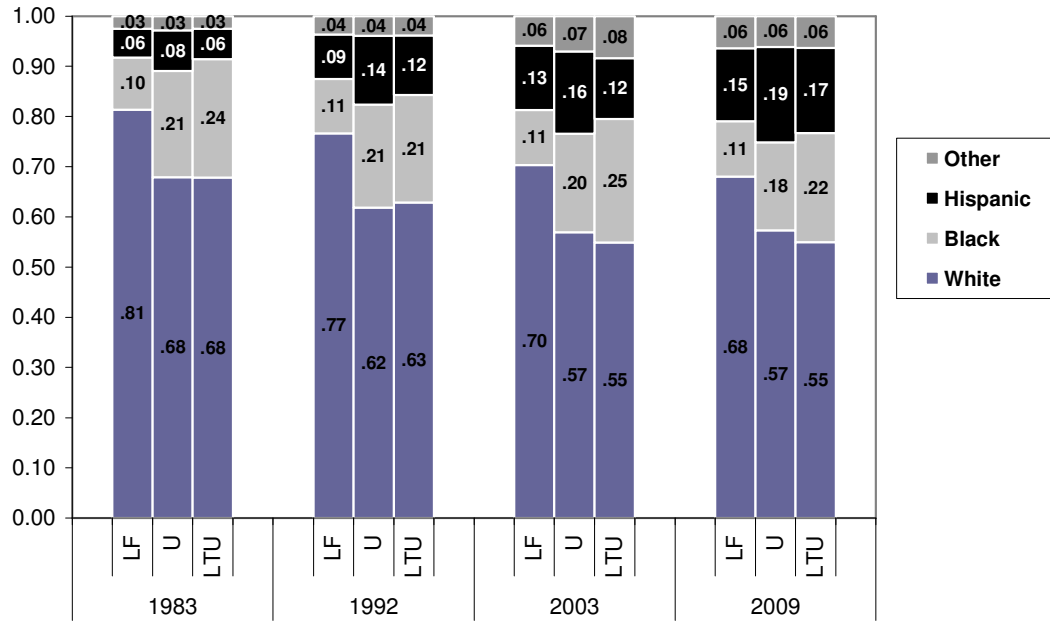
Source: Current Population Survey.

Chart 6. Labor force, unemployment and long-term unemployment share analysis by gender



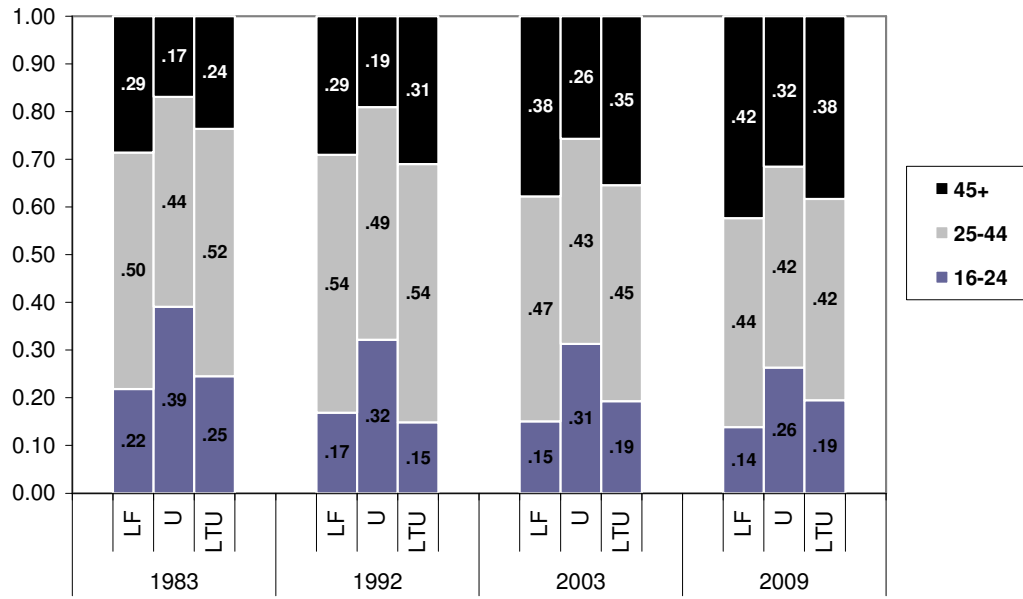
Source: Current Population Survey.

Chart 7. Labor force, unemployment and long-term unemployment share analysis by race/ethnicity



Source: Current Population Survey.

Chart 8. Labor force, unemployment and long-term unemployment share analysis by age cohorts



Source: Current Population Survey.

Table 1. Unemployment and long-term unemployment, 2009
(in shares)

	Within group		Share distribution of overall LTU		
	U rate	LTU share	LF	U	LTU
All	9.3%	31.5%	100%	100%	100%
Education:					
Less than high school	18.2%	28.6%	0.11	0.21	0.19
High school	11.3%	32.8%	0.29	0.35	0.37
Some college	8.6%	32.2%	0.29	0.27	0.28
At least a BA degree	4.8%	31.4%	0.31	0.16	0.16
Gender:					
Male	10.3%	31.7%	0.54	0.59	0.60
Female	8.1%	31.2%	0.47	0.41	0.40
Race/ethnicity:					
White	7.8%	30.2%	0.68	0.57	0.55
Black	14.7%	39.0%	0.11	0.18	0.22
Hispanic	12.1%	28.2%	0.15	0.19	0.17
Asian	7.4%	34.5%	0.05	0.04	0.04
Other	13.2%	28.7%	0.02	0.02	0.02
Age:					
16-19	24.3%	19.4%	0.04	0.11	0.07
20-24	14.7%	26.0%	0.10	0.15	0.13
25-34	9.9%	30.4%	0.22	0.23	0.22
35-44	7.9%	33.1%	0.22	0.19	0.20
45-54	7.2%	37.5%	0.23	0.18	0.22
55+	6.6%	39.4%	0.19	0.13	0.17
Major Occupation:					
Management, business & financial	4.9%	36.6%	0.15	0.08	0.09
Professional & related	4.4%	30.5%	0.21	0.10	0.10
Service	9.6%	28.8%	0.18	0.18	0.17
Sales and related	8.8%	33.1%	0.11	0.11	0.11
Office & administrative support	8.3%	34.7%	0.13	0.12	0.13
Construction & extraction	19.7%	28.9%	0.06	0.13	0.12
Production	14.7%	34.7%	0.06	0.09	0.10
Transportation & material moving	12.0%	31.4%	0.06	0.08	0.08
Other ^a	22.5%	29.2%	0.05	0.12	0.11
Major Industry:					
Construction	17.0%	30.1%	0.08	0.14	0.13
Manufacturing	11.9%	34.5%	0.11	0.14	0.15
Wholesale & retail trade	8.9%	32.5%	0.14	0.13	0.14
Transportation & utilities	7.5%	31.7%	0.05	0.04	0.04
Information	8.9%	37.1%	0.02	0.02	0.03
Financial activities	6.2%	38.3%	0.07	0.04	0.05
Professional & business services	10.0%	33.0%	0.11	0.12	0.12
Educational & health services	4.5%	29.8%	0.22	0.11	0.10
Leisure & hospitality	11.4%	27.9%	0.09	0.11	0.10
Other services	6.8%	33.4%	0.05	0.04	0.04
Public administration	2.9%	32.2%	0.05	0.01	0.01
Other ^b	32.9%	27.2%	0.03	0.10	0.08

Source: Current Population Survey.

Notes: ^aIncludes the occupations of farming, fishing and forestry, and installation, maintenance, and repair.

^bIncludes the industries of agriculture, forestry, fishing, and hunting, and mining. Both 'Other' categories also include those unemployed workers who did not report an occupation or industry.

**Table 2. Changes in the labor force, unemployment and long-term unemployment:
1983-2009**

	Percentage-point change in shares			Percentage change in raw counts		
	LF	U	LTU	LF	U	LTU
All	---	-0.4	7.8	37.8%	32.3%	75.8%
Education:						
Less than high school	-9.2	-13.8	-13.2	-25.4%	-19.6%	4.7%
High school	-8.2	-3.6	-6.7	7.3%	20.0%	48.7%
Some college	6.4	8.7	11.0	76.7%	95.4%	193.1%
At least a BA degree	11.0	8.7	8.9	113.5%	185.8%	289.2%
Gender:						
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/Ethnicity:						
White	-13.3	-10.5	-12.9	15.2%	11.8%	42.5%
Black	0.6	-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+	13.8	14.6	14.7	104.3%	146.6%	184.9%

Source: Current Population Survey.

Table A-1. The labor force, unemployment and long-term unemployment: 1983 and 2009
(in millions)

	Labor force		Unemployment		Long-term unemployment	
	1983	2009	1983	2009	1983	2009
All	111.9	154.1	10.8	14.3	2.6	4.5
Education:						
Less than high school	22.5	16.8	3.8	3.1	0.8	0.9
High school	41.5	44.6	4.2	5.0	1.1	1.7
Some college	25.3	44.8	2.0	3.9	0.4	1.2
At least a BA degree	22.5	48.0	0.8	2.3	0.2	0.7
Gender:						
Male	63.1	82.1	6.2	8.5	1.8	2.7
Female	48.7	72.0	4.5	5.8	0.8	1.8
Race/ethnicity:						
White	91.0	104.9	7.3	8.2	1.7	2.5
Black	11.6	17.0	2.3	2.5	0.6	1.0
Hispanic	6.4	22.4	0.9	2.7	0.2	0.8
Other	2.8	9.9	0.3	0.9	0.1	0.3
Age:						
16-24	24.4	21.4	4.2	3.8	0.6	0.9
25-44	55.5	67.5	4.7	6.0	1.3	1.9
45+	31.9	65.2	1.8	4.5	0.6	1.7

Source: Current Population Survey.

Table A-2. The distribution of the total change in raw counts for the labor force, unemployment and long-term unemployment: 1983 to 2009

	LF	U	LTU
Total change	100%	100%	100%
Education:			
Less than high school	-13.5%	-21.3%	2.0%
High school	7.2%	24.2%	28.0%
Some college	45.9%	54.0%	42.1%
At least a BA degree	<u>60.4%</u>	<u>43.2%</u>	<u>27.9%</u>
	100%	100%	100%
Gender:			
Male	44.9%	63.4%	47.9%
Female	<u>55.1%</u>	<u>36.6%</u>	<u>52.1%</u>
	100%	100%	100%
Race/Ethnicity:			
White	32.8%	24.7%	38.0%
Black	12.7%	6.2%	19.2%
Hispanic	37.7%	52.6%	31.4%
Other	<u>16.8%</u>	<u>16.5%</u>	<u>11.3%</u>
	100%	100%	100%
Age:			
16-24	-7.2%	-13.0%	12.8%
25-44	28.4%	36.2%	29.6%
45+	<u>78.8%</u>	<u>76.8%</u>	<u>57.7%</u>
	100%	100%	100%

Note: Each column for the LF, U, and LTU sums to 100% for each demographic grouping.

Source: Current Population Survey.