Economic Watch

United States

Houston, July 9, 2013
Economic Analysis

Jason Frederick
jason.frederick@bbvacompass.com

Boyd Stacey
boyd.stacey@bbvacompass.com

An Improving Labor Market?

Employment-to-Population Ratio Is A Key Metric

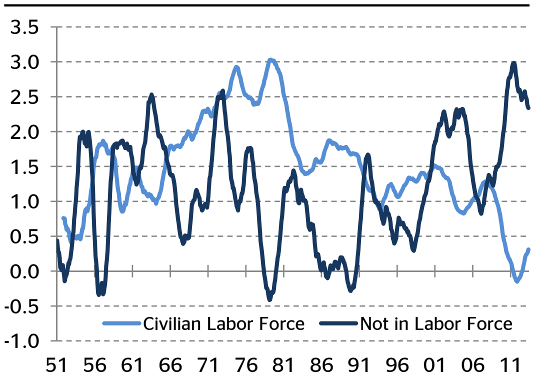
- **During the past four years, the fall in the unemployment rate has been due primarily to declining labor force participation.**
- **Job creation is still too low to raise the fraction of the population employed.**
- **200,000+ jobs per month are consistent with a healthier labor market.**

The Federal Reserve's dual mandate to achieve maximum employment with stable prices suggests an equal balance between the two directives. As unemployment has remained stubbornly high, the Fed recently committed to "[k]eep the target range of the federal funds rate at 0 to 1/4 percent … as long as the unemployment rate remains above 6.5%." The specific and measurable target is a clear attempt to quell speculation on rate increases; however, the Fed maintains that this target is flexible and any decision to raise the federal funds rate will be predicated on its perception of labor market improvement and stable inflation expectations.

The unemployment rate is one of many labor market indicators. A 6.5% unemployment rate is not a sufficient indicator of a healthy labor market, because even at this threshold, labor demand may not match with the skills of the unemployed. Job creation could be too low to boost economic growth, and thus the numbers of people marginally-attached to the labor force and the long-term unemployed could remain elevated. To understand how a declining unemployment rate could mislead us into thinking that the labor market is improving, we decompose it using the employment-to-population ratio (EPR) and the labor force participation rate (LFP). By analyzing the dynamics of those ratios, we obtain a clearer picture of challenges facing the labor market.[1]

$$\text{Unemployment Rate}_t \equiv 1 - \frac{\frac{\text{Employed}_t}{\text{Population}_t}}{\frac{\text{Labor Force}_t}{\text{Population}_t}} = 1 - \frac{\text{Employment-to-Population Ratio}_t}{\text{Participation Rate}_t} = 1 - \frac{\text{EPR}}{\text{LFP}}$$

Chart 1
Labor Force Growth
3-Year Moving Average (YoY %)



Source: BLS and BBVA Research

Chart 2
Labor Market Snapshot, and
BBVA Baseline Scenario

Labor Market Snapshot	Jan-07	Jun-13	Difference
Working-Age Population (16+), K	230,650	245,552	14,902
Labor Force, K	153,144	155,835	2,691
Not In Labor Force, K	77,506	89,717	12,211
Participation Rate at 66.4%		163,047	7,212
New Entrants Not in Labor Force*, K			4,999
Employment-to-Population Ratio	63.3%	58.7%	-4.6pp
Participation Rate	66.4%	63.5%	-2.9pp
16-19 Year Olds	42.2%	35.0%	-7.2pp
20-24 Year Olds	75.0%	71.4%	-3.6pp

* Also includes population revisions based on 2012 census

BBVA Baseline Scenario	May-14	May-15	May-16
Unemployment Rate	7.3%	6.5%	5.8%
Employment-to-Population Ratio	59.0%	59.5%	60.1%
Participation Rate	63.6%	63.7%	63.8%

Source: BLS and BBVA Research

[1] Throughout this brief, and in the equation above, population is defined as civilian non-institutional residents of working age. We choose this measure to coincide with the BLS definition of labor force participation.

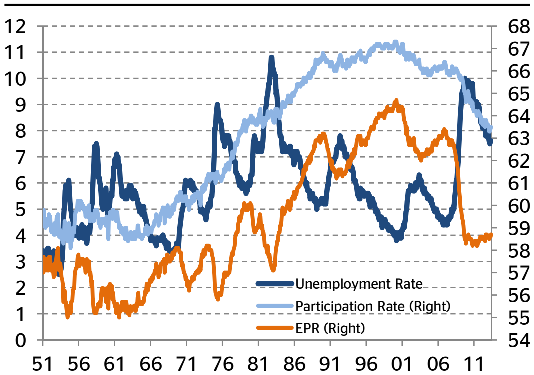
The unemployment rate captures the number of people unemployed as a percentage of the labor force, and thus a decline in this ratio can be due to either a rise in the number of employed persons as a fraction of the potential workforce (rising EPR) or a decline in the labor force (falling LFP). These two outcomes can lead to entirely different assessments of the labor market. If, for example, jobs are being created at a fast pace relative to population growth, the EPR will rise and, holding the LFP constant, the unemployment rate will come down. In contrast, however, if the EPR remains flat and LFP declines, the unemployment rate will *also* come down. In the former, robust job growth signals an improving economy, while in the latter, people are choosing not to participate in the labor force.

During the past four years, we have been closer to that second scenario without a clear indication of an improving labor market. Chart 3 indicates that the labor market remains in an unprecedented stall. First, the labor force participation rate slid a total of 3.0 percentage points (pp) between January 2007 and May 2013. Second, by mid-2011, the EPR had dropped a total of 5.1 percentage points from its peak of 63.3%, and to date it has only risen 0.5 percentage points from that trough. It has been essentially flat since late 2009. Thus, the unemployment rate has only come down because the LFP has steadily declined. These dynamics are unique for the U.S., because since at least 1950, a fall in the unemployment rate has always coincided with an increase in the EPR. In this recovery, however, the link has been severed.

A simple calculation shows that, assuming constant population growth and a stable participation rate at the current 63.5%, average monthly job creation would need to exceed 225,000 during the next twelve months to achieve an unemployment rate of 6.5% by June 2014. In contrast, if the participation rate declines a further a 1.0pp to 62.5% by June 2014, a monthly job creation rate as low as 43,000 would reduce the unemployment rate to 6.5% in twelve months. Clearly, the latter scenario is not consistent with an improving labor market, and the pace of job growth would be insufficient to push the employment-to-population ratio upward.

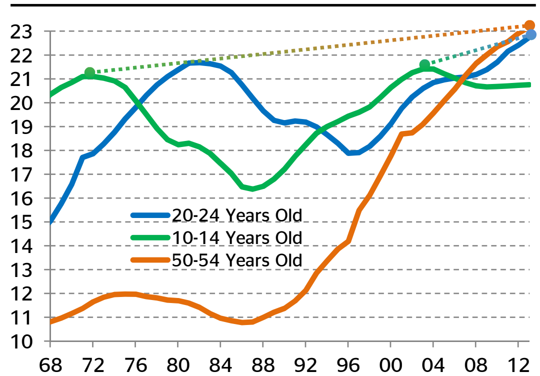
The historic declines in the EPR and LFP are due to many factors. Millions of layoffs, the halt of the construction sector, changing demographics, and lower labor force participation from younger workers are all contributing to anemic job creation and a stable EPR. Changing skill demand and the prolonged housing malaise have resulted in uneven job gains across occupations.[2]

Chart 3
Unemployment Rate, Employment-to-Pop. Ratio and Participation Rate (%)



Source: BLS and BBVA Research

Chart 4
Annual Population, by Age Ranges (Millions)



Source: Census and BBVA Research

[2] The BLS classifies occupations into five major categories: (1) management, professional and related, (2) service occupations (includes), (3) sales-related and office administrative, (4) natural resources, construction and maintenance, (5) production, transportation and material moving.

The only two broad occupation categories whose June 2013 employment is higher than their March 2007 peaks are the lowest-wage service and the highest-wage management and professional-related occupations. The personal care, food service, and healthcare support occupations comprise 97% of the 1.8 million increase in service occupations. At the other end of the wage spectrum, more than 90% of the 2.9 million increase in management and professional-related jobs stems from occupations in management, business and financial operations, computers, and healthcare practitioners and technicians.

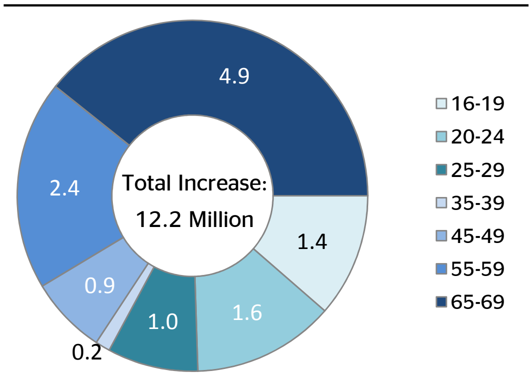
In contrast, the combined total of employment in the middle-wage occupations of construction, maintenance, natural resources, sales, office administration, production and transportation occupations remains 7.0 million below its March 2007 peak.

A rebound in the housing construction sector is providing a boost for these occupations; however, many of those jobs are unlikely to return rapidly. As we have emphasized in prior briefs, the downturn in construction employment particularly affected young male workers, while the cutbacks in office administration and sales occupations greatly impacted female workers. These middle wage industries will absorb some workers as further expansion of the domestic oil and natural gas industry occurs. Certainly, transitioning these workers into other occupations and industries is holding back the pace of job creation and influencing the low and stable EPR.

Two demographic trends are simultaneously impacting the labor market. Since 2007, the number of people not in the labor force has increased by 12.2 million. Most of this change is accounted for by older workers, but working-age young people also account for the second-largest share.

Chart 5

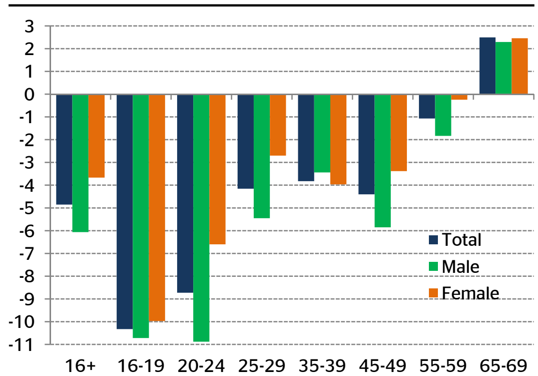
Not-In-Labor Force Growth, by Age Jan. 2007-May 2013 (Millions)



Source: BLS and BBVA Research

Chart 6

Change in EPR, by Sex and Age Jan. 2007-May 2013 (pp)

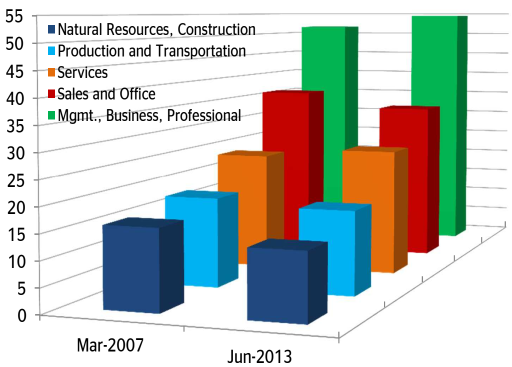


Source: BBVA Research

Although the labor force participation rate of older people is rising in part because they are living and working longer, during the next two decades an increasing number of older workers will retire each year. Additionally, there is a surge of young people in their early 20s who are just now entering the labor force. As seen in chart 4 the number of 10-14 year-olds in the U.S. population peaked in the early 1970s and 2000s. The people in the first peak are now in their mid-to-late 50s, while those in the second peak are now in their early 20s.

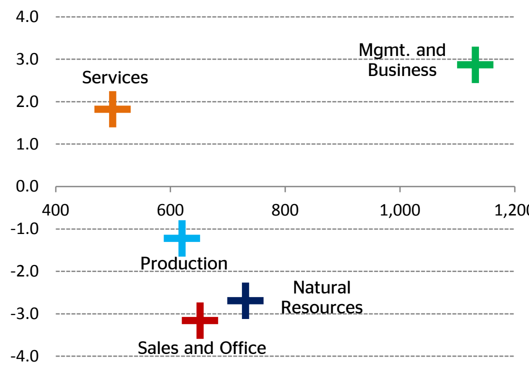
The low and stable EPR stems from the elevated numbers of both young and elderly people in the population. The EPR for young workers has taken the hardest hit, as their participation fell sharply and is just now beginning to rise. Many working-age young people have chosen not to enter the labor force, in part because there are limited jobs available for newly minted high school graduates. With the decline in middle-skill job opportunities, young people are choosing to continue their education rather than enter the labor force.

Chart 7
Employment by Occupation (Millions)



Source: BLS and BBVA Research

Chart 8
Change, Empl. by Occ. Since Mar. 07 (Millions), by Median Weekly Wage ($)



Source: BLS and BBVA Research

Bottom Line: A rising employment ratio signals a healthier labor market

Currently, the labor market appears to be turning a corner, as the participation rate is rising slowly. Young people are entering the workforce, but if jobs are not being created fast enough to absorb these new entrants, the unemployment rate will remain flat or potentially rise. Thus, the key figure that will indicate an improving labor market is the employment-to-population ratio. In a strengthening labor market, only sufficient job creation that raises the EPR faster than any increase in the participation rate will bring the unemployment rate down.

In our baseline scenario, monthly job creation averages just below 200,000 throughout 2013 and exceeds this benchmark by late 2014. The unemployment rate reaches 6.5% by May 2015, as the labor force participation rate rises slightly to 63.7% and the employment-to-population ratio rises above 59.5%. Nevertheless, the market will pay close attention to the actual evolution of both the LFP and EPR, as these ratios will influence the Federal Reserve's monetary policy decisions during the next several years.