

**Research Coordinator:**

**Dimitris Malliaropoulos**  
Economic Research Advisor  
[dmalliaropoulos@eurobank.gr](mailto:dmalliaropoulos@eurobank.gr)

**Olga Kosma**  
Economic Analyst  
[okosma@eurobank.gr](mailto:okosma@eurobank.gr)

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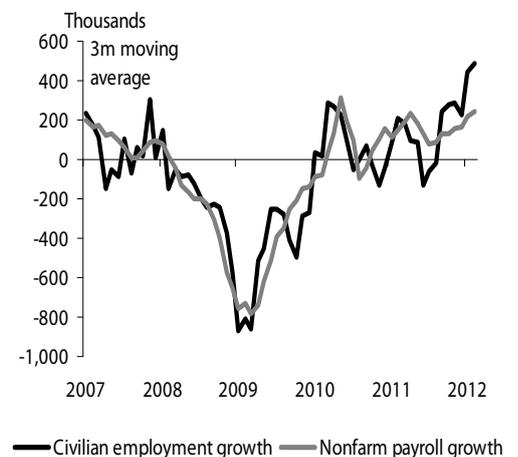
## A closer look at the US labor market

- The US labor market keeps on strengthening, with nonfarm payrolls and civilian employment reporting robust monthly gains.
- However, mismatches between available jobs and available workers weighs on the pace of the labor market recovery.
- Reentrants into the labor force should not reverse the downward trend in the unemployment rate.
- The historical relationship between movements in the unemployment rate and real GDP growth has broken down since the 2007-09 recession, as fluctuations in productivity and financial uncertainty has affected firms' hiring and firing decisions.
- Further significant improvement in the labor market should be accompanied by faster economic expansion. Our GDP growth forecast of 2.0% in 2012 suggests modest and gradual progress reducing unemployment, averaging at around 8.2% in 2012 from 8.9% in 2011.

### Continuing strength in the labor market, although mismatch between available jobs and workers weighs on the pace of the recovery

The February employment report reinforced the improving trend in the labor market in recent months. Payroll employment rose 227k, following an upwardly revised 284k gain in January. On a three-month average basis, total nonfarm payrolls have been increasing by an average of 250k, marking their strongest gain since May 2010, while the household survey has been even more robust, with civilian employment growth reporting the strongest increase in more than a decade (Figure 1). As a result, the unemployment rate has gradually fallen from its recent peak of 10.0% in October 2009 to a three-year low of 8.3% in February. Furthermore, the Job Openings and Labor Turnover (JOLTs) report has shown an upward trend in job openings, with an estimated 3.7 unemployed job seekers for each opening, significantly lower than the recent peak of 6.7 in July 2009 (Figure 2).

**Figure 1**



Source: Bureau of Labor Statistics (BLS), EFG Research

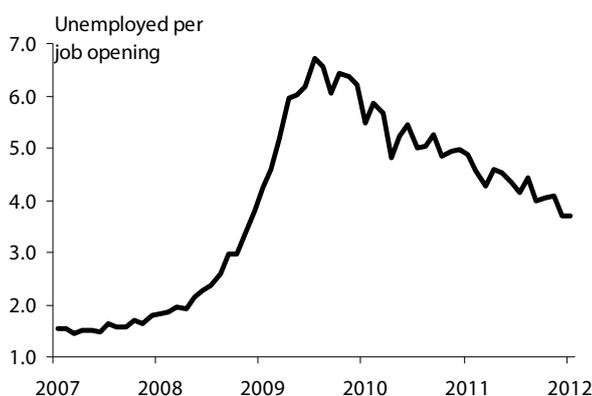
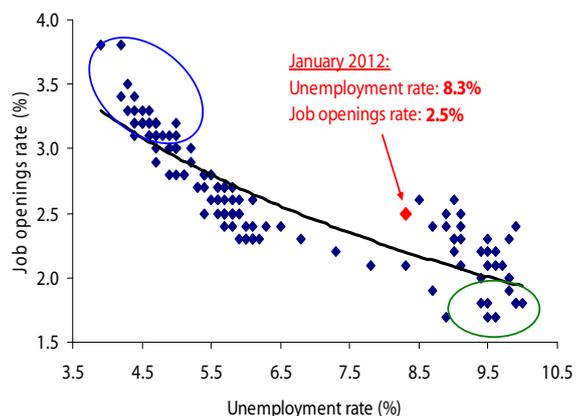
Unemployment and job openings rates tend to vary in a systematic way during the business cycle. The negative slope between the two variables is widely known as the Beveridge curve (Figure 3). The dots in the green cycle represent low job openings and high unemployment with a position low and to the right on the curve, indicating a period of economic contraction. On the contrary, the dots in the blue cycle (high and to the left on

April 6, 2012

FOCUS NOTES

the curve) represent high job openings and low unemployment rates, indicating a period of economic expansion. Figure 3 shows that there is increased recruiting activity on the part of the business sector as is evident by the high openings rate, while there is a relatively small decline in the unemployment rate (red dot). The 2.5% job openings rate reported in January 2012 would correspond to an unemployment rate of about 7%, while the current rate of unemployment currently stands at the high level of 8.3%.

Figure 2

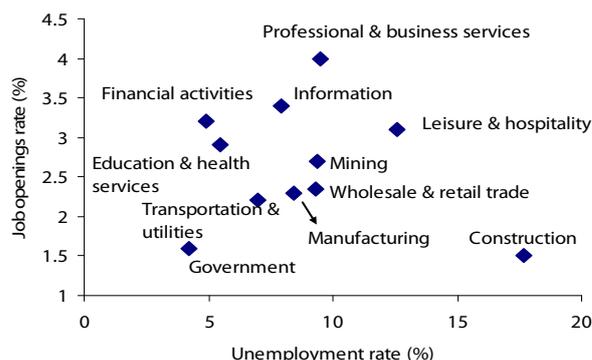
Figure 3  
US Beveridge Curve (Dec 2000-Jan 2011)

Source: Bureau of Labor Statistics (BLS), EFG Research

There are different theories about the mismatch between available jobs and the unemployed. According to the cyclical viewpoint, the economy usually takes time to adjust to changes in job openings and unemployment as it may take longer for unemployment to decline than for job openings to increase. This could be attributed to the reentry into the labour force of jobseekers who had stopped looking for a job when the economy was in decline. On the other hand, there are structural forces that create mismatches between the types of job openings and the

skills of available workers. Long-term joblessness, which has been a key feature of the latest recession and recovery (Figure 4), tends to create structural unemployment, as long-term unemployed workers tend to lose skills and contacts and find it difficult to get a job. Furthermore, structural shifts in the Beveridge curve could be industry or geography-related. In particular, looking at the unemployment rates and the job openings rate among different sectors of the economy (Figure 5), we find that there is high unemployment in the construction sector (17.7%) but there is not high demand for workers in that sector (1.5%). On the contrary, there is high demand for workers in financial services (3.2%), where the unemployment rate is currently hovering around the low level of 5.0%. In addition, geographic disparity may also exist due to the difficulty of jobseekers to sell a house in order to accept a job in a different region. Taking this into account, high unemployment may persist due to potential employees' inability to move to another location to fill new job openings. The negative impact of mismatches on the labor market recovery is also evident in Figure 6, which portrays job openings versus new hires growth. The number of openings in the nonfarm sector has increased by about 21% since the start of 2011, while actual hiring has risen by less than 6%.

Figure 4

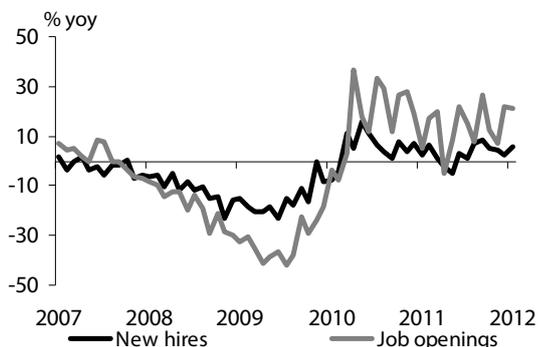
Figure 5  
Sectoral unemployment & job openings rates, as of Jan 2012

Source: Bureau of Labor Statistics (BLS), EFG Research

April 6, 2012

FOCUS NOTES

Figure 6

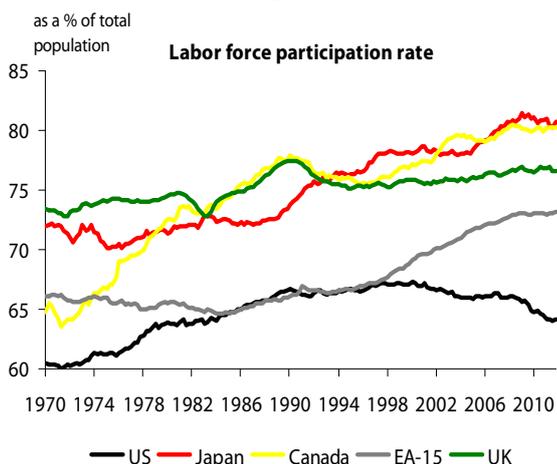


Source: Bureau of Labor Statistics (BLS), EFG Research

### Reentrants into the labor force should not reverse the downward trend in the unemployment rate

Although February's employment report was overall positive, confirming the ongoing improvement in labor market dynamics, the unemployment rate held steady at 8.3% as civilian employment gains (+428k) largely matched the rise in the civilian labor force (+476k). The unemployment rate is computed as the number of unemployed people actively looking for a job as a proportion of the overall labor force and, therefore, is vulnerable to fluctuations of the active labor force. Many investors and economists believe that a number of discouraged workers who exited the labor market during the recession will turn back into the labor force and reverse the ongoing downward trend in the unemployment rate.

Figure 7

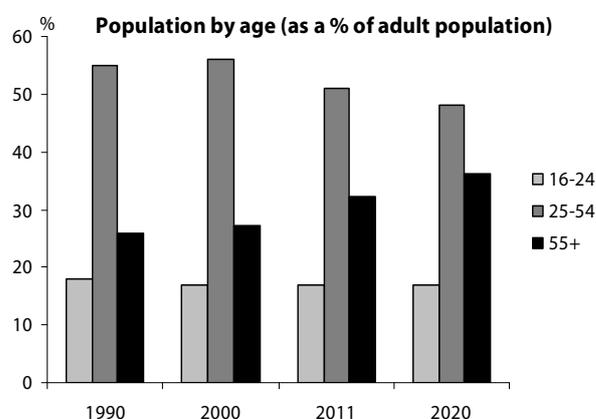


Source: OECD

Labor force participation, which measures the proportion of the population in the active labor force, has declined from 66% in December 2007 to a 30-year low of 63.7% in January 2012. The participation rate has actually been on an upward trend between 1970 and 2000, due to the entering of women into the labor force. After reaching its peak at the beginning of 2000, the participation rate in the US has been trending lower due to

demographic factors, in contrast to the euro zone countries and other major industrialized countries (Figure 7). The baby boom generation reached their 50s, and early retirement has accounted for a steady downward pull on the total participation rate. Indeed, the share of over 55s in the adult population has increased substantially over the last decade, and is projected to continue rising above 36% by 2020 (Figure 8). Nevertheless, the decline in the participation rate since December 2007 was not entirely due to the above mentioned structural shift, but was rather reinforced by cyclical factors during the 2008-2009 recession, as many workers became discouraged by fewer labor market opportunities and quit their efforts to find a job.

Figure 8



Source: Census Bureau, EFG Research

Trying to quantify the structural and cyclical factors that have led to the decline in the labor force participation rate since the onset of the last recession, we use the breakdown of persons not in the labor force from the Bureau of Labor Statistics (BLS). In particular, the labor force participation rate fell by about 2.4% during the last 4 years, from 66% in December 2007 to 63.6% in February 2012 (not seasonally adjusted data). In other words, persons not in the labor force as a percentage of total population increased by about 2.4%, from 34% to 36.4%. The majority of this increase (1.9% out of 2.4%) represents persons who do not want a job, providing a proxy for how much of the labor force participation decline has been structural. Besides, most of those who do not want a job are 55 years and over, reinforcing the view that the aging of the baby boomer generation has led to an increase in the rate of retirement, contributing to the decline in the labor force participation rate since the 2008-09 recession. Only 0.6% out of the 2.4% decline in the labor force participation rate is attributed to persons who want a job, suggesting that the cyclical decline in the labor force participation has been essentially smaller than the structural (Figures 9 & 10).

Figure 9

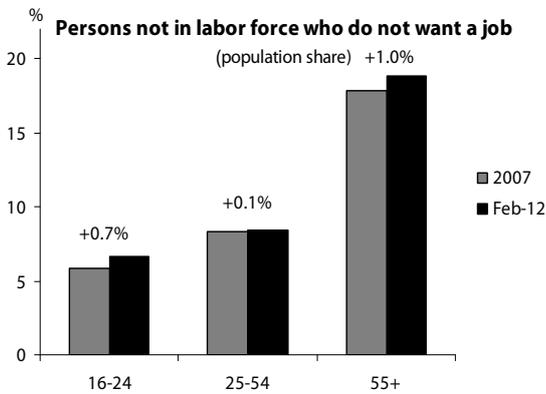
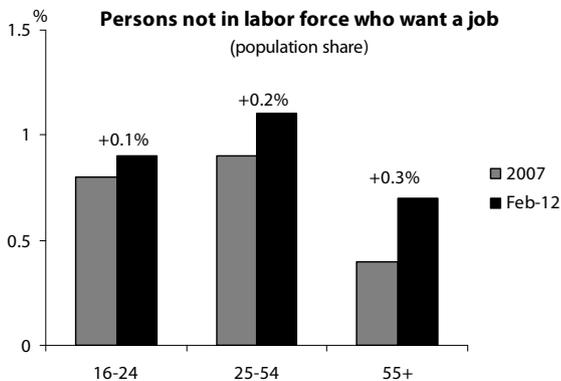


Figure 10

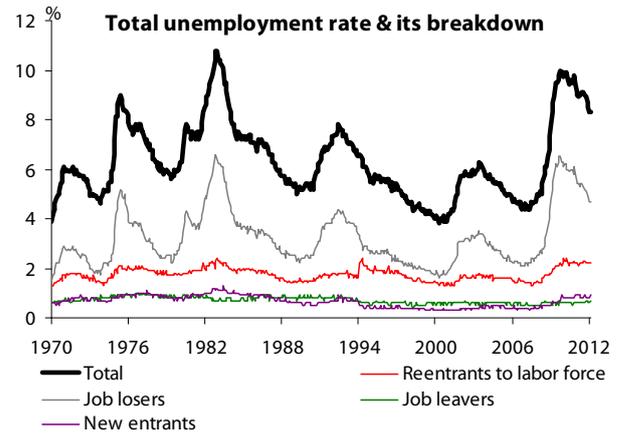


Source: Bureau of Labor Statistics (BLS), EFG Research

To sum up, the decline in the labor force participation rate since December 2007, when the latest recession started, has been due to structural as well as cyclical forces. The aging of the population will keep pushing towards lower labor force participation. Although there should be some cyclical rebound in the participation rate as the recent strength in the labor market should encourage more potential workers to join the labor force, the upward pressure from new entrants will not fully offset the downward trend driven by demographic factors. The participation rate may increase slightly in the following months as previously discouraged job seekers enter the labor force, but in the medium term the participation rate is expected to keep on falling due to the exit of older workers from the labor force. The exit of old workers exerts downward pressure on the unemployment rate, as lower labor force growth means that less employment growth is necessary to keep the unemployment rate stable. Hence, we do not believe that a large come back of job seekers to the labor force will reverse the downward trend in the unemployment rate. Meanwhile, unemployed reentrants as a share of the civilian labor force has already increased from its recent trough of 1.3% in mid-2007 to 2.2% in February 2012, and does not seem to play a determinant role in the development of unemployment rate dynamics. Figure 11 portrays the breakdown of the unemployed with regards to reasons for unemployment to job losers and persons who completed temporary jobs, job

leavers, reentrants and new entrants, and suggests that movements in the rate of unemployment have historically been driven mainly by workers that have lost their job and looked for a new position.

Figure 11

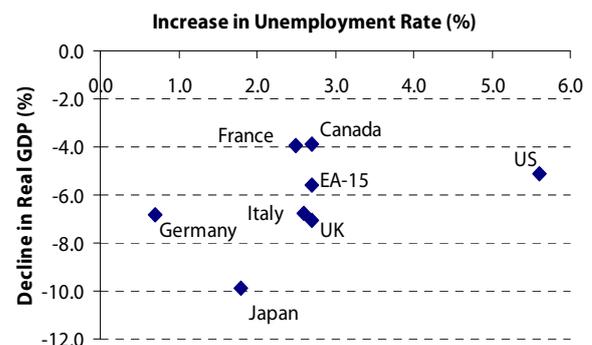


Source: Bureau of Labor Statistics (BLS), EFG Research

**The relationship between economic and employment growth**

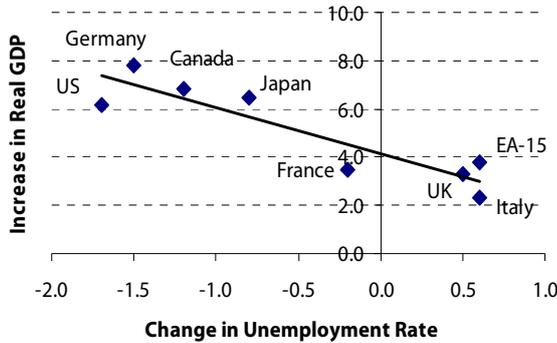
Although the US had one of the lowest unemployment rates among major advanced economies in the prior two decades before the 2007-09 recession, it actually experienced the largest increase in the unemployment rate among G7 countries and EA-15 as a whole. However, the sharp increase in the unemployment rate of about 5.6% was not proportional to the relatively small decline in the US real GDP of about 5.0%. Although the US reported the third smallest decline in real GDP among major advanced economies (after Canada and France), it actually experienced the largest increase in its unemployment rate (Figure 12). The same story exists for the 2009-2011 recovery period; the US experienced the largest decline in the unemployment rate, while it has not reported such a large increase in its real economic activity (Figure 13).

Figure 12  
The impact on GDP & Unemployment during the 2007-09 recession



Source: OECD, Ecowin

**Figure 13**  
The impact on GDP & Unemployment during the 2009-11 recovery

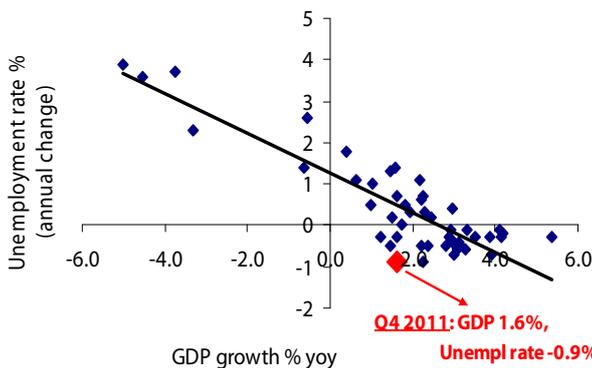


Source: OECD, Ecowin

The historical relationship between movements in the unemployment rate and real GDP growth has broken down since the latest recession. According to Okun's law, when the economy increases faster/slower than its long-run trend, the unemployment rate falls/increases by about half as much as the gap between the actual and the potential GDP growth in percentage points. For example, 2011 GDP growth of 1.7% y-o-y, which was about 0.8% above a long-run trend of 2.5%, would normally bring down the unemployment rate by 0.4% in 2011, a low estimate compared with the actual decline of 0.9% reported in 2011 (Figure 14).

**Figure 14**

US: Relationship between change in economic activity and unemployment (2000-2011)

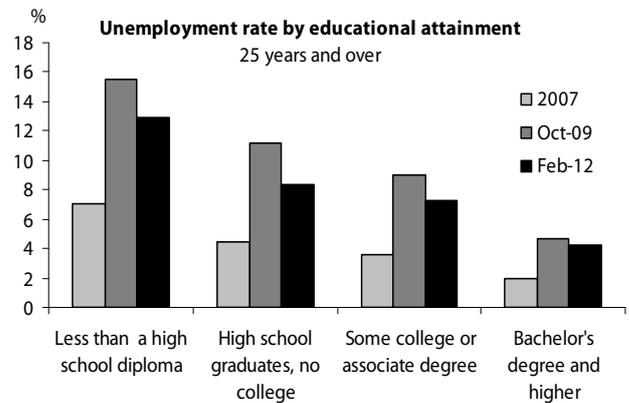


Source: Bureau of Economic Analysis (BEA), Bureau of Labor Statistics (BLS)

One explanation for the deviation from Okun's law could be the massive layoffs that occurred during 2008 and 2009 and, consequently, the reversal of these layoffs during the 2010-2011 recovery. Looking at the employment status of the civilian population (25 years and over) by educational attainment, we find that low-skilled workers are affected the most during a typical recession. Figure 15 shows that the unemployment rate

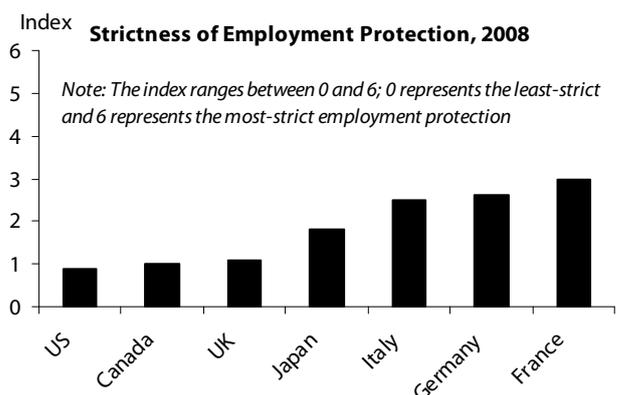
for people with less than a high school diploma increased by 8.4% from 2007 to October 2009, while the corresponding increase for people with bachelor's degree and higher was only 2.7%. The massive layoffs, which were largely concentrated in workers with a lower level of education, suggest that business managers are more able to lay off workers in the US compared to other advanced economies. The Organization for Economic Co-operation and Development (OECD) has constructed an index to measure the strictness of employment protection for G-7 countries, based on a set of employment protection indicators that measure rules and costs concerning layoffs and the use of temporary contracts. As is evident in Figure 16, the US do have the least-strict employment protection, a significant factor that gives firms the flexibility to shed workers or hire temporary workers.

**Figure 15**



Source: Bureau of Labor Statistics (BLS), EFG Research

**Figure 16**



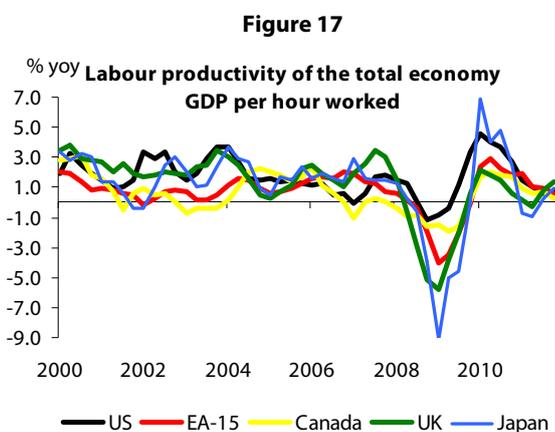
Source: OECD

Outsized job losses during the most recent recession and the reversal of these layoffs that accompanied the recovery are highly correlated with shifts in productivity growth. The US experienced a relatively small decline in labor productivity growth compared to other advanced economies during the recession, allowing firms to economize on labor (Figure 17). Labor productivity growth in the US has increased well above labor productivity

April 6, 2012

FOCUS NOTES

growth in the EA-15 or other advanced economies (with the exception of Japan) during the first year of the recovery, but has slowed significantly since mid-2010, resulting in more job growth per unit of output.

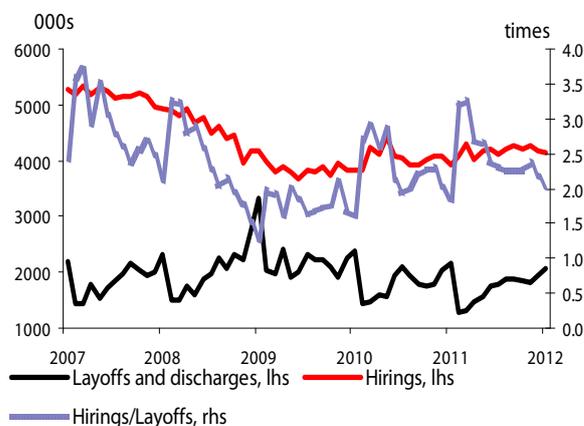


Source: OECD

An alternative explanation for the relatively strong payroll growth since December 2011 is that exceptionally warm weather of recent months may have boosted employment both in absolute terms and relative to economic activity compared to previous years. The minutes of the March 13 FOMC meeting revealed that several participants acknowledge that unseasonably warm weather may account for a portion of the recent improvement in employment indicators. A possible weather payback in the following months could contribute to a more moderate pace of payroll growth, reducing the discrepancy between GDP and employment growth.

Meanwhile, as Chairman Ben Bernanke highlighted in a recent speech on the labor market, the increase in the employment growth since the end of the recession has been largely attributed to a significant decline in layoffs but only a moderate improvement in hiring. Looking at the balance between hirings and firings (Figure 18), we conclude that the ratio of hirings to layoffs has declined from 3.7 at the beginning of 2007 to 1.3 at the beginning of 2009, not only due to a decline in hirings (-1179k) but also due to a sharper increase in layoffs (+1889k). Two years later, although hiring has remained essentially flat, the ratio has trended upwardly to 3.2 on the back of a reversal of the unusually large layoffs that occurred since 2007 (-2059k). The ratio of nonfarm hirings to layoffs currently stands at the low level of 2.0, as hirings have improved only modestly while the reversal of the sharp layoffs is in near completion. Hence, further significant improvement in the labor market should be accompanied by an acceleration in the hirings rate and, consequently, a faster expansion of production and demand from households and businesses. Our GDP growth forecast for 2012 is close to the US economy's average growth during the last decade, suggesting modest and gradual progress reducing unemployment. We expect the unemployment rate to move slightly lower, averaging at around 8.2% in 2012 from 8.9% in 2011.

Figure 18



Source: Bureau of Labor Statistics (BLS), EFG Research

## Research Team

### Financial Markets Research Division

**Platon Monokroussos:** *Head of Financial Markets Research Division*

**Paraskevi Petropoulou:** *G10 Markets Analyst*

**Galatia Phoka:** *Emerging Markets Analyst*

### Sales Team

**Nikos Laios,** *Head of Sales*

**Vassillis Gulbaxiotis,** *Head of International Sales*

**Yiannis Seimenis, Ioannis Maggel,** *Corporate Sales*

**Stogioglou Achilleas,** *Private Banking Sales*

**Alexandra Papathanasiou,** *Institutional Sales*

### Economic Research & Forecasting Division

**Dimitris Malliaropoulos:** *Economic Research Advisor*

**Tasos Anastasatos:** *Senior Economist*

**Ioannis Gkionis:** *Research Economist*

**Vasilis Zarkos:** *Economic Analyst*

**Stella Kanellopoulou:** *Research Economist*

**Olga Kosma:** *Economic Analyst*

**Maria Prandeka:** *Economic Analyst*

**Theodosios Sampaniotis:** *Senior Economic Analyst*

**Theodoros Stamatiou:** *Research Economist*

Eurobank EFG, 20 Amalias Av & 5 Souri Str, 10557 Athens, tel: +30.210.333.7365, fax: +30.210.333.7687, contact email: [Research@eurobank.gr](mailto:Research@eurobank.gr)

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