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Global Economic Perspectives

US labor force participation likely to continue to decline

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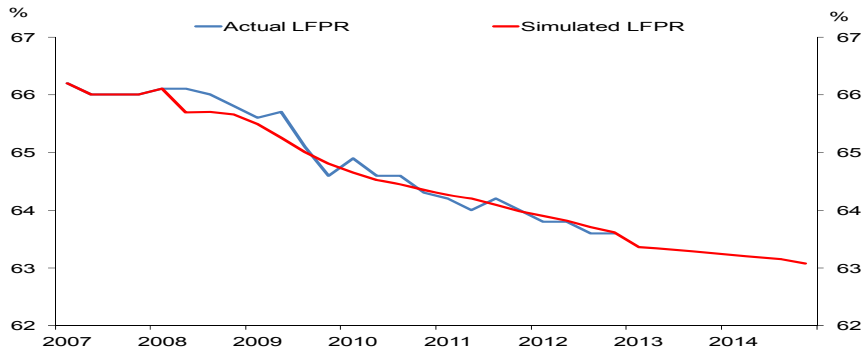
- The US labor force participation rate has fallen by about 3% points from its pre-crisis levels, and this decline has been an important factor in the steady reduction in the unemployment rate since its peak. In this GEP we analyze whether the declining participation rate is due mostly to longer-term, structural factors or short-term, cyclical forces. Understanding which forces have been more important in this decline is crucial for a view about how the unemployment rate and monetary policy will evolve over the next several years.
- Our analysis suggests that at least 50-60% of the decline in the participation rate is due to longer-term, structural factors, such as demographics, and that while there is some potential for a cyclical rebound in the participation rate in the near term, we expect structural forces to dominate and the participation rate to continue to decline gradually. As a result, we anticipate that the participation rate will remain between 63% and 63.5% through the end of 2014, with realizations below the current level of 63.3% most likely.
- Using these projections, we then derive implied unemployment rates for year-end 2014. Under our most likely scenario, the unemployment rate hits the Fed's 6.5% threshold for rate hikes before 2015, ahead of FOMC median projections. However, we believe that this will cause a communication headache rather than an earlier than anticipated tightening, as the Fed downplays the declining unemployment rate, and instead highlights continued weakness in the participation rate, employment-population ratio, and other labor market indicators. We see the first rate hike coming in 2015 H1.

Participation projected to decline through 2014



Sources: BLS, Haver Analytics, DB Global Market Research

Key Economic Forecasts

	Real GDP % growth b			Consumer Prices % growth c			Current Account % of GDP d			Fiscal Balance % of GDP		
	2012F	2013F	2014F	2012F	2013F	2014F	2012F	2013F	2014F	2012F	2013F	2014F
US	2.2	2.2	3.2	2.1	2.1	2.6	-3.1	-3.2	-3.4	-6.8	-6.3	-5.3
Japan	2.0	1.4	0.6	0.0	0.0	2.0	1.0	1.2	2.3	-9.6	-9.4	-7.4
Euroland	-0.6	-0.6	1.0	2.5	1.6	1.6	1.3	1.7	1.6	-3.7	-3.0	-2.6
Germany	0.7	0.3	1.5	2.1	1.7	1.8	7.0	6.3	6.1	0.2	-0.4	-0.2
France	0.0	-0.6	1.1	2.2	1.4	1.5	-2.3	-2.2	-1.9	-4.8	-3.8	-3.2
Italy	-2.4	-1.8	0.9	3.3	1.8	1.6	-0.7	0.0	0.4	-3.0	-3.0	-2.4
Spain	-1.4	-1.6	0.5	2.4	1.9	1.3	-1.1	0.5	0.3	-10.6	-6.2	-5.3
UK	0.3	0.5	1.8	2.8	3.0	2.6	-3.7	-3.1	-2.5	-7.8	-7.1	-6.4
Sweden	1.2	1.3	2.3	0.9	1.0	1.5	7.1	6.5	6.0	-0.7	-0.5	0.0
Denmark	-0.5	0.3	1.5	2.4	2.0	2.0	5.6	5.0	4.5	-4.4	-2.5	-2.0
Norway	3.0	2.2	2.6	0.7	1.8	2.0	14.1	14.0	13.0	10.1	10.5	10.0
Poland	2.1	1.4	2.3	3.7	1.8	2.5	-3.5	-2.3	-3.0	-3.6	-3.5	-2.9
Hungary	-1.7	-0.2	1.6	5.7	2.6	3.1	1.6	1.2	0.5	-2.1	-2.7	-2.6
Czech Republic	-1.2	0.7	2.8	3.3	2.0	2.0	-2.4	-2.3	-2.4	-4.4	-3.2	-2.7
Australia	3.6	2.5	4.0	1.8	2.5	2.3	-3.7	-3.2	-3.0	-3.0	-1.8	-1.0
Canada	1.8	2.1	3.0	1.5	2.4	2.3	-2.6	-1.9	-1.3	-1.4	-1.1	-0.7
Asia (ex Japan)	5.9	6.8	7.5	3.8	3.8	4.2	1.3	0.9	0.6	-2.8	-3.0	-2.5
India	4.1	6.9	7.2	7.5	6.2	6.2	-5.1	-4.8	-4.3	-7.7	-7.5	-7.3
China	7.8	8.2	8.9	2.6	3.0	3.5	2.7	2.0	1.6	-1.6	-2.1	-1.5
Latin America	2.8	3.4	4.0	7.8	8.2	8.1	-1.4	-1.6	-1.8	-2.6	-2.2	-1.9
Brazil	0.9	3.3	4.2	5.4	6.1	5.4	-2.4	-2.9	-3.3	-2.5	-2.9	-2.5
EMEA	2.7	3.1	3.7	5.2	5.3	5.1	1.5	1.4	0.6	-0.5	-0.8	-0.6
Russia	3.4	3.1	3.5	5.2	6.5	6.1	4.1	3.4	1.5	-0.1	-0.9	-0.6
G7	1.4	1.3	2.2	1.9	1.8	2.3						
World	2.9	3.2	4.0	3.3	3.3	3.6						

Source: Deutsche Bank

a) Euroland forecasts as at the last forecast round on 22/03/13. Bold figures signal upward revisions, bold, underlined figures signal downward revisions. (b) GDP figures refer to working day adjusted data. (c) HICP figures for euro-zone countries and the UK (d) Current account figures for Euro area countries include intra regional transactions.

Forecasts: G7 quarterly GDP growth

% qoq saar/annual: % yoy	Q1 12	Q2 12	Q3 12	Q4 12	2012	Q1 13F	Q2 13F	Q3 13F	Q4 13F	2013F	2014F
US	2.0	1.3	3.1	0.4	***2.2***	2.5	2.3	3.0	3.5	***2.2***	***3.2***
Japan	6.1	-0.9	-3.7	0.2	***2.0***	3.1	3.4	2.6	2.5	***1.4***	***0.6***
Euroland	-0.3	-0.6	-0.3	-2.3	***-0.6***	-1.0	0.0	0.7	0.8	***-0.6***	***1.0***
Germany	2.0	1.1	0.9	-2.4	***0.7***	1.2	0.8	1.7	1.0	***0.3***	***1.5***
France	-0.2	-0.4	0.7	-1.2	***0.0***	-1.3	-0.5	0.2	0.7	***-0.6***	***1.1***
Italy	-3.7	-3.0	-0.8	-3.7	***-2.4***	-2.3	-1.4	0.0	0.8	***-1.8***	***0.9***
UK	-0.3	-1.5	3.8	-1.2	***0.3***	1.2	0.6	1.0	1.5	***0.5***	***1.8***
Canada	1.2	1.9	0.7	0.6	***1.8***	2.5	2.8	3.0	3.7	***2.1***	***3.0***
G7	1.9	0.3	1.3	-0.5	***1.4***	1.7	1.7	2.2	2.6	***1.3***	***2.2***

Sources: National authorities, Deutsche Bank

US labor force participation likely to continue to decline

- The US labor force participation rate has fallen by about 3% points from its pre-crisis levels, and this decline has been an important factor in the steady reduction in the unemployment rate since its peak. In this GEP we analyze whether the declining participation rate is due mostly to longer-term, structural factors or short-term, cyclical forces. Understanding which forces have been more important in this decline is crucial for a view about how the unemployment rate and monetary policy will evolve over the next several years.
- Our analysis suggests that at least 50-60% of the decline in the participation rate is due to longer-term, structural factors, such as demographics, and that while there is some potential for a cyclical rebound in the participation rate in the near term, we expect structural forces to dominate and the participation rate to continue to decline gradually. As a result, we anticipate that the participation rate will remain between 63% and 63.5% through the end of 2014, with realizations below the current level of 63.3% most likely.
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Introduction[1]

The labor force participation rate (LFPR) has fallen by almost 3% points since the onset of the financial crisis and is currently at levels last observed in the late 1970s. Part of this decline is the result of a longer-term downtrend due to an aging population and declining participation rates within age groups that preceded the financial crisis (i.e. structural reasons), but part of the decline is due to weak labor market conditions in the aftermath of the financial crisis that have caused individuals to become discouraged with labor market prospects and drop out of the labor force (i.e. cyclical reasons). Because the declining LFPR has tended to put downward pressure on the unemployment rate, understanding the relative magnitude of these forces is critical for forming a view on how the unemployment rate and monetary policy will evolve over the next several years. Indeed, if cyclical factors dominate, labor market improvement should lead to a rise in participation and stabilize, or possibly even increase, the unemployment rate. On the other hand, if structural reasons are more important, we would expect a continued decline in participation and the unemployment rate.

The key is how much of the drop in LFP is cyclical vs structural

[1] We would like to thank Sourav Dasgupta, Kaushik Baidya, Rajsekhar Bhattacharyya, and Mayank Jha for their contributions to this research piece.

Fed view has shifted toward more structural

The answer to this question has important implications for the timing of Fed rate hikes down the road, as it will affect the pace at which the unemployment rate declines through the 6.5% barrier that the Fed has set up as a condition for commencing rate hikes, and could even move the Fed to alter that condition. Chairman Bernanke's views on the relative importance of these structural and cyclical factors seem to have shifted over the past year toward a more structural interpretation, implying a somewhat speedier decline in the unemployment rate. In an April 2012 speech he indicated that, "I think I would agree with the argument that a significant part of the decline over and above the downward trend in the participation rate is reflecting cyclical factors and should reverse when the economy gets stronger."[2] However, he suggested in his March 2013 press conference that, "…I doubt that, in the near term at least, that we'll see an increase in labor force participation because—besides the effects of the slow recovery, high unemployment, we've had a downward trend in the U.S., which is not due to the recession, it's due to underlying demographic factors."[3]

In this week's GEP we assess the relative magnitude of these forces and then analyze the implications for the unemployment rate and the Fed. Our analysis supports the Chairman's current thinking, as we conclude that more than half of the decline in the LFPR since the financial crisis is due to longer-term, structural factors, and that any cyclical rebound will likely be offset by the continued structural decline in participation. Therefore, the LFPR is likely to remain below 63.5% over the next few years, and it is more likely that it will remain at or below its current level of 63.3%. If this scenario materializes, it may complicate Fed communications regarding interest rate guidance, as a low or falling LFPR will continue to put downward pressure on the unemployment rate even in the midst of relatively modest non-farm payroll growth. To this end, we compute the implied unemployment rate at year-end 2014 under various assumptions about LFPR and non-farm payroll growth and conclude that the unemployment rate could breach the Fed's 6.5% threshold before 2015, somewhat ahead of the schedule implied by the midpoint of the FOMC's projections.

This could imply an earlier start to policy rate increases

Historical trends in LFPR

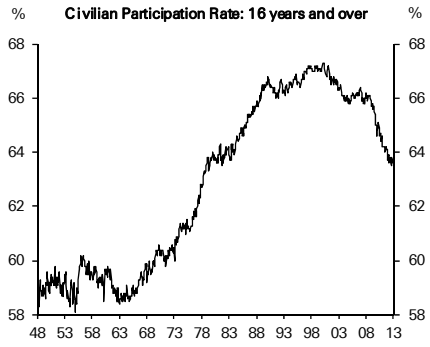
LFPR climbed through the late 1990s

The aggregate LFPR climbed by almost 9% points between the early 1960s and late 1990s, peaking at 67.3% in early 2000 (Chart 1). Two primary factors were behind this rise. First, female participation increased dramatically (Chart 2). While the male participation rate has declined steadily since the 1940s, this decline was more than offset by a doubling of the female participation rate over this period. In particular, while only about 30% of women were attached to the labor force prior to 1950, about 60% of women were either employed or actively searching for a job in the late 1990s.

Rising female participation drove LFP up for decades

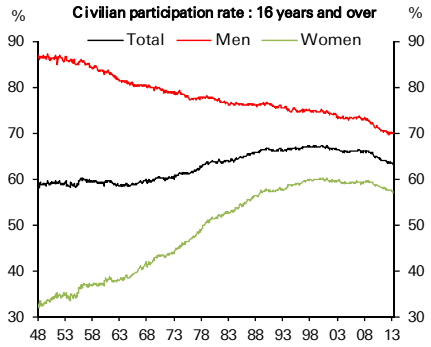
[2] See the transcript from Bernanke's April 2012 press conference here: www.federalreserve.gov/mediacenter/files/FOMCpresconf20120425.pdf
[3] See the transcript from Bernanke's March 2013 press conference here: www.federalreserve.gov/mediacenter/files/FOMCpresconf20130320.pdf

Chart 1: Participation rate rose through late 1990s, but reversed in early 2000s



Source: BLS, Haver Analytics, DB Global Market Research

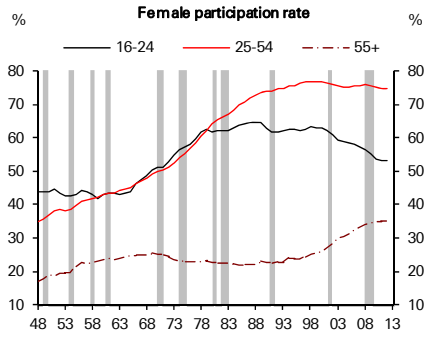
Chart 2. Rising female participation drove overall increase



Source: BLS, Haver Analytics, DB Global Market Research

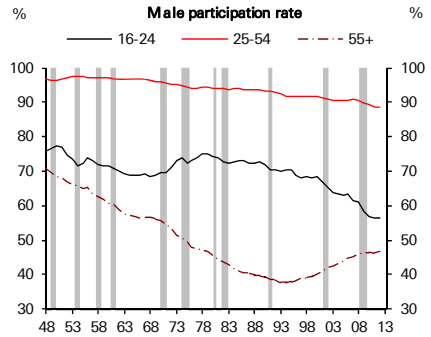
Much of the rise in the female participation rate was due to a significant increase in labor force attachment for women between the ages of 25 and 54 years (Chart 3). From 1948 until 2000 the participation rate of this age group increased by nearly 45% points, from 35% to almost 80%. This long upward trend produced a strong convergence between male and female participation rates, which was reinforced with a gradual decline in the male participation rate. The male LFPR has generally declined since the late 1940s for each of the three age groups: 16-24, 25-54, and 55+, except for the more recent rise for the 55+ group (Chart 4).

Chart 3. 25-54 female participation rate rose dramatically



Source: BLS, Haver Analytics, DB Global Market Research

Chart 4. 25-54 male participation rate has declined for several decades

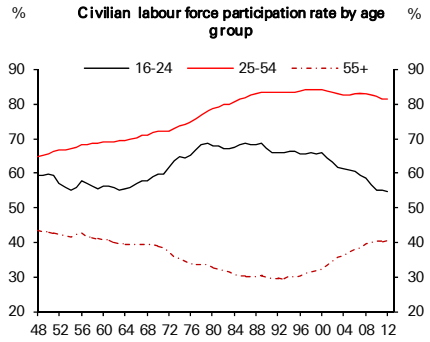


Source: BLS, Haver Analytics, DB Global Market Research

The second reason for the rise in the aggregate LFPR is demographics, or changing population shares. There is a clear relationship between age and participation rates. Participation tends to peak when individuals are in the 25-54 age group and decline substantially as they get closer to retirement age (Chart 5). Therefore, a shift in the relative population shares of these groups has important implications for the aggregate LFPR. The most notable of these population shifts was the Baby boom. From the late-1970s through the mid-1990s, the population share of the 25 to 54 age group increased by about 1/5, from 50% to almost 60% (Chart 6). As the Baby boom generation migrated into this age group with a relatively high participation rate they mechanically increased the aggregate LFPR.

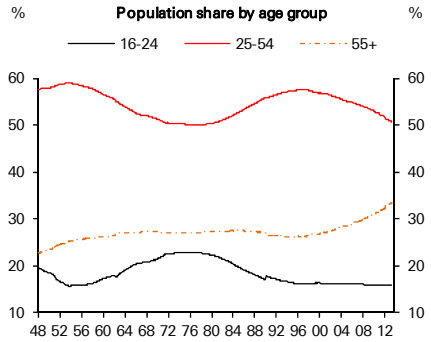
Baby boomers reaching prime working age drove LFP up too

Chart 5. 25-54 age group has relatively high participation rate



Source: BLS, Haver Analytics, DB Global Market Research

Chart 6. Baby boomers moved into the prime age group in 1980s and 1990s



Source: BLS, Haver Analytics, DB Global Market Research

Why did the LFPR decline prior to the crisis?

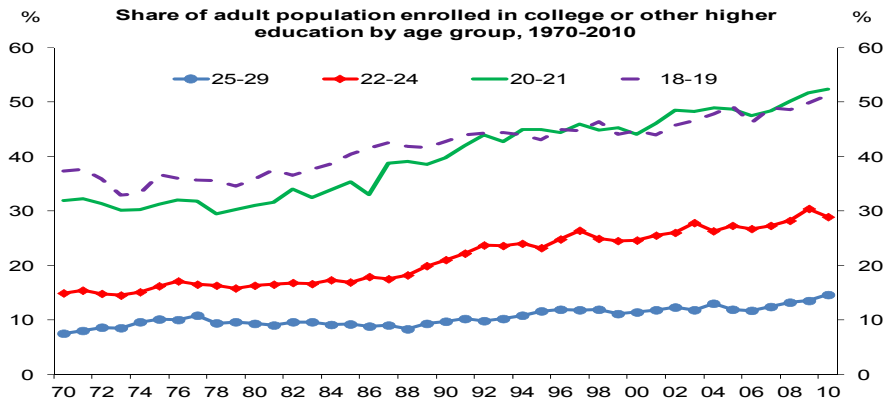
The aggregate LFPR began to decline in the early 2000s, as both the male and, to a lesser extent, female participation rates edged lower. This decline was caused by several factors. First, as the Baby boom generation aged, the population share of the 55+ age group began to rise in the late 1990s and the share of the population between 25 and 54 years of age declined in turn. Because the participation rate for the 55+ age group is significantly below the LFPR for younger age groups – about 50% points lower as of the late 1990s – a rising population share for the former group mechanically will lead to a declining aggregate participation rate. This remained true even though the participation rate for the 55+ age group has increased over the past decade.

The more recent decline in LFP reflects baby boomers reaching retirement age

A second reason why the LFPR began to decline prior to the financial crisis was rising college enrollment, which reduced the participation rate most noticeably for the 16 to 24 age group. Higher education enrollment rates for younger age groups have risen steadily since at least the 1970s (Chart 7). And these increases have been substantial for some age groups. Enrollment rates for the 20 and 21 age group rose by about 20% points over the past four decades, from about 30% in 1970 to more than 50% by 2010. A similar increase can be observed for the 18 and 19 age group, and the higher education enrollment rate for the 22-24 age group also doubled over this period, from about 15% in 1970 to 30% in 2010.

Rising college enrollment added to the decline in LFP

Chart 7. Rising higher education enrollment has reduced the LFPR for younger age groups



Sources: NCES, DB Global Market Research

A third reason for the decline in the aggregate participation rate prior to the financial crisis was a declining LFPR for the 25-54 age group. While the participation rate for men aged 25-54 had declined steadily since the 1940s, this decline was offset by the substantial increase in the participation rate for women aged 25-54, and the aggregate participation rate for the 25-54 age group rose through the late 1990s as a result. However, the female participation rate for the 25-54 age group reversed a several decades long uptrend in the early 2000s, and began to decline gradually leading up to the financial crisis, which reduced the aggregate participation rate for the 25-54 age group. The reasons for the gradual decline in the prime age participation rate are not particularly well understood. Several explanations that the academic literature has considered are expansions of the Social Security Disability Insurance program and higher incarceration rates.[4]

LFP for prime-age women had peaked by 2000

Expansion of SSI may have contributed to declining LFP

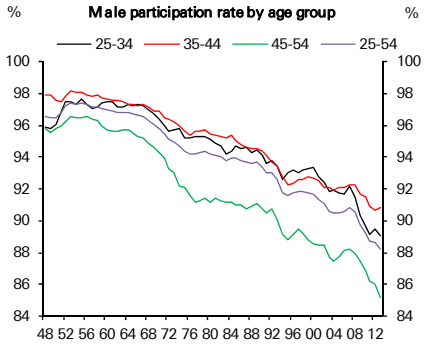
However, these explanations are not the entire story. It is also clear that demographics and increased higher education enrollment played a role in the declining participation rate for this age group. For example, the participation rate for the male 45-54 age group has historically been well below the 25-44 group (Chart 8).[5] Thus, a rising share of the population in the 45-54 age group relative to the 25-44 age group, as has occurred since the early 1990s, will tend to reduce the participation rate for the overall 25-54 age group (Chart 9). Thus, to more accurately quantify the impact of population aging on the LFPR, we should consider a more granular age group decomposition than is commonly used. In addition, higher educational enrollment for the 25-29 age group has risen steadily since 1970. While about 8% of adults in the 25-29 age group were enrolled in higher education in 1970 almost 15% were enrolled in 2010 (see Chart 7).

Demographics also help explain recent declines in LFP for prime age group

[4] See Erceg, C.J. and A.T. Levin (April 9, 2013), "Labor Force Participation and Monetary Policy in the Wake of the Great Recession" and the references therein. (www.bos.frb.org/employment2013/papers/Erceg_Levin_Session1.pdf)

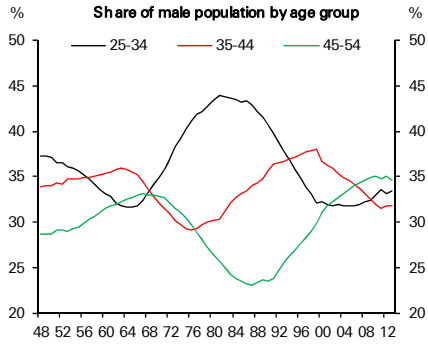
[5] We focus on men here because there is little difference in female participation rates within the 25-54 age group.

Chart 8. Participation rate for 45-54 men well below 25-44…



Source: BLS, Haver Analytics, DB Global Market Research

Chart 9….and the 45-54 share of the population has risen



Note: Each line depicts the male population of that age group relative to the total population in the 25-54 age group for men only.
Sources: BLS, Haver Analytics, DB Global Market Research

The (a)cyclical nature of the LFPR

It is clear from the preceding discussion that the longer-term drivers of the LFPR have been primarily secular trends, such as rising female participation, and slow-moving demographic shifts, such as the aging of the Baby boom generation. Part of the reason for this focus is that the LFPR has not been particularly sensitive to cyclical factors historically. That is, there has not been a significant difference in LFPR growth in expansions versus recessions. Since 1948 the average annualized monthly change in the LFPR is 0.071% points during recessions and 0.075% points during expansions. Indeed, it is even difficult to visually discern a clear cyclical pattern to the LFPR from the charts presented in earlier sections, as any cyclical response of the LFPR has tended to be overwhelmed by longer-run structural trends.

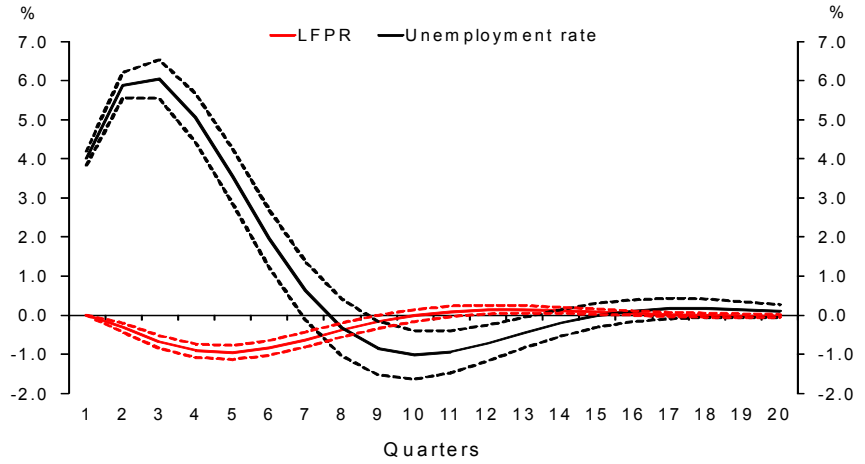
LFP has not shown much cyclical variance historically

We conduct two tests of this acyclical view of the LFPR. First, following the analysis in Erceg and Levin (2013), we compute the impulse response of the cyclical portion of the LFPR to a shock to the cyclical portion of the unemployment rate from a vector autoregression (VAR) between these two variables (Chart 10).[6] In response to a 4% point shock to the unemployment rate – a shock similar in magnitude to the rise in the unemployment rate during the financial crisis – the LFPR experiences a peak decline of about 1% point five quarters following the unemployment rate shock, and returns back to its pre-shock level by around 9 quarters following the shock. Thus, based on the historical relationship between the unemployment rate and the LFPR, large movements in the former are not typically associated with large movements in the latter.

VAR analysis says a 4% pt rise in unemployment reduces LFP by only 1%

[6] We use a Hodrick-Prescott filter to decompose the LFPR and unemployment rate into cyclical and trend components for this experiment and then estimate a quarterly VAR with the cyclical components, using a lag length of two quarters.

Chart 10. LFPR not very response to shocks to unemployment rate historically

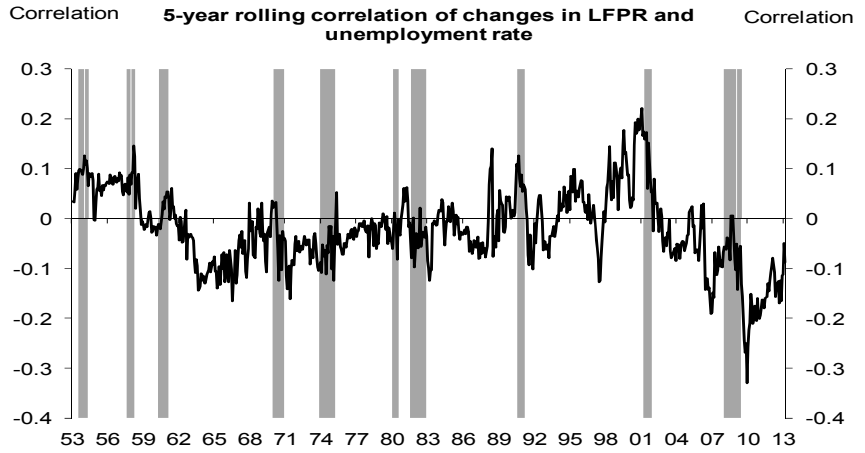


Note: Dotted lines represent standard errors bands.
Sources: DB Global Markets Research

The acyclical nature of the LFPR can also be found in the lack of a significant correlation between the unemployment rate – a strongly countercyclical variable – and the participation rate. In particular, a 5-year rolling correlation of the unemployment rate and the change in the LFPR shows that these two variables have not been highly correlated over time, with the correlation typically slightly negative (Chart 11). A similar picture emerges if we use a 10-year rolling correlation.

Correlation between unemployment and LFP has been quite low historically

Chart 11. Unemployment and participation became more negatively correlated since the crisis



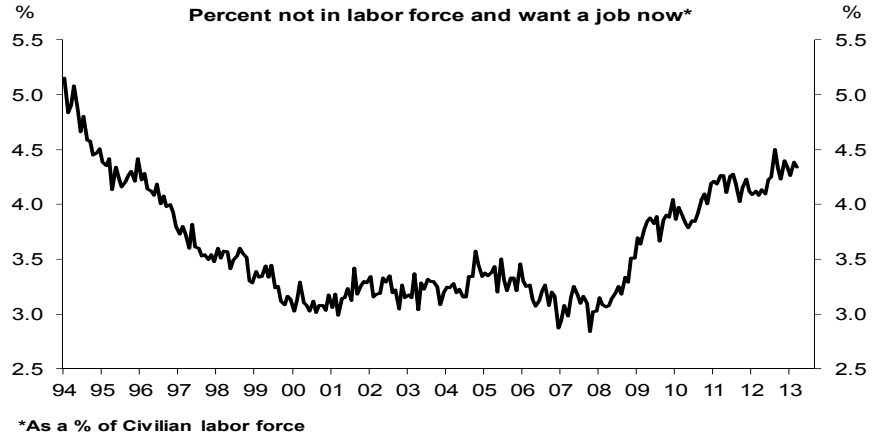
Sources: BLS, Haver Analytics, DB Global Markets Research

Although the LFPR has not been driven by cyclical factors historically, there is some evidence that cyclical factors may have had a more important role in the recent decline. For example, the correlation between the unemployment rate and LFPR became sharply negative in the wake of the financial crisis (Chart 11). In addition, measures of the number of people not currently in the labor force, for example because they have become discouraged with labor market prospects, but that want a job have risen substantially since the financial crisis. In fact, the number of people that are not in the labor force but that want a job as a fraction of the total labor force rose by about 50% since the crisis, from about 3% in 2007 to almost 4.5% more recently (Chart 12). While this metric is

Negative correlation between unemployment and LFP did rise briefly just after financial crisis

well above the levels observed throughout the 2000s, it is still below levels in the mid-1990s.

Chart 12. Not in labor force but want a job has risen

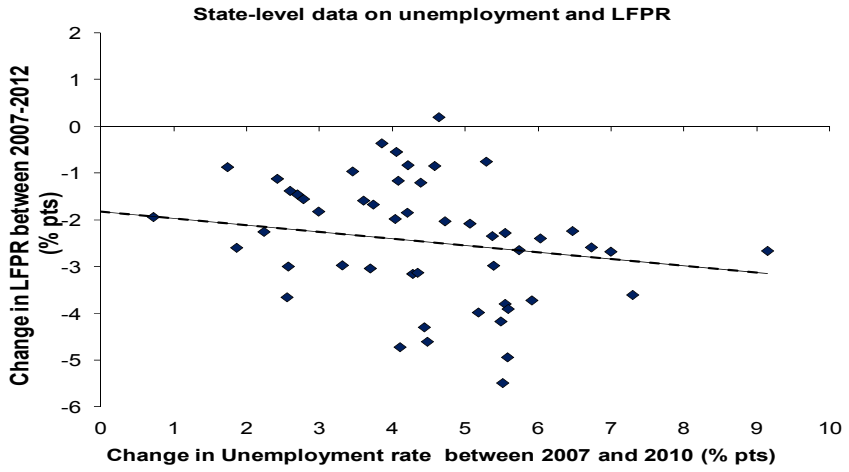


Sources: BLS, Haver Analytics, DB Global Markets Research

Further evidence of the cyclical forces underlying the decline in the LFPR can be found in the negative correlation between changes in state-specific unemployment rates and LFPR (Chart 13). The logic is that if movements in the LFPR were driven solely by structural forces that are expected to be consistent across states, then we should see little relationship between the change in the unemployment rate and change in the LFPR. In other words, if everything was driven by structural forces, we would expect a similar decline in the LFPR across states irrespective of the change in the unemployment rate. However, there is in fact a negative relationship between these two variables, suggesting that those states that experienced a larger increase in the unemployment rate, tended to subsequently experience a larger decline in the LFPR. This relationship should not be overstated, however, as a regression suggests that changes in the unemployment rate are not statistically significant in explaining changes in the LFPR.

Some weak evidence of cyclical variance in LFP can be seen in cross-state analysis

Chart 13. States with greater increase in unemployment had larger decrease in LFPR



Sources: Erceg and Levin (2013) BLS, Haver Analytics, DB Global Markets Research

Therefore, although the LFPR has historically been driven primarily by structural factors and has been less affected by cyclical forces, there is some compelling evidence that cyclical factors have been important in the wake of the crisis. To quantify the relative importance of each of these factors, we next decompose the drop in the LFPR since 2007.

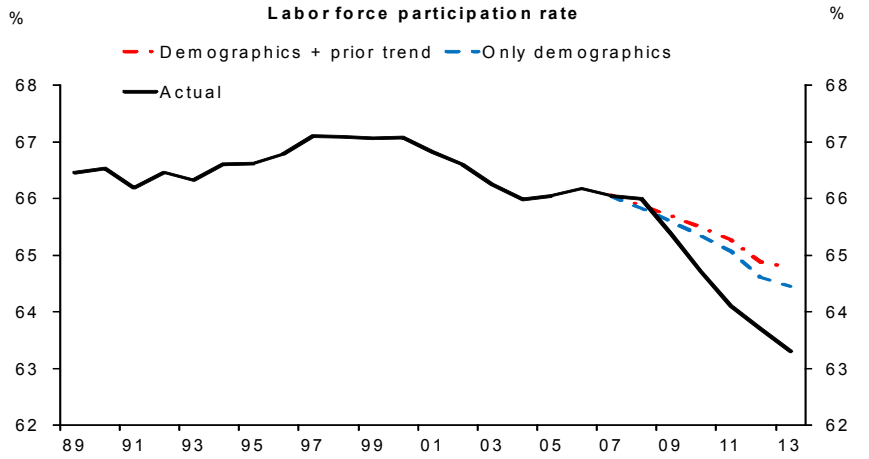
Bottom line: cyclical component of LFP has become more important since the crisis

What has caused the sharp decline in the LFPR since 2007?

One way to decompose the post-crisis decline in the LFPR between structural and cyclical factors is to isolate the role of demographics and pre-crisis trends. We isolate the demographic effect on the LFPR by fixing the within age group participation rates at their pre-crisis levels and only allowing the population shares to vary in line with the actual change in the population shares over the past several years.[7] According to this decomposition, the LFPR would have been about 64.4% in March 2013 if no cyclical factors were driving the LFPR, compared to the actual LFPR of 63.3% (Chart 14). Thus, based on demographics alone, we estimate that nearly 60% of the decline in the LFPR since the financial crisis is due to structural/demographic factors. If, instead, we also extrapolate the pre-crisis trends within each group in addition to the demographic shifts, we would estimate that approximately 50% of the decline was due to structural factors.

Demographic trends alone explain about 50-60% of the drop in LFP since the financial crisis

Chart 14. 50-60% of LFPR decline since 2007 is structural



Note: In the "Only demographics" simulation, everything is held constant at 2007 values except population shares, which vary according to observed values post-2007. "Demographics + prior trend" also allows for a linear continuation of the within age group participation rate trends that prevailed between 1989 and 2007.

Sources: BLS, Haver Analytics, DB Global Markets Research

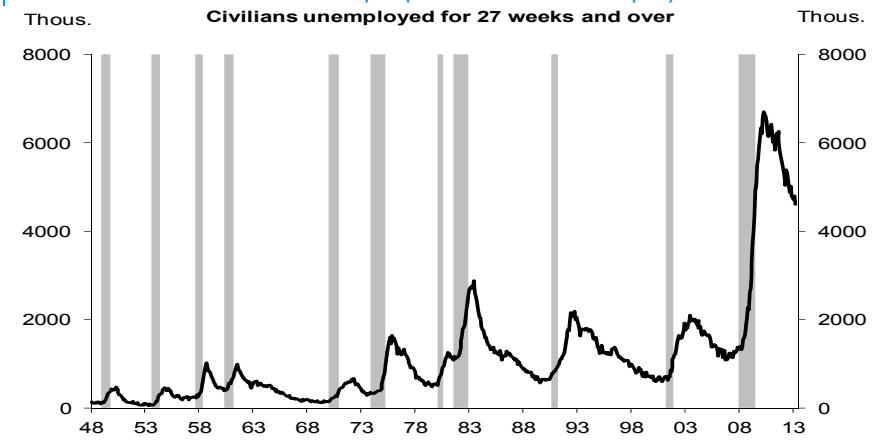
Based on these estimates, we conclude that roughly 50-60% of the post-crisis decline is due to structural factors, leaving approximately 40-50% to be caused by cyclical factors. Recent BLS updates to LFPR projections and some Fed analyses are consistent with this view.[8] However, other work from the Fed and

[7] For this calculation we decompose the aggregate labor force participation rate into the summation over age groups of the product between the age group-specific participation rate and population share.
[8] See Toossi (October 2012), "Projections of the labor force to 2050: a visual essay." *BLS Monthly Labor Review.* (http://www.bls.gov/opub/mlr/2012/10/art1full.pdf), and Van Zandweghe (2012), "Interpreting the Recent Decline in Labor Force Participation." *Kansas City Fed Economic Review.* (www.kc.frb.org/publicat/econrev/pdf/12q1VanZandweghe.pdf)

IMF suggests that cyclical factors may be more important, perhaps even accounting for as much as 75% of the decline since 2007. [9]
But even these estimates may understate the structural decline in the LFPR that we would expect to continue because the cyclical decline in participation may have longer-lasting effects on participation. There is substantial evidence that long-term unemployment spells hurt employment prospects going forward due to skill erosion, loss of attachment to the labor force, and loss of professional networks, among other reasons. As a result, the fact that more than 4.6 million people remain unemployed for at least 27 weeks, suggests that there is potential for these cyclical factors to turn into more lasting factors reducing the LFPR (Chart 15). And there may already be some evidence of this with the surge in the number of disability applications since 2009. Therefore, it is likely that greater than 50-60% of the recent decline in the LFPR is more permanent.

Detrimental effects of long-term unemployment worsen the structural drop in LFP

Chart 15. More than 4.6 million people have been unemployed for 27+ weeks



Sources: BLS, Haver Analytics, DB Global Markets Research

What are the implications for the LFPR going forward?

As we noted in the introduction, there has been an apparent shift in Chairman Bernanke's view about the near-term evolution of the LFPR. While in April 2012 he appeared to suggest that it was likely that the LFPR would rise as the labor market improved, and that this would put upward pressure on the unemployment rate in the near term, he expressed doubt that the LFPR would increase in his most recent press conference. Instead, he mentioned that he believed more structural forces would continue to dominate.

Fed seems to expect LFP to move lower ahead

Our projections agree with this more recent assessment. Based on demographic factors alone, we would anticipate that the LFPR would decline by 0.2-0.3% points per year over the next two years. This would suggest that the LFPR should fall to about 63% by the end of 2014 (the LFPR was 63.6% at the end of 2012), which is consistent with recent BLS projections for a continued gradual decline.

We agree that structural decline in LFP will exceed cyclical rebound

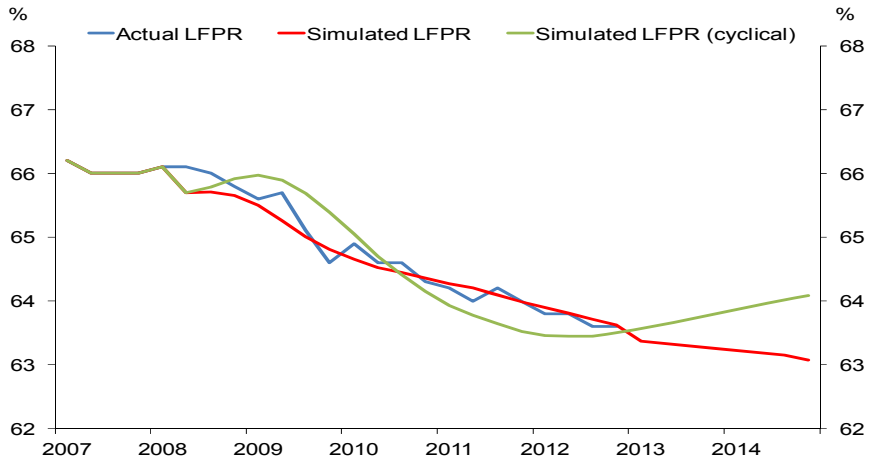
A second approach to projecting the LFPR through the end of 2014 is to use the estimated relationship between the unemployment rate and LFPR (from the VAR discussed earlier) to construct shocks that are consistent with the Fed's

VAR-based projections show LFP trending lower over next several years

[9] See Erceg and Levin (2013) and Aaronson, D., J. Davis, and L. Hu (March 2012), "Explaining the Decline in the U.S. Labor Force Participation Rate." *Chicago Fed Letter.* (http://www.chicagofed.org/digital_assets/publications/chicago_fed_letter/2012/cflmarch2012_296.pdf)

median unemployment rate forecast, and see what the model implies for the LFPR. The results of this analysis are shown in Chart 16. Our projections based on this method are consistent with our analysis that simply extrapolates the demographic trends. Namely, both methods suggest that the LFPR should approach 63% by the end of 2014.

Chart 16. Structural factors to dominate cyclical forces as LFPR continues to decline



Sources: BLS, Haver Analytics, DB Global Markets Research

One benefit of this approach is that we can isolate the cyclical portion of the fluctuations in the LFPR to analyze how much potential there is for a cyclical rebound, while abstracting from the underlying structural forces that are reducing the LFPR over time. This analysis suggests that if there were only cyclical forces going forward, we would anticipate the LFPR to rise noticeably through the end of 2014. However, given the significant downward pressure on participation from structural factors, this cyclical rebound is projected to be more than offset by the ongoing structural decline.

Absent structural factors, cyclical forces would raise LFP over the next two years

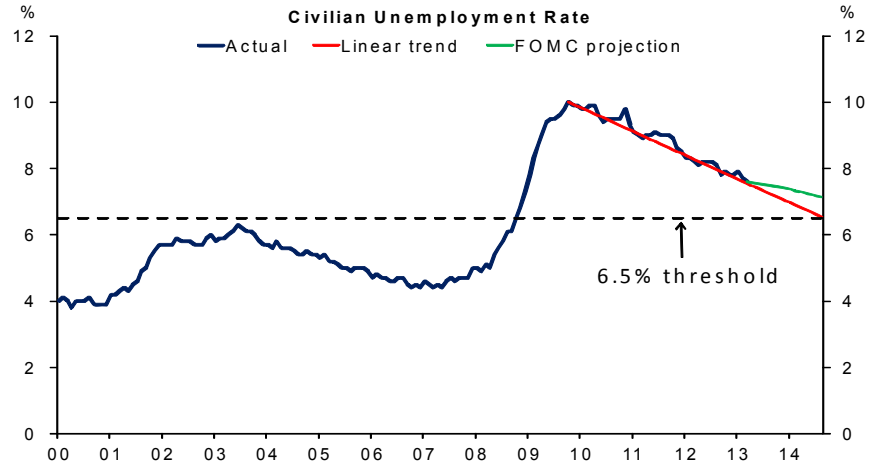
Implications for the unemployment rate

If the LFPR declines as we anticipate, it will continue to put downward pressure on the unemployment rate. In this section we discuss prospects for the unemployment rate given our analysis of the LFPR.

Since the unemployment rate reached its peak of 10% in 2009, it has declined at a remarkably steady average pace of 0.06% points per month despite a relatively uneven recovery (Chart 17). This decline has been caused in part by a falling LFPR, which declined at an average pace of 0.04% points per month since the unemployment rate's peak. If this trend were to continue, the unemployment rate would near the Fed's 6.5% threshold for rate hikes in August 2014 – well before FOMC projections, which predict that the unemployment rate will not reach this threshold until mid-2015.

Under simple extrapolation of recent downtrend in LFP, unemployment would reach 6.5% by summer of 2014

Chart 17. At post-crisis pace, unemployment rate hits 6.5% threshold in August 2014



Sources: BLS, Haver Analytics, DB Global Markets Research

However, simply extrapolating the linear trend that has occurred since the unemployment rate reached its peak ignores the analysis we have conducted on LFPR prospects. Using this information, we can construct more informed unemployment rate predictions over the next several years.

Based on our LFPR analysis, although there is some potential for a cyclical rebound, this will most likely be more than offset by a continued structural decline. As a result, we anticipate that the LFPR will remain bound between 63% and 63.5% in the near term, and realizations at or below the current value of 63.3% are most likely in our view. By combining this view of the LFPR with population projections and assumptions about average monthly non-farm payroll growth, we can compute the implied unemployment rate at year-end 2014. Table 1 presents these results. Our baseline scenario is for non-farm payroll growth to average around 200k per month and the LFPR to be between 63% and 63.3% by the end of 2014. Given these assumptions, the unemployment rate would be between 6.1% and 6.5% at that time. Note that if the LFPR is 63% at the end of 2014, 175k non-farm payroll growth per month on average is consistent with an unemployment rate of 6.4% in December 2014. Therefore, this analysis suggests that there is a risk the unemployment rate declines more quickly than currently anticipated.

Under more realistic assumption of modest decline in LFP, unemployment would fall below 6.5% by end 2014

Table 1. Unemployment rate projections for December 2014

		Average Non-farm payroll growth (1,000s)		
LFPR		150	200	250
(%)	**63.0**	6.8	6.1	5.4
	63.3	7.2	6.5	5.8
	63.5	7.5	6.9	6.2

Sources: DB Global Markets Research

What does this mean for the Fed and monetary policy?

The Fed's current threshold guidance for interest rates states that the FOMC "…currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to

be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored."[10]

Our preceding analysis suggests that the unemployment rate could drop below this threshold in 2014. Would this mean that the Fed would begin to hike rates prior to expectations? We do not think so, at least not unless the inflation picture heated up more than we and the Fed expect between now and then. The Committee has moved in the direction of treating the threshold as a minimum improvement that must be achieved before they consider raising rates, not as an automatic trigger for rate increases. In the baseline scenario we have outlined, the unemployment rate falls below this threshold prior to current FOMC expectations, but this is accompanied by a continued decline in the LFPR and only a moderate increase in the employment-population ratio – not really an environment with broad-based labor market improvement. Consequently, we think this baseline scenario would mean more work for the Committee on the communication front. They would need to emphasize the role of other labor market indicators, as well as inflation indicators, and downplay the importance of the declining unemployment rate in their decision to hold off raising rates until well into 2015 as we (and they) currently expect.

Unemployment falling below 6.5% may not mean immediate rate hikes, but would present Fed with communication challenge

These dynamics may present a dilemma for the FOMC going forward. If they believe that the unemployment rate understates broader labor market weakness, then more policy accommodation may be appropriate. This is a point raised in a paper by Erceg and Levin (2013) presented at a recent Boston Fed conference. According to these authors, if the LFPR is low due to cyclical factors, there may be additional downward pressure on inflation and wages relative to what would be implied simply by the unemployment rate gap. As a result, monetary policy should be more accommodative than implied by standard rules, such as the Taylor rule, to achieve the Committee's dual mandate on price stability and full employment.

Erceg-Levin argue for pushing unemployment still lower to raise LFP

However, we see the empirical evidence as supporting a more structural (less cyclical) view of the downtrend in LFP. Our analysis suggests that further monetary accommodation may not bring about a significant improvement in participation. Delaying monetary tightening in an effort to raise LFP by pushing unemployment still lower would risk raising inflation unduly.

But we see LFP as less cyclical and this strategy as more risky for inflation

On balance, we expect the Fed to begin raising rates by sometime in the first half of 2015, within a quarter or two after the unemployment rate has moved below 6.5%.

Fed should begin raising rates by 2015 H1

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[10] For example, see the official statement from the March 2013 FOMC meeting here: http://www.federalreserve.gov/newsevents/press/monetary/20130320a.htm

Central Bank Watch

G3

US

The Fed reconfirmed at its May meeting that it would continue its purchases of MBS at $40bn per month and longer-term Treasuries at $45bn per month until the labor market shows substantial improvement or the costs of balance sheet expansion outweigh the benefits. If economic conditions continue to weaken the committee has now said that their next move could be to increase the pace of QE. The minutes from the March meeting indicated that if the economic recovery resumes in the near term (as we expect it will), a significant number of FOMC members would favor starting to taper these purchases by this summer (September) and end purchases by year-end or early 2014.

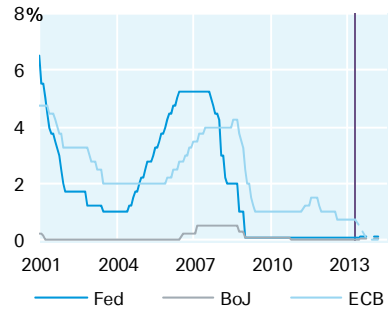
Japan

The BoJ deliberately exceeded market expectations with their announced "quantitative and qualitative" easing policy. In magnitude, a doubling of base money over two years is much more than expected, and the targeted duration of government bonds purchased -- seven years versus three years previously -- is also longer than expected. At JPY 7tn per month, the BoJ will purchase the equivalent of about 70% of gross bond issuance. This program is expected to deliver inflation of about 2% in about two years although a stable rate below 2% would still be viewed as a success. The transmission mechanism is expected to be via a rise in expected inflation (so lower ex ante real interest rates) and higher asset prices.

Euroland

The combination of weakening prospects in core countries and improving bank credit supply relative to demand favour a conventional monetary policy response over a new unconventional policy response. We now expect the ECB to cut the refi rate 25bp on 2 May to 0.50% and another 25bp in the summer.

Figure 1: G3 policy rates



%	Current	Jun-13	Sep-13	Mar-14
Fed	0-0.25	0-0.25	0-0.25	0-0.25
BoJ	0-0.10	0-0.10	0-0.10	0-0.10
ECB	0.75	0.50	0.25	0.25

Source: Deutsche Bank

Other European countries

UK

Despite a change in the Bank's remit (the government underlined its view that the Bank may miss its 2% target in the near term for the greater good of growth or financial stability) the MPC left policy unchanged in April. We do not expect further QE but do not see the first hike in rates until the end of 2014.

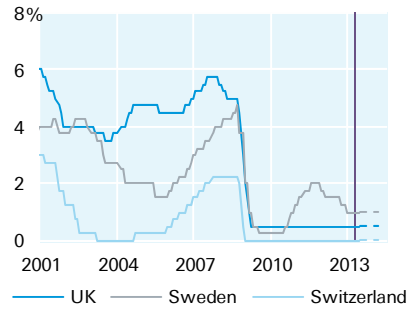
Sweden

After the Riksbank's rate cut in December the risks remain for further action. However, household debt concerns should prevent this. Next meeting: 3 Jul.

Switzerland

The SNB opted to keep its EUR/CHF floor at 1.20 at its March meeting, but lowered the outlook for inflation. Next meeting: 20 Jun.

Figure 2: Key European policy rates



%	Current	Jun-13	Sep-13	Mar-14
BoE	0.50	0.50	0.50	0.50
SRB	1.00	1.00	1.00	1.00
SNB	0.00	0.00	0.00	0.00

Source: Deutsche Bank

Dollar bloc

Canada

Given that inflation, both core and headline, is well below the BoC's 2% target, the mixed signals from key indicators of US economic activity and lingering uncertainty about the prospects for global commodity prices, this stronger than expected acceleration in Q1 output is unlikely to have an impact on monetary policy in the near term.

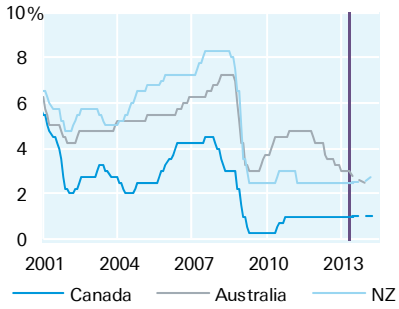
Australia

As the outstanding supply of ACGBs has increased substantially, the 10Y ACGB/UST spread has actually declined. We think it is difficult to argue that in mid-2008 the market was expecting a dramatic increase in the supply of ACGBs and hence that the spread reflected that increase. We can explain the width of the 10Y ACGB/UST spread in 2008 by reference to the fact that the RBA had taken the cash rate to 7.25% (which is of no surprise to any regular readers of our research).

New Zealand

The recent ANZ Business Survey suggests that there has been a modest decline in business confidence but it is still solid. As far as the RBNZ is concerned the broad message from the survey is little different to that suggested by previous surveys (or indeed the NZIER's quarterly survey). If the growth that firms expect is realized, over a period of time this would likely lead to a gradual increase in inflation pressures and an eventual need to tighten monetary policy – as the RBNZ is forecasting. However, as yet there remains no sign that this need will occur in 2013.

Figure 3: Dollar bloc policy rates



%	Current	Jun-13	Dec-13	Mar-14
BoC	1.00	1.00	1.00	1.00
RBA	3.00	2.75	2.50	2.50
RBNZ	2.50	2.50	2.50	2.75

Source: Deutsche Bank

BRICs

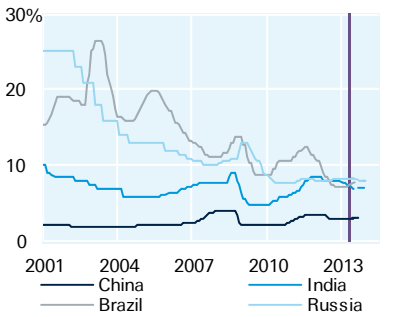
China

CPI inflation fell to 2.1% yoy in March, down from 3.2% in February. On a mom basis, the CPI fell by a sharp 0.9%. This decline in CPI should help alleviate some market concerns on monetary and credit tightening. This decline in CPI inflation reflects mainly the seasonal fall in food prices after the Chinese New Year, as well as the reduction in demand for pork and poultry due to the recent "dead pig incident" and the bird flu. Non-food inflation was a very modest 0.1% mom or an annualized 1.2%. Give this very modest non-food inflation, even if food prices rise by an annualized 6% (higher than the historical average), the annual average CPI inflation will be only 3.2%, below the government target of 3.5%.For April, we expect yoy CPI inflation to fall further to around 1.8%, as food prices continued to decline throughout March and thus the April average will likely be substantially lower than the March average. For H1 as a whole, we expect CPI inflation to be as low as 2.3%. Against this backdrop, we do not see major pressure for the central bank to tighten monetary and credit policies in the coming few months. The PPI declined 1.9% yoy in March, vs. the 1.6% yoy decline in February. Sequentially the PPI remained unchanged.

India

Meeting consensus expectations, the Reserve Bank of India cut its policy repo and reverse repo rates by 25bps each in the March policy review meeting. The tone of the policy statement was mixed. Clearly the central bank is pleased with declining inflation, but it sees various lingering risks to prices, including the perennial demand-supply imbalance, ongoing increase in diesel price and probable second-round effects, as well as pipeline rise in food procurement price. The central bank is also concerned about the high level of current account deficit and associated risks to external stability. Against this, the guidance from the central bank was that "the headroom for further monetary easing remains quite limited." We think that there are at least two more cuts (25bps each) ahead, but after that the cycle may well come to an end unless

Figure 4: BRICs policy rates



%	Current	Jun-13	Sep-13	Dec-13
PBoC	3.00	3.00	3.00	3.25
RBI	7.50	7.00	7.00	7.00
BCB	7.50	7.75	8.00	8.00
CBRF	8.25	8.25	8.00	8.00

Source: Deutsche Bank

the growth-inflation nexus turns out to be poorer than expectations. We see the path of fiscal and inflation in the coming months conducive toward rate cuts in early-May and mid-June, especially with inflation momentum declining and economic growth showing scant sign of bottoming. We see the latest RBI guidance as a hedge against expectations of further cuts, but we think ultimately the need to support growth and asset markets would prevail, and further easing lies ahead.

Brazil

The Central Bank increased the SELIC overnight rate target by 25bps to 7.50% in April, and indicated that monetary tightening will proceed slowly. Two of the eight COPOM members voted for no increase in rates at all, while the official statement claimed that lingering domestic and external uncertainties recommend that monetary policy be managed with caution. Although inflation continues to surprise on the upside despite the several administrative measures taken by the government to curb prices (especially tax cuts on energy and foodstuff), we believe the slow recovery in economic activity will prevent the Central Bank from moving more aggressively. Consequently, although the risk is tilted toward higher rates, we continue to forecast only two additional 25bp hikes this year.

Russia

On its last meeting The Central Bank of Russia (CBR) decided to keep key policy rates on hold, while cutting long-term liquidity provision/absorption rates by 25bps. We believe that the decision to lower long-term rates marks the start of a more dovish stance on the part of the monetary authorities, which may lead to further interest rate cuts this year to support growth. The CBR stated that the decision to lower long-term rates was supported by the assessment of inflation risks and economic growth prospects. According to the monetary authorities, the cut on liquidity provision operations will unlikely have a significant impact on the level of money market interest rates, but will improve the opportunities for banks to borrow at the rates closer to main liquidity provision operations. The CBR did not include the statement on the adequacy of interest rates into the note, which implies that changes in rates may continue in the near term, possibly encompassing a wider array of interest rates, including the refinancing rate. The latter, in our view, is likely to be lowered by 25 bps next month, given the more dovish statement released by the CBR. Overall, given the weakness in growth we believe the balance of risks for the government and the CBR has shifted more squarely towards supporting growth rather than keeping a lid on inflationary pressures. We believe that the measures to lower rates are unlikely to deliver a significant growth impulse in the near term, while inflationary risks may rise as prioritisation of inflation appears to be accorded secondary importance.

Global central bank policy rate changes since August 2009

	2009				2010											2011												2012												2013					
	Trough policy rate	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Net Change
Israel	0.50	0.75			1.00	1.25			1.50				1.75		2.00				2.25	2.50	3.00		3.25				3.00		2.75		2.50				2.25					2.00		1.75					125
Australia	3.00			3.25	3.50	3.75			4.00	4.25	4.50						4.75													4.50	4.25				3.75	3.50				3.25		3.00					0
Norway	1.25			1.50		1.75					2.00												2.25								1.75			1.50													25
Vietnam	7.00					8.00											9.00				11.00	12.00	13.00	14.00				15.00					14.00	13.00	12.00	11.00	10.00					9.00		8.00			100
Malaysia	2.00								2.25		2.50		2.75										3.00																								100
India	4.75								5.00	5.25			5.75		6.00		6.25		6.50		6.75		7.25	7.50	8.00		8.25	8.50						8.00									7.75		7.50			275
Brazil	8.75									9.50		10.25	10.75						11.25		11.75	12.00		12.25	12.5		12.00	11.50	11.00		10.50		9.75	9.00	8.50		8.00	7.50		7.25						7.50	-125
Peru	1.25										1.50	1.75	2.00	2.50	3.00				3.25	3.50	3.75	4.00	4.25																								300
Canada	0.25											0.50	0.75		1.00																																75
Chile	0.50											1.00	1.50	2.00	2.50	2.75	3.00	3.25		3.50	4.00	4.50	5.00	5.25							5.00																		450
New Zealand	2.50											2.75	3.00								2.50																										0
Taiwan	1.25											1.38			1.50			1.63			1.75			1.88																								63
Sweden	0.25												0.50		0.75	1.00		1.25		1.50		1.75			2.00					1.75		1.50						1.25			1.00						75
S Korea	2.00												2.25				2.50		2.75		3.00			3.25													3.00			2.75								75
Thailand	1.25												1.50	1.75				2.00	2.25		2.50	2.75		3.00	3.25	3.50			3.25		3.00								2.75								150
Serbia	8.00													8.50	9.00	9.50	10.50	11.50	12.00		12.25	12.50		12.00	11.75		11.25	10.75	10.00	9.75	9.50					10.00	10.25	10.50		10.75	10.95	11.25	11.50	11.75			375
Uruguay	6.25	8.00				6.25									6.50						7.50			8.00						8.75								9.00			9.25						300
Nigeria	6.00														6.25				6.50		7.50		8.00		8.75		9.25	12.00																			600
China	2.25															2.50		2.75		3.00		3.25			3.50												3.25	3.00										75
Hungary	5.25	8.0	7.5	7.0	6.5	6.25	6	5.75	5.5	5.25							5.50	5.75	6.00										6.50	7.00									6.75	6.50	6.25	6.00	5.75	5.50	5.25	5.00	4.75	-50
Poland	3.75																		3.75			4.00	4.25	4.50											4.75					4.50	4.25	4.00	3.75	3.25			-50
Indonesia	5.75																				6.75							6.50	6.00			5.75															0
Colombia	3.00	4.5	4.0		3.5						3.0									3.25	3.50	3.75	4.00	4.25	4.50				4.75		5.00	5.25						5.00	4.75			4.50	4.25	4.00	3.75	3.25		25
Russia	7.75	10.75	10.5	10.0	9.0	8.75		8.5	8.25	8.0	7.75									8.00		8.25								8.00								8.25									50
Philippines	4.00																				4.25		4.50								4.25		4.00				3.75		3.50								-50
Kazakhstan	7.00	7.5	7.0																		7.50											7.00	6.50			6.00		5.50									-150
Euroland	1.00																						1.25		1.50				1.25	1.00						0.75											-25
Denmark	0.80	1.35	1.25				1.05																1.30		1.55				1.20	0.80	0.70			0.60	0.45	0.20					0.30					-50
Iceland	4.25	12.00			11.00	10.0	9.50		9.00		8.50	8.00		7.00	6.25		5.50	4.50		4.25						4.50		4.75				5.00		5.50	5.75				6.00							175
Czech Republic	0.75	1.25	1.0								0.75																								0.50				0.25	0.05							-70
Romania	5.25	8.50	8.00				7.50	7.00	6.50		6.25																		6.00		5.75	5.50	5.25														0
Sri Lanka	8.50	11.0	10.5		9.75								9.5	9.0					8.5												9.00		9.75								9.50						100
South Africa	5.50	7.0							6.5						6.0		5.5																			5.00											-50
Switzerland	0.00																								0.00																						0
Egypt	8.25																											9.25															9.75			150
Turkey	5.75										7							6.5	6.25						5.75																	5.50				5.00	-75

Source: Deutsche Bank; government data

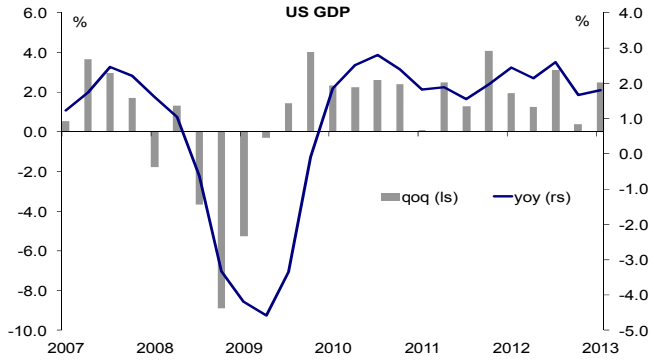
Global data monitor: Recent developments and near-term forecasts

	B'bergcode	Q2-12	Q3-12	Q4-12	Q1-13	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13
OECD leading indicators											
(6M change, %, ann.)											
OECD		0.4	0.9	1.2		1.3	1.3				
US	OLEDUSA	1.1	1.7	2.0		2.0	1.9	1.9			
Euro area	OLEDEU12	-1.6	-1.2	-0.5		-0.5	-0.3				
Japan	OLEDJAPN	0.3	0.2	0.3		0.3	0.4	0.6			
China	OLEDCHIN	0.3	0.2	0.3		0.3	0.4	0.6			
India	OLEDINDI	5.9	5.6	4.9		4.9	4.5	4.2			
Russia	OLEDRUSS	0.7	-0.2	-0.4		-0.4	-0.4	-0.3			
Brazil	OLEDBRAZ	2.0	3.6	4.3		4.3	4.3	4.1			
Purchasing manager indices											
Global (manufacturing)	50	49.9	48.9	49.2	50.7	49.2	49.3	51.0	51.1	50.0	
US (manufacturing ISM)	NAPMPMI	52.3	50.9	50.6	52.9	49.9	50.2	53.1	54.2	51.3	51.3
Euro area (composite)	46.4	46.4	46.3	46.5	47.7	46.5	47.2	48.6	47.9	46.5	
Japan (manufacturing)	SEASPMI	50.4	47.9	46.1	48.9	46.5	45.0	47.7	48.5	50.4	51.1
China (manufacturing)	EC11CHPM	48.6	48.3	50.5	51.5	50.5	51.5	52.3	50.4	51.6	
India (manufacturing)	54.9	54.9	52.8	53.7	53.1	53.7	54.7	53.2	54.2	52.0	
Russia (manufacturing)	52.3	52.3	51.8	51.7	51.6	52.2	50.0	52.0	52.0	50.8	50.6
Other business surveys											
US dur. goods orders (%pop1)	DGNOCHNG	0.9	-0.2	1.8	-1.7	0.6	3.6	-3.7	4.3	-5.7	
Japanese Tankan (LI)	JNTSMFG	-1.0	-3.0	-12.0	-8.0						
Euro area EC sentiment	EUESEMU	92.3	87.4	86.8	90.1	86.9	88.0	89.7	90.4	90.1	88.6
Industrial production (%pop1)											
US	IP CHNG	2.9	0.3	2.3	5.0	1.2	0.1	-0.1	1.1	0.4	0.1
Euro area	EUITEMUM	-1.9	0.2	-8.0	-0.5	-0.6	0.7	-0.6	0.4		
Japan	JNIPMOM	-7.7	-15.8	-7.2	8.0	-1.4	2.4	0.3	0.6	0.2	
Retail sales (%pop1)											
US	RSTAMOM	-0.4	5.3	6.1	3.9	0.5	0.5	-0.1	1.0	-0.4	0.1
Euro area	RSSAEMUM	-3.0	0.1	-6.0	1.1	0.2	-0.7	0.9	-0.3		
Japan (household spending)	0.8	0.8	-3.4	-0.1	16.3	0.1	-0.1	1.9	2.2	2.0	
Labour market											
US non-farm payrolls2	NFP TCH	108	152	209	168	247	219	148	268	88	190
Euro area unemployment (%)	UMRTEMU	11.3	11.5	11.8	12.0	11.8	11.8	12.0	12.0	12.1	
Japanese unemployment (%)	JNUE	4.4	4.3	4.2	4.2	4.2	4.3	4.2	4.3	4.1	
CP inflation (%yoy)											
US	CPICHNG	1.9	1.7	1.9	1.7	1.8	1.7	1.6	2.0	1.5	
Euro area	ECCPEMUY	2.5	2.5	2.3	1.9	2.2	2.2	2.0	1.8	1.7	1.3
Japan	JNCPIYOY	0.2	-0.4	-0.2	-0.6	-0.2	-0.1	-0.3	-0.6	-0.9	
China	CNCPIYOY	2.8	1.8	2.0	2.3	1.9	2.4	1.9	3.1	2.0	
India		7.5	7.9	7.3	6.7	7.2	7.3	7.3	6.8	5.9	
Russia	RUCPIYOY	3.8	6.0	6.5	7.1	6.5	6.6	7.1	7.3	7.0	
Brazil		5.0	5.2	5.6	6.4	5.5	5.8	6.2	6.3	6.6	
Current account (USD bn)3											
US (trade balance, g+s)	USTBTOT	-45.9	-41.6	-42.8	-43.7	-48.2	-38.1	-44.5	-43.0	-45.0	
Euro area		12.7	12.5	16.4	20.1	19.6	17.1	18.4	21.8		
Japan		6.3	3.7	3.2	2.0	3.0	1.8	4.1	0.0		
China (trade in goods)	23.6	23.6	20.9	22.7	26.6	17.9	27.4	21.7	39.3	18.6	
Russia (trade in goods)	16.3	16.2	14.8	15.9	13.6	16.4	14.9	13.8	13.4		
Other indicators											
Oil prices (Brent, USD/b)	EUCRBRDT	108.5	109.7	110.3	112.6	109.4	109.6	113.0	116.2	108.5	102.5
FX reserves China (USD bn)	CNGFOREX	3240.0	3285.1	3311.6		3297.7	3311.6				

Quarterly data in shaded areas are quarter-to-date. Monthly data in the shaded areas are forecasts.
%pop=%change in this period over previous period. Quarter on quarter growth rates is annualized.
Pop change in '000, quarterly data averages of monthly changes.
Quarterly data are averages of monthly balances.
Source: Bloomberg Finance LP, Reuters, Eurostat, European Commission, OECD, Bank of Japan, National statistical offices, Deutsche Bank.

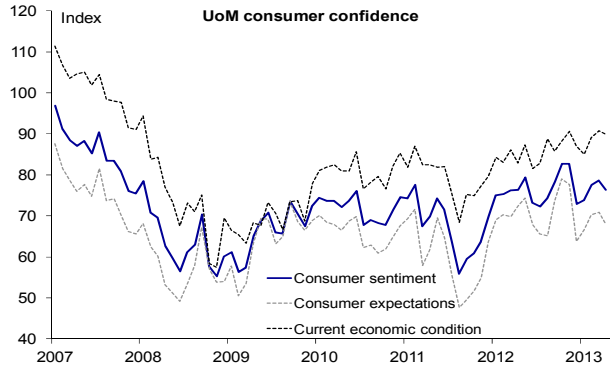
Charts of the Week

Chart 1. In the US, GDP grew at 2.5% annualized rate in Q1-2013, as government and next exports weighed on headline…



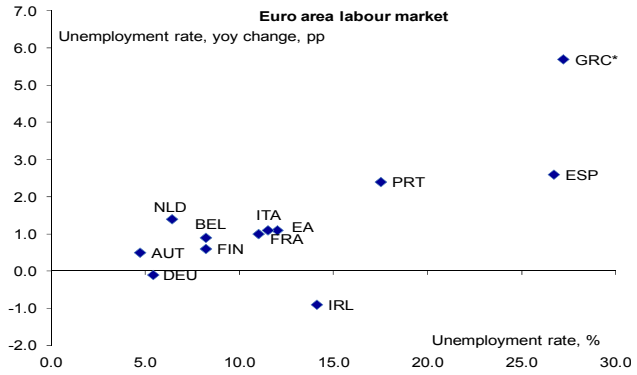
Source: BEA, Deutsche Bank

Chart 2…while confidence among consumers fell to a three month low to 76.4 in April



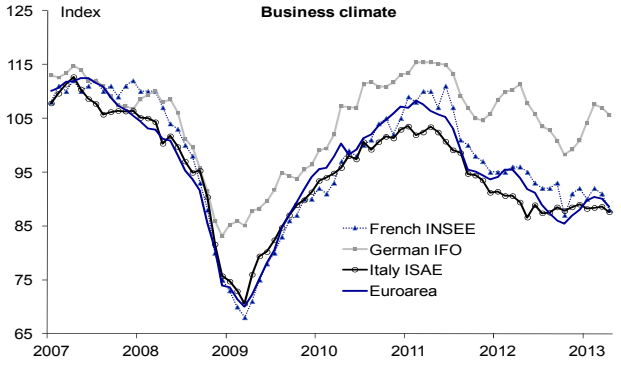
Source: UMICH, Deutsche Bank

Chart 3. In Euro area, unemployment rate hit a new record at 12.1% in March…



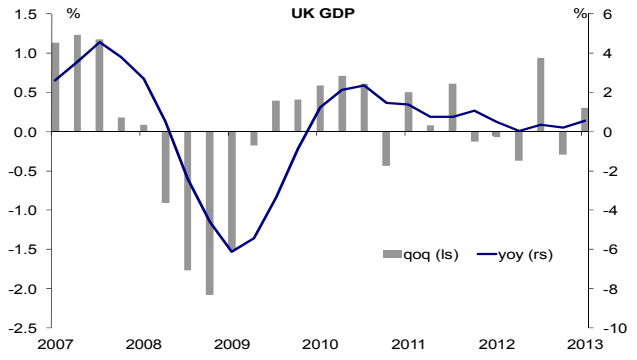
Source: Eurostat, Deutsche Bank

Chart 4 … also business confidence remained weak through out the region in April



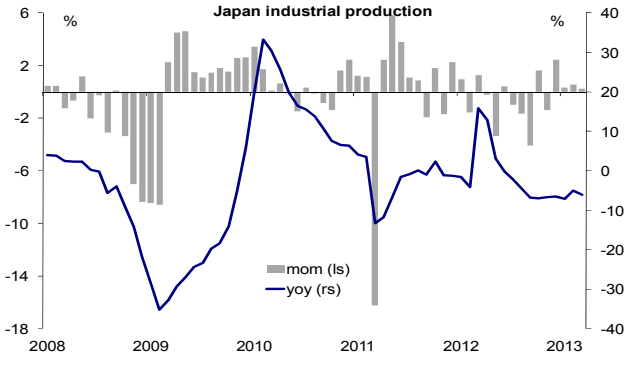
Source: EC, IFO,INSEE,ISTAT Deutsche Bank

Chart 5. In UK, GDP growth of 0.3% qoq in Q1-2013 helped in avoiding the triple-dip recession.



Source :ONS, Deutsche Bank

Chart 6… also in Japan, industrial production rose at a slow pace for the fourth successive months in March



Source: METI, Deutsche Bank

Global Week Ahead: Thursday, 02 May – Friday, 10 May

- Dollar Bloc: In the US, markets will focus on the April labour market report – it is the most crucial release. Trade balance, consumer credit and factory orders are the other indicators queued up for publication. In Canada & Australia, the week will see the release of unemployment report and trade balance data. RBA will also announce its policy rate. In New Zealand, the first quarter HLFS unemployment rate is due.
- Europe: In the Eurozone, the ECB rate decision is the most significant event of the week. A rate cut of 25 bps is likely. Data-wise focus will be on the IP figures from across the major economies. The release of German and French trade balances will highlight the trade dynamics in the region. In survey data, PMI (manufacturing & services) from across the board are due. In other releases, area-wide retail sales and German factory orders are the additional important indicators due. In UK, BoE is expected to keep their interest rates and asset purchases unchanged. IP and trade balance data are also due. In Scandinavia, we have the Norges Bank rate meeting. In CEE, the Polish & Czech National Bank will announce its policy rate decision. IP numbers from across the region will also be published next week.
- Asia incl. Japan: In Japan, trade balance data is due. In China, we have the CPI, PPI & trade balance data releasing in the coming week. In India, we expect the RBI to reduce its policy rate by 25bps. IP data is also due.

Country	GMT	Release	DB Expected	Consensus	Previous
		Thursday, 02 May			
AUSTRALIA	01:30	Export prices (Q1)	4.0%	4.5%	-2.4% (-14.3%)
AUSTRALIA	01:30	Import prices (Q1)	0.3% (4.4%)	-0.5%	0.30% (-0.9%)
SPAIN	07:15	PMI manufacturing (Apr)	44.9	44.6	44.2
ITALY	07:45	PMI manufacturing (Apr)	44.7	45.0	44.5
FRANCE	07:50	PMI manufacturing (Apr)	44.4	44.4	44.0
GERMANY	07:55	PMI manufacturing (Apr)		47.9	49.0
EUROLAND	08:00	PMI manufacturing (Apr)		46.5	46.8
CZECH REPUBLIC	11:00	CNB board meeting (May)	0.05%	0.05%	0.05%
EUROLAND	11:45	ECB rate decision (May)	0.50%	0.50%	0.75%
US	12:30	Productivity prelim (Q1)	0.5%	1.0%	-1.9% (0.5%)
US	12:30	Unit labor costs prelim (Q1)	2.5%	0.7%	4.6% (2.1%)
CANADA	12:30	Trade balance (Mar)	-CAD0.7bn	-CAD0.7bn	-CAD1.0bn
US	12:30	Trade balance (Mar)	-USD45.0bn	-USD42.3bn	-USD43.0bn
Events and meetings: EUROLAND: EU's Barroso to hold speech in Brussels – 06:30 GMT EUROLAND: EU's Rompuy to hold speech in Estoril – 10:30 GMT. CZECH: Czech National Bank to announce rate decision – 11:00 GMT. EUROLAND: ECB to hold Governing Council meeting, interest rate announcement scheduled – 11:45 GMT; news conference by Draghi					
		Friday, 03 May			
INDIA	05:30	RBI meeting (May)	7.25%	7.25%	7.50%
UK	08:30	PMI services (Apr)		52.4	52.4
US	12:30	Average hourly earning (Apr)	0.1%	0.2% (1.9%)	0.0% (1.8%)
US	12:30	Average workweek (Apr)	34.6	34.6	34.6
US	12:30	Payrolls (Apr)	190.0k	148.0k	88.0k
US	12:30	Unemployment rate (Apr)	7.7%	7.6%	7.6%
US	14:00	Factory orders (Mar)	-3.0%	-3.0%	3.0% (2.7%)
US	14:00	ISM non-mfg (Apr)	54.0	54.0	54.4
Events and meetings: INDIA: Reserve Bank of India to announce interest rate decision – 05:30 GMT. CZECH: Czech National Bank to publish minutes of May rate setting meeting – 07:00 GMT. US: Fed's Tarullo to hold speech in Washington – 16:30. GMT US: Fed's Lacker to hold speech in Virginia – 16:45 GMT. CANADA: BoC's Carney to hold speech in Toronto – 17:05 GMT.					
		Monday, 06 May			
AUSTRALIA	01:30	Retail trade (Mar)			1.3% (4.6%)
SPAIN	07:00	Unemployment change (Apr)			-5.0k
SPAIN	07:15	PMI services (Apr)			45.3
ITALY	07:45	PMI services (Apr)			45.5
FRANCE	07:50	PMI services (Apr)			41.3

Country	GMT	Release	DB Expected	Consensus	Previous
		Monday, 06 May (continued)			
GERMANY	07:55	PMI services (Apr)			50.9
EUROLAND	08:00	PMI services (Apr)			46.4
EUROLAND	09:00	Retail sales (Mar)			-0.3% (-1.4%)

Events and meetings: EUROLAND: ECB's Mersch to hold speech in Luxembourg. EUROLAND: ECB's Draghi to hold speech in Rome – 13:00.

		Tuesday, 07 May			
AUSTRALIA	01:30	International trade (Mar)			-AUD0.2bn
AUSTRALIA	04:30	RBA cash rate announcement (May)		3.00%	3.00%
FRANCE	06:45	Industrial production (Mar)			0.7% (-2.5%)
FRANCE	06:45	Trade balance (Mar)			-EUR6.0bn
DENMARK	07:00	Industrial production (Mar)			-4.8%
HUNGARY	07:00	Industrial production (Mar)			(-1.10%)
CZECH REPUBLIC	07:00	Industrial production (Mar)		(-4.5%)	(-5.7%)
GERMANY	10:00	Factory orders (Mar)			2.3% (0.0%)
US	19:00	Consumer credit (Mar)	USD16.0bn	USD16.0bn	USD18.1bn

Events and meetings: EUROLAND: ECB's Mersch, EU's Rehn & Dijsselbloem to hold speech in Brussels. AUSTRALIA: Reserve Bank of Australia to hold board meeting; rate decision to follow at – 04:30 GMT. EUROLAND: ECB's Liikanen to hold speech in Helsinki – 05:45.

		Wednesday, 08 May			
CHINA	-	Trade balance (Apr)			-USD0.9bn
POLAND	-	MPC meeting (May)		3.25%	3.25%
GERMANY	10:00	Industrial production (Mar)			0.5% (-1.8%)
NORWAY	12:00	Norges bank deposit rate (May)			
NEW ZEALAND	22:45	HLFS unemployment rate (Q1)			6.9%

Events and meetings:. EUROLAND: ECB's Asmussen to hold speech in Brussels. POLAND: National Bank of Poland to hold rate decision meeting. NORWAY: Norges bank to announce rate decision – 12:00 GMT. US: Fed's Stein to hold speech in Chicago – 12:30. GMT

		Thursday, 09 May			
AUSTRALIA	01:30	Labour force unemployment rate (Apr)			5.6%
CHINA	01:30	Consumer price index (Apr)			(2.1%)
CHINA	01:30	Producer price index (Apr)			(-1.9%)
SPAIN	07:00	Industrial production (Mar)			(-6.5%)
UK	08:30	Industrial production (Mar)	0.4% (-1.4%)		1.0% (-2.2%)
UK	08:30	Manufacturing production (Mar)	0.6% (-1.7%)		0.8% (-1.4%)
UK	11:00	BoE rate announcement (May)	0.50%	0.50%	0.50%
US	14:00	Wholesale inventories (Mar)	0.4%	0.4%	-0.3% (4.6%)
JAPAN	23:50	BoP trade balance (Mar)			JPY156.30bn

Events and meetings: UK: Bank of England to announce MPC decision – 11:00 GMT. US: Fed's Lacker to hold speech in New York – 12:00. GMT. US: Fed's Plosser to hold speech in Chicago – 17:15. GMT

		Friday, 10 May			
INDIA	05:30	Industrial production (Mar)			(0.6%)
GERMANY	06:00	Trade balance (Mar)			EUR16.8bn
ITALY	08:00	Industrial production (Mar)			-0.8% (-7.6%)
UK	08:30	Trade balance non EU25 (Mar)	-GBP4.0bn		-GBP4.3bn
UK	08:30	Visible trade balance (Mar)	-GBP9.0bn		-GBP9.4bn
CANADA	12:30	Unemployment rate (Apr)			7.2%

Events and meetings: AUSTRALIA: Reserve bank of Australia to release minutes of its May MPC meeting – 01:30 GMT. US: Fed's Evans to hold speech in Chicago – 12:25. GMT. US: Fed's Bernanke to hold speech in Chicago – 12:30. GMT. US: Fed's George to hold speech in Wyoming – 18:00. GMT

Source: Australian Bureau of Statistics; Bank of Canada; Bank of Japan; BEA; BLS; Bundesbank; Bureau of Labor Statistics, U.S Department of Labor; Cabinet Office, Government of Japan; ECB; Eurostat; Indian Central Statistical Organization; INE; INSEE; ISTAT; ISTAT.IT; Ministry of Finance Japan; National Association of Realtors; National Bureau of Statistics; National Statistics Office; OECD - Composite Leading Indicator; People's Bank of China; Reserve Bank of Australia; Reserve Bank of New Zealand; Statistics Canada; Statistics Netherlands; Statistics of New Zealand; U.S. Census Bureau; U.S. Department of Labor, Employment & Training Administration; U.S. Department of the Treasury; U.S. Federal Reserve.

Note: Unless otherwise indicated, numbers without parenthesis are either % month-on-month or % quarter-on-quarter, depending on the frequency of release, while numbers in parenthesis are % year-on-year. * on the release time means indicative release time. * on indicator name means indicative/earliest release date

Source: Deutsche Bank

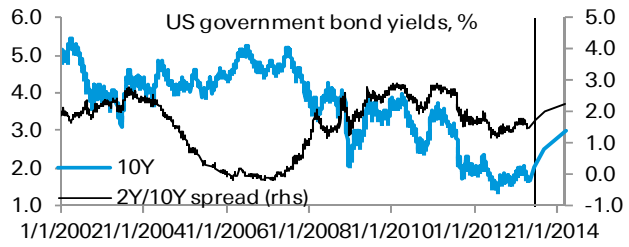
Financial Forecasts

		US	Jpn	Euro	UK	Swe*	Swiss*	Can*	Aus*	NZ*
3M Interest	**Actual**	0.24	0.23	0.21	0.50	1.00	0.00	1.00	3.00	2.50
Rates1	**Jun-13**	0.35	0.30	0.25	0.51	1.00	0.00	1.00	2.75	2.50
DB forecasts	**futures**	(0.27)	(0.23)	(0.18)	(0.50)	---	---	---	---	---
& Futures	**Sep-13**	0.35	0.30	0.25	0.52	1.00	0.00	1.00	2.50	2.50
	futures	(0.29)	(0.23)	(0.19)	(0.48)	---	---	---	---	---
	Mar-14	0.35	0.30	0.30	0.60	1.25	0.00	1.75	2.50	2.75
	futures	(0.32)	(0.24)	(0.25)	(0.47)	---	---	---	---	---
10Y Gov't2	**Actual**	1.67	0.59	1.22	1.69	1.60	0.55	1.70	3.10	3.17
Bond	**Jun-13**	2.00	0.70	1.40	2.25	1.65	0.70	2.25	3.25	3.25
Yields/	**futures**	1.75	0.62	1.27	1.76	---	---	---	---	---
Spreads3	**Sep-13**	2.50	0.80	1.55	2.45	1.75	0.90	2.75	3.75	4.00
DB forecasts	**futures**	1.84	0.66	1.33	1.83	---	---	---	---	---
& Forwards	**Mar-14**	3.00	0.90	1.85	2.90	2.05	1.20	3.50	4.00	4.25
	futures	2.00	0.73	1.46	1.98	---	---	---	---	---

		EUR/ USD	USD/ JPY	EUR/ GBP	GBP/ USD	EUR/ SEK	EUR/ CHF	CAD/ USD	AUD/ USD	NZD/ USD
Exchange	**Actual**	1.32	97.5	0.85	1.55	8.53	1.23	1.01	1.04	0.86
Rates	**3M**	1.26	103.0	0.87	1.45	8.20	1.25	0.98	1.04	0.83
	6M	1.23	106.0	0.86	1.43	8.00	1.25	0.98	1.02	0.82
	12M	1.20	110.0	0.85	1.41	7.80	1.25	1.00	1.00	0.80

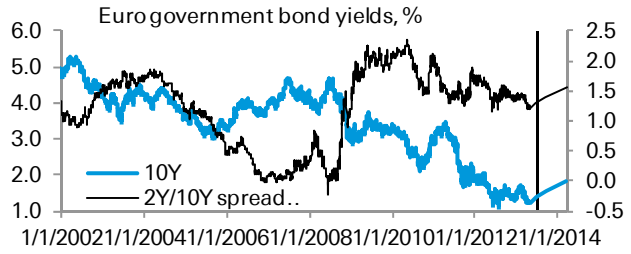
*(1) Future rates calculated from the June, September and March 3M contracts. Forecasts are for the same dates. * indicates policy interest rates.*
(2) Forecasts in this table are produced by the regional fixed income strategists. Forwards estimated from the asset swap curve for 2Y and 10Y yields.
(3)Bond yield spreads are versus Euroland. US 10Y Govt. bond yield forecasts has been taken from US Fixed Income Weekly.
Sources: Bloomberg Finance LP, Deutsche Bank . Revised forecasts in bold type. All current rates taken as at Tuesday at 11:00 GMT.

US 10Y rates



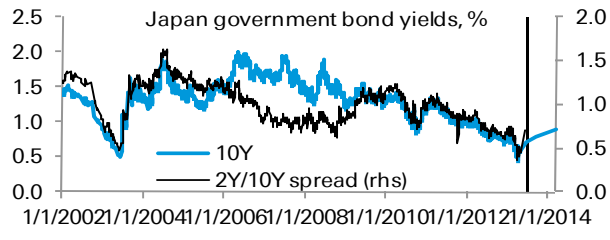
Source: Deutsche Bank , Bloomberg Finance LP

Euroland 10Y rates



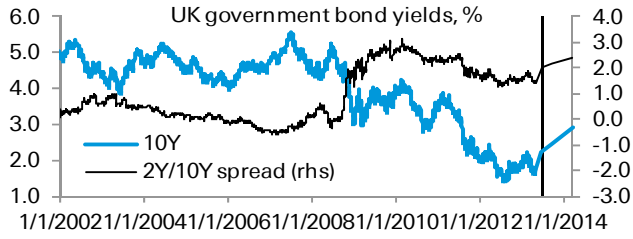
Source: Deutsche Bank , Bloomberg Finance LP

Japan 10Y rates



Source: Deutsche Bank , Bloomberg Finance LP

UK 10Y rates



Source: Deutsche Bank , Bloomberg Finance LP

Appendix 1

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