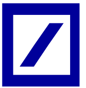

Deutsche Bank

20 October 2010

Global Economic Perspectives

Economics

Housing sector likely drag on US GDP growth in 2011

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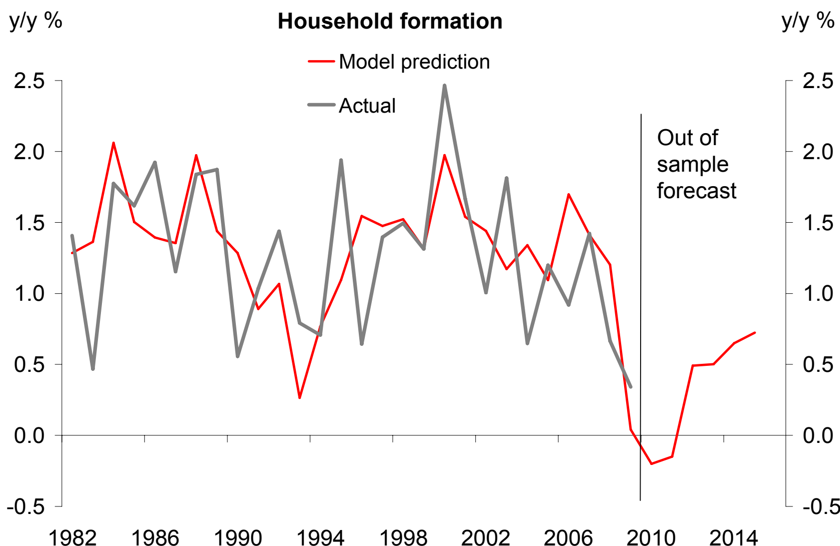
Notes on Boston Fed Conference

- **We have also included this week, Peter Hooper's summary notes on the Boston Fed conference and his discussant comments on the Boston Fed staff's paper on inflation prospects that was presented at the conference.**

US Household formations could remain depressed for another year



Source: DB Global Markets Research

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Key Economic Forecasts

	Real GDP % growth[b]			Consumer Prices % growth[c]			Current Account % of GDP[d]			Fiscal Balance % of GDP		
	2009	2010F	2011F	2009	2010F	2011F	2009	2010F	2011F	2009	2010F	2011F
US	-2.6	2.8	3.1	-0.3	1.6	1.7	-2.7	-3.4	-3.6	-10.2	-8.6	-6.3
Japan	-5.2	2.7	0.1	-1.4	-0.8	-0.7	2.8	3.4	4.0	-5.6	-6.4	-7.4
Euroland	-4.1	1.5	1.0	0.3	1.6	1.7	-0.6	-0.4	0.0	-6.3	-6.0	-4.7
Germany	-4.7	3.4	1.7	0.2	1.1	1.5	4.9	5.4	5.0	-3.1	-3.9	-3.0
France	-2.5	1.5	1.0	0.1	1.7	1.5	-2.0	-1.7	-2.0	-7.5	-7.6	-6.2
Italy	-5.1	1.1	0.9	0.8	1.6	1.9	-3.2	-3.6	-3.2	-5.3	-4.9	-3.3
Spain	-3.7	-0.5	0.0	-0.2	1.6	1.4	-5.5	-5.0	-4.5	-11.2	-9.0	-7.1
UK	-4.9	1.7	2.0	2.2	3.1	2.0	-1.1	-1.4	-0.7	-11.1	-9.8	-7.1
Sweden	-5.1	4.2	2.7	-0.3	1.2	1.8	7.5	6.0	6.5	-5.7	-3.5	-2.5
Denmark	-4.7	2.0	2.0	1.3	2.1	1.8	4.1	3.0	3.0	-6.6	-6.0	-5.0
Norway	-1.3	0.9	2.5	2.2	2.5	1.5	13.1	14.0	15.0	9.9	7.5	8.5
Poland	1.7	3.4	3.1	3.5	2.5	2.5	-1.6	-3.2	-4.3	-7.1	-6.5	-5.7
Hungary	-6.3	0.6	3.0	4.5	5.0	3.1	-0.5	1.5	1.2	-4.4	-5.0	-3.6
Czech Republic	-4.1	2.2	2.4	1.1	1.4	2.1	-1.1	-2.1	-2.6	-5.9	-5.5	-4.7
Australia	1.2	3.1	3.8	1.9	3.2	3.3	-4.4	-2.6	-2.4	-2.1	-4.5	-3.5
Canada	-2.5	3.1	3.0	0.3	1.8	2.2	-2.8	-3.0	-2.6	-3.5	-3.1	-1.7
Asia (ex Japan)	5.7	8.8	7.3	0.9	4.5	4.0	5.0	4.0	2.9	-3.4	-2.1	-1.7
India	5.7	8.9	8.1	2.2	9.1	6.4	-2.6	-2.7	-2.6	-6.7	-5.7	-5.6
China	9.1	9.6	8.6	-0.7	3.0	2.5	6.0	3.9	2.9	-2.9	-2.5	-2.0
Latin America	-2.7	5.6	4.0	6.4	8.6	8.3	-0.4	-0.8	-1.3	-3.0	-2.3	-1.9
Brazil	-0.2	7.6	4.5	4.3	5.0	5.0	-1.5	-2.5	-2.8	-3.3	-2.3	-2.0
EMEA	-5.4	4.1	4.2	8.0	7.6	6.9	0.8	0.6	-0.4	-5.7	-4.6	-2.5
Russia	-7.9	4.0	4.5	8.8	8.1	7.3	4.8	5.0	2.9	-6.1	-4.0	-0.5
G7	-3.5	2.6	2.1	-0.1	1.3	1.4						
World	-0.9	4.5	3.8	1.2	3.1	2.9						

(a) Euroland forecasts as at the last forecast round on 04/10/10. 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 09	Q2 09	Q3 09	Q4 09	*2009*	Q1 10	Q2 10	Q3 10F	Q4 10F	*2010F*	*2011F*
US	-4.9	-0.7	1.6	5.0	***-2.6***	3.7	1.7	2.0	3.3	***2.8***	***3.1***
Japan	-16.4	9.7	-0.4	3.5	***-5.2***	5.0	1.5	2.0	-3.2	***2.7***	***0.1***
Euroland	-9.6	-0.6	1.7	0.8	***-4.1***	1.4	3.9	1.0	0.8	***1.5***	***1.0***
Germany	-13.1	1.8	3.0	1.2	***-4.7***	1.9	9.0	2.9	1.4	***3.4***	***1.7***
France	-5.8	0.6	1.1	2.4	***-2.5***	0.7	2.8	1.1	0.7	***1.5***	***1.0***
Italy	-11.0	-1.2	1.8	-0.3	***-5.1***	1.7	1.8	1.3	0.7	***1.1***	***0.9***
UK	-9.0	-3.1	-1.2	1.4	***-4.9***	1.8	4.7	2.3	2.2	***1.7***	***2.0***
Canada	-7.0	-2.8	0.9	4.9	***-2.5***	5.8	2.0	1.8	3.1	***3.1***	***3.0***
G7	-8.4	1.0	1.2	3.5	***-3.5***	3.3	2.7	2.0	1.6	***2.6***	***2.1***

Sources: National authorities, DB Global Markets Research

Housing sector likely drag on US GDP growth in 2011

- **Our update of the outlook for the US housing sector suggests that residential construction is likely to remain depressed for another year. The overhang of vacant homes remains elevated despite the historically low level at which residential construction has been running relative to GDP.**
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Introduction

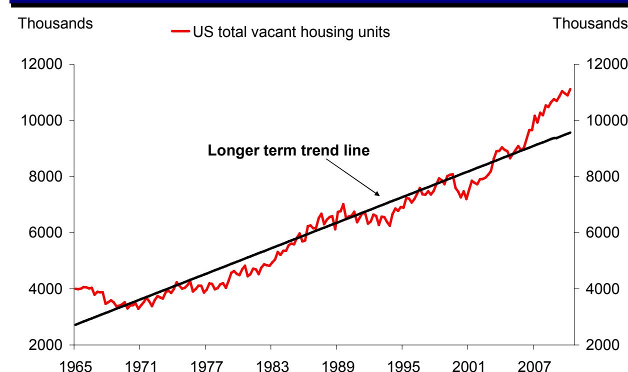
The outlook for the US housing sector will be a key factor determining when the economy will begin to move significantly into recovery mode. Home building normally accounts for a substantial part of the bounce in discretionary spending that propels the economy back to full employment during cyclical recoveries. This time around, however, residential investment has remained subdued, partly because of a large overhang of vacant existing homes, partly because of ongoing weakness in the economy (and labor market) more broadly, and partly because mortgage finance remains partially impaired despite record low mortgage interest rates. In addition, the outlook for home prices, a crucial variable in the link between the housing market and the economy via household wealth, consumer spending, and bank balance sheets, remains downbeat in the face of the overhang of vacant homes and especially substantial ongoing home foreclosure activity.

In the following we review the outlook for the housing sector, including both residential investment and home prices. We look at the demand and supply situation in the housing market and take a special look at prospects for household formations, a critical demand factor underlying this outlook. We find that household formations could remain depressed for another year or so before beginning to recover and provide more support for the housing market. With a sizable excess stock of vacant homes still to be worked off, and with foreclosures stalled for the time being and likely to recede only slowly from record levels, we see both homebuilding and home prices remaining depressed for at least the next year, adding little or nothing to GDP growth.

Housing supply

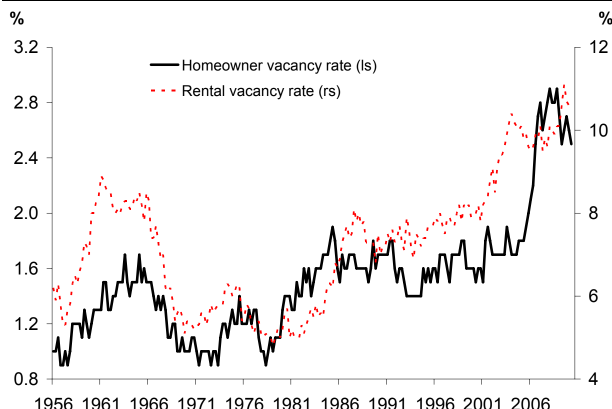
The stock of vacant homes is an important gauge of how far along we have come in working off the excess inventory in the housing market. The stock of vacant new and existing homes, including those for sale or rent or held off the market (excluding seasonal and second homes) has begun to level off but is still running at more than one and a half million units above the trend (Chart 1). The homeowner vacancy rate—at about 2.5 percent of owner occupied homes—and the rental vacancy rate—at about 11 percent of rental properties—are both running high (Chart 2). Turning to housing production, home starts and completions are now running at about 600k per year, nearly 1 million per year below the longer term trend in household formations plus demolitions (Chart 3). This suggests that we should be liquidating the excess inventory in the housing market at a rapid pace. The stock of vacant units has not yet shown signs of trending down, however, because of developments on the demand side of the market.

Chart 1. Excess supply of homes still running high



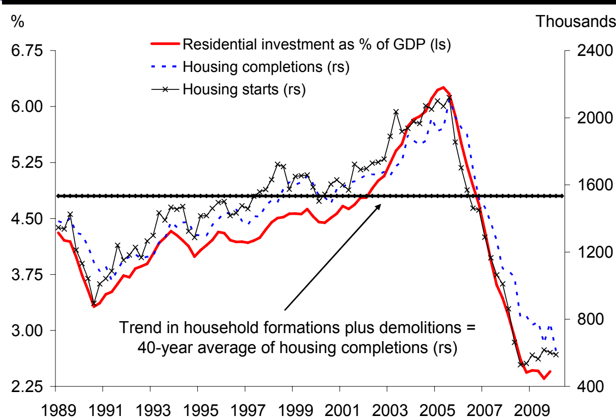
Source: Census, DB Global Markets Research

Chart 2. Vacancies running high for both owner occupied and rental units



Source: Census, DB Global Markets Research

Chart 3. Home production running way below trend

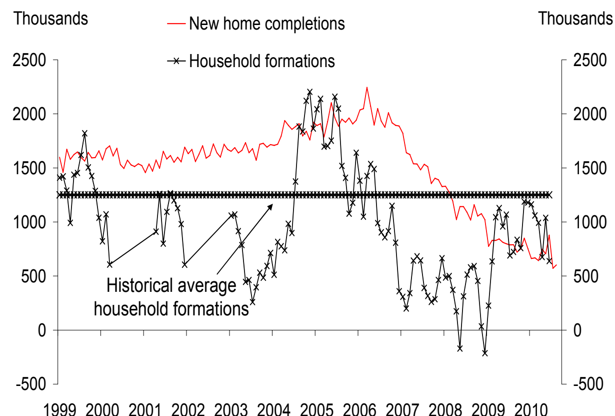


Source: Census, BEA, DB Global Markets Research

Housing demand

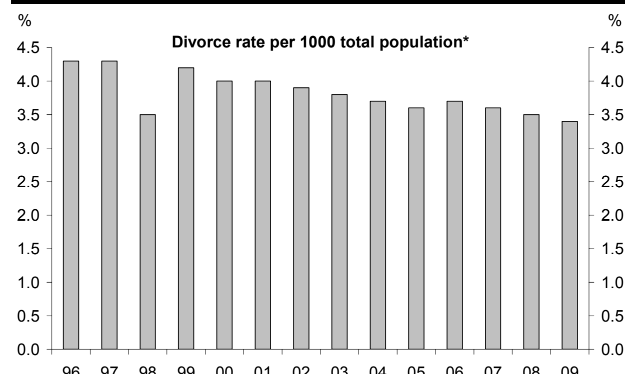
The most important factor on the demand side of the market is demographic trends. In recent years, household formations have been running well below normal and near the depressed level of completions, which is the main reason why total vacancies are not yet falling significantly. The latest year/year change in the number of households was about in line with the number of new single- and multi-family homes completed during that period (Chart 4). Both household formations and completions ran at about 750k in the year to Q2 and 600k in the year to June. Household formations have no doubt been depressed in recent years for a variety of reasons. A number of factors may have discouraged potential new homeowners (and household formers) from taking the plunge: income and job uncertainty in the wake of a deep recession, as well as much greater difficulty in qualifying for mortgage finance. The labor market has been very depressed, causing potential new job entrants and household formers to stay at home with parents or in school for longer. With the housing market so depressed, selling the family home has become much more difficult, forcing households that might otherwise be splitting to stay together. The divorce rate has moved lower in recent years (Chart 5). Finally, population growth has declined by 0.2 million over the past couple years. No doubt, the depressed job market (perhaps especially in the construction sector) may have reduced both legal and illegal immigration.

Chart 4. Household formations running well below trend



Source: Census, DB Global Markets Research

Chart 5. Divorce rate per 1000 total population



Source: CDC, DB Global Markets Research

Modelling household formations

To try to quantify some of these influences and get a handle on where household formations may be headed in the period ahead, we have built a simple empirical model of household formations. In constructing the model, we tested current and lagged values (up to three-year lags) of a number of variables, including the unemployment rate, after-tax income, current home buying conditions, housing affordability, mortgage rates, banks' willingness to lend, consumer sentiment, rent of primary residence, immigration, and other demographic variables. The model was estimated with annual data spanning the past thirty years. The variables that proved to have significant

explanatory power empirically included the unemployment rate, after-tax income, mortgage rates, and banks' willingness to lend. The other variables we tested either had very low statistical significance or failed to have the expected sign. The estimated model is shown in Table 1. Household formations are stimulated by increases in income in the current quarter and bank willingness to lend with a two-year lag; it is depressed by increases in the unemployment rate and mortgage rates with two and three quarter lags, respectively.

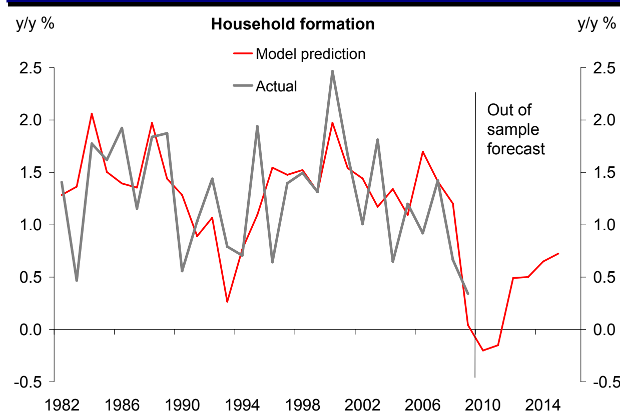
Table 1. Model of household formation growth

	Coefficient	P-values
Constant	3.05	0.04
Nominal disposable personal income	0.19	0.01
Mortgage interest payments as % of income (-3)	-0.40	0.09
Unemployment rate (-2)	-0.15	0.14
Bank willingness to lend (-2)	0.02	0.08
R-squared	0.50	
Durbin-Watson stat	2.35	
Sample	1980 to 2009	

Source: DB Global Markets Research

Chart 6 shows actual household formation and the model's prediction, and Tables 2 and 3 shows the individual contribution of the factors to the change in household formation as predicted by the model for 2008-2009 and over the next 3 years.

Chart 6. Household formation predicted to remain weak in the near term



Source: Census, DB Global Markets Research

Table 2. Contribution to change in Household formation growth in 2008-09 (predicted by model)

Nominal personal disposable income	-0.8
Mortgage interest payment as % of income	-0.2
Unemployment rate	0.0
Bank willingness to lend	-0.1
Total	-1.2

Source: DB Global Markets Research

Table 3. Contribution to change in Household formation growth over the next 3 years (in %) (predicted by model)

	2009-2010	2010-2011	2011-2012
Nominal personal disposable income	0.5	0.1	0.1
Mortgage interest payment as % of income	-0.1	0.1	0.1
Unemployment rate	-0.2	-0.5	0.0
Bank willingness to lend	-0.5	0.4	0.5
Total	-0.2	0.1	0.6

Source: DB Global Markets Research

Because of the model's failure to capture some variables we would have thought important (demographic, confidence, broader measures of housing affordability, and home buying conditions), we take its predictions with a grain of salt. While it appears to capture most of the larger swings in household formations over the past several decades, it substantially under-predicts the number for 2009. Nevertheless, we take its prediction as some indication that household formation will remain depressed through 2011 in lagged reaction to the recent severe recession. Household formation then bounces back in 2012 under the assumption that the labor market begins to improve, income has been rising at modestly above trend rates, and especially with banks becoming significantly more willing to lend (something that has already begun to happen). Overall, these predictions are at least suggestive of significant downside risk to housing activity over the year ahead, and a more positive outlook in 2012.

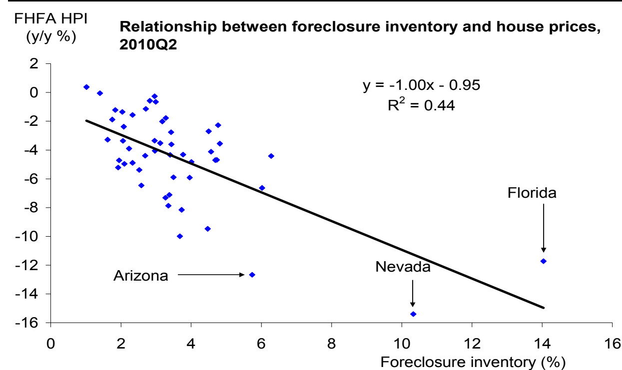
Foreclosures

Home foreclosures are projected to rise to more than 3 million this year and remain high for at least the next year. These foreclosures will be adding to the net supply (or reducing the net demand for homes to some extent). Most families that are foreclosed on move out of their owner-occupied units into rental units, thereby not changing the overall vacancy rate for housing units (rental plus owner-occupied). However, it is likely that some fraction of families that are foreclosed on have been dropping out of households by moving in with family or friends.

The recent hold that has been put on foreclosures by major US banks will likely slow the process and result in a temporary decline in the flow of foreclosed homes onto the market for existing home sales. However, this is likely to be only a temporary reprieve, and the recent disruption could also constrain the flow of new mortgage loans, which would tend to dampen demand for homes and push prices lower.

Foreclosures have put significant downward pressure on prices for a variety of reasons, and this pressure is clearly reflected in the strong negative correlation between the incidence of foreclosures and movement in home prices across states (Chart 7). With nearly 6 million mortgage loans more than 60 days delinquent, the foreclosure rate is likely to remain high and continue to put downward pressure on home prices for some time to come (Table 4).

Chart 7. Foreclosures negatively correlated with home prices



Source: Haver, DB Global Markets Research

Table 4. Number of mortgage loans outstanding and delinquency rates

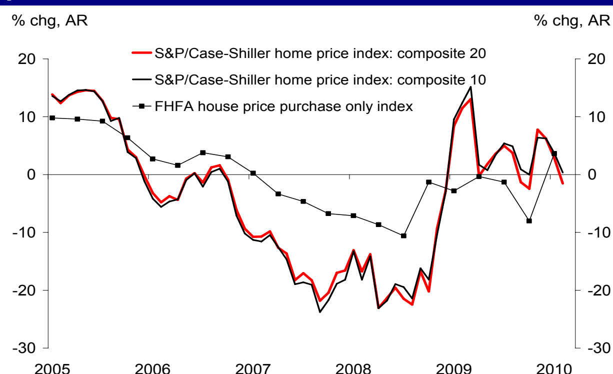
	Current data		
	Number of loans (mlns)	60+ day delinquency rate	Loans delinquent 60+ days (mlns)
Total	49.6	11.5%	5.7
Subprime	4.3	42.6%	1.8
Prime	45.3	8.5%	3.9
Agency	40.1	6.8%	2.7
Alt-A	2.6	26.7%	0.7
Jumbo	2.2	9.9%	0.2
Option ARM	0.6	43.6%	0.2

Source: Loan Performance, DB Global Markets Research

Home prices

Despite the high rate of foreclosures, home prices have shown signs of stabilizing or even firming **some** over the past year or so (Chart 8). This stabilization no doubt owes significantly to fiscal measures introduced to prop up the housing market for a time. With the homebuyer tax credit now expired, the risk is that home prices will recede again over the year ahead in response to the still high stock of vacant homes and especially the elevated rate of foreclosures.

Chart 8. Home prices have firmed some over the past year

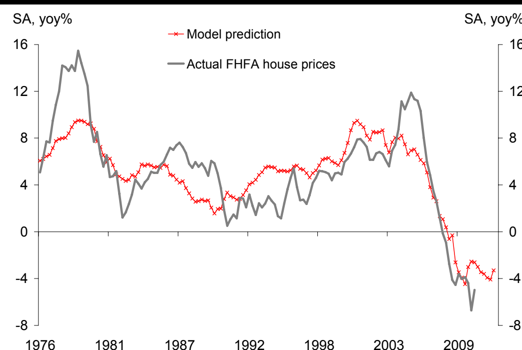


Source: S&P, FHFA & DB Global Markets Research

Our home price model

To gauge the possible path of home prices over the years ahead, we have updated our model of home prices. In this model house prices are a function of mortgage rates, income growth, inflation, the vacancy rate and the number of subprime borrowers.[1] Inserting our forecasts for these variables into the model yields a prediction that home prices will decline moderately (around 4-5%) from current levels over the next year (Chart 9).

Chart 9. DB house price model



Source: Census, DB Global Markets Research

[1] See our DB Global Macro Issues: "How far could US Home Prices Fall?" October 2007.

Conclusion

Our update of the outlook for the US housing sector suggests that residential construction is likely to remain depressed for another year. The overhang of vacant homes remains elevated despite the historically low level at which residential construction has been running relative to GDP.

Adjustment of the housing overhang has been slowed by a depressed rate of new household formations. Our analysis suggests that household formations will remain subdued for another year or so in lagged response to the economic downturn and tightening of credit conditions. Prospects for 2012 look better however.

We also see home prices being depressed further over the year ahead by a high rate of foreclosures. The recent disruption to the foreclosure process could temporarily ease that pressure by slowing the rate of foreclosure sales, but it could also increase it by slowing the production of new mortgages (and therefore the demand for homes). Another 5% decline in home prices seems likely and would further depress household wealth and sentiment, retarding the expansion of consumer spending.

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Notes on Boston Fed Conference and Comments on Fuhrer, Olivei and Tootle (2010)

Summary Notes on Boston Fed Conference

I recently attended the Boston Fed's conference on "Revisiting Monetary Policy in a Low Inflation Environment." The conference covered substantial ground on fairly wide ranging topics. The following is a summary of my notes focused narrowly on what I learned regarding near-term prospects for monetary policy and how Fed folks see economic prospects during the various presentations made at the conference. (Further below, I have attached my discussant comments on the interesting paper on inflation prospects prepared for the conference by the Boston Fed research staff.)

1. The reopening of a large scale asset purchase program ("LSAP2") at the November FOMC meeting now seems a sure thing. My hearing/reading of the speeches by Bernanke, Rosengren, Evans suggests it will be flexible/no "shock and awe."
2. LSAP is not expected to have a large positive effect on the economy. Much of the expected effect on financial markets (rates, stock market, dollar, inflation expectations) have probably already been felt.
3. Potentially negative implications for the dollar will by no means inhibit the Fed from implementing LSAP2. Foreign authorities are seen as having the option to let their currencies rise or adopt expansive policies.
4. The Fed is not concerned about the recent backup in nominal yields, as it reflects rising inflation expectations (a good thing). Real yields are moving lower. Backup in nominal yields is due to rising inflation expectations and will not induce them to act more aggressively (less flexibly).
5. The November statement may find a way to further strengthen the low for long message over and above or at least in conjunction with LSAP2 announcement.
6. While the risk of deflation may still be relatively small, it is nontrivial and rising in the minds of some at the Fed. The paper by Boston Fed research staff sees inflation falling 1 pct over the year ahead and sees a Japan style deflation in the US as a quite plausible scenario. This is based on fairly standard Phillips curve analysis. (See comments that follow these notes.)
7. The Fed is moving closer to inflation targeting centered on an objective of about 2 pct., but adoption of a formal target seems unlikely given the problem of how to handle equally important employment mandate.
8. Price level targeting has gained some support. But my sense is that this is an idea that will take a good more time to be developed (and to develop sufficient support on the committee). One of the key arguments in its favor is that it adds credibility to the low for long promise. It would allow the Fed to be patient on exiting in the face of a rise in inflation.
9. If the economy takes a significant turn for the worse and fiscal policy is still on the sidelines, Fed could invoke 13.3 and set up facilities to finance purchases of broader set of assets (like equities). But this course of action is probably less likely (and less effective) than fiscal expansion. Implementing a new TALF-like program would require agreement from Treasury and new legislation from Congress to put up the funds to capitalize it. Congressional support is difficult to envision absent a real economic and financial emergency, and a tax cut would be more likely.

Comments on Fuhrer, Olivei, and Tootle, "Inflation Dynamics when Inflation is Near Zero"

The following are my discussant comments on the paper by Fuhrer, Olivei, and Tootle (FOT) prepared for the October 2010 Boston Fed conference on "Revisiting Monetary Policy in a Low Inflation Environment."[2] The conference was a revisit of a conference the Boston Fed held on the same topic in October 1999 in response to growing concerns about the deflation that was by then clearly getting under way in Japan. While much of the 2010 conference program paralleled much of that in 1999, the FOT paper breaks new ground. It's focus on the near-term prospects for US inflation and immediate risks of the US actually following Japan's lead into deflation represents an innovation: this issue has become much more immediately relevant and pressing for the US economic outlook and US monetary policy today than it was in 1999.

The paper Fuhrer, Olivei, and Tootle have written is excellent; indeed, it is three papers for the price of one, no doubt related to the fact that there are three authors. The paper has a unifying title, "Inflation dynamics in a low inflation environment," but the real central focus is on the question, "Will inflation decline further or rise over the year ahead?" And on that issue, the paper clearly has a unified conclusion--all three parts of the paper come to the same finding that inflation can be expected to fall significantly further, or at least will not be inhibited from doing so, over the year ahead. In fact, it lays out a plausible scenario for the US following much the same pattern as Japan, which has been mired in deflation for over a decade.

[2] The Fuhrer, Olivei, and Tootle paper can be found at the Boston Fed's conference website: www.bos.frb.org/revisitingmp

In Part I of the paper the authors review conventional models of inflation. So called hybrid models, or those that put significant weight on backward-looking expectations are found to do a better job of fitting/explaining inflation during US post-war recovery cycles than those that put primary weight on forward-looking expectations. These models also tend to predict declining inflation well into cyclical recoveries as has been the historical norm. Not surprisingly, these models point to a continued gradual decline in US inflation over the next several years.

As the authors note, the hybrid inflation models have exhibited both instability over time and nonlinearities that may call into question their applicability to the current period of unusually low inflation. That is, when unemployment is high, a given amount of or change in unemployment may have less effect on prices than when it is at more normal levels. With unemployment unusually high currently, the hybrid model may be overstating the amount of disinflation to come. There is at least a superficial contradiction here with Stock and Watson's finding at this conference two years ago that output or unemployment gaps do not affect inflation significantly until they become large.[3]

In any event, to address this problem, the authors focus on a model estimated over periods of low inflation, including 1954 to 1963 and 2003 to present. They find that the model's parameters estimated over each of these two periods are reasonably similar. They also find that the model predicts that core inflation will decline by another 1% over the year ahead, assuming unemployment remains near current levels and assuming the underlying long-term trend in inflation or long-term inflation expectations remain unchanged. As the authors note, the projected decline in inflation is slightly greater than the decline predicted by Stock and Watson in their more recent paper at Jackson Hole this year based on a model with a fairly different specification.[4]

I should emphasize here that the model Fuhrer, Olivei, and Tootell use for this forecast includes long-term inflation expectations with a coefficient constrained to unity. The addition of long-term inflation expectations is found to be crucial in helping to identify a stable relationship between inflation and unemployment during periods of low inflation or high unemployment. And in the forecast presented, the assumption that long-term inflation expectations will remain unchanged limits the projected decline in inflation in the face of a large output gap. As the authors note, if long-term inflation expectations begin to slip, the projected decline in inflation would be even greater, presumably by the amount of the decline in expectations.

To set up my discussion of the next two parts of the paper, a recent IMF survey paper by Andre Meier has documented an empirical regularity of sorts across countries in recent decades that high levels of unemployment beget significant disinflation, but that disinflation tends to taper off, and significantly so, as inflation nears zero. Rarely does one see significant deflation emerge. The two reasons most often cited for this behavior are (1) well anchored longer-term inflation expectations, and (2) downward nominal wage rigidities.

The second and third parts of the Fuhrer, Olivei, and Tootell paper challenge the view that disinflation will necessarily taper off at very low inflation rates. It does so by presenting evidence that the role of long-term inflation expectations may not be all that it is chalked up to be and evidence that nominal wage or compensation inflation in the US at least, is not constrained from moving below zero. The first finding is an important challenge to the received wisdom that stable and relatively elevated longer-term inflation expectations will at least limit further declines in inflation and could over time exert significant upward pressure on inflation.

Part II of the paper looks at Japan's experience with deflation and notes that reasonably well anchored positive long-term inflation expectations have not prevented a prolonged bout of deflation (12 years and counting), albeit a rate of deflation that has been relatively mild and stable.

The authors estimate a standard expectations-augmented Phillips curve model of Japanese inflation, in which they test survey measures of both long-term and short term inflation expectations. They find that long-term expectations do consistently poorly and short-term expectations consistently well in explaining movements in Japanese inflation. They then estimate parallel equations for the US and find much the same thing: that the SPF survey of one-year ahead inflation expectations does much better than the 10-year survey in explaining movements in US inflation. In fact, the long-term expectations survey is found generally to be statistically insignificant in explaining current inflation. The one-year expectations have considerably more variance than the long-term expectations and can be successfully modeled as a function of lagged inflation and the output gap (Chart 1). Forecasting simulations with this model under plausible assumptions show that US inflation could follow a pattern similar to that traced by Japanese inflation over the past decade, i.e., a prolonged period of moderate deflation.

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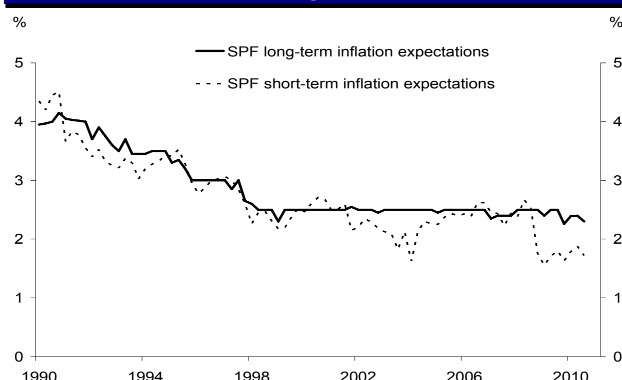
[3] See Stock, J.H and Watson, W.W (2008), *Forecasting Inflation*, in Boston Fed Conference Series 53 "Understanding Inflation and the Implications for Monetary Policy: A Phillips Curve Retrospect", Massachusetts, June 9-12.

[4] See Stock, J.H and Watson, W.W (2010), *Modeling Inflation after the Crisis*, in Federal Reserve Bank of Kansas City Symposium, "Macroeconomic Policy: Post-crisis and Risks Ahead", Jackson Hole, Wyoming, August 26-28.

Chart 1. Short run and long run inflation expectation



Source: FRB, DB Global Markets Research

This is a troubling result for a number of reasons. Not only does it appear to disagree with a finding in the first part of the paper, but more importantly, it poses a threat to one's faith in a key argument for further action by the Fed at this juncture—the importance of doing everything possible to more firmly anchor long-term inflation expectations. Indeed, I was troubled enough to feel the urge to replicate the results reported in the paper and to do some additional testing.

Replicating the results reported in the paper was no problem. Finding a way out of them was more challenging. First, to test for robustness, I substituted the Michigan survey of short term and long term inflation expectations for the SPF measures and found essentially the same results, although the Michigan data did not do as well as the SPF data in explaining inflation movements. I also tried using the core PCE deflator in place of the core CPI, and estimating over different (earlier) sample periods, but neither of these changes significantly affected the results. Second, I wondered about direction of causation between core inflation and one-year expectations. Granger causality tests showed that the one-year expectations do Granger cause current inflation. Third, I wondered if long-term expectations might still have a role in affecting inflation via an influence on short-term expectations, and here I finally came up with something solid to grasp hold of.

When long-term expectations are inserted as an explanatory variable into the equation for short-term inflation expectations reported in the paper, they prove to be a highly significant contributing factor (Table 1). In fact, they become the dominant contributor, significantly reducing the coefficients on current and lagged actual inflation as well as the constant term; they also result in a somewhat higher coefficient on the output gap. Moreover, the addition of the long term expectations variable significantly reduces the standard error of the short-term expectations regression, although I suspect that much of the gain comes before 2000, after which the long-term expectations have remained relatively constant (see Chart 1 above). In any event, it would appear that long-term inflation expectations do still have an important role to play in affecting inflation, but in this model it is via their influence on short-term inflation expectations.

Table 1. One-year expectation equation model

$$\pi_t^{1y} = \sum_{i=0}^{4} d_i \pi_{t-i} + \sum_{i=0}^{2} e_i \tilde{y}_{t-i} + e_0$$

Variable	Coefficient	S.E.	p- value
$\sum d_i$	0.66	0.032	0.00
$\sum e_i$	0.037	0.032	0.00
e_0	0.95	0.087	0.00
R-square		0.86	
SE of Regression		0.26	

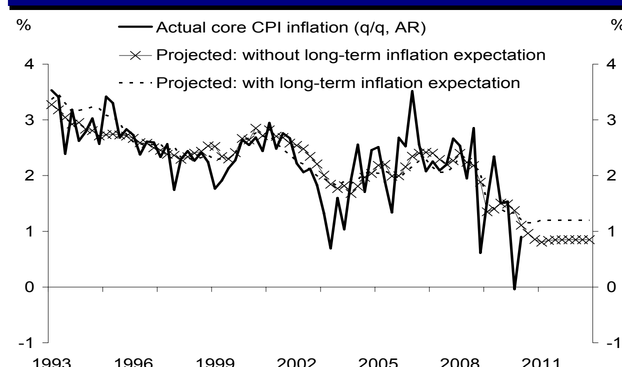
$$\pi_t^{1y} = \sum_{i=0}^{4} d_i \pi_{t-i} + \sum_{i=0}^{2} e_i \tilde{y}_{t-i} + f_i \pi_t^{LR} + e_0$$

Variable	Coefficient	S.E.	p- value
$\sum d_i$	0.19	0.07	0.01
$\sum e_i$	0.14	0.02	0.00
f_i	0.86	0.10	0.00
e_0	-0.24	0.15	0.00
R-square		0.92	
SE of Regression		0.18	

Source: Fuhrer et al (2010, Boston Fed Conference), DB Global Markets Research

To see how much difference this change makes to the inflation forecast, I ran a simple partial equilibrium projection with the inflation and short-term expectations equations, assuming the output gap, marginal cost inflation and long-term inflation expectations remain unchanged. Under these conditions, inflation is predicted to remain little changed over the year ahead, but the equations with long-term expectations have it about 0.3% higher than those without (Chart 2). Long-term expectations appear to have the expected effect.

Chart 2. Actual, fitted and projected core CPI inflation under two scenarios



Source: BLS, DB Global Markets Research

I did not have the wherewithal to run a full or general-equilibrium model simulation as the authors did. One

would need to think about how to make long-term inflation expectations endogenous, presumably by tying it to the monetary policy rule. In that vein, I found myself wondering whether the policy rule in the paper—and the connection of expectations to it, might be enriched by the inclusion of a shift term for quantitative easing or LSAPs. Certainly widespread expectations of LSAP2 have helped to bolster market measures of inflation expectations of late.

A final thought on expectations. It may well be that the direct pull of longer-term expectations on inflation is weaker than we thought. But that does not mean it is absent. Long-term expectations of around 1% in Japan may have helped to keep actual inflation from dipping below -1%. Likewise, long-term expectations in the vicinity of 2 to 2.5% in the US may help keep inflation from dropping below zero.

Part III of the paper considers evidence on the existence of downward nominal wage rigidity at low inflation. There is a substantial empirical literature on this topic that finds significant existence of downward rigidity. Such rigidity is found to be stronger when unemployment is low, when unions are powerful, or when employment protection laws are strong. Not surprisingly, much of the evidence is derived from European experience, though there is some for the US as well. As the authors note, evidence in the US case is for the most part centered on data that focuses on surveys of individual workers that do exhibit resistance to wage declines.

The paper notes fairly convincingly, that downward rigidity for individuals does not prevent firms from reducing labor costs via job turnover. Indeed, evidence from one of the two available employer based surveys does show significant downward mobility of wage bills at the firm level. But the strength of this conclusion must be tempered by the findings of another paper (by Lebow, Saks, and Wilson) that is cited by the authors, which finds significant evidence of downward wage rigidity using the other available firm level survey, albeit one that is based on a relatively small sample of firms.[5]

To conclude, this paper is an important companion to the recent Stock-Watson prediction that inflation is likely to decline noticeably over the year ahead. But it goes a step further than I would have in suggesting that stable positive long-term inflation expectations are unimportant in retarding that disinflation. Indeed, the paper appears to have two views on this point itself. There may well be something to the notion that short-term expectations have a stronger direct effect on inflation than long-term expectations, but well anchored long-term expectations would still appear to have a strong influence, at least through their effect on short-term expectations.

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[5] See Lebow, D E, Saks, R E and Wilson, B A (2003), *Downward Nominal Wage Rigidity: Evidence from the Employment Cost Index*, published in "The B.E Journal of Macroeconomics"

Central Bank Watch

US

The Fed has made it clear in various public statements that it will be reopening its large scale asset purchase program at the November meeting. Details are yet to be worked/spelled out, and we expect this will be done at the November meeting. We expect a program to be announced that will be flexible, with the objective of moving/holding longer-term rates lower. The Fed is unlikely to announce up front a large overall number that it will commit to over time (a la LSAP1), nor do we expect it will announce explicit targets or caps for rates. Some guidance will likely be given about the expected initial flow: e.g., something on the order of $300 bn over the next two intermeeting periods ($500 bn over the next two to four intermeeting periods is a reasonable guess as well). But such an expected flow would also likely be described as adjustable should circumstances change from those currently envisioned by the Committee. We also expect that some indication will be given that on the Fed's current forecast, additional purchases could be anticipated beyond the next three months. We expect the Committee will be prepared to expand the Fed's balance sheet by at least another one trillion dollars in implementing this program, depending on how economic and financial developments unfold. Finally, the November statement may well try to find a way to reinforce the Fed's expectation that policy rates will be held near zero for an extended period--until the Fed sees good prospects for employment to return to full employment levels and inflation to return to its mandated level (which it may choose to define more specifically to be at or a bit below 2 percent). The purchase program should focus on Treasuries with maturities up to 10 years

	Current	Dec10	Mar11	Sep11
Fed funds rate	0 - 0.25	0 - 0.25	0 - 0.25	0.75

Japan

BoJ has cut its overnight rate to “virtually zero” and the creation of a fund to buy JGBs and other assets. The Bank “will maintain the virtually zero interest rate policy until it judges that price stability is in sight.” The BoJ’s decision to buy assets was driven by the desire to “extensively influence market interest rates and risk premiums.” In terms of the assets to be purchased, “the Bank will examine long-term government bonds, treasury discount bills, commercial paper (CP), asset-backed CP (ABCP), corporate bonds, exchange-trade funds, and Japan real estate investment trusts (J-REITs)”. In terms of size, “the Bank will examine the size of the program centering on about 35 trillion yen, which is the sum of assets to be newly purchased – about 5 trillion yen – and the size of the fixed rate funds-supplying operation against pooled collateral – about 30 trillion yen”, i.e. the new funds available total 5 trillion.

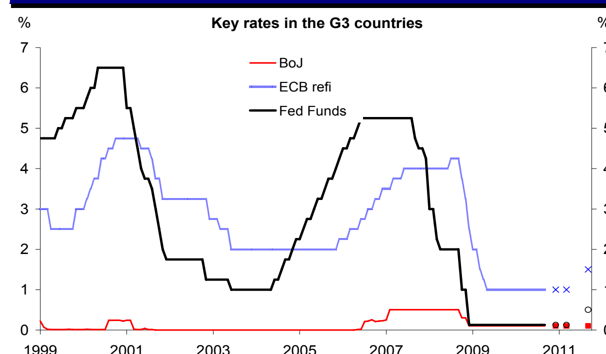
	Current	Dec10	Mar11	Sep11
ON rate	0 - 0.10	0.10	0.10	0.10

Euroland

At the October ECB meeting it was a case of 'the words may change but the message remains the same'. Some of the ECB's rhetoric on growth was more positive, but inflation is seen “moderating” in 2011. Trichet's message on the euro currency was not the strongest form of ECB verbal intervention, but the rhetoric was nevertheless tough. The decline in ECB liquidity was viewed as a positive by Trichet – “proof of progressive normalisation”, voluntarily driven by banks. Decisions on what to do next the non-standard policies will be taken closer to their expiry (full allotment on the LTRO ends in December and on the MRO and special 1-month tenders in January). Neither a further easing nor an imminent rate hike seems in prospect - we see the first hike in Q3 2011.

	Current	Dec10	Mar11	Sep11
Refi rate	1.00	1.00	1.00	1.25

Key rates in the G3 countries



Source: DB Global Markets Research

UK

We have recently changed our view and see the BoE waiting for longer before beginning to raise rates. Still, we expect the MPC to make the first move ahead of the ECB and the Fed, both of which we expect to begin the process of normalisation in Q3 next year. As such, we see the first move from the Bank coming in Q2 2011. The risks remain weighted towards a delay relative to our view. Market and banking sector concerns along with the negative impact of fiscal tightening on economic growth are the main risks for further delays in hiking rates (or even easing policy further); sticky inflation is the most important upside risk in our view.

	Current	Dec10	Mar11	Sep11
Bank rate	0.50	0.50	0.50	1.00

Sweden

The Riksbank raised rates from 0.50% to 0.75% at its September meeting, as the market had been expecting. We expect the Bank to leave rates on hold on 26 October.

	Current	Dec10	Mar11	Sep11
Repo rate	0.75	1.00	1.25	1.75

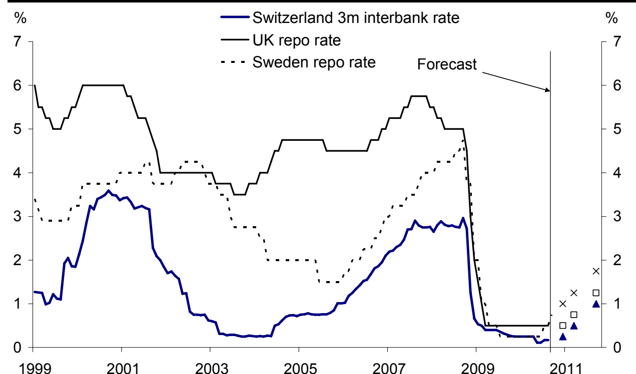
Central Bank Watch (continued)

Switzerland

The SNB left policy rates unchanged in September. While the economy has performed better than expected, we see the franc continuing to put downward pressure on core inflation. Next meeting: December 16.

	Current	Dec10	Mar11	Sep11
3M Libor tgt	0.25	0.25	0.25	0.75

Key rates in the peripheral European countries



Source: DB Global Markets Research

Canada

Following three consecutive increases we expect the Bank of Canada to adopt a neutral policy stance in October in order to gauge the effect of the weaker US growth on Canada. However, given that financial conditions remain very stimulative, further tightening is likely before the end of the year.

	Current	Dec10	Mar11	Sep11
ON rate	1.00	1.25	1.50	2.25

Australia

Despite the majority of market economists (including us) expecting the cash rate to rise this month, and indeed despite market pricing moving to price such an outturn as more likely than not, the RBA left the cash rate unchanged at its October meeting. Given that the RBA has not seen it necessary to raise the cash rate, we have re-considered our expectation that the cash rate will rise further in 2010. While November must still be considered a live meeting, we suspect that the 'story' is unlikely to change sufficiently over the next four weeks to justify the Bank raising the cash rate then. In other words if the case had not been 'made' by October, we struggle to see how November will be much different. So short of a material change in the outlook, and ahead of the release of the minutes to the October meeting, nominating a rate rise before February next year looks hard to justify on the back of the RBA's decision.

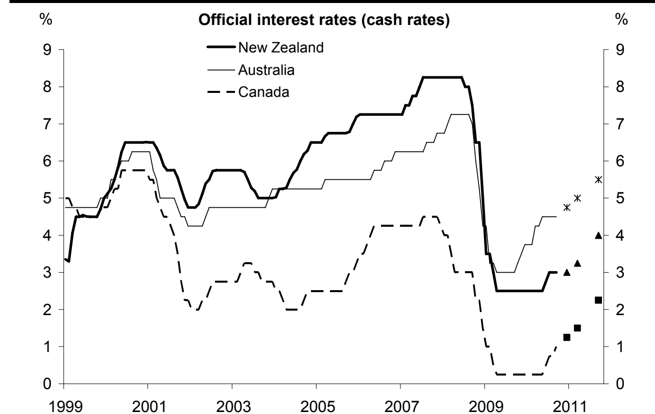
	Current	Dec10	Mar11	Sep11
OC rate	4.50	4.50	5.00	5.50

New Zealand

After 50bps of hikes, the RBNZ is now firmly back on the sidelines until at least early next year as it allows a tepid recovery to gather more momentum, helped by reconstruction after the Canterbury earthquake.

	Current	Dec10	Mar11	Sep11
OC rate	3.00	3.00	3.25	4.00

Key rates in the Peripheral $-bloc



Source: DB Global Markets Research

China

PBOC surprised most market observers by hiking benchmark rates by 25bps in Oct 19 evening. We believe this signals the start of a new hiking cycle with two further rate hikes of 25 bps each to come in the next 12 months. It also reveals that the government would be more tolerant of lower GDP growth, and that a consensus has been reached within the government about the seriousness of a negative real interest rate problem. Agricultural price index has increased by more than 9% in the last two months on sequential terms. There is a time lag before agricultural price inflation could pass through to CPI. Therefore we expect higher CPI inflation in September than August. Afterwards, due to factors like base effect, China monthly CPI will move south. We think the government will set 2011 CPI target at 3%.

	Current	Dec10	Mar 11	Sep11
1-year rate	2.50	2.50	2.75	3.00

India

In its September policy review, the RBI raised the reverse-repo rate by 50bps to 5.00% and repo rate by 25 bps to 6.00%, effectively narrowing the Liquidity Adjustment Facility (LAF) corridor to 100bps. The central bank justified the action owing to a need to contain inflation pressures and normalizing policy rates.

Central Bank Watch (continued)

The RBI noted that real interest rates remain substantially negative, and stressed that such rates for a prolonged period cause distortions to the economy (by discouraging deposits, for example), and that policy action would aim to ameliorate this situation. The RBI also noted that with the current inflation rate hovering significantly above the trend level of 5.0-5.50%, "there is, therefore, need for continued policy response to contain inflation and inflationary expectation". Hence we expect to see the central bank continue to hike rates in the remaining two policy meetings (two 25bps hikes) this year. Another 50bps in rate hike would take place next year, in our view. We expect policy actions to be symmetric going forward, i.e. the 100 bps spread between repo and reverse repo would persist.

The latest actions and policy statement suggest that the RBI is no longer inclined to stay "behind the curve" with respect to its monetary policy stance. Unless external conditions deteriorate in the period ahead, the central bank will remain on firm tightening mode, in our view. We have noted the RBI's hint toward the end of its policy statement from hereon the role of normalization as a motivation for further actions is likely to be less important; instead current and expected macroeconomic conditions will be more important considerations. Our call is that the domestic demand and price situation will remain tight enough to keep the central bank on a rate-hike mode in the short term.

	Current	Dec10	Mar11	Sep11
Repo rate	6.0	6.5	6.5	7.0

Brazil

The Central Bank kept the SELIC overnight rate at 10.75% in August and signalled the end of the tightening cycle. The slowdown in economic growth in 2Q10, a sharp drop in headline inflation due to food price deflation, and increased uncertainty about the global economic recovery prompted the Central Bank to interrupt the tightening cycle. The authorities highlighted that interest rates at the current levels are adequate to ensure convergence of inflation to the target, and warned that an eventual rise in inflation in the next months would not change the benign inflation outlook. The COPOM minutes repeated the dovish tone, stressing that the Central Bank inflation forecasts for 2011 and 1H12 were close to the center inflation target, that economic growth moved to a trajectory consistent with long-term equilibrium, and that structural changes in the economy reduced its neutral interest rate and increased the efficiency of monetary policy. We expect the SELIC rate to remain at 10.75% throughout the end of 2011.

	Current	Dec10	Mar11	Sep11
CBR refi rate	10.75	10.75	10.75	10.75

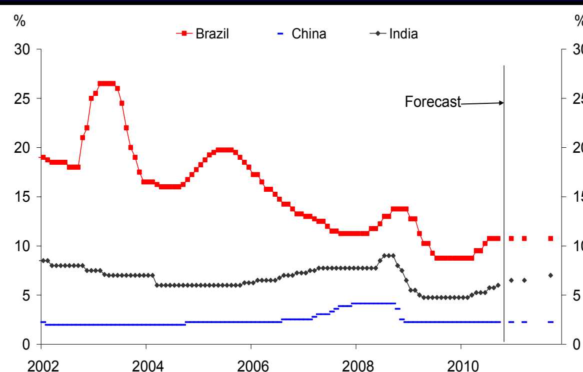
Russia

Starting from May 30th the CBR reduced the refinancing rate by 25 basis points to7.75%.This was already 14th reduction in the refinancing rate since April 2009 when the rate stood at a 13%. According to the statement released by the CBR, the decision to reduce the refinancing rate is partly due to the moderation in inflationary pressures as the 12-month inflation rate declined from 8.8% at the end of last year to 6.1% as of beginning September. Moreover, the CBR explicitly referred in its statement to the absence of factors that could lead to a significant acceleration in inflation this year. At the same time the statement points to the instability in the path of economic recovery, with the main rationale for the reduction in interest rates being the need to boost economic activity via higher lending.

Also, according to the CBR statement 'CBR considers likely to keep the current level of the refinancing rate for the nearest months'. The level of the refinancing rate is likely to be kept intact until the end of the year, with some possibility of a moderate increase in rates in case inflationary pressures become prohibitively high.

	Current	Sep10	Dec10	Jun11
CBR refi rate	7.75	7.75	8.00	8.00

Key rates in major emerging markets



Source: DB Global Markets Research

Global central bank policy rate hikes since September 2008														
	Trough	2009				2010								Total bps
	policy rate	Aug	Oct	Nov	Dec	Mar	Apr	May	Jun	Jul	Aug	Sep		hike
Israel	0.50%	0.75%		1.00%	1.25%	1.50%				1.75%		2.00%		150
Australia	3.00%		3.25%	3.50%	3.75%	4.00%	4.25%	4.50%						150
Norway	1.25%		1.50%		1.75%			2.00%						75
Vietnam	7.00%				8.00%									100
Malaysia	2.00%					2.25%		2.50%		2.75%				75
India	4.75%					5.00%	5.25%			5.75%		6.00%		125
Brazil	8.75%						9.50%		10.25%	10.75%				200
Peru	1.25%							1.50%	1.75%	2.00%	2.50%	3.00%		175
Canada	0.25%								0.50%	0.75%		1.00%		75
Chile	0.50%								1.00%	1.50%	2.00%	2.50%	**2.75%**	225
New Zealand	2.50%								2.75%	3.00%				50
Taiwan	1.25%								1.38%			1.50%		25
Sweden	0.25%									0.50%		0.75%		50
S Korea	2.00%									2.25%				25
Thailand	1.25%									1.50%	1.75%			50
Serbia	8.00%										8.50%	9.00%	**9.50%**	150
Uruguay	6.25%											6.50%		25
Nigeria	6.00%											6.25%		25

Note: Reserve Bank of India hiked twice in July, each by 25bps

Global data monitor: Recent developments and near-term forecasts

	B'bergcode	Q4-09	Q1-10	Q2-10	Q3-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10
OECD leading indicators (6M change, %, ann.)											
OECD		5.7	10.0	8.2	4.6	8.3	6.8	5.3	3.9		
US	OLEDUSA	4.9	11.2	9.9	5.8	10.1	8.4	6.6	5.0		
Euro area	OLEDEU12	6.4	9.3	7.5		6.7					
Japan	OLEDJAPN	0.4	7.5	8.0	5.6	8.1	7.2	6.2	5.1		
China	OLEDCHIN	26.9	23.9	17.6	13.2	17.6	15.6	13.9	12.6		
India	OLEDINDI	15.4	14.4	10.9	8.6	10.8	9.8	9.0	8.3		
Russia	OLEDRUSS	10.5	17.2	15.4	11.0	15.6	13.8	11.9	10.2		
Brazil	OLEDBRAZ	15.3	20.4	13.1	6.2	13.1	10.0	7.3	5.2		
Purchasing manager indices											
Global (manufacturing)		53.4	56.0	56.4	54.3	56.7	55.0	54.8	54.6	53.5	
US (manufacturing ISM)	NAPMPMI	54.6	58.2	58.8	55.4	59.7	56.2	55.5	56.3	54.4	53.0
Euro area (composite)		53.6	54.4	56.6	55.7	56.4	56.0	56.7	56.2	54.1	
Japan (manufacturing)	SEASPMI	53.5	52.5	54.1	50.8	54.7	53.9	52.8	50.1	49.5	
China (manufacturing)	EC11CHPM	55.7	56.7	52.8	51.4	52.7	50.4	49.4	51.9	52.9	
India (manufacturing)		54.4	58.0	57.8	56.6	59.0	57.3	57.6	57.2	55.1	
Russia (manufacturing)		49.2	50.4	52.2	52.3	52.0	52.6	52.7	52.9	51.2	
Other business surveys											
US dur. goods orders (%pop1)	DGNOCHNG	0.2	1.8	0.7	-0.1	-0.7	-0.2	1.2	-1.5	0.0	
Japanese Tankan (LI)	JNTSMFG	-25.0	-14.0	1.0	8.0						
Euro area EC sentiment	EUESEMU	91.9	96.6	99.3	102.2	98.4	98.9	101.1	102.3	103.2	
Industrial production (%pop[1])											
US	IP CHNG	6.9	7.2	6.9	4.7	1.1	0.1	0.6	0.2	-0.2	
Euro area	EUITEMUM	5.1	9.5	10.0	3.8	1.2	-0.1	0.1	1.0		
Japan	JNIPMOM	25.9	30.9	6.2	-4.7	0.1	-1.1	-0.2	-0.5		
Retail sales (%pop[1])											
US	RSTAMOM	7.6	8.2	4.6	2.4	-1.0	-0.3	0.5	0.7	0.6	
Euro area	RSSAEMUM	0.6	2.1	0.2	0.9	0.5	0.3	0.0	-0.4		
Japan (household spending)		4.3	-1.4	-6.8	8.6	0.7	2.9	-0.4	0.7		
Labour market											
US non-farm payrolls[2]	NFP TCH	-90	87	190	-73	432	-175	-66	-57	-95	90
Euro area unemployment (%)	UMRTEMU	9.9	9.9	10.1	10.1	10.1	10.1	10.1	10.1		
Japanese unemployment (%)	JNUE	5.2	4.9	5.2	5.2	5.2	5.3	5.2	5.1		
CP inflation (%yoy)											
US	CPICHNG	1.4	2.4	1.8	1.2	2.0	1.1	1.2	1.1	1.1	
Euro area	ECCPEMUY	0.4	1.1	1.5	1.7	1.6	1.4	1.7	1.6	1.8	1.9
Japan	JNCPIYOY	-2.0	-1.2	-0.9	-0.9	-0.9	-0.7	-0.9	-0.9		
China	CNCPIYOY	0.4	2.1	2.7	3.0	2.8	2.7	3.1	3.2		
India		4.3	9.4	10.6	9.1	10.5	10.3	10.1	8.6	8.7	
Russia	RUCPIYOY	9.2	7.2	5.9	6.1	6.0	5.8	5.5	6.0	7.0	
Brazil		4.2	4.9	5.1	4.6	5.2	4.8	4.6	4.5	4.7	
Current account (USD bn)[3]											
US (trade balance, g+s)	USTBTOT	-34.9	-38.2	-43.9	-44.5	-41.8	-49.8	-42.6	-46.3		
Euro area		-3.5	-4.3	-7.2		-9.3	-4.6	-4.9			
Japan		14.7	17.1	13.7	15.3	10.0	15.2	16.7	13.8		
China (trade in goods)		12.6	6.2	19.9	22.4	24.2	26.0	31.2	18.5	17.4	
Russia (trade in goods)		11.9	17.9	13.1	7.8	12.1	12.1	9.9	5.7		
Other indicators											
Oil prices (Brent, USD/b)	EUCRBRDT	74.6	76.3	78.3	77.6	75.2	74.9	76.0	78.3	78.6	
FX reserves China (USD bn)	CNGFOREX	2399.2	2447.1	2454.3	2648.3	2439.5	2454.3	2538.9	2547.8	2648.3	

Quarterly data in shaded areas are quarter-to-date. Monthly data in the shaded areas are forecasts.

(1) % pop = % change this period over previous period. Quarter on quarter growth rates is annualised.

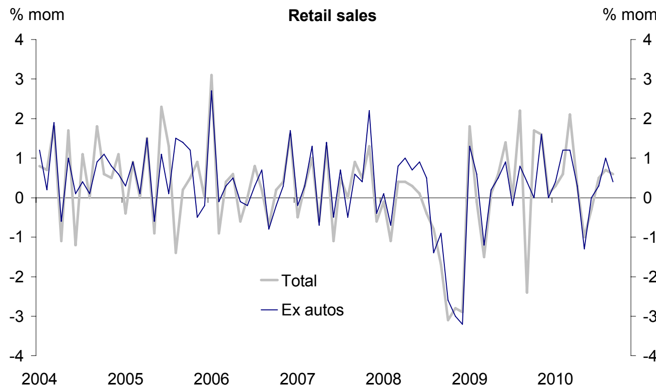
(2) pop change in '000, quarterly data are averages of monthly changes.

(3) Quarterly data are averages of monthly balances.

Sources: Bloomberg Finance LP, Reuters, Eurostat, European Commission, OECD, Bank of Japan, National statistical offices.

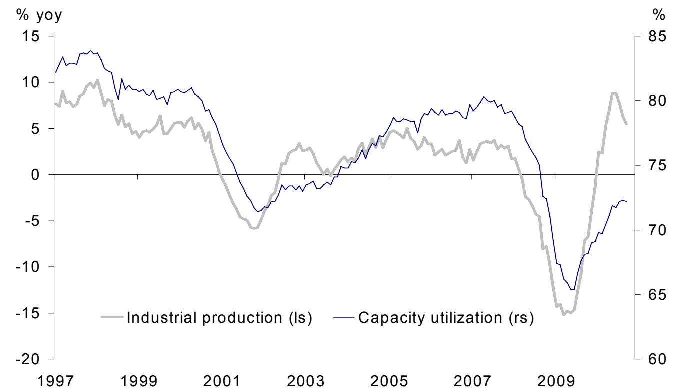
Charts of the Week

Chart 1. In US, retail sales data reported a third consecutive monthly gain fuelled by car sales…



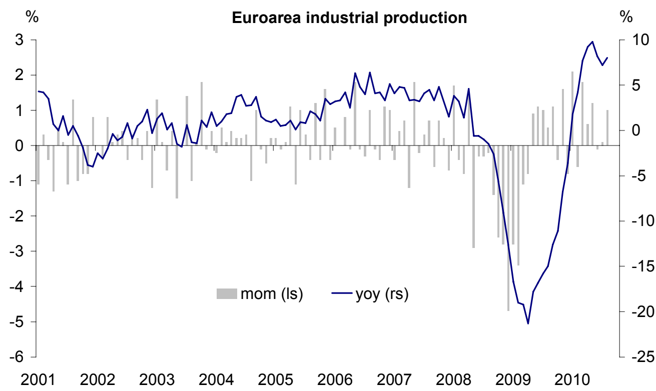
Source: FRB, DB Global Markets Research

Chart 2….while September's IP figure showed activity moderating



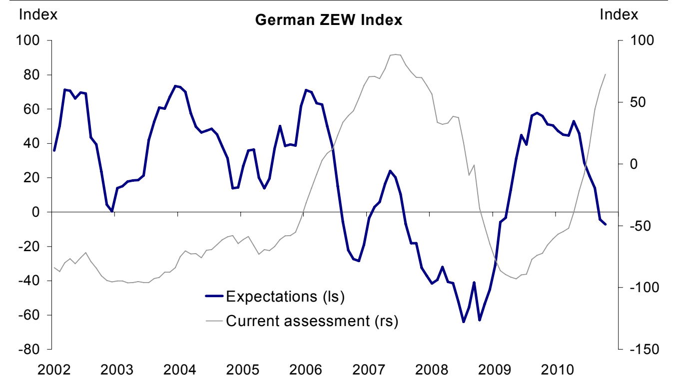
Source: Census, DB Global Markets Research

Chart 3. Eurozone IP came out robust in August…



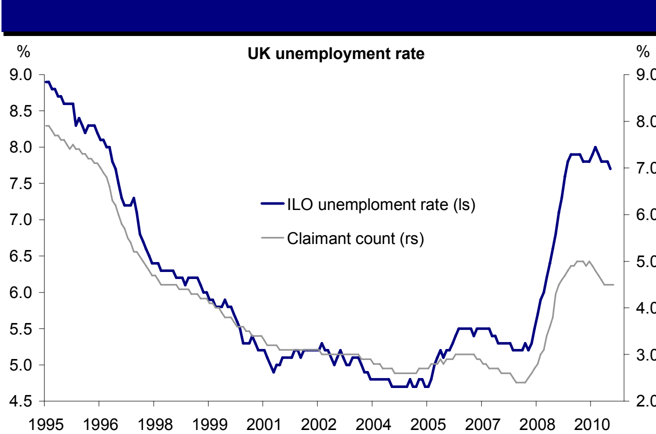
Source: Eurostat, DB Global Markets Research

Chart 4….but German ZEW index reported a mixed outcome



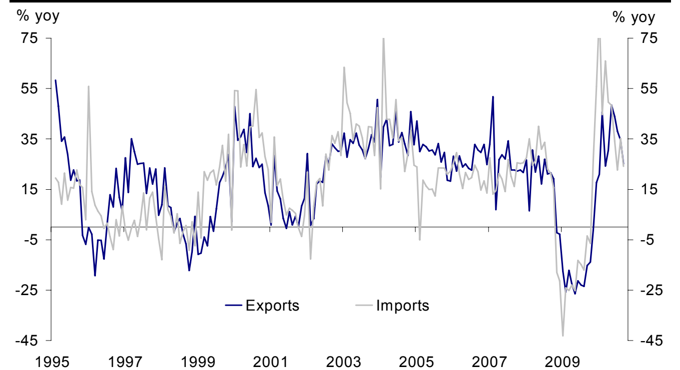
Source: ZEW, DB Global Markets Research

Chart 5. UK unemployment rate fell down to 7.7%…



Source: ONS, DB Global Markets Research

Chart 6….while Chinese export growth eased out to 25.1% in September



Source: China Customs, DB Global Markets Research

Global Week Ahead: Thursday, 21 October – Wednesday, 27 October

- **Dollar Bloc**: In the **US**, markets will be focused on Philly Fed and consumer confidence survey reports – both are likely to improve. September's existing and new home sales data will shed light on the housing market; while durable goods orders will tell us about the activity level. In **Australia**, we are forecasting 0.9% qoq increase in the headline CPI. Aside, PPI data is also due this week. In **Canada**, August's retail sales report will be watched out for, whether the hot weather had an impact on consumer spending, while CPI data will tell us about the price level. In **New Zealand**, we will have RBNZ official cash rate decision this week.
- **Europe**: In the **Eurozone**, focus will be on the advance estimates of the manufacturing and services PMI data for the region, together with October's Ifo, INSEE, ISAE & BNB reports. The release of area-wide, French and Italian consumer confidence surveys along with Italian and Spanish retail sales numbers will tell us about the consumer spending pattern. Elsewhere, Euro area M3 and industrial new orders, German HICP and Spanish PPI data are also scheduled for release this week. In the **UK**, the release of advance estimate of Q3 GDP and September's retail sales figures are the most important data releases. In **Switzerland**, trade balance data is due on Thursday. In **Scandinavia**, markets will keenly watch the rate setting meetings of Riksbank and Norges bank. In **CE3**, we will keep an eye on Polish and Hungarian Central bank rates decision.
- **Asia incl. Japan**: In **Japan**, industry activity index figure is the most important data release. In **China**, we will have many important data releases this week (GDP, CPI, retail sales & IP) - we are in the bearish camp for Q3 GDP (yoy).

Country	GMT	Release	DB Expected	Consensus	Previous
		Thursday, 21 October			
CHINA	02:00	Consumer price index (Sep)	3.7%	3.6%	3.5%
CHINA	02:00	GDP constant price (Q3)	(9.1%)	(9.5%)	(10.3%)
CHINA	02:00	Industrial production (Sep)	(13.0%)	(14.0%)	(13.9%)
CHINA	02:00	Producer price index (Sep)	(4.1%)	(4.1%)	(4.3%)
CHINA	02:00	Retail sales (Sep)	(18.5%)	(18.5%)	(18.4%)
JAPAN	04:30	All industry activity index (Aug)	-0.4%	-0.4%	1.0%
SWITZERLAND	06:15	Trade balance (Sep)		CHF1.2bn	CHF0.6bn
FRANCE	06:45	INSEE business confidence (Oct)		98.0	98.0
FRANCE	06:45	Personal production outlook (Oct)			0.0
FRANCE	06:45	Production outlook indicator (Oct)			3.0
DENMARK	07:30	Consumer confidence (Oct)		1.8	2.3
EUROLAND	08:00	PMI manufacturing, flash (Oct)		53.2	53.7
EUROLAND	08:00	PMI services, flash (Oct)		53.7	54.1
EUROLAND	08:00	PMI composite, flash (Oct)		53.7	54.1
UK	08:30	Retail sales (Sep)		0.2% (1.9%)	-0.4% (1.9%)
US	12:30	Initial jobless claims (Oct 16)		455.0k	462.0k
CANADA	12:30	Leading indicators (Oct)	0.4%	0.2%	0.5%
US	14:00	Philly fed (Oct)	9.0	1.9	-0.7

Events and Meetings: EUROLAND: ECB to hold Governing council meeting, no interest rate announcement scheduled. **POLAND**: National Bank of Poland to publish minutes of its September 30 rate setting meeting – 12:00 GMT. **UK**: Bank of England Posen to hold speech in Vienna – 09:15 GMT. **US**: Fed's Bullard to hold speech on monetary policy in St. Louis – 18:00 GMT.

Country	GMT	Release	DB Expected	Consensus	Previous
		Friday, 22 October			
FRANCE	06:45	Quarterly manufacturing survey (Q3)			2.0
GERMANY	08:00	IFO - business climate (Oct)		106.5	106.8
GERMANY	08:00	- current assessment (Oct)		110.0	109.7
GERMANY	08:00	- expectations (Oct)		102.9	103.9
ITALY	08:00	Retail sales (Aug)		0.0% (1.5%)	0.0% (1.7%)
CANADA	11:00	CPI (Sep)	0.4% (1.8%)	0.2% (1.9%)	-0.1% (1.7%)
CANADA	11:00	Core CPI (Sep)	0.2% (1.6%)	0.3% (1.6%)	0.1% (1.6%)
CANADA	12:30	Retail sales (Aug)	0.1%	-0.1%	-0.1%
CANADA	12:30	Retail sales ex auto (Aug)	0.5%	0.5%	-0.4%
BELGIUM	13:00	BNB business confidence (Oct)		-3.8	-3.4

Events and Meetings: US: Fed's Hoenig to hold speech on economy in Albuquerque – 01:45 GMT. **EUROLAND**: ECB's Nowotny to hold speech in Vienna – 07:15 GMT. **US**: Fed's Plosser to hold speech in Philadelphia – 12:00 GMT. **EUROLAND**: ECB's Bini Smaghi to hold speech in Rome – 12:20 GMT. **EUROLAND**: ECB's Costa to hold speech in Lisbon – 16:00 GMT.

Country	GMT	Release	DB Expected	Consensus	Previous
Sunday, 24 October					
JAPAN	23:50	Merchandise trade balance (Sep)			JPY589.7bn

Events and Meetings: No significant event scheduled.

Country	GMT	Release	DB Expected	Consensus	Previous
Monday, 25 October					
AUSTRALIA	00:30	PPI (Q3)		0.5% (1.4%)	0.3% (1.0%)
SPAIN	07:00	PPI (Sep)			0.1% (2.7%)
EUROLAND	09:00	Industrial new orders (Aug)			-2.4% (11.2%)
BRAZIL	10:00	FGV CPI IPC-S (Oct)			0.7%
HUNGARY	12:00	MPC meeting (Nov)		5.25%	5.25%
US	14:00	Existing home sales (Sep)	4.0m	4.3m	4.1m

Events and Meetings: AUSTRALIA: Reserve Bank of Australia's Stevens to hold speech in Canberra – 00:25 GMT. **UK**: Bank of England's Tucker to hold speech in London – 06:00 GMT. **HUNGARY**: National Bank of Hungary to announce interest rate decision – 12:00 GMT. **US**: Fed's Cumming to hold speech in Brussels – 12:00 GMT. **US**: Fed's Bernanke to hold speech in Virginia – 12:30 GMT. **US**: Fed's Dudley to hold speech in Ithaca – 14:30 GMT. **EUROLAND**: ECB's Stark to hold speech in Frankfurt – 16:00 GMT. **US**: Fed's Bullard to hold speech in St. Louis – 17:30 GMT. **US**: Fed's Dudley to hold speech at Cornell University in Ithaca – 20:30 GMT.

Country	GMT	Release	DB Expected	Consensus	Previous
Tuesday, 26 October					
FRANCE	06:45	Consumer confidence (Oct)			-35.0
ITALY	07:30	Consumer confidence (Oct)			107.2
SWEDEN	07:30	Riksbank interest rate (Nov)			0.75%
UK	08:30	GDP flash estimate (Q3)			1.2% (1.7%)
US	14:00	House price index (Aug)			-0.5%
US	14:00	Consumer confidence (Oct)	50.0	50.0	48.5
US	14:00	Richmond fed (Oct)			-2.0

Events and meetings: US: Fed's Hoenig to hold speech in Kansas City. **SWEDEN**: Riksbank to announce interest rate decision – 07:30 GMT. **EUROLAND**: EU's Rehn to hold in Brussels – 08:00 GMT. **US**: Fed's Dudley to hold speech in New York – 20:30 GMT.

Country	GMT	Release	DB Expected	Consensus	Previous
Wednesday, 27 October					
GERMANY	-	HICP preliminary (Oct)			-0.2% (1.3%)
AUSTRALIA	00:30	CPI (Q3)	0.9% (3.0%)	0.8% (2.9%)	0.6% (3.1%)
FRANCE	06:45	Consumer spending (Sep)			-1.6% (1.2%)
SPAIN	07:00	Retail sales (Sep)			(-2.5%)
EUROLAND	08:00	M3 (Sep)			(1.1%)
NORWAY	12:00	Norges bank overnight rate (Nov)			2.0%
US	12:30	Durable goods (Sep)	0.0%	1.7%	-1.3% (11.2%)
US	12:30	Durable goods ex transport (Sep)	0.5%	0.5%	2.0% (12.9%)
POLAND	13:20	MPC meeting (Nov)		3.5%	3.5%
MEXICO	14:00	Global economic indicator (IGAE) (Aug)		6.3%	5.1%
US	14:00	New home sales (Sep)	290.0k	297.0k	288.0k
NEW ZEALAND	20:00	RBNZ official cash rate (Oct)		3.0%	3.0%
JAPAN	23:50	Retail trade (Sep)			1.4% (4.3%)

Events and meetings: POLAND: National Bank of Poland to hold rate decision meeting. **JAPAN**: Bank of Japan's Nishimura to hold speech in Tokyo – 00:00 GMT. **NORWAY**: Norges Bank to announce overnight rate – 12:00 GMT. **NEW ZEALAND**: Reserve Bank of New Zealand to announce official cash rate – 20:00 GMT. **US**: Fed's Dudley to hold speech in New York – 20:00 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.

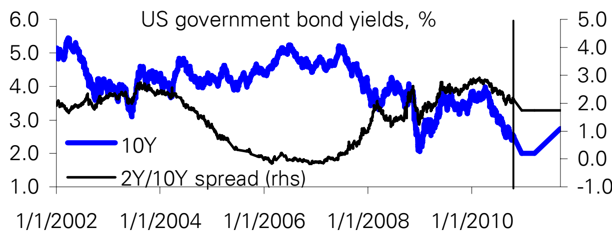
Note: Unless otherwise indicated, numbers without parenthesis are either % month-on-month or % quarter-on-quarter, depending on the frequency of release, while numbers in parenthesis are % year-on-year. * on the release time means indicative release time. * on indicator name means indicative/earliest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

Financial Forecasts

		US	Jpn	Euro	UK	Swe*	Swiss*	Can*	Aus*	NZ*
3M Interest	**Actual**	0.29	0.34	0.94	0.74	0.75	0.25	1.00	4.50	3.00
Rates[1]	**Dec10**	0.30	0.35	0.90	0.80	1.00	0.25	1.25	4.50	3.00
DB forecasts	***futures***	0.36	0.32	1.13	0.77	---	---	---	---	---
& Futures	**Mar11**	0.30	0.30	1.00	0.90	1.25	0.25	1.50	5.00	3.25
	futures	0.41	0.30	1.21	0.82	---	---	---	---	---
	Sep11	0.90	0.30	1.40	1.50	1.75	0.75	2.25	5.50	4.00
	futures	0.51	0.29	1.32	0.94	---	---	---	---	---
10Y Gov't[2]	**Actual**	2.51	0.90	2.38	2.96	2.56	1.30	2.44	5.12	4.83
Bond	**Dec10**	2.00	0.90	2.25	2.75	2.50	1.35	2.75	4.75	5.00
Yields/	***futures***	2.61	0.94	2.46	3.06	---	---	---	---	---
Spreads[3]	**Mar11**	**2.00**	0.90	2.40	3.00	2.80	1.60	3.00	5.00	5.00
DB forecasts	***futures***	2.71	0.98	2.51	3.14	---	---	---	---	---
& Forwards	**Sep11**	2.75	1.00	2.75	3.50	3.30	2.10	3.50	5.25	5.25
	futures	2.88	1.05	2.62	3.28	---	---	---	---	---
		EUR/ USD	**USD/ JPY**	**EUR/ GBP**	**GBP/ USD**	**EUR/ SEK**	**EUR/ CHF**	**CAD/ USD**	**AUD/ USD**	**NZD/ USD**
Exchange	**Actual**	1.39	81.5	0.88	1.59	9.28	1.34	1.02	0.98	0.75
Rates	**3M**	**1.40**	80.0	**0.88**	1.59	9.25	1.40	1.12	0.82	0.65
	6M	**1.37**	78.0	**0.85**	1.61	9.00	1.45	1.12	0.80	0.64
	12M	**1.30**	78.0	**0.82**	1.59	9.00	1.50	1.12	0.80	0.64

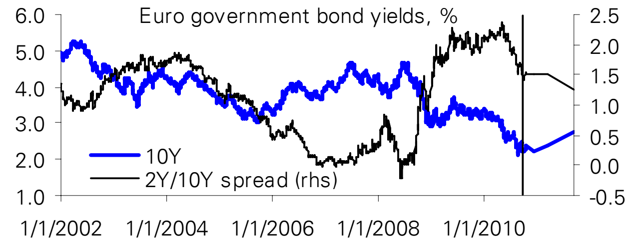
*(1) Future rates calculated from the December, March and September 3M contracts. Forecasts are for the same dates. * indicates policy interest rates.*
(2) Forecasts in this table are produced by the regional fixed income strategists. Forwards estimated from the asset swap curve for 2Y and 10Y yields.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

US 10Y rates



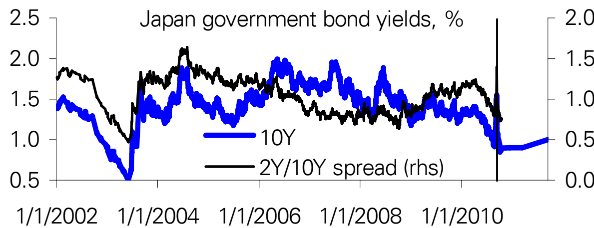
Source: DB Global Markets Research

Euroland 10Y rates



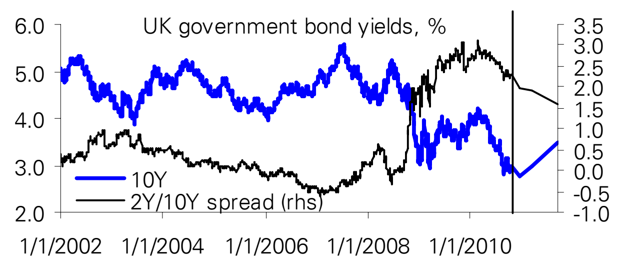
Source: DB Global Markets Research

Japan 10Y rates



Source DB Global Markets Research

UK 10Y rates



Source: DB Global Markets Research

Main Deutsche Bank Global Economics Publications

Global

Dbdaily – European Edition (daily)
Dbdaily – Asian Edition (daily)
Dbdaily – Pacific Edition (daily)

Global Economics Perspectives (weekly)

The World Outlook (quarterly)

Global Macro Issues (occasional paper series)

- Credit impulse: Lessons from the Great Depression (13 March 2009)
- The impact of credit on growth (19 November 2008)
- Commodities: Falling off their peak (31 July 2008)
- How far could US Home Prices Fall? (Oct 5, 2007)
- Why Hasn't Homebuilding Employment Dropped? (July 10, 2007)
- Is Emerging Asia Holding Down US Inflation (Feb 26, 2007)
- Evolution in Bretton-Woods II: Controlled Reflation as the Path of Least Resistance (Dec 7, 2006)
- US Trend Employment Growth Has Fallen To 100,000 Per Month (Dec 6, 2006)
- Understanding MEW and How It Is Spent (Nov 17, 2006)
- Financial system modernisation and economic growth in Europe: Financial markets as risk managers for the economy (Oct 27, 2006)
- Housing and the US Consumer: What Foreign Experience Has to Say (Oct 16, 2006)
- The Transatlantic Productivity Divide: Reasons and Consequences (Oct 13, 2006)

US

US Daily Economic Notes (daily)
US Economics and Strategy Weekly (weekly)

Europe

Europe Inflation Report (weekly)
Focus Europe (weekly)

Japan

Japan Economics Weekly (weekly)

Emerging Markets

Emerging Markets Daily – European Edition (daily)
Emerging Markets Daily – Asian Edition (daily)
Emerging Markets Daily – US Edition (daily)
EM Event Radar (weekly)
EM Monetary Policy Rate Calls (monthly)
Emerging Markets Monthly (monthly)
EM Balance of Payment Monitor (quarterly)
Emerging Markets Special Publications (occasional series)

Dollar Bloc

Dollar Bloc Weekly (weekly)
Australian Economics Monthly (monthly)

Asia

Asia Economics Daily (daily)
Asia Economics Monthly (monthly)
Real Exchange Rate Monitor (monthly)

Appendix 1

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Risks to Fixed Income Positions

Macroeconomic fluctuations often account for most of the risks associated with exposures to instruments that promise to pay fixed or variable interest rates. For an investor that is long fixed rate instruments (thus receiving these cash flows), increases in interest rates naturally lift the discount factors applied to the expected cash flows and thus cause a loss. The longer the maturity of a certain cash flow and the higher the move in the discount factor, the higher will be the loss. Upside surprises in inflation, fiscal funding needs, and FX depreciation rates are among the most common adverse macroeconomic shocks to receivers. But counterparty exposure, issuer creditworthiness, client segmentation, regulation (including changes in assets holding limits for different types of investors), changes in tax policies, currency convertibility (which may constrain currency conversion, repatriation of profits and/or the liquidation of positions), and settlement issues related to local clearing houses are also important risk factors to be considered. The sensitivity of fixed income instruments to macroeconomic shocks may be mitigated by indexing the contracted cash flows to inflation, to FX depreciation, or to specified interest rates – these are common in emerging markets. It is important to note that the index fixings may -- by construction -- lag or mis-measure the actual move in the underlying variables they are intended to track. The choice of the proper fixing (or metric) is particularly important in swaps markets, where floating coupon rates (i.e., coupons indexed to a typically short-dated interest rate reference index) are exchanged for fixed coupons. It is also important to acknowledge that funding in a currency that differs from the currency in which the coupons to be received are denominated carries FX risk. Naturally, options on swaps (swaptions) also bear the risks typical to options in addition to the risks related to rates movements.

David Folkerts-Landau
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