



# DB Inflation Report Outlook 2015

## Inflation Markets 2014

**Market performance:** ILBs have delivered an above expectations performance in 2014 as (i) real yields fell on the back of downward revisions to policy rate expectations in EUR and to a lesser extent GBP and (ii) lower term premia have led to flatter real yield curves, benefiting relatively long-duration ILBs.

**Macro trends & correlations:** Declining term premia have been an important driver of real yields this year. Trends in B/Es have been dominated by commodities, especially oil, with the correlation to economic data trends low. B/Es have continued to be sensitive to changes in risk aversion.

## CPI Outlook

**EUR:** We forecast euro area HICP inflation to turn negative in Q1, stay close to 0% in Q2, before recovering slightly in H2 and into 2016 on the back of some rise in core inflation, normalizing food inflation and base effects from energy.

**GBP:** RPI/CPI inflation is expected below 2%/1% in early 2015. We see it rising again from Q2, and forecast RPI at 2.1% on average in 2015 and 3.0% in 2016.

**USD:** Headline inflation may well drop to close 0% in H1 on the back of lower oil prices, but is expected to rebound in H2. We see core inflation between 1.7-1.9% y/y in H1, rising towards 1.9-2% in Q4 2015.

## Inflation Market Outlook

**Global:** Commodities have been the dominant driver of CPI inflation and B/Es, but have also masked differences in domestic economics. Should commodities stabilize we would see upside for USD 5y5y B/Es, outright and against EUR.

**EUR:** The macro backdrop remains challenging for B/Es, but the risk-reward for long B/Es positions at the short-end would look more attractive should oil prices stabilize. With only limited risks of policy failure priced at the long-end and significant downside risks priced in at the short-end, our bias would be for somewhat flatter curves.

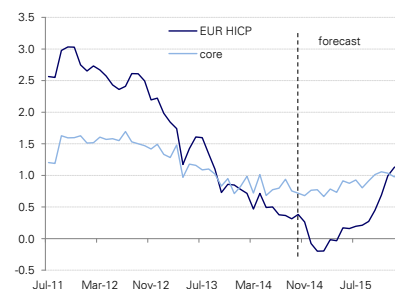
**GBP:** External factors remain a headwind, and the uncertainty about—still strong—domestic economic trends has risen somewhat. In that context we would be neutral on B/Es into 2015, but remain biased towards higher valuations at a 1y horizon.

**USD:** We think early 2015 maturing TIPS are rich, but find 5y B/Es cheap and like being long 2y2y or 2y3y forward B/Es to take advantage of cheap valuations, while avoiding negative carry. Longer-term forwards will appear attractive if oil prices can stabilize. 30y B/Es look undervalued.

**AUD & NZD:** AUD B/E steepening pressure may begin to ease in H2 2015 if inflationary pressures rise as we expect. We look for higher NZD B/Es, both outright and against ACGBs.

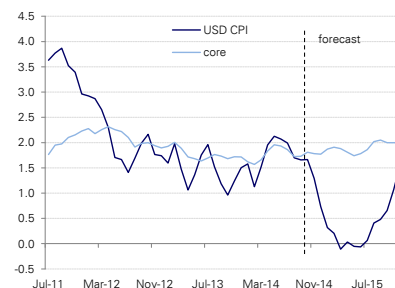
**EMEA:** Low spot inflation remains a near-term headwind in most markets, but current valuations provide attractive medium-term opportunities.

## EUR inflation forecasts



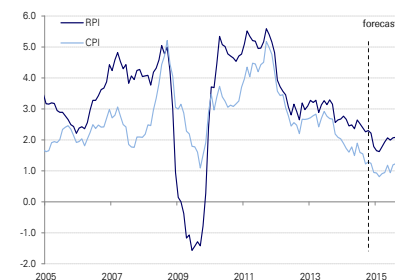
Source: Deutsche Bank

## USD inflation forecasts



Source: Deutsche Bank

## GBP inflation forecasts



Source: Deutsche Bank



# Inflation Market performance 2014

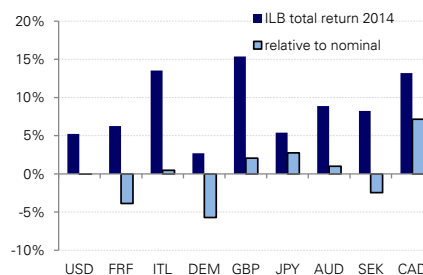
- ILBs have delivered an above expectations performance in 2014 as (i) real yields fell on the back of downward revisions to policy rate expectations in EUR and to a lesser extent GBP and (ii) lower term premia have led to flatter real yield curves, benefiting relatively long-duration ILB benchmarks.

Advanced economy inflation-linked bonds have performed better than expected in 2014, with benchmark index returns in most of the main markets above 5% (chart 1). Real yields have turned lower again, and at the end of November 10y real rates in USD/EUR/GBP stood about 40bp/90bp/80bp below the levels recorded at the end of last year (chart 3). In EUR (as well as in GBP in H2), this has been driven by progressive downward revisions to policy rate expectations on the back of weaker than expected inflation and economic trends (data surprise indicators have been on a downward trend). Declines in EUR and GBP real yields are likely to have weighed on USD rates as well, where policy rate expectations (and economic trends) have been more stable, but spreads have widened significantly this year. Another factor supporting ILB performance has been the ongoing decline in term premia, with 5y10y real yield curves flattening steadily through this year (chart 2). This has benefited typically long duration ILB benchmarks, and explains the outperformance of relatively long-dated markets such as GBP or CAD (chart 1). BTPei have benefited from sovereign spread tightening.

Breakeven inflation trends have been similar across USD, EUR and GBP markets, with valuations broadly following commodity and especially oil price moves: down slightly in Q1, up slightly in Q2, down significantly in Q3 and lower again in Q4 (chart 5). Weaker economic data may have played a role as well in the EUR and GBP B/E decline in Q3 and so have probably short-term trends in US core inflation (acceleration/deceleration) in Q2 and Q3. Perhaps somewhat surprisingly given the focus on downside risks in EUR, both USD and EUR 10y B/Es have declined by about 40bp since the end of 2013; 10y GBP B/Es are down 30bp. Falling B/E inflation has weighed on the relative performance of ILBs against nominal bonds, although in many cases this was offset by the longer duration of headline IL benchmarks (chart 1).

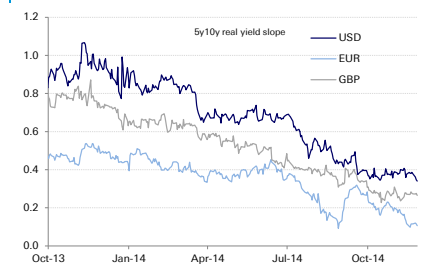
Markus Heider (+44) 20 754 52167

## 1. 2014 ILB returns



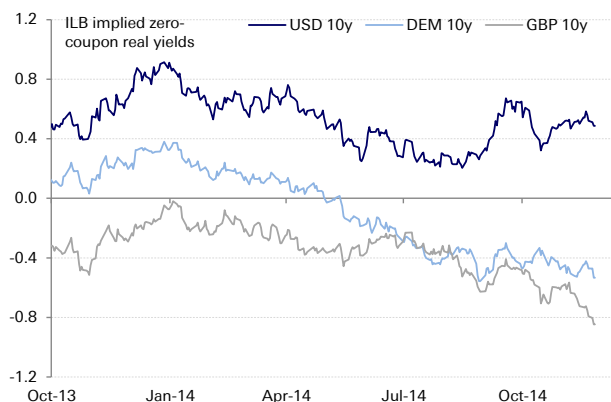
Source: Deutsche Bank

## 2. Real yield curves flattened



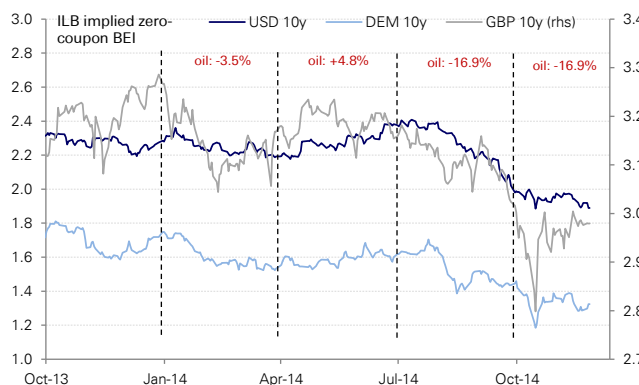
Source: Deutsche Bank

## 3. Real yields declined



Source: Deutsche Bank

## 4. B/Es moved in parallel, lower with oil in H2



Source: Deutsche Bank



## 2014: Macro trends & correlations

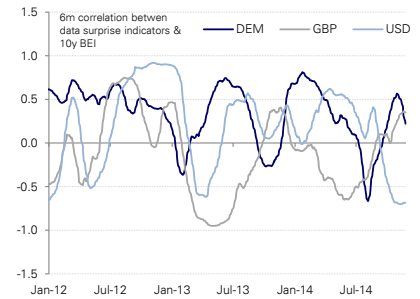
- Declining term premia have been an important driver of real yields this year. Trends in B/Es have been dominated by commodities, especially oil, with the correlation to economic data trends low. B/Es have continued to be sensitive to changes in risk aversion.

Declining bond risk premia had a significant impact on trends in real yields in 2014. As a result, in the US and UK the importance of policy rate expectations as a driver of real yields has declined somewhat (chart 3). In USD, 2y money market rates have been rising through much of the year, while declining term premia have meant a much flatter trend in 10y real yields (perhaps helped by cross market correlation; see chart 3 in the '2014 performance' section), especially in H1. In GBP, policy rate expectations have risen through the first half of the year, and fallen through H2, while 10y real yields have been on a downward trajectory, which has led to a fall in correlation in H1, and a subsequent recovery in H2 (chart 3). In EUR, the correlation between 2y ahead money market rates and 10y real rates has remained high (chart 3); both have declined steadily through the year.

Trends in breakevens have been dominated by commodities, and in particular the slump in oil prices in the second half of the year, with B/E - crude oil correlations around 90% (chart 4). This has brought about a high cross-market B/E correlation (see chart 4 in the '2014 performance' section), despite differences in domestic economic trends. The flip side of this has been a relatively low correlation with data surprise indicators (chart 1), especially in the US, where the H2 B/E slump has taken place despite strong economic data (correlation negative; chart 1). The B/E-data correlation has been highest in EUR, where economic data trends have been disappointing through most of the year. The sensitivity of B/Es to risk aversion (proxied by implied stock market volatility) has remained high across all markets (chart 2), with B/Es selling off during periods of rising risk aversion, such a mid-October.

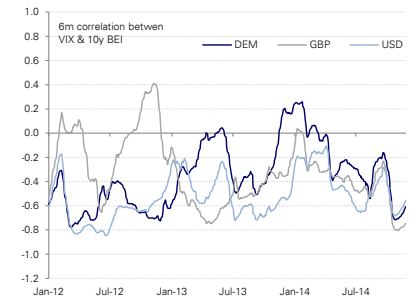
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### 1. B/E – eco data correlation



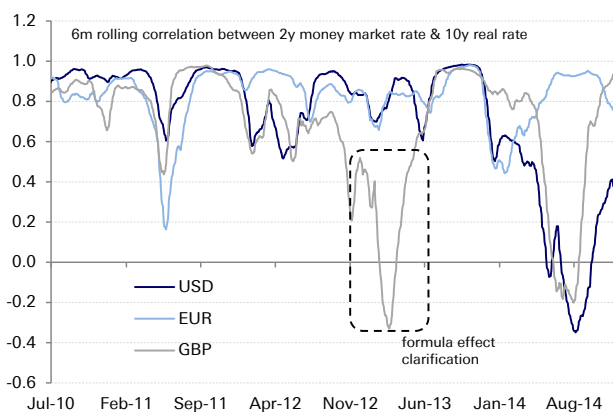
Source: Deutsche Bank

### 2. B/E – risk aversion correlation



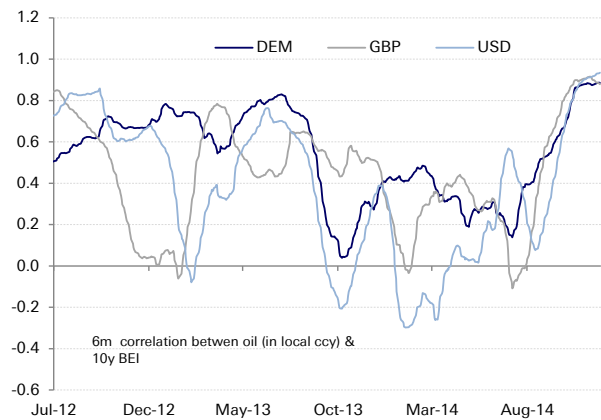
Source: Deutsche Bank

### 3. 10y real yield – policy rate correlation



Source: Deutsche Bank

### 4. 10y B/E – oil correlation



Source: Deutsche Bank



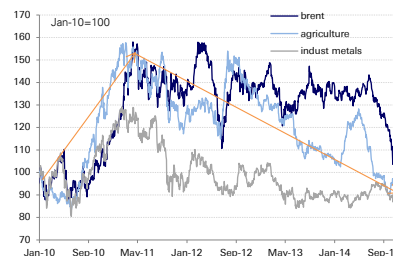
## Global inflation outlook

- Commodities have been the dominant driver of CPI inflation and B/Es, but have also masked an improvement in the outlook for domestic drivers of inflation, in particular in the US. Should commodities stabilize we would see upside for USD 5y5y B/Es, outright and against EUR.

Global factors, and commodity prices in particular, have been the dominating drivers of both, advanced economy CPI inflation and inflation market valuations over the past few years in general and in 2014 in particular. Prices for the three commodity groups with the strongest impact on inflation—industrial metals, agriculture and energy—rose 20% to 50% between January 2010 and mid-2011, and have retraced this increase since; at the end of 2014, prices stood between 2% (agriculture) and 15% (brent) below January 2010 levels (chart 1). This has not only led to a close correlation in global consumer energy and food prices, but together with coincident policy and demand trends in important producer economies, also in tradable manufactured goods prices. US and euro area clothing inflation for example has largely moved in parallel since 2011, following the up and down in Chinese producer, export (chart 2) and cotton prices. In the first ten months of 2014, clothing inflation has averaged 0.32% y/y in the euro area and 0.34% y/y in the US. As a result of these direct and indirect effects, advanced economy CPI inflation has followed commodity price swings closely since 2010 (chart 3). In particular, CPI inflation has been at relatively high levels in 2011 and 2012 despite subdued economic growth, and has remained relatively low since 2013, despite some recovery in economic conditions. Since 2010, CPI inflation has averaged 2.0% in the US and 1.8% in the euro area (3.0% for UK CPI), i.e. has been close to policy targets despite on average sub-par economic trends. Commodities have also been the main driver of inflation market valuations. 10y TIPS B/Es for example—apart from some temporary support from monetary policy during ‘QE eternity’—have largely followed trends in commodity prices (chart 4).

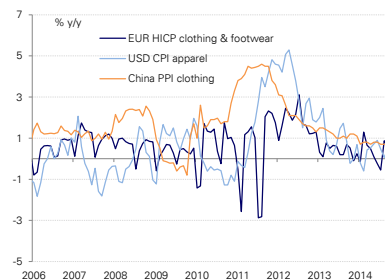
Looking into 2015, the recent strong decline in crude oil prices is likely to push headline inflation rates to unusually low levels early in the year (chart 3); EUR HICP is expected to see negative prints and US CPI could see lows close to 0% y/y. Moreover, indirect effects from lower commodity costs are likely to slow the recovery in core inflation in 2015/2016. This, together with likely downward revisions to institutional forecasts, indicators of consumer expectations and weak trends in business survey price indices which tend to follow commodity corrections could initially make for a challenging macro backdrop for B/Es.

### 1. Commodities up 50%, down 50%



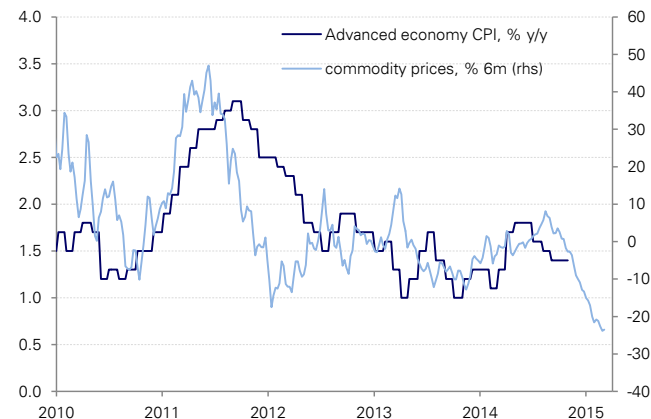
Source: Deutsche Bank

### 2. Global clothing inflation



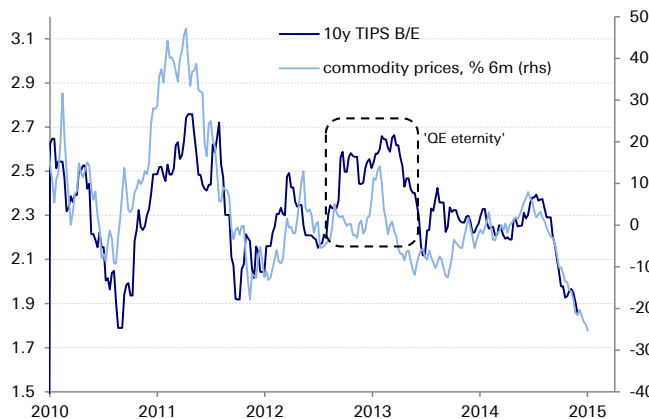
Source: Deutsche Bank

### 3. Commodities have been the primary driver of CPIs...



Source: Deutsche Bank; commodity prices are an average of brent, agriculture and base metals

### 4. ...and breakevens

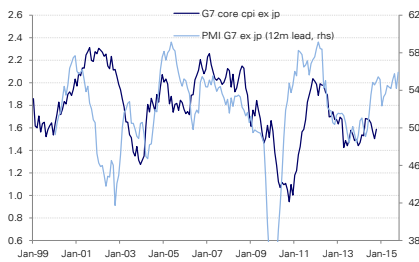


Source: Deutsche Bank; commodity prices are an average of brent, agriculture and base metals



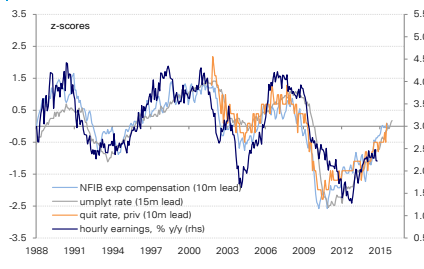
The strong commodities price swings are however also creating opportunities in inflation markets. They have masked (i) an improvement in the outlook for domestic drivers of inflation such as wages and profits and (ii) some significant cross country divergence in these trends. Assuming some stabilization in commodities, we would expect the market to focus more on these domestic factors. Recent trends in indicators of economic activity alone (i.e. abstracting from lower commodity costs) for example would appear consistent with some pick-up in advanced economy inflation (chart 5). This is particularly true for the US, where leading indicators point to further wage gains in the coming quarters (chart 6), and recent levels of the ISM in the past would have been consistent with a noticeable acceleration in core inflation over the following year (chart 7). In the absence of cost shocks, these trends could be expected to be supportive for B/Es (chart 8). While euro area economic conditions have improved as well, current growth momentum would appear consistent with a very gradual recovery in core inflation at best (chart 9).

**5. Demand points to higher inflation**



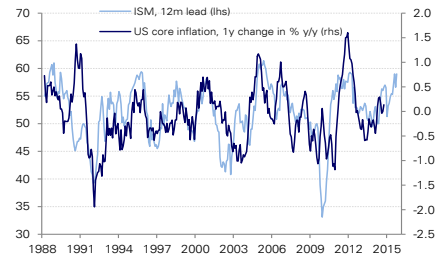
Source: Deutsche Bank

**6. US wage inflation rising**



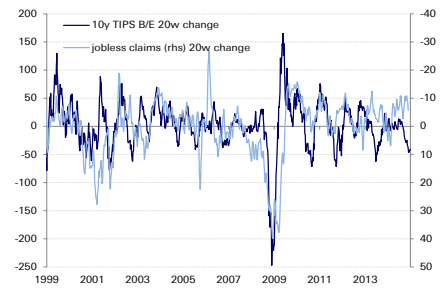
Source: Deutsche Bank

**7. ISM v US core inflation**



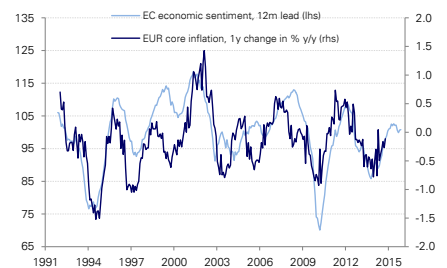
Source: Deutsche Bank

**8. Claims v US B/Es**



Source: Deutsche Bank

**9. EC survey & EUR core inflation**

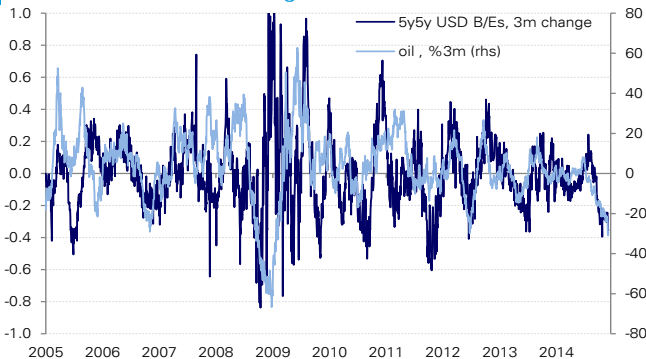


Source: Deutsche Bank

Given the improvement in economic conditions as well as the fact that the weakness in oil and agricultural markets appears to have been largely supply driven, the recent market reaction in some cases may seem extreme, even allowing for some reduction in inflation risk premia. For example, a decline in oil prices should not impact inflation expectations beyond say two years, yet there appears to be a positive correlation between oil prices and 5y5y forward B/Es, both in USD (chart 10) and EUR. As a result, the US B/E curve looks flat and 5y5y B/Es close to historical lows point to unusually low inflation risk premia. Moreover, the spread between USD and EUR 5y5y B/Es is close to post-crisis historical averages (chart 11; about 10bp above pre-crisis means), pointing to a lack of differentiation of inflation risks in valuations. Charts 4 and 10 argue against fighting the first round impact of lower commodity prices, but opportunities are likely to arise should the latter stabilize. In that case we would see upside for USD 5y5y B/Es outright and against EUR.

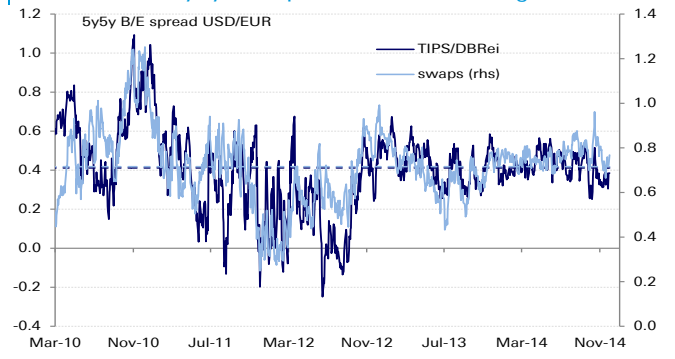
Markus Heider (+44) 20 754 52167

**10. Decline in oil has weighed on forward B/Es as well**



Source: Deutsche Bank

**11. USD/EUR 5y5y B/E spreads around average**



Source: Deutsche Bank



## Euro area inflation outlook

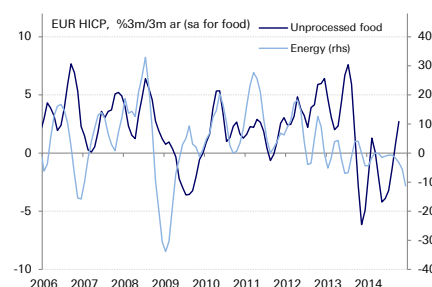
- Assuming commodity prices in line with market valuations, we forecast euro area HICP inflation to turn negative in Q1, stay close to 0% in Q2, before recovering slightly in H2 and into 2016 on the back of some rise in core inflation, normalizing food inflation and base effects from energy. We see average inflation at 0.2% in 2015 and 1.3% in 2016.

### Inflation lower than expected in 2014

For the second year in a row, euro area inflation turned out lower than expected in 2014. This was above all due to price shocks to unprocessed food in H1 and energy in H2 (chart 1), but also to subdued global inflation trends and somewhat weaker than expected domestic economic conditions. Headline inflation fell from 0.8% in Q4 2013, to 0.3% in November, and probably 0.2% in Q4. Across main HICP components, this can mainly be attributed to food and energy items (chart 3). Food inflation declined from 1.8% in Q4, to 0.5% in November (it was negative in the summer), explaining about half of the slowdown in the headline rate (chart 3). Unprocessed food prices in particular surprised to the downside in H1, declining by about 4% (annualized) in Q2 (chart 1), as supply rose on the back of favourable weather conditions. The latter has also weighed on energy prices (via falling natural gas prices), which eased slightly through H1. In H2, downward pressure intensified as crude oil prices fell sharply; HICP energy is expected to be down over 10% (annualized) in Q4 (chart 1). This would put the y/y rate about 2.5pp below Q4 2013, taking some 0.15pp off headline inflation between Q4 13 and November (chart 3).

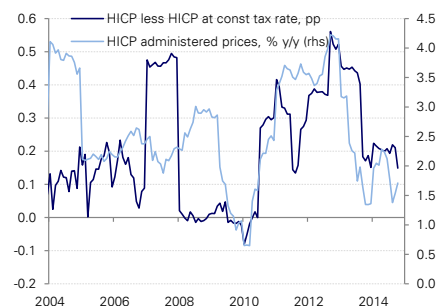
Core inflation has moved broadly sideways since Q4 2013 (chart 3). Trends were about in line with expectations until the summer, but lower than projected since the autumn. Somewhat weaker than expected economic conditions may have played a role. Moreover, import prices have continued to decline, with the import deflator down for the eighth consecutive quarter in Q3 2014, which is likely to have affected core goods prices (see for example clothing inflation in chart 2 in the 'Global inflation outlook' section) and more generally domestic price trends indirectly via lower production costs. The government contribution to inflation has remained muted, with administered price inflation low by historical standards (chart 2) and the indirect tax contribution easing (and likely to decline further in 2015). Finally, there are signs of some adjustment lower in inflation expectations which implies the risk of low inflation becoming more persistent.

### 1. Fresh food & energy surprised



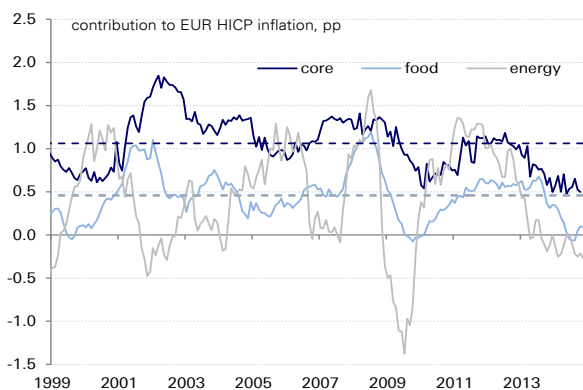
Source: Haver, Deutsche Bank

### 2. Gov't contribution



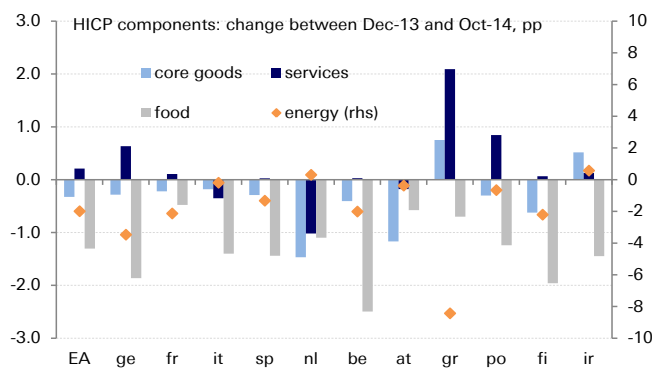
Source: Haver, Deutsche Bank

### 3. Food, energy lower, core not rising



Source: Haver, Deutsche Bank

### 4. Trends in HICP components across countries



Source: Haver, Deutsche Bank



Chart 4 shows the change in (y/y) inflation since December 2013 for the main HICP components across countries. The fall in food and energy prices has been a consistent trend (with the exception of energy in the Netherlands and Ireland). Core goods inflation was down slightly in most countries, while services inflation was unchanged to slightly higher in most countries. The inflation trend has been particularly weak in the Netherlands and Italy, but also lower than expected in Germany, where food and energy prices fell more than elsewhere and core inflation rose less than projected.

### Inflation to stay low in 2015

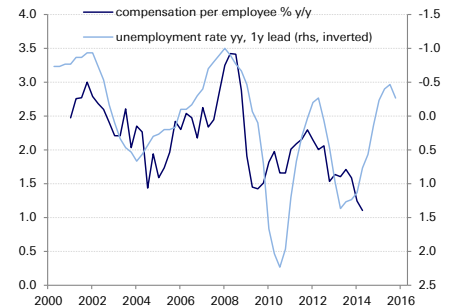
We forecast euro area inflation to fall further into 2015, to stay at very low levels through much of H1 and to rise gradually through H2 and 2016; inflation looks however likely to stay at sub-par levels in 2016—we project annual averages of 0.2% in 2015 and 1.3% in 2016.

The outlook for external price pressures remains uncertain. Agricultural prices were showing some signs of stabilization at the end of 2014 and global demand is projected to pick up over the coming two years. Oil prices are however still falling at the time of writing and the currency depreciation appears to have stalled since late September. Our projections are based on the assumption that price dampening external influences gradually fade on the back of stronger global demand, past exchange rate depreciation, and some stabilization in commodity prices; imported inflation is however projected to remain low.

Domestic inflation is expected to stabilize and rise only marginally in the context of sluggish economic growth and indirect effects from past declines in import costs. Nevertheless, the projected improvement in labour markets could allow some slight rise in wage growth through the coming two years (chart 5), although in terms of unit labour cost growth this will be reduced by a projected pick-up in productivity. On the other hand, better economic conditions, for example as reflected by surveys of order intake, could translate into some recovery in profit margins (chart 6). Recent signs of somewhat lower inflation expectations are a downside risk to these projections.

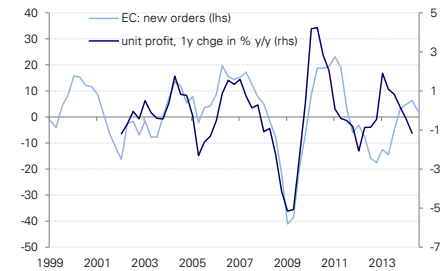
We discuss the outlook for the main HICP components in some more detail below.

### 5. Wages to stabilise



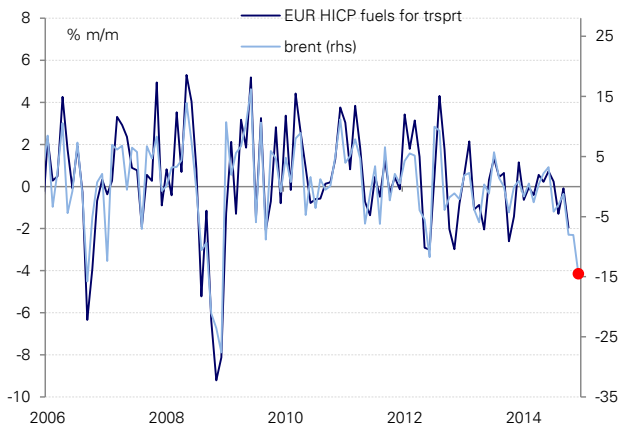
Source: Haver, Deutsche Bank

### 6. Better eco to support profits



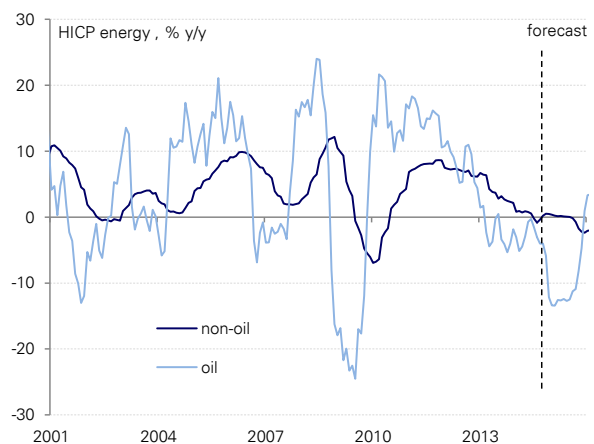
Source: Haver, Deutsche Bank

### 7. Slump in brent pulling energy inflation lower



Source: Haver, Deutsche Bank

### 8. Energy inflation negative in 2015



Source: Haver, Deutsche Bank



**Energy:** Energy inflation is likely to fall strongly in December and January, given the recent slump in oil prices. We expect HICP oil-energy to be down more than 12% y/y in January (from -4.0% in October), and this may well be enough to pull headline inflation into negative territory early next year. Non-oil energy inflation has eased as well through most of this year on the back of falling natural gas prices and the lagged effect of lower oil prices. It has risen slightly again this autumn (as household energy prices increased in France, Italy and Spain), but given the recent slump in crude as well as lower energy taxes in Germany, some renewed slowdown next year looks possible. Assuming oil prices in line with market pricing, we project total HICP energy to contract by more than 5% on average next year, before rising again in 2016.

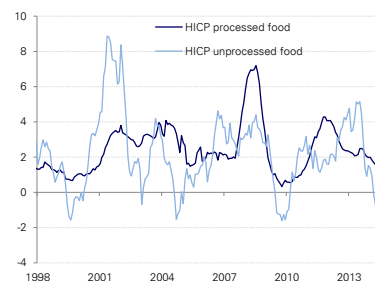
**Food:** After surprising to the downside in H1, unprocessed food inflation has bottomed at record low levels this summer, and has started to normalize in recent months (chart 9). This was above all due to seasonal food prices, while meat inflation has continued to decline (chart 10). The recovery may be slowed by indirect effects from the Russian import embargo, but we are projecting further increases from early 2015.

Processed food inflation has slowed progressively through 2014 (chart 9). World agricultural picked up at the start of the year, but reversed from the spring, which—together with subdued demand—has led to successive downward revisions to consumer food price forecasts. Business survey indicators of selling price expectations for food products suggest that processed food inflation can decline further until at least early next year (chart 11), and (excluding tobacco and alcohol items) turn negative. Assuming agricultural prices to stabilize from here, processed food inflation could start to rise modestly from next spring (chart 13).

These projections imply that after slowing somewhat in December and January, overall food (food, alcohol, tobacco) inflation could recover gradually through next year, while remaining on average at relatively subdued levels (around 1%). Our projections see it rising back towards 2% in 2016.

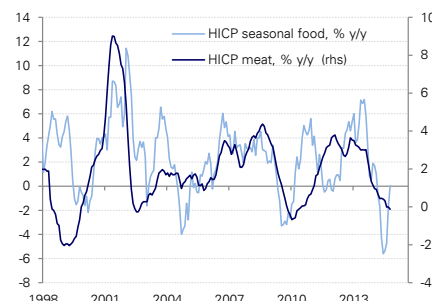
**Core goods:** Core goods inflation turned out somewhat lower than expected this year. It was stable in Q1 which was in line with end of 2013 projections, but dropped again in Q2 and has since trended broadly sideways at about 0.0% - 0.1% y/y. Across main components, both semi-durables and non-durables declined further from their Q4 2013 levels (chart 13). This was somewhat lower than suggested by leading indicators such as PPI for (core) consumer goods (chart 17), or business surveys (chart 16).

### 9. Unprocessed food has bottomed



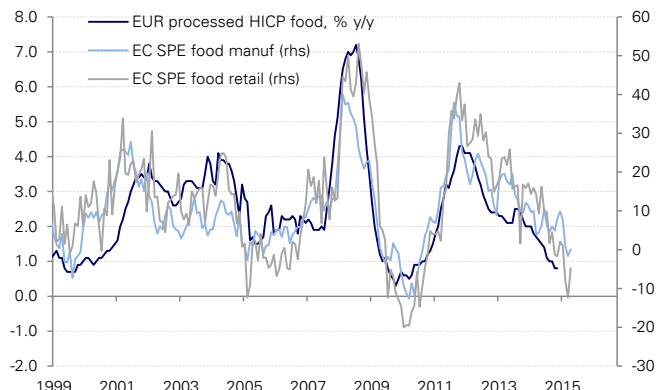
Source: Haver, Deutsche Bank

### 10. Unprocessed food components



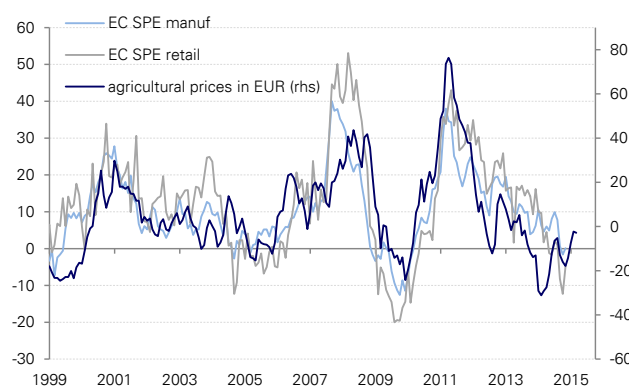
Source: Haver, Deutsche Bank

### 11. Processed food inflation to fall further



Source: Haver, Deutsche Bank

### 12. But to normalise later in 2015 if agriculture stable

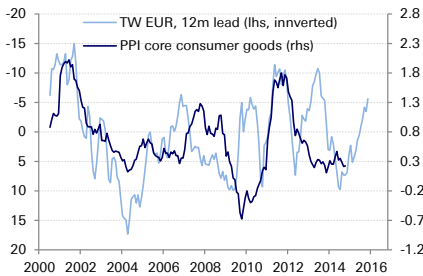


Source: Haver, Deutsche Bank



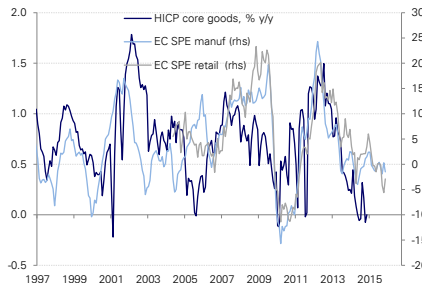
Looking ahead, indicators of domestic output costs such as PPI have remained subdued (chart 17), while business survey selling price expectations have recently fallen slightly again; risks may well remain on the downside given the recent decline in oil prices. Domestic pipeline price pressures are therefore likely to remain low, which would point to a sideways trend at best in HICP core goods inflation through much of next year (chart 17), although better retail demand could provide support. Some upward pressure on production costs and output prices could come from the weaker currency (chart 15), which remains a direct upside risk for consumer prices via imported consumer goods as well (chart 14). Nevertheless, we see core goods inflation trending broadly sideways from here, with some potential for a slight rise in inflation rates in H2 on the back of a weaker exchange rate and more resilient demand.

15. ...indirect upside risk



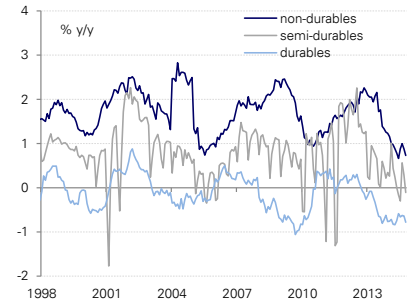
Source: Deutsche Bank

16. HICP core goods v surveys



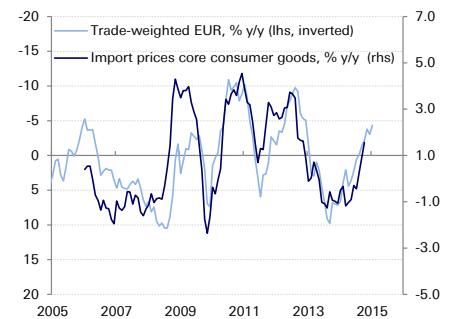
Source: Deutsche Bank

13. HICP core goods components



Source: Haver, Deutsche Bank

14. Lower FX: direct and...

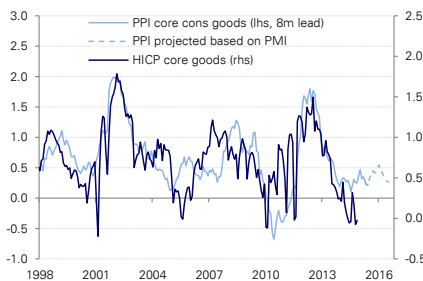


Source: Haver, Deutsche Bank

**Services:** Services inflation has trended broadly sideways since the end of 2013, with quarterly averages between 1.2% and 1.3% y/y. This was below expectations (as of end 2013) of a slight rise in H2. Inflation in all major components is currently running at levels well below historical averages, although health and communication have recovered from the one-off induced (abolishment of German medical visit fees; new entrant in French communication services market) lows seen in 2013 (chart 19). Health services inflation has risen marginally through 2014, but stands at less than half of 1999-2012 averages. Housing inflation eased marginally (chart 18), and German rent inflation in particular turned out lower than expected (1.4% y/y in November, broadly unchanged from Q4 2013). Lower energy and food costs are likely to have weighed on trends in transport and catering services.

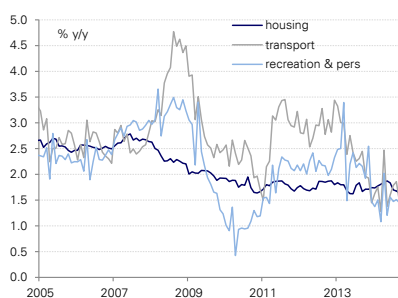
Services inflation is expected to remain around current subdued levels in early 2015. Base effects from this year's French VAT hike will put some downward pressure on y/y rates in at the start of next year, and cost pressures are likely to remain modest for now, as the trend in labour costs remains low and further knock-on effects from lower energy and food prices can be expected.

17. HICP core goods seen sideways



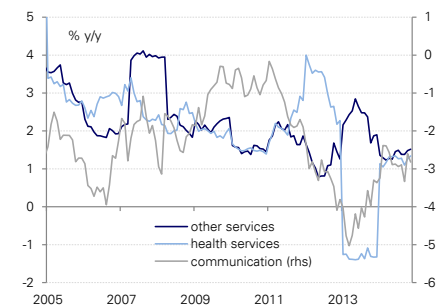
Source: Deutsche Bank

18. HICP services components...



Source: Deutsche Bank

19. ...have trended sideways in 2014



Source: Deutsche Bank



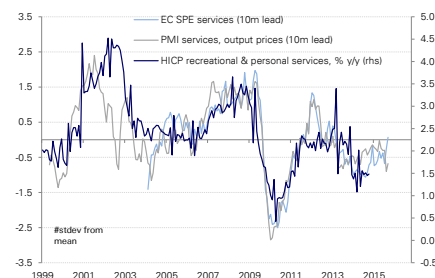
Some increase in wage costs, higher German rent inflation, fading indirect effects from lower food prices as well as lower pressure on margins on the back of improving demand conditions could allow some increase in services inflation in H2 2015 and 2016. For now, information about price setting intentions from business surveys remains somewhat inconclusive. The services PMI's output price index has recently fallen again, but had been pointing to somewhat higher inflation before (chart 20). The EC services survey's selling price expectations on the other hand has recently been rising and has perhaps been a better guide to services inflation trends since 2013 (chart 20). Across countries, the rise was led by Germany and Spain, and to a lesser extent Italy (as well as the Netherlands); price setting intentions in France have remained low (chart 21).

**HICP & core HICP:** The projections for core goods and services prices imply a fairly flat profile for core (total excluding food and energy) inflation, which is expected around current (0.7-0.8%) levels through much of H1, before rising towards around 1% at the end of the year. We would expect a modest uptrend to remain in place in 2016. Further economic weakness as well as the possibility of lower inflation expectations are downside risks. Given the projected subdued trends in food and energy components, we see headline inflation at 0.2% in 2015, and 1.3% in 2016 (chart 23). Q1 is expected to see negative inflation rates.

**Top-down projections:** Standard top-down forecasting models have important shortcomings, given model uncertainty as well as the fact that typical explanatory variables such as expectations or output gaps are not observable, at least not in real time. Moreover, structural economic adjustments as well as signs of somewhat lower inflation expectations raise the question of model stability; the former could potentially raise the sensitivity of inflation to trends in economic activity, the latter lead to higher persistence of inflation. These difficulties notwithstanding, the bottom-up forecasts discussed above are broadly consistent with projections from simple top-down inflation forecasting models. For example, a standard Phillips-curve model (using 2y SPF HICP expectations, an output/unemployment gap measure, oil prices and lagged HICP as right-hand side variables) would be consistent with rising (% q/q) HICP inflation in 2015 and 2016, at least when assuming the output gap to narrow (albeit stay negative) in line with EC projections and expectations to remain stable (chart 24).

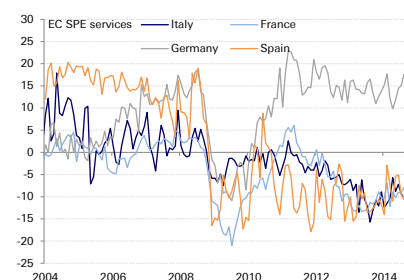
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## 20. Surveys somewhat diverging



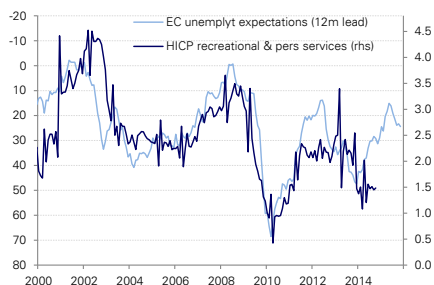
Source: Haver, Deutsche Bank

## 21. Price surveys across big4



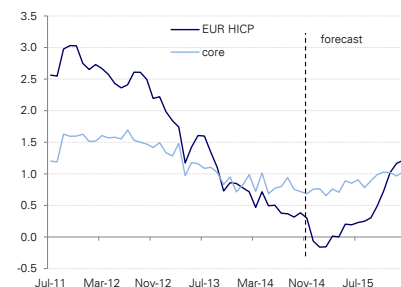
Source: Haver, Deutsche Bank

## 22. Better labour market a support



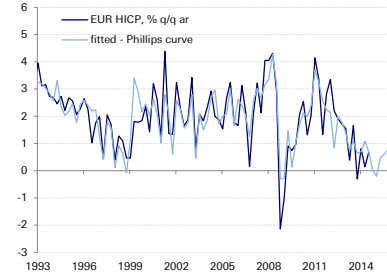
Source: Deutsche Bank

## 23. Headline negative in Q1



Source: Deutsche Bank

## 24. Top-down model projections



Source: Deutsche Bank



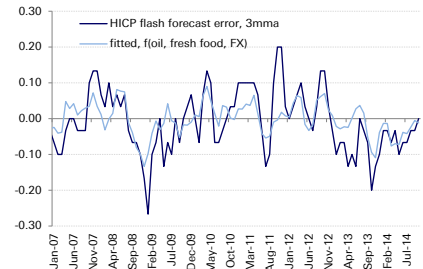
## EUR inflation market outlook

- Further declines in spot inflation may be a headwind for B/Es in the short-run, but the risk-reward for long B/Es positions at the short-end would look more attractive should oil prices stabilize. With only limited risks of policy failure priced at the long-end and significant downside risks priced in at the short-end, our bias would be for somewhat flatter curves in 2015.

A series of price shocks in the context of sluggish economic growth has produced another lower than expected inflation outcome in the euro area in 2014. In H1 this was mainly driven by downward pressure on prices of fresh food products and natural gas resulting from unusually mild winter temperatures and related excess supply. In H2, strong declines in agricultural and energy commodity prices have dominated revisions to the inflation outlook. As a result, monthly HICP prints have tended to surprise to the downside, a trend which had been in place since early 2013 (chart 1). Most of these surprises can be explained by changes in oil and fresh food prices as well as the currency and at least as far as monthly trends are concerned forecast errors appear to have been somewhat more balanced in autumn (chart 1). Nevertheless, for the average of 2014, inflation will likely turn out some 0.6pp below the December 2013 ECB staff forecasts, and also lower than implied by front-end HICP swaps. In October and November inflation was running about 60bp below 1y swaps nine months earlier, which is slightly lower than the forecast error at the end of last year (chart 2). Forecast misses of the 1y swap can to a large part be explained by trends in commodity prices (chart 2).

With economic growth remaining muted, the repeated price shocks and related expected indirect effects on domestic production costs have also pulled medium-term core inflation forecasts lower. The successive downward revisions appear to have started to put some downward pressure on longer-term expectations and inflation risk premia as well. This has led to a change in the term structure of B/Es. While 10y B/Es have been trending lower since autumn 2012 (chart 3), until this summer this had been above all driven by downward revisions to shorter-end expectations (5y B/Es reached new ex-2008 lows from end 2013; chart 4), while 5y5y forward B/Es had remained relatively close to historical averages (chart 5). This has changed from this summer, with forward B/Es starting to decline—5y5y swaps falling towards 1.8% and 9y1y towards 2%. This trend has been broadly consistent with economists' perception of rising downside risks to the longer-term inflation outlook (chart 6), and is likely to have played a role in the ECB's decision to shift towards a quantitative balance sheet objective this autumn.

### 1. 2014 surprises on the downside



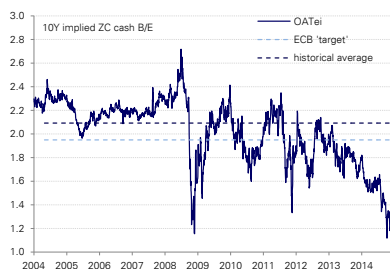
Source: Deutsche Bank

### 2. 1y swap forecast errors v commodities



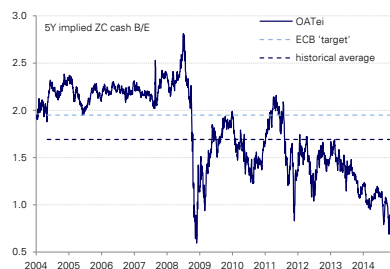
Source: Deutsche Bank

### 3. 10y B/Es on a downtrend...



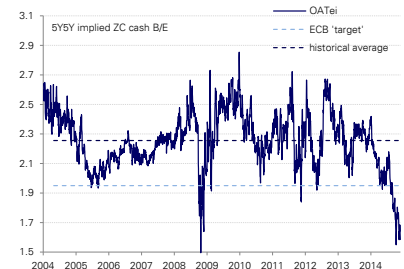
Source: Deutsche Bank

### 4. ...driven by 5y and...



Source: Deutsche Bank

### 5. ...recently also by 5y5y

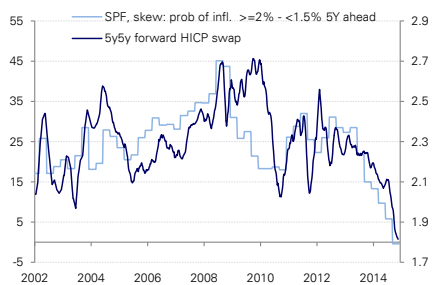


Source: Deutsche Bank



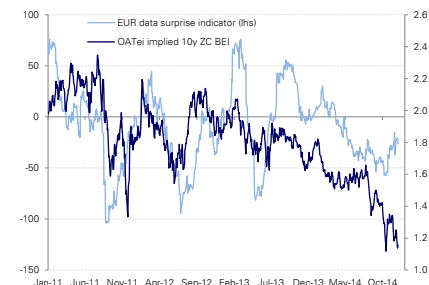
The fact that B/Es are pricing a risk of a regime shift in inflation is not only suggested by their significant divergence from historical means as well as from the ECB's inflation objective (charts 3 – 5). Their relationship with economic indicators has also broken down. Over the past ten years or so, 10y B/Es would have been on average about 50bp higher at the current level of PMIs, PMI price indices, spot inflation and risk aversion (chart 10). Finally, the cheapness of B/Es to baseline inflation forecasts has become more extreme reaching 50bp or more in 5y. In sum, at the end of 2014, B/Es are pricing in significant downside risks to the inflation outlook, especially at the shorter-end.

### 6. Risk premia falling



Source: Deutsche Bank

### 7. Some stabilisation in data trend



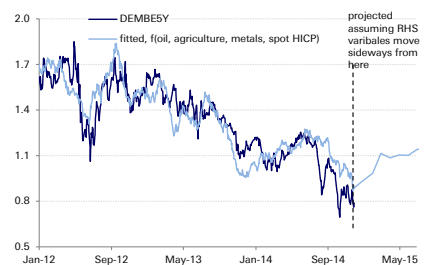
Source: Deutsche Bank

### 8. B/E v spot HICP



Source: Deutsche Bank

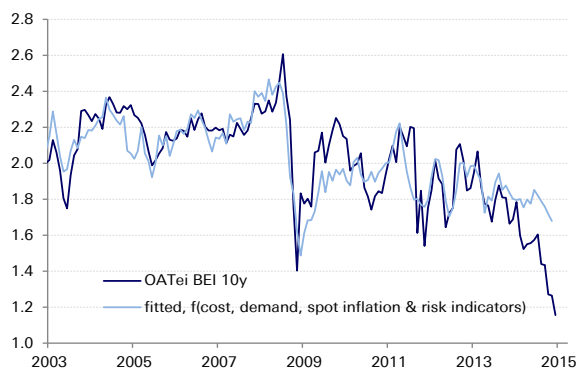
### 9. 5y B/E projection assuming commodities stable



Source: Deutsche Bank

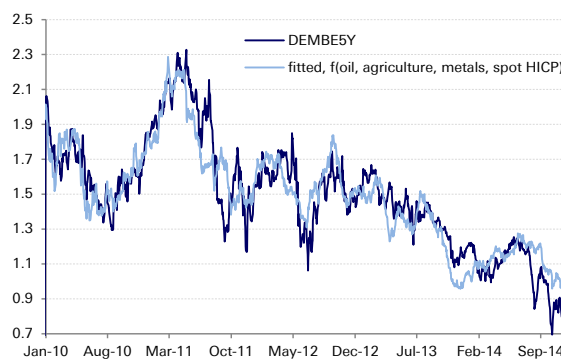
Looking forward, a necessary condition for a recovery in B/Es is likely to be the stabilization in commodities and some signs of a pick-up in spot inflation (chart 8). We note that one model that has continued to track B/Es reasonably well is a regression of 5y B/Es on changes in oil, agriculture and industrial prices as well as (ex energy) spot inflation (chart 11). Assuming the explanatory variables to stabilize from here at face value would point to about 30bp upside for 5y B/Es through next year (chart 9). This is consistent with the assessment that B/Es are already pricing in some downside risks, and that for 1y1y B/Es at 50bp to be realized additional declines in commodity prices and/or a renewed deterioration in economic conditions are likely to be necessary. At the time of writing 1y1y corresponds to y/y inflation in September 2016, which the December ECB staff baseline forecast for example puts close to 1.4%. While the inflation sentiment is likely to remain challenging for now given expectations of headline inflation turning negative in the coming months, the risk-reward for long B/Es positions at the short-end would look attractive should commodity prices stabilize, especially given the possibility of ECB government bond purchases (which in our view would include ILBs). Any additional FX weakness resulting from policy divergence would benefit 2-3y inflation expectations in particular.

### 10. B/Es low against economic trends



Source: Deutsche Bank

### 11. But broadly in line with commodities



Source: Deutsche Bank



Long-dated forward B/Es on the other hand would seem more at risk should the ECB be perceived to be behind the curve. Valuations are low by historical standards, but not necessarily low in absolute terms, and 5y5y or 10y5y swaps at 1.8% and 2.15% for example remain consistent with the ECB's definition of price stability, i.e. are not pricing policy failure. At the long-end, the 10y30y slope looks somewhat too steep when regressed on 10y B/Es as well as the 5y10y slope (chart 12). In our view, long-dated forward B/Es remain a hedge against ECB disappointment or unexpected persistent economic weakness.

In sum, the main downside risk (beyond further declines in commodities) would seem growing perceptions of 'ECB failure' in which case longer-dated forwards can decline further, but 1y1y does not necessarily need to fall. The main upside risk would be some stabilization in commodities, better economic data, further ECB support and related FX weakness which would allow a recovery in B/Es led by the shorter-end. In both scenarios the B/E curve could end up somewhat flatter. Our bias would be to position for somewhat flatter B/E curves, especially in 3y (or 5y) v 10y.

**RV:** After persistent inflation valuation differences across issuers since 2011, 2014 has been the year of convergence. B/Es or ASW differential type measures have moved broadly back in line, with only Germany about 5bp richer (chart 13). In z-spread terms, 10y ILBs offer about 15bp pick-up over nominals, which is roughly in line with past averages. While we would consider this as about fair, the possibility of ILBs being included in a potential ECB bond purchase program may provide some support for ILBs in the coming months. Chart 13 also illustrates the relative cheapness of OATei30 and BTPei24 & -26, as well as of SPGei19 v SPGei24.

**FRFi:** Spreads between FRF CPI and EUR HICP swaps have recovered from their mid-year weakness. In 2y, we have a preference for EUR over FRF given that the French government has continued to exclude the possibility of a VAT hike ahead of the 2017 presidential election and several past and planned government reforms contain disinflationary elements. Scope for some recovery in domestic inflation from current levels would seem higher in Germany or Spain than in France in our view.

**Issuance:** EUR ILB gross supply has been the highest on record in 2014, exceeding EUR50bn (chart 14). Issuance rose slightly in Germany, recovered back to pre EUR crisis levels in Italy (ex BTP Italia), while Spain entered the market with sales in excess of EUR12bn. French issuance was again skewed towards EUR inflation bonds and a new 10y OATi next year looks like a distinct possibility. We would expect broadly similar supply trends next year, with total euro area ILB issuance above EUR50bn again. A new (5y?) benchmark can be expected from Germany, while Spain may look to extend its ILB curve to 15y.

**Cash-flows:** The heaviest cash-flow month will be July next year, with the redemption of the OATei15 (EUR17bn together with interest payments), while March, April and September are expected to see coupon payments of about EUR1.5bn, EUR0.7bn and EUR1.5bn (chart 15). ILB benchmark duration will lengthen at the end of April and September, as the DBRei16 and BTPei16 drop out of 1y+ indices.

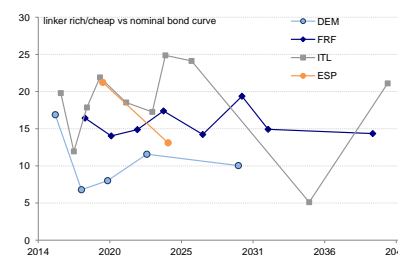
Markus Heider (+44) 20 754 52167

## 12. 10y30y steep v 10y & 5y10y



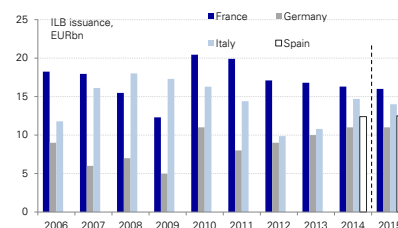
Source: Deutsche Bank

## 13. EUR ILBs back in line



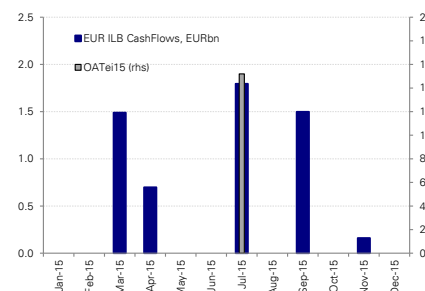
Source: Deutsche Bank

## 14. ILB issuance



Source: Deutsche Bank

## 15. Expected 2015 cash-flows



Source: Deutsche Bank



## GBP inflation outlook

- The recent slump in oil prices is expected to push RPI/CPI inflation below 2%/1% in early 2015. Dampening effects from this year's currency appreciation and declines in imported costs are expected to prevent a strong pick-up in inflation thereafter, despite a robust domestic economy. Still, we see inflation rising again from Q2, and forecast average RPI inflation at 2.1% in 2015 and 3.0% in 2016.

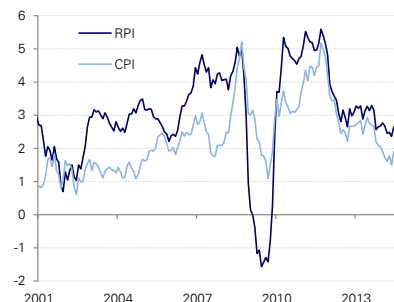
UK inflation turned out weaker than expected in 2014. RPI inflation has fallen from 2.6% y/y in Q4 2013 to 2.3% in October (chart 1) and average 2014 inflation, probably at 2.4%, will be about 0.2pp below our end 2013 forecast. CPI inflation fell from 2.1% in Q4 2013 to 1.3% in October, which compares to a Q4 2013 BoE projection of 2.1% for Q3 and Q4 2014.

The downside surprise was above all due to weaker than expected imported inflation, given falling commodity prices, subdued global (and especially euro area) inflation of manufactured goods and an about 9% appreciation in sterling between mid-2013 and mid-2014. In Q3, the import deflator was down 4.2% y/y, the lowest rate over the past fifteen years (chart 4). Domestic inflation has however also been slower than expected to react to strong economic activity—perhaps limited by indirect effects from lower imported costs—although GDP deflator inflation has accelerated slightly from 1.9% y/y in Q4 2013 to 2.1% in Q3 2014 (chart 4).

Across the main CPI components, the slowdown in inflation was above all due to falling food inflation which has subtracted about 0.5pp from headline inflation between Q4 2013 and the three months up to October 2014 (chart 3); energy has taken off 0.2pp, while core inflation has remained relatively stable. Within core, services inflation has only shown a marginal increase through the year, while core goods inflation, which had shown some surprising stickiness through H1, has fallen in H2 (chart 2).

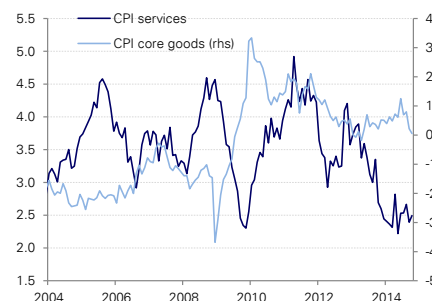
Looking ahead, lower commodities and lingering effects from past currency appreciation will continue to weigh on import prices and headline RPI and CPI inflation are expected to ease further in early 2015. This is also likely to work against increasing core inflation, but with the output gap projected to close (based on OECD or EC forecasts), we would expect clearer signs of a pick-up in domestic inflation next year.

### 1. Inflation has been falling in 2014



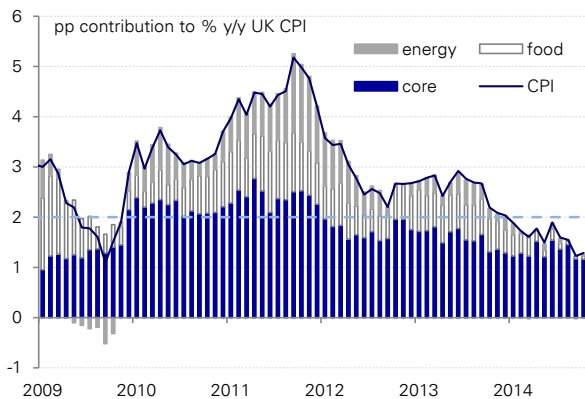
Source: Haver, Deutsche Bank

### 2. Core goods & services inflation



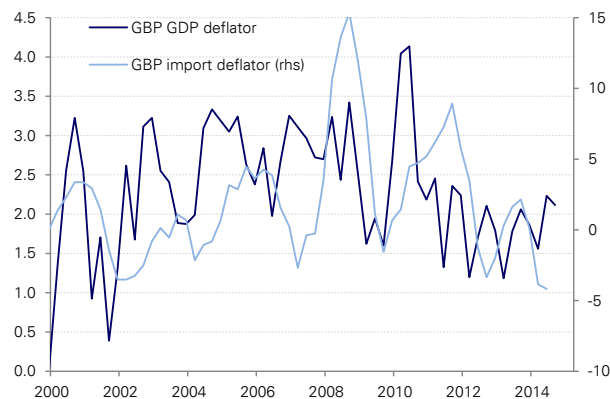
Source: Haver, Deutsche Bank

### 3. CPI: contributions from main components



Source: Haver, Deutsche Bank

### 4. Imported inflation at lows, domestic inflation sideways

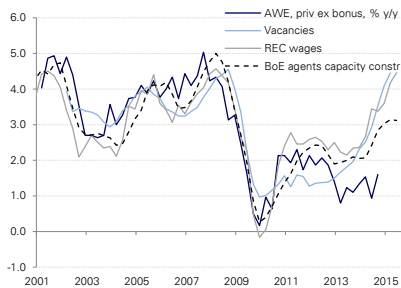


Source: Haver, Deutsche Bank



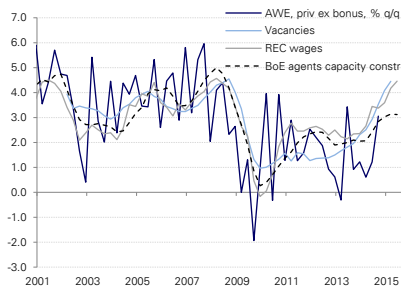
Leading indicators—such as unemployment, vacancies, indicators of capacity constraints, or pay surveys—continue to consistently point to a noticeable acceleration in wage growth in the coming quarters for example. After the subdued trend in early 2014, y/y earnings growth remains below these indicators (chart 7), but wage momentum has picked up through the year, with Q3 q/q growth above 3% (annualised, chart 8). These trends should support services inflation next year, and we would see headline inflation rising again from Q2. We discuss the outlook for the main RPI/CPI components below.

**7. Wage inflation still low, ...**



Source: Deutsche Bank

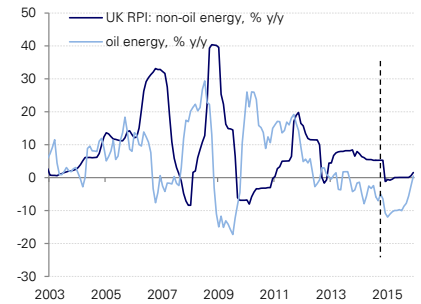
**8. ...but accelerating**



Source: Deutsche Bank

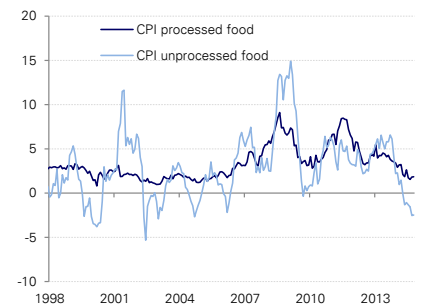
**Energy:** Energy inflation will slow sharply over the coming months, not only because of the slump in crude oil, but also because of a base effect related to last December's hike in utility bills (chart 5). This is likely to be enough to pull headline CPI inflation below 1% and RPI below 2% in early 2015. With energy bills unlikely to rise before the election, we project overall energy inflation at well below 2009 levels (down more than 4% on average) and hence to subtract significantly from headline inflation next year.

**5. Energy inflation to fall strongly**



Source: Haver, Deutsche Bank

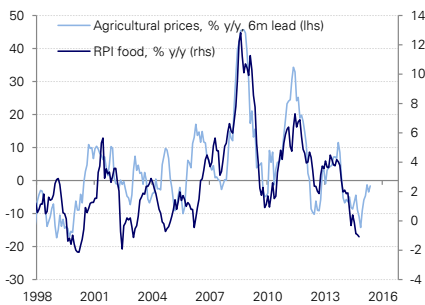
**6. Food inflation has fallen**



Source: Haver, Deutsche Bank

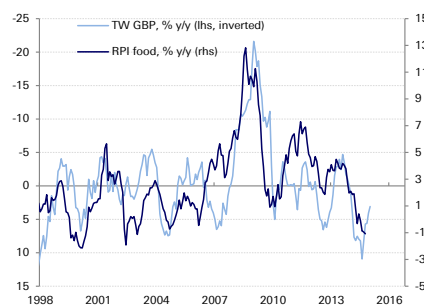
**Food:** Food inflation was expected to slow this year, but the extent of the decline has been larger than forecast, with both processed and unprocessed food inflation trending lower (chart 6). Several factors have weighed on price developments: supply shocks from favourable weather, the Russian import embargo and global agricultural prices (chart 9), sterling appreciation (chart 10) as well as intensifying supermarket competition. These factors are expected to continue to weigh on consumer price trends in the near-term and firms' selling price expectations (as well as PPI trends) have remained subdued (chart 11). Assuming some stabilization in commodity prices and normalization in local supply conditions, we would see food inflation recovering from Q2 next year, reaching above target levels in Q4 2015.

**9. A stabilization in commodities...**



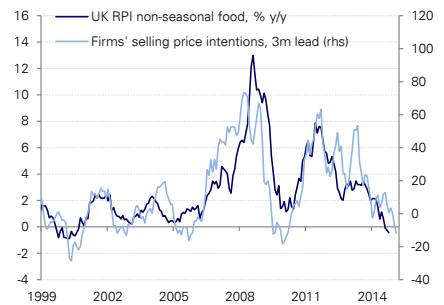
Source: Deutsche Bank

**10. ...and FX could provide support**



Source: Deutsche Bank

**11. Selling price expects low for now**



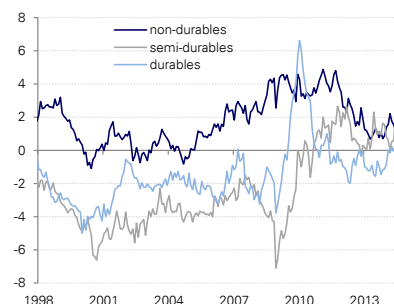
Source: Deutsche Bank



**Core goods:** CPI and RPI core goods inflation has proved somewhat stickier than expected in H1, but has fallen quickly since the summer (charts 12 & 14). Changing seasonality in retail pricing may explain some of these moves. Low imported inflation as well as a strong currency are likely to continue to be dampening factors, while domestic output price inflation has trended broadly sideways through the year (chart 13). Business survey price setting indicators have started to fall again since August and further weakness could be in store given the slump in oil prices. This means that domestic cost pressures in manufacturing are likely to be contained in the coming quarters (chart 13), although rising labour cost growth and wider profit margins should limit the downside risk for core goods inflation. Regressing RPI core goods inflation on past trends in downstream PPI inflation and the currency would point to a broad sideways trend in the coming quarters (chart 14), but the uncertainty around these projections remains elevated not least given the difficulties in accounting for past tax and methodological changes.

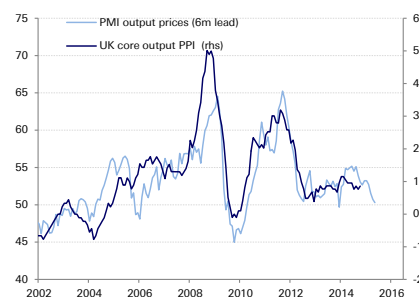
**Services:** Services inflation has remained fairly flat in 2014, as strong economic activity has been slow to translate into rising wages and prices. Indirect effects from lower imported costs are likely to have played a role. Housing related inflation accelerated, but catering inflation slowed amid lower food costs, while inflation for health and communication services was down as well. Economic conditions for a pick-up in domestic inflation remain in place, with demand indicators pointing to widening margins and a faster pace of price increases (chart 15), and pay indicators pointing to rising labour costs (charts 7 & 8) which should support services inflation (chart 16). Indirect effects from lower food and energy costs are however likely to continue to limit any gains, especially for catering or transport services. The 'tuition-fees' base effect will weigh on education inflation in October, and the government contribution to inflation is expected to remain relatively low ahead of the election. In all, we see services inflation rising only modestly next year.

### 12. Core goods components



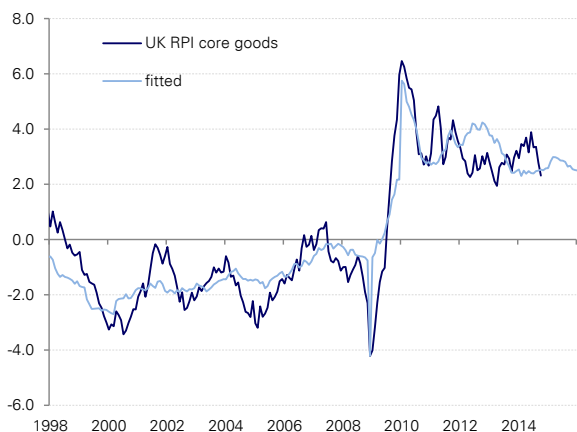
Source: Haver, Deutsche Bank

### 13. Downstream PPI sideways



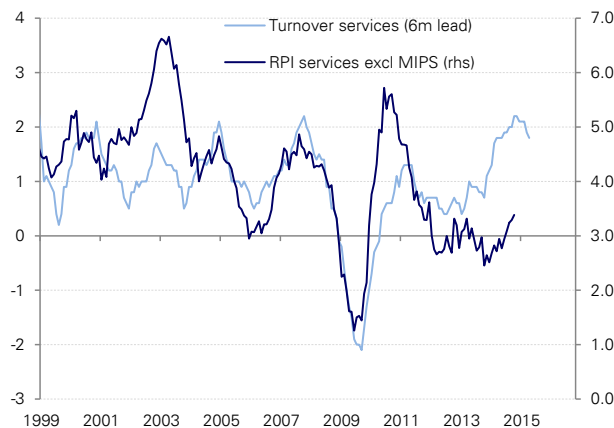
Source: Haver, Deutsche Bank

### 14. Core goods inflation projected sideways



Source: Haver, Deutsche Bank

### 15. Stronger demand to support services inflation



Source: Haver, Deutsche Bank



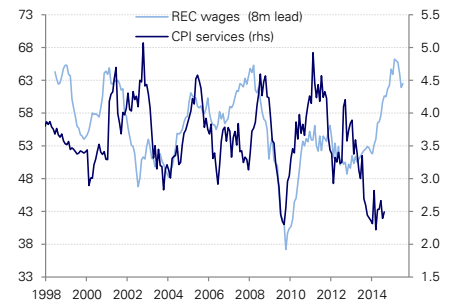
**RPI/CPI wedge:** The RPI-CPI wedge has averaged 0.88pp between January and October 2014, which was up from 0.48pp in 2013 (chart 18), and somewhat higher than expected. This was mainly driven by a rising contribution from housing components (chart 18). MIPS inflation actually fell, but this was more than offset by rising house price inflation, with non-MIPS housing components adding 0.5pp to the wedge on average over the first ten months of 2014, which was up from 0.16pp in 2013, and the highest since 2007. The formula effect remained stable around 1.0pp, while other components subtracted on average 60bp from the overall wedge, which compares to 0.67pp in 2013 (chart 18).

The wedge is expected to stabilize next year. Formula effect and 'other' contributions are projected broadly sideways, but leading indicators have recently been pointing to some deceleration in house price inflation (chart 17). With market policy rate expectations having declined, this may be only partly offset by a higher MIPS contribution. The wedge could rise above 1pp from 2016, if the BoE raises rates in line with market pricing.

**RPI/CPI forecasts:** The projections for the main components discussed above imply a fairly flat trend in UK core inflation, despite the marked improvement seen in the economy over the past couple of years. This is mainly because of a strong currency and indirect effects from declines in imported costs. Nevertheless, some increase in domestic inflation, a normalization in food inflation and in H2 base effects from energy are expected to translate into rising headline inflation from Q2. Q1 is likely to see RPI inflation below 2% and CPI inflation below 1% however, given the recent strong drop in oil prices. We see average RPI inflation at 2.1% in 2015 and 3.0% in 2016.

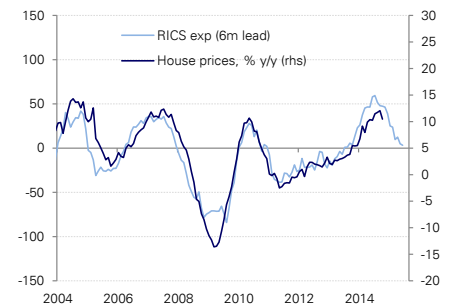
*Markus Heider (+44) 20 754 52167*

16. So should rising labour costs



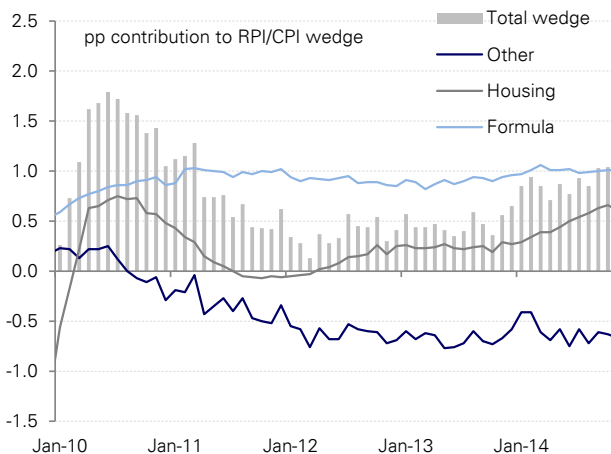
Source: Haver, Deutsche Bank

17. House price inflation to slow



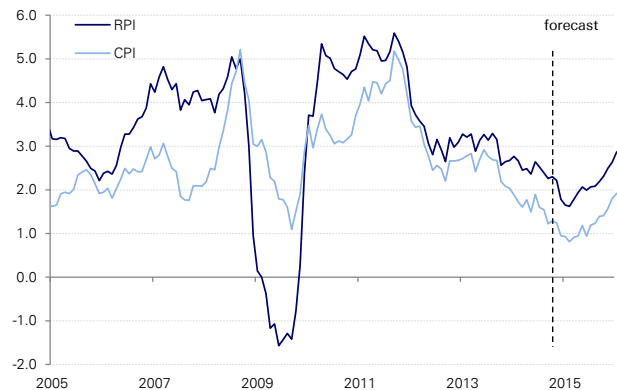
Source: Haver, Deutsche Bank

18. RPI/CPI wedge components



Source: Deutsche Bank

19. Inflation to fall, but higher again in H2



Source: Deutsche Bank

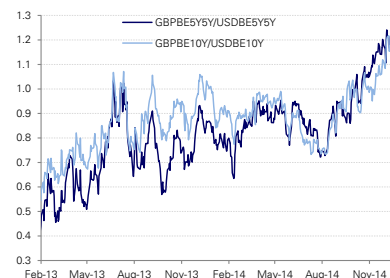


# GBP inflation market outlook

- External factors remain a headwind, and the uncertainty about—still strong—domestic economic trends has risen somewhat. In that context we would be neutral on B/Es into the year, but remain biased towards higher valuations at a 1y horizon.

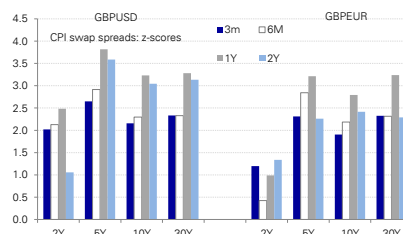
GBP B/Es declined in a challenging global inflation environment this year, with 5y, 10y and 30y B/Es down between 20bp to 40bp since the end of 2013. The perhaps most noteworthy trend has however been the relative resilience of the GBP inflation market, with GBP B/Es outperforming markedly on a cross market basis. This has not only been the case against EUR, where the market has been pricing in the risk of low inflation becoming entrenched, but also against USD, with GBP/USD B/E spreads widening strongly in the B/E sell-off since the summer; 5y5y B/E spreads for example have risen by more than 30bp (chart 1). Contrary to the US, 2y1y or 4y1y forwards have remained largely unaffected by the oil induced downward revisions to near-term inflation forecasts (chart 3). The outperformance has occurred despite data surprise indicators showing less resilience than in the US. In any case, at the end of the year, GBP/USD or GBP/EUR B/E spreads beyond 5y stand at least two standard-deviations above historical averages (chart 2).

## 1. GBP B/Es have outperformed



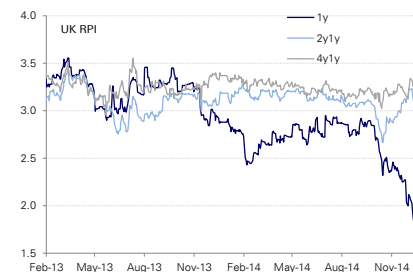
Source: Deutsche Bank

## 2. Cross market spreads wide



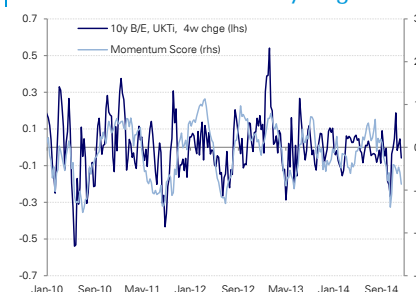
Source: Deutsche Bank

## 3. Forwards well behaved



Source: Deutsche Bank

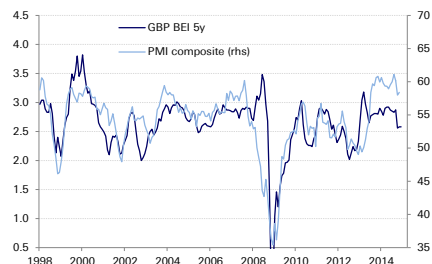
## 4. Macro momentum very negative



Source: Deutsche Bank

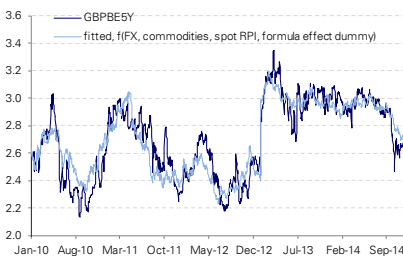
**Macro backdrop:** B/Es remain stuck between a supportive domestic economic backdrop—despite some recent signs of a slowdown in data momentum, not least from the housing market—and a challenging global inflation environment. B/Es would seem low against the former alone (chart 5), but fair against the latter and the very weak near-term spot inflation momentum (chart 6). Attempting to take into account both would suggest some upside for B/Es (chart 7), but for this to be realized, the negative near-term market momentum (chart 4) may need to fade (i.e oil prices would need to stabilize). With spot inflation likely at unusually low levels in early 2015, we would be neutral on B/Es into the year, but remain biased towards higher B/Es at a 1y horizon.

## 5. B/Es low against PMI, but...



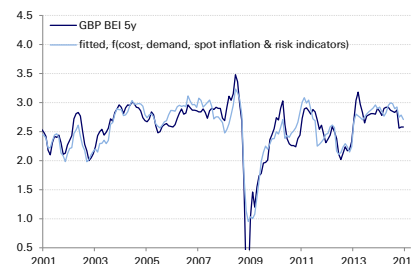
Source: Deutsche Bank

## 6. ...fair vs commodities, spot RPI



Source: Deutsche Bank

## 7. Slightly low against both



Source: Deutsche Bank



**B/E curve:** The B/E curve has steepened significantly since the summer given the downward revisions to near-term RPI forecasts on the back of lower oil prices, lower expected house price inflation and the repricing of policy rate expectations. Slopes are well above average (chart 8). The move has however been orderly, and forward B/Es have remained resilient. Some reflattening would seem likely if oil prices stabilize. 20y remains the richest point on the forward B/E curve, with 15y5y RPI at 3.9% (above 4% in cash B/E, chart 11) and 10y10y at 3.86%, reflecting perhaps the concentration of pension fund liabilities in that sector. The 5y10y30y RPI fly has normalized (10y has cheapened; chart 8) since mid-November, after having been rich over most of Q3 and early Q4.

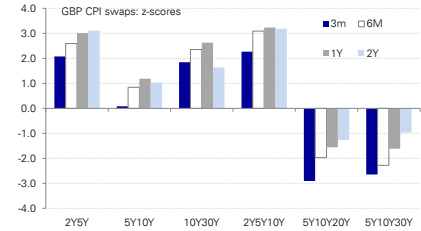
**Real yields:** Real yield forwards have fallen significantly through Q4 reaching record lows at the end of the year (chart 9). In swaps, forward valuations are below -1%, and the shape of the forward curve has become relatively flat (chart 9). The low point is around 25y, with 20y5y and 15y10y below -1.2%.

**ASWs:** Swap-bond B/E spreads currently are close to the upper end of the range seen over the past year, especially for shorter maturities (chart 10). UKTi across the curve have underperformed swaps in the global risk-off seen in December, but trends had diverged earlier in Q4. Spreads up to 15y had been widening through Q4, while 50y UKTi had been richening against swaps in October and November. Spreads have remained in a relatively well defined range over the past 1.5 years, which would argue for some stabilisation from here. Chart 11 suggests that in forward space 15y5y and 20y5y cash B/Es are rich against swaps.

**Flows:** January and July will see the largest coupon payments next year (about GBP860m; chart 12), followed by May and November (GBP780/790m). No ILG will mature. The UKTi16 will drop out of 1y+ benchmarks in July, which will lead to a large (around 1.1y) duration extension. Similarly, the exclusion of the UKTi20 from 5y+ benchmarks will lengthen index duration by over 1y in April. The latter could trigger significant portfolio adjustment flows, and could provide some support for the long-end. 15y+ benchmark duration finally will lengthen (by more than 0.9y) in July when the IL30 is excluded.

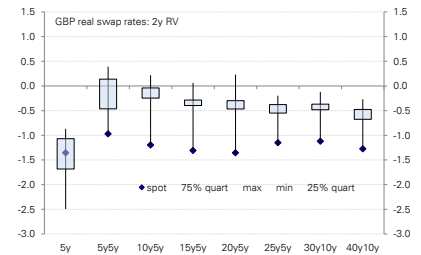
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8. B/E curve steeper than average



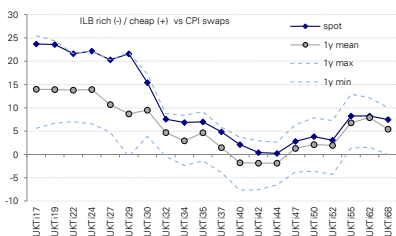
Source: Deutsche Bank

9. Real yield forwards at record lows



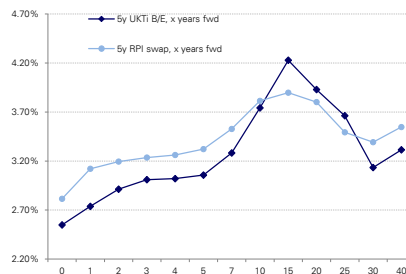
Source: Deutsche Bank

10. Cash has cheapened v swaps



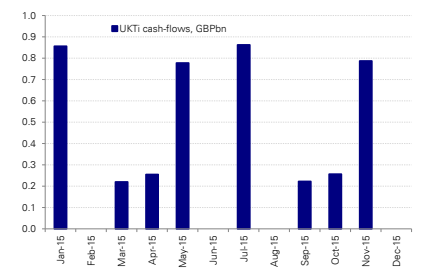
Source: Deutsche Bank

11. 15y5y cash B/Es rich v swaps



Source: Deutsche Bank

12. Expected 2015 cash-flows



Source: Deutsche Bank



## US inflation outlook

- Core CPI YoY is likely to stabilize in a tight 1.7-1.9% range in H1 2015 before picking up marginally towards 1.9-2% in Q4 2015. The negative impact of the collapse of commodity prices on core inflation will most likely be felt over the course of 2016 given significant lags between lower production costs and the actual decline in core goods prices.
- Core CPI should be supported in 2015 by rent inflation for most of the year but should also benefit from some mild recovery in core goods inflation resulting from past upward pressures on import prices and core PPI. The recovery in wage inflation should ultimately floor services inflation.
- A top-down approach linking core inflation to the output gap and long term inflation expectations confirms the above result, implying a mild acceleration of core inflation towards 1.9% by the end of 2015.
- Assuming a stabilization of crude oil futures going forward (WTI ~\$60 at time of writing), US headline inflation should breach 0% towards March 2015. While the emergence of negative inflation in the US is a symbolic shock, this phenomenon is transitory, being solely due to the large correction in energy markets. CPI YoY will recover quickly from Q3 onwards as base effects on energy prices become favorable. Food inflation will become a small drag to headline inflation in 2015, slowing down gradually from 3%+ in early 2015 towards sub 1.5% by Dec-2015.

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### Core inflation outlook – bottom up approach

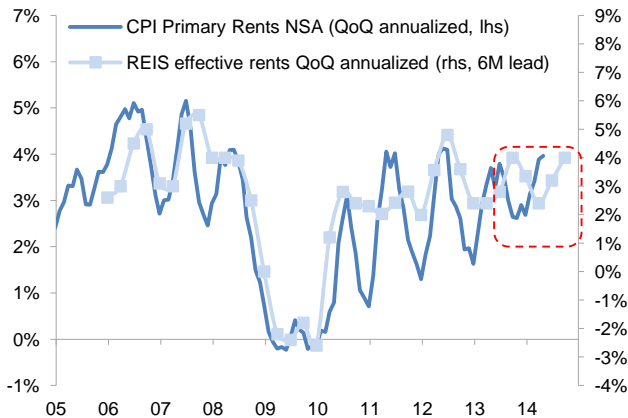
Core inflation was on a mild positive trend in 2014, starting the year at 1.6% and ending it around 1.8%. In our outlook from Dec 2013 we were anticipating some acceleration towards 1.9%. As expected, continuous upward pressures on rent inflation have been offset by some persistent softness of inflation for core goods and services, the natural consequence of the decline in pipeline inflation seen in 2013. We however failed to anticipate the continuous drop in medical care services inflation. To build our core CPI forecasts for 2015 we first adopt a bottom-up approach, where we forecast key subcomponents of core CPI, and then we adopt of top-down approach based on a macro model.

#### Shelter inflation

Shelter represents over 40% of the core CPI basket and corresponds mostly to rent inflation. The strength in rent inflation has been the key driver of the recovery of core CPI over the past 12 months thanks to historically low rental vacancy rates and to the lagged correlation between rents and higher house prices. At this stage we continue to see further strength in rent inflation for most of 2015. The estimate by REIS of effective apartment rent inflation is an excellent leading indicator (2 quarters) of the BLS measure of rent CPI (which is smoothed). Latest REIS data on rents and vacancy rates continue to imply resilient rent inflation over H1 2015 (see figure 1 below). The past dynamics of house prices y/y also implies further upside risk to shelter inflation towards a 3.2/3.4% range by mid 2015 before slowing down back towards 3% by year end and towards 2.5% in 2016 as a result of the recent slowdown in house prices appreciation (see figure 2). Other leading indicators are sending a similar message (a) consumption growth has been an excellent leading indicator of rent inflation and is implying some stabilization in the next 12 months (b) the NMHC Quarterly Survey of Apartment Condition continues to show some tightening of the rental market, supporting rent inflation for the next 12 months.

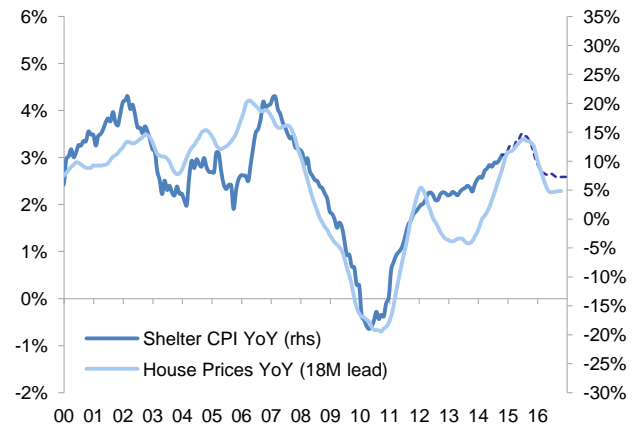


Figure 1: Rent inflation as estimated by REIS is implying upside risk to BLS rent inflation in next 2 quarters



Source: Deutsche Bank, REIS

Figure 2: Dynamics of house price implies strong shelter inflation for most of 2015, downside risk for 2016



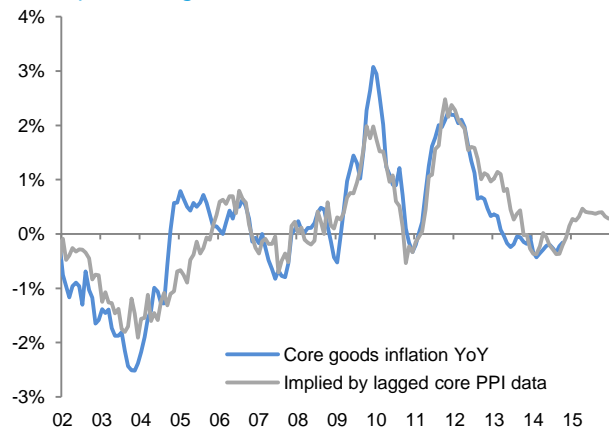
Source: Deutsche Bank, BLS, Bloomberg

### Core goods inflation

The dynamics of inflation for core goods (CPI Commodities less food and energy, ~24% of the core CPI basket) is mainly a function of the past dynamics of pipeline inflation (production costs) and of imported inflation. Pipeline inflation has gradually increased over the course of 2014 with higher core PPI YoY at the different stages of the production process. This should ultimately pass through core goods inflation over most of 2015. We generally find a 9-12M lag between PPI core finished goods y/y and core goods inflation y/y for instance. Figure 3 shows the expected recovery in core goods inflation in 2015 given the past dynamics of core PPI.

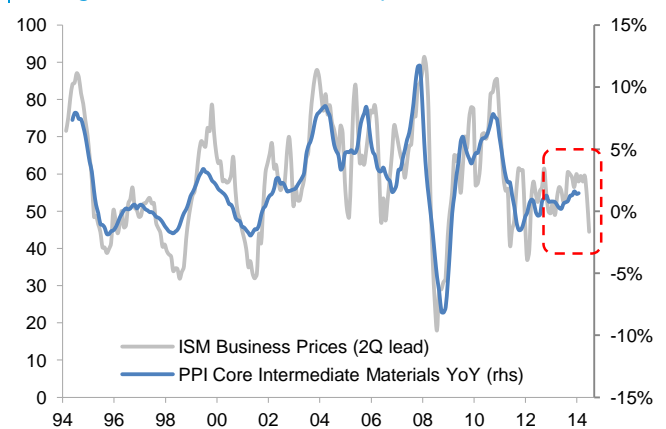
However we expect the recent decline in energy and industrial metal prices to have a substantial negative impact on pipeline inflation in the coming months. While surveys of business prices (ISM business prices) have already declined sharply in response to the commodity shock, it will take a few quarters for this shock to translate into a generalized decline of various measures of core PPI (from core processed materials to finished goods) With pipeline inflation under pressure in H1 2015, we should start seeing renewed downside risk to core goods inflation from Q4 2015 or from Q1 2016 onwards.

Figure3: Past dynamics of core PPI data implies some recovery of core goods inflation in 2015



Source: Deutsche Bank, BLS

Figure 4: Pipeline inflation will be under pressure in H1 2015 given the recent commodity shock

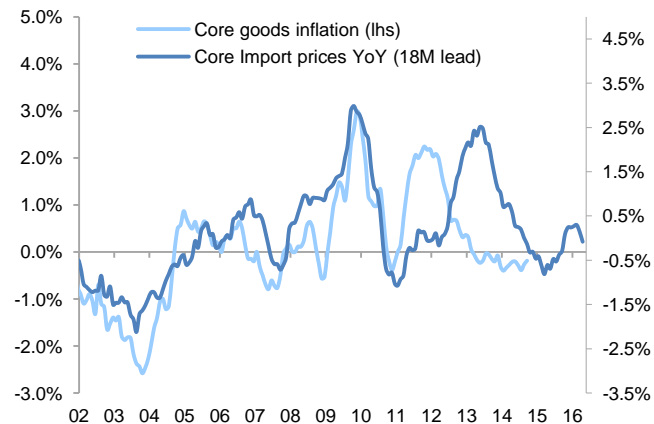


Source: Deutsche Bank, Bloomberg



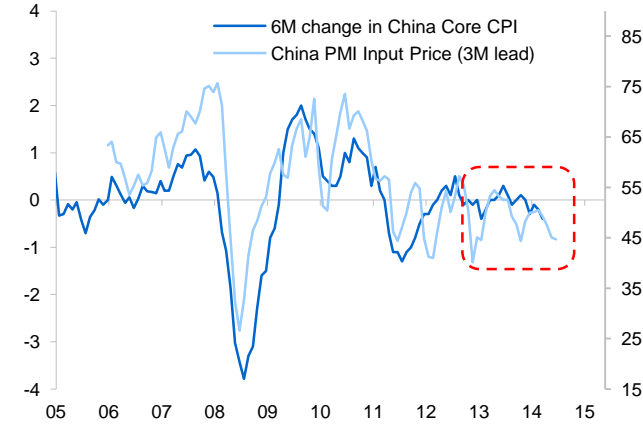
Beyond prices of domestically produced goods, the dynamics of import prices also matters to the determination of core goods inflation. Imported inflation of core consumer goods and capital goods has recovered over the past 12-15 months which should also support some recovery in core goods inflation in 2015 (see figure 5). But this recovery may not last beyond 2015 given the development of some recent weakness in imported inflation. The drop in commodity prices is negative for China pipeline inflation and thereby for China core CPI going forward (see fig 6). This should translate in a slow-down of imported inflation in 2015, with a negative impact on core goods CPI in 2016.

Figure 5: Import prices leading core goods prices



Source: Deutsche Bank, BLS, Bloomberg

Figure 6: China to experience lower core inflation

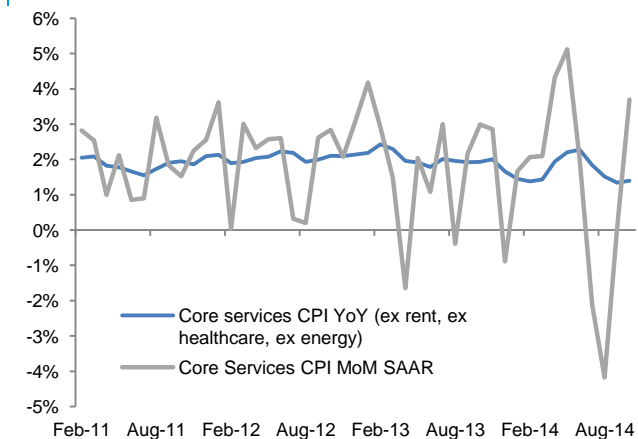


Source: Deutsche Bank, Bloomberg

### Services inflation

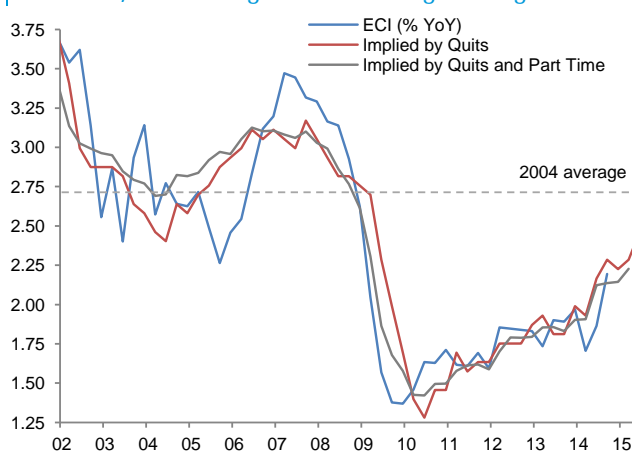
**Core services inflation:** we define core services as services excluding rent, healthcare and energy. This category embeds notably personal services, education, communication, recreation and transportation services (~22% of core CPI basket). Core services were responsible for the unexpected weakness in core CPI in Q3 but they have recovered in October (see fig. 7). We expect a tighter job market to generate upward pressure on wage inflation (see fig 8) and to floor core services CPI. We see core services inflation stabilizing in a 1.2-1.6% range (1.4% currently) in H1 before normalizing towards 2% in H2.

Figure 7: Core services inflation most likely to stabilize and normalize towards 2% trend



Source: Deutsche Bank, BLS

Figure 8: Improvement in job market, characterized by Quits rate, is a leading indicator of higher wage inflation



Source: Deutsche Bank, BLS

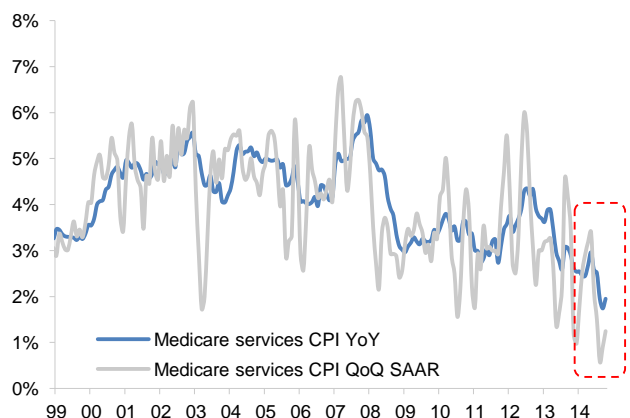


**Medical care service inflation** (~8% of the core CPI basket) has dropped markedly in 2014, a consequence of the deregulation of the market for medical services following the application of Obamacare. Obamacare has provided US consumers with the ability to compare and choose in a transparent way the cheapest providers of healthcare services, leading to significant reductions in their average cost. Consumption of healthcare services as measured by the GDP has been fairly stable in the past few years so that the drop in healthcare inflation stands out as a supply story rather than a demand story. As such the softness of healthcare inflation is an issue of timing rather than a serious concern and we would at least expect some stabilization in medical care services inflation around 2% (see figure 9 below).

### Conclusion on core inflation from the bottom up analysis

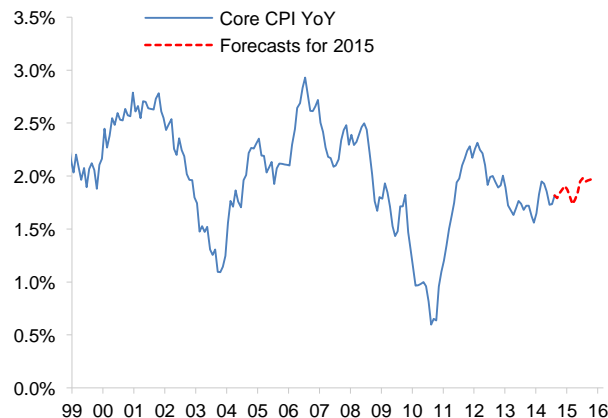
All in all, shelter inflation should be mostly unchanged at 3% at the end of 2015 (contribution to core CPI ~1.25%), core goods inflation should normalize from -0.2% YoY currently towards 0.4% at the end of 2015 (contribution of 0.1%), core services inflation should normalize towards 2% (contribution of 0.45%), medical care inflation (both goods and services) should stabilize at 2% (contribution of 0.2%), leading to an **overall core CPI YoY rate around 2% in December 2015**. The decline in commodity prices should ultimately weight negatively on core CPI but only in 2016 or towards the end of 2015. Based on these bottom-up forecasts and the different weightings of the core PCE basket, core PCE could normalize towards 1.8% from 1.6% currently.

Figure 9: Medical care services inflation has declined markedly in 2014 but should stabilize



Source: Deutsche Bank, BLS

Figure 10: Core CPI forecasts for 2015, stabilization around 1.8% in H1, towards 1.9-2% in H2



Source: Deutsche Bank

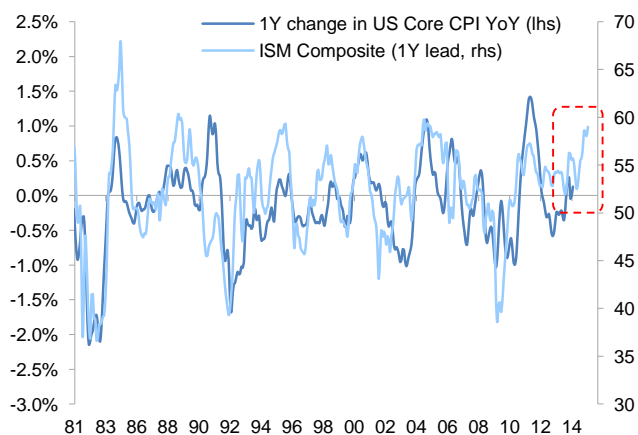
### Core inflation forecasting from a top down/macro approach

Core inflation is a lagging indicator of economic activity and we find a strong empirical relationship between the level of economic activity (i.e. real GDP growth or ISM levels) and the subsequent 12-month change in the YoY rate of core inflation. US core inflation tends to accelerate after the economy has been growing above trend. Conversely, disinflationary pressures tend to appear if the economy has been growing below trend (see figure 11 below). In 2014, excluding Q1 which was distorted by extreme weather, the economy has been running above trend (average of Q2, Q3 and Q4 GDP growth SAAR is 3.6% assuming 2.5% only for Q4). This is confirmed by ISM data: ISM composite is flirting with a cyclical high level ~60 while trend growth is usually associated with ISM ~52. Looking at the empirical relationship between ISM and the subsequent 12M change in core CPI YoY, we find that ISM levels seen in 2014 are indeed consistent with some acceleration of core CPI YoY in 2015.



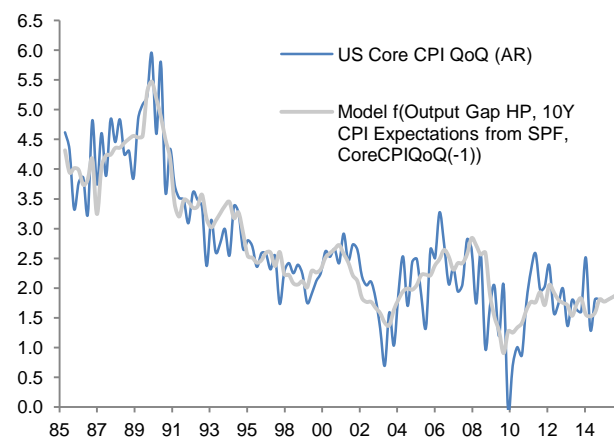
We also build a macro model where the level of core CPI QoQ is explained by the output gap level, by median 10-year inflation expectations from the SPF, and by the previous Core CPI QoQ to capture some potential persistence of inflation. Taking the assumption that US real GDP growth in 2015 will be 3.5% on average in 2015 assuming trend growth at 2.5% (in line with our World Outlook forecasts), we can estimate the future path of the output gap (using statistical methods such as the Hodrick-Prescott Filter). We can then use this output gap projection in our model in order to derive the expected path of Core CPI over the next couple of years (see chart 12 below).

Figure 11: Above-trend growth tends to be followed by an acceleration of core CPI 12 month later



Source: Deutsche Bank

Figure 12: Macro model linking core CPI to output gap suggests mild acceleration of core CPI to 1.9% in 2015



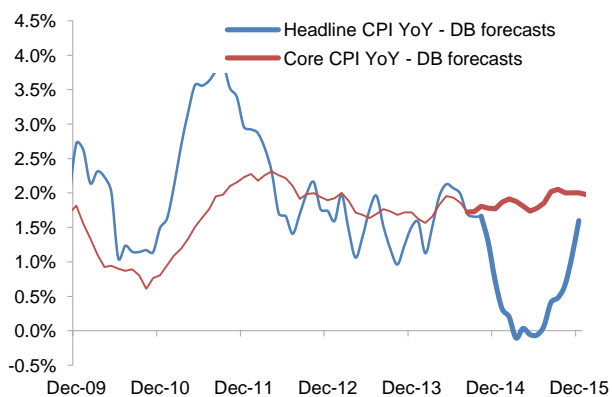
Source: Deutsche Bank, Philly Fed SPF

This macro model suggests core CPI QoQ should increase gradually towards 1.9% by Q4 2015 assuming unchanged median SPF inflation expectations at historically low levels. The model confirms the conclusion from the bottom-up analysis that core CPI has room for a mild acceleration towards 1.9-2%.

## Headline inflation outlook

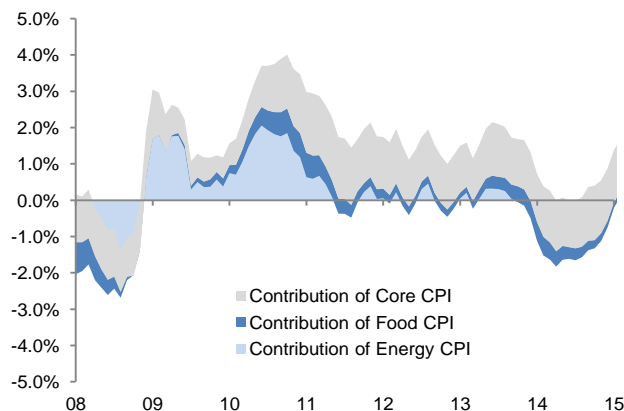
While core inflation should increase slowly towards 1.9-2% by the end of 2015, the outlook for headline inflation is much more negative (see fig. 13) given the collapse of commodity prices since Q3 2014 (see fig. 14).

13. Headline CPI YoY to drop sharply towards 0% in H1



Source: Deutsche Bank

14. Contribution of food and energy to headline inflation



Source: Deutsche Bank



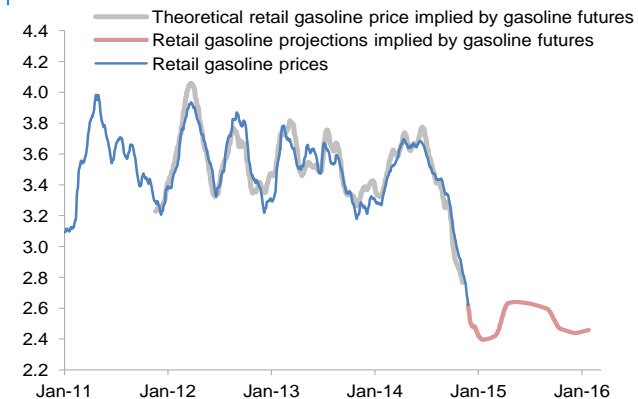
Assuming some stabilization of commodity prices going forward, we see CPI YoY dropping just below 0% by Mar-15 and remaining ~ 0% until Jul-15 before normalizing partially towards 1.6% by Dec 2015 on the back of improving base effects in energy inflation partly offset by a negative dynamics on food inflation.

**Energy inflation:** Energy CPI represents only 9.5% of the CPI basket but the annual change in energy CPI explains ~80% of the variance of the annual change in CPI-U. It is therefore by far the primary driver of headline inflation. Assuming some stabilization of crude oil futures WTI around \$60, we see retail gasoline prices declining towards \$2.4 per gallon in Q1 2015, so that gasoline inflation YoY would reach -30% YoY in March. This would push energy CPI YoY towards -20% YoY, contributing -1.9% YoY to headline inflation. Combined with about 1.8% YoY for core CPI contributing 76% of the basket i.e. 1.35% and with food CPI YoY likely to be around 2.9% contributing 14% of the basket i.e. 0.4%, we see the negative contribution of energy inflation more than offsetting the positive contribution from core CPI and food CPI. The base effect on energy inflation will become favorable from July onwards, allowing some normalization of headline inflation. Our forecasts assume that retail gasoline prices will follow the dynamics implied the term structure of gasoline futures prices (RBOB). The term structure of gasoline futures takes into account the seasonal pattern of energy prices, richening in H1 particularly between February and May, and cheapening in H2. The market is currently pricing in that average retail gasoline prices will increase by ~10% between Feb-15 and May-15, before underperforming in H2 2015 (see fig 15). Forecasts are subject to frequent changes given the volatility of energy prices.

**Food inflation:** Food inflation is mostly driven with a 6M lag by the dynamics of foodstuff commodity prices. While foodstuff commodity prices remain higher than a year ago, they have declined by nearly 15% from their peak seen between April and July 2014 and this will lead to a material slowdown in food inflation in 2015. Assuming some stabilization of commodity prices going forward, the negative base effect will be the largest around June 2015. Taking into account the typical 6M lag between food CPI and foodstuff commodity prices, food inflation is likely to reach a trough ~1.5% YoY by the end of 2015. We see food inflation peaking above 3% in Q1 before declining marginally towards 2.3-2.5% in Q2 and then dropping quickly below 1.5% by Dec 2015 (see fig. 16). While the base effect for energy inflation will improve over H2 2015, it will deteriorate significantly for food inflation in H2 2015, preventing headline inflation from fully normalizing.

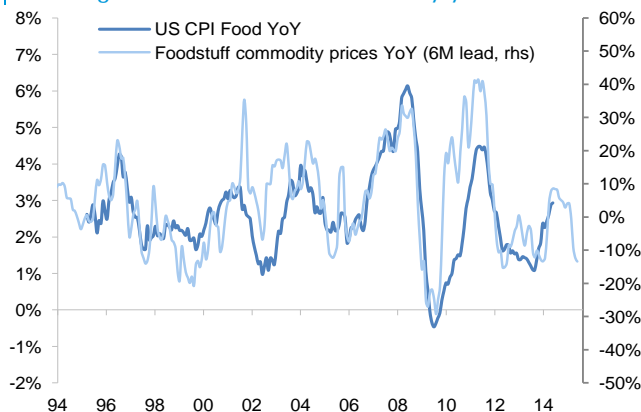
*Jerome Saragoussi +1 212 250 3529*

**Figure 15: Path of retail gasoline prices priced in by the market and assumed for our headline CPI forecasts**



Source: Deutsche Bank, Bloomberg

**Figure 16- Food inflation to peak in early 2015 before declining from ~3% towards ~1.5% by year end**



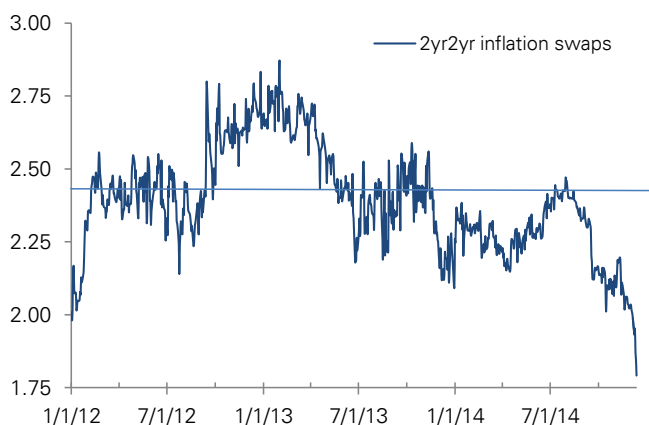
Source: Deutsche Bank, Bloomberg, BLS



## USD inflation market outlook

- Although it's difficult to predict whether a bottom has been found in breakevens, the recent sharp corrections in the inflation market present many trading opportunities for 2015.
- We think early 2015 maturing TIPS are rich, and 2016s are closer to fair value. 5s look cheap; there could be further supply concession leading to the \$16 billion auction on December 18. We like being long 2yr2yr or 2yr3yr forward breakevens to take advantage of cheap 5s, while avoiding negative carry in front end TIPS.
- Besides 2yr2yr and 2yr3yr, other longer-term forwards have dropped to their multi-year lows as well. The forward breakeven levels will appear attractive on a long-term basis given the recovery in labor market and in housing. The latter supports shelter inflation. The risk is further decline in energy prices, eroding the already low inflation risk premium.
- The long end inflation market looks undervalued, with the 30-year TIPS breakevens trading below 2%. Being long 30-year versus the ten-year, either in real yield or breakevens, has positive carry near term. Long-end real yields in the US seem high relative to those in Europe.
- Given the recent corrections in energy prices, we expect the headline CPI to drop towards zero percent on a year-over-year basis in late first quarter to mid year 2015. The headline CPI rises towards 1.6 percent by 2015 year end in our forecast. We expect shelter inflation to stay resilient near to medium term, supporting the core CPI.
- TIPS supply will probably remain stable in 2015, in the order of \$155 billion. There will be about \$68 billion maturing TIPS in 2015, leaving net issuance at about \$87 billion.

### 2yr2yr inflation swaps are at a historically low level



Source: Bloomberg Finance LP and Deutsche Bank



## 2015 US Inflation Market Outlook

### Front end to the five-year sector

We think early 2015 TIPS are rich, and 2016s are closer to fair value. 5s look cheap; there could be further supply concession leading to the \$16 billion auction on December 18. We like being long 2yr2yr or 2yr3yr forward breakevens to take advantage of cheap 5s, while avoiding negative carry in front end TIPS.

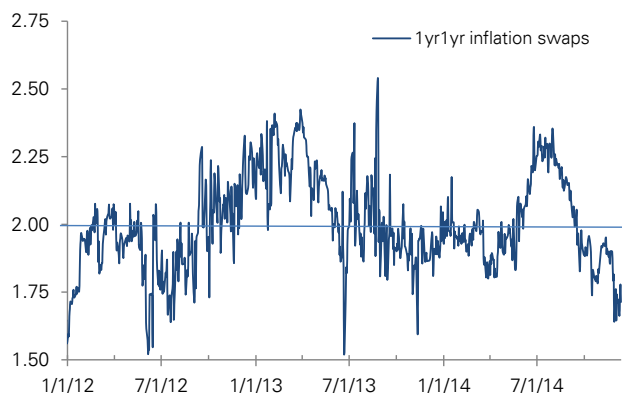
### Short maturity TIPS valued against DB CPI forecast

| Price date: 12/10/14 |              |             |                 |                       |
|----------------------|--------------|-------------|-----------------|-----------------------|
| TIPS                 | BE Inflation | Implied CPI | DB forecast CPI | Rich/ Cheap           |
| TII 0.500% 4/15/2015 | -3.09%       | 235.32      | 234.96          | Rich: 5 ticks (-44bp) |
| TII 1.875% 7/15/2015 | -0.35%       | 237.36      | 237.46          | Cheap: 1 ticks (07bp) |
| TII 2.000% 1/15/2016 | 0.34%        | 238.76      | 238.80          | Cheap: 1 ticks (02bp) |
| TII 0.125% 4/15/2016 | 0.42%        | 239.22      | 239.41          | Cheap: 2 ticks (06bp) |
| TII 2.500% 7/15/2016 | 1.06%        | 241.92      | 242.30          | Cheap: 5 ticks (10bp) |
| TII 2.375% 1/15/2017 | 1.04%        | 243.09      | 243.45          | Cheap: 5 ticks (07bp) |

Source: Deutsche Bank

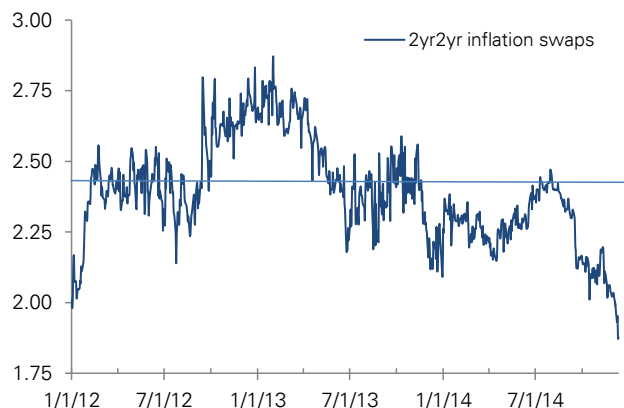
When we value short maturity TIPS against our CPI forecast, early 2015 TIPS stand out as being rich. In the past, short maturity TIPS tended to trade cheap to our forecast by 10bp to 20bp. Although some of them still imply a terminal CPI lower than our forecast, they are clearly a lot less cheap than they were before.

### 1yr1yr inflation swaps are low



Source: Bloomberg Finance LP and Deutsche Bank

### 2yr2yr inflation swaps are at a historically low level



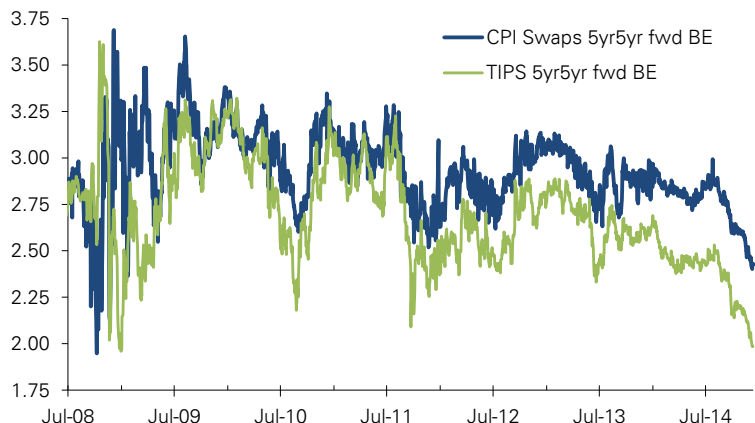
Source: Bloomberg Finance LP and Deutsche Bank

Investors who would like to take advantage of the recent drop in inflation breakevens, but are concerned about near term negative carry in short maturity TIPS should consider buying 2yr2yr or 2yr3yr in either inflation swaps or TIPS. The 2yr2yr inflation appears attractive on a long term history, and more attractive than some longer term forwards, such as the 5yr5yr. In inflation swaps, the current 2yr2yr spread around 1.86 is well below the three-year average of 2.4%. In TIPS, being long 2019 breakevens versus 2016 breakevens has positive carry. The forward breakeven inflation rates are less correlated with energy prices than the one- or two-year breakeven spreads.



A 2yr2yr forward breakeven at 1.8% on the CPI implies a core PCE around 1.6%, which is well below the central tendency in the Fed's core PCE forecast for 2016 (1.8 to 2.0) and 2017 (1.9 to 2.0).

5yr5yr forward breakevens are at their multi-year lows

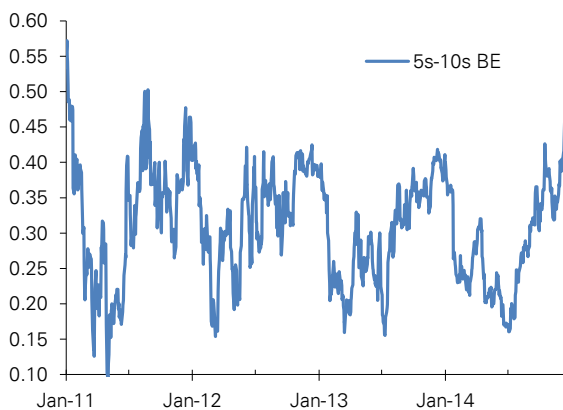


Source: Fed, Bloomberg Finance LP and Deutsche Bank

Intermediate sector

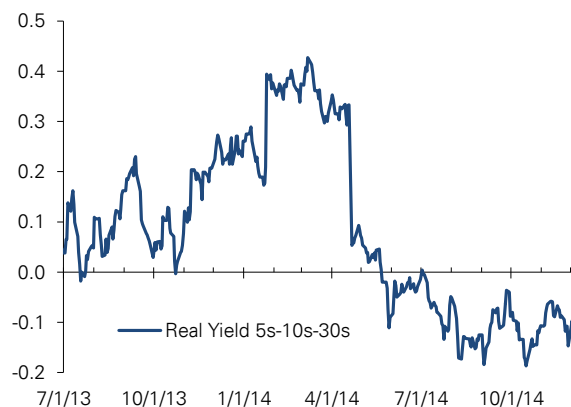
Besides 2yr2yr and 2yr3yr, other longer term forwards, such as 5yr5yr, have dropped to their multi-year lows. Although it's difficult to predict whether a bottom has been found, the current forward breakeven levels should appear attractive on a long term basis given the recovery in labor market and in housing. The latter provides support to shelter inflation, which carries a high weight in the CPI. The risk is further decline in energy prices, eroding the already low long term inflation risk premium.

5s-10s breakeven curve is steep



Source: Bloomberg Finance LP and Deutsche Bank

Similar to the ten-year nominal Treasury note, ten-year TIPS look rich against five- and 30-year TIPS on the real yield curve



Source: Bloomberg Finance LP and Deutsche Bank

The 5s-10s breakeven curve is steep, possibly as the market set up for the supply in 5s and some investors put on breakeven curve steepeners. On a seasonal basis, the 5s-10s breakeven curve tends to be steep towards year end, and tends to flatten after the New Year. Similar to the ten-year nominal Treasury note, ten-year TIPS look rich against five- and 30-year TIPS on the real yield curve.

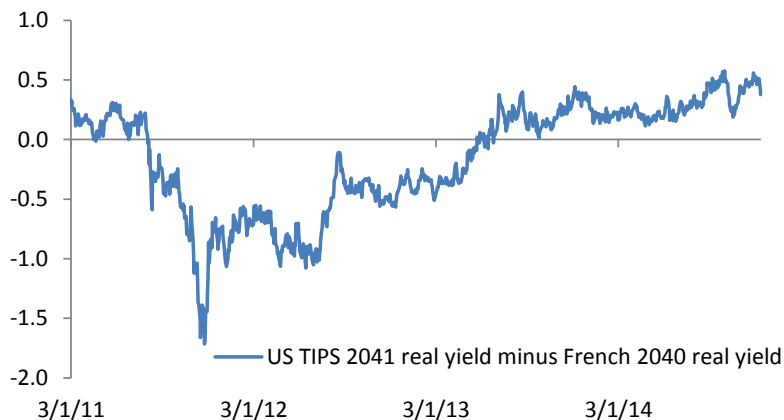


### 30yr TIPS breakevens near multi-year lows



Source: Bloomberg Finance LP and Deutsche Bank

### Long end real yields in the US seem high relative to those in Europe



Source: Bloomberg Finance LP and Deutsche Bank

#### Long end

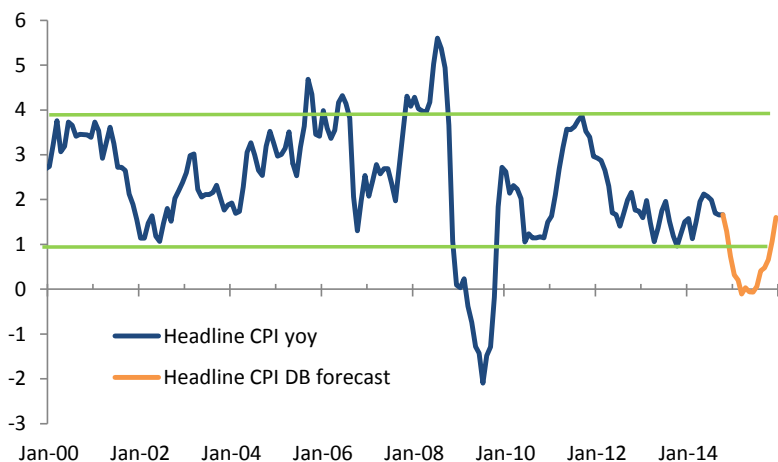
The long end inflation market looks undervalued, with the 30-year TIPS breakevens trading below 2%. When 30-year TIPS breakevens traded near this level in late 2011, the Fed started Twist operations. Being long 30-year versus the ten-year, either in real yield or breakevens, has positive carry near term. That said, the 10s-30s breakeven curve has steepened about 7bp over the past two weeks. Long end real yields in the US seem high relative to those in Europe.

### CPI Outlook

Given the recent corrections in energy prices, we expect the headline CPI to drop towards zero percent on a year-over-year basis in late first quarter to mid year 2015, and rise towards 1.6 percent by year end. If this forecast is correct, the Fed could raise the funds rate for the first time when the year-over-year headline CPI is near zero percent. The market currently implies the first rate hike to take place between the June and the September FOMC meetings.

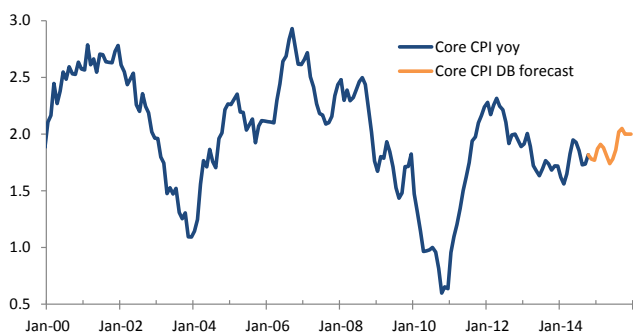


In DB CPI forecast, the year-on-year headline CPI drops to around zero percent from March to July 2015, and then recovers towards about 1.6 percent by year end



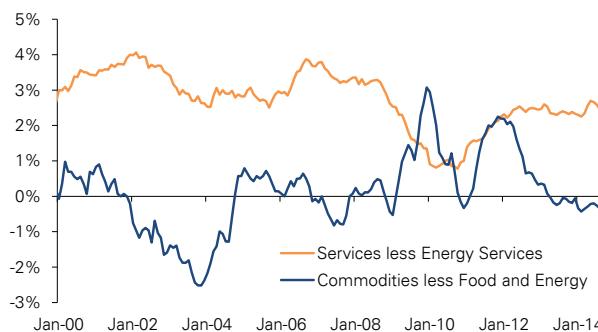
Source: BLS and Deutsche Bank

OER will likely support core CPI over the near to medium term



Source: BLS and Deutsche Bank

Core commodity prices have been weak, while core services inflation has been broadly stable



Source: BLS and Deutsche Bank

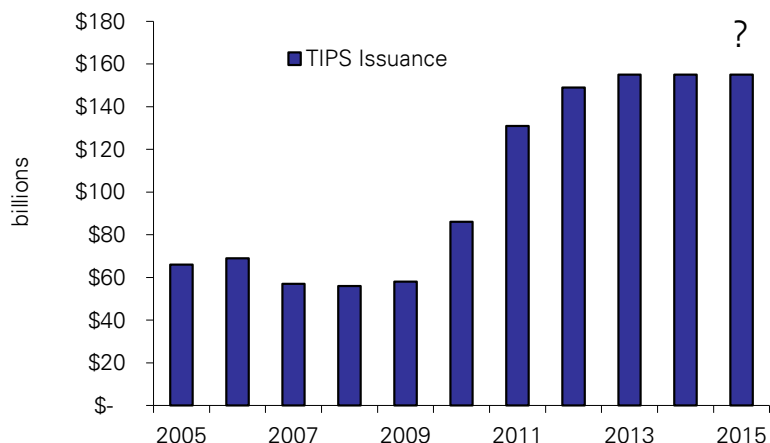
We expect shelter inflation to stay resilient near to medium term, supporting the core CPI and consistent with leading indicators. The Owner Equivalent Rent (OER) inflation currently runs at 2.7% year-over-year, from about 2.5% a year ago. OER tends to correlate with housing market vacancies. The lower the housing vacancy rate, the higher the OER. The housing vacancy rate has dropped gradually but consistently over the past few years, from a peak of 5.9% in the third quarter 2010 to the latest 4.4%. Our analysis shows that over the long run, vacancy rate leads the OER by about four quarters. Due to the resilience in the OER, core services inflation has been broadly stable, while core commodity prices have been weak.

## Issuance Outlook

TIPS supply will probably remain stable in 2015, in the order of \$155 billion. There will be about \$68 billion maturing TIPS in 2015, leaving net issuance at about \$87 billion. At the November 2014 refunding announcement, Treasury stated that TIPS auction sizes would remain unchanged.

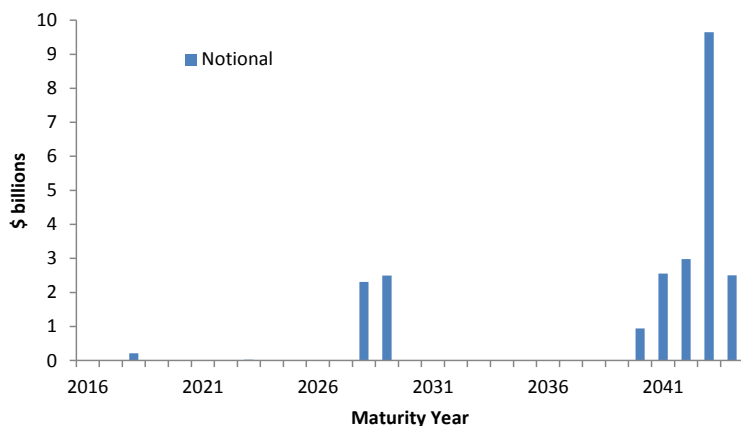


TIPS supply will probably remain stable in 2015



Source: Treasury and Deutsche Bank

Fed QE3 purchases in 2013 and 2014



Source: Fed and Deutsche Bank

The projected \$155 billion gross issuance is worth about \$180 billion ten-year equivalents. Fed QE focused on long dated TIPS; the duration of a TIPS index that excludes Fed holdings will lengthen next year due to composition changes, all else being equal. An analysis by our fixed income index group shows the TIPS index, which excludes Fed holdings, is currently about 0.68 years shorter in duration than a theoretical TIPS index that includes all Fed holdings (securities purchased during QE1, QE2, Twist and QE3).

Five-Year TIPS Re-Opening Auction Preview

Treasury will sell \$16 billion 0.125s of 4/15/2019 TIPS on December 18, 2014 to settle December 31. The recent two auctions recorded strong indirect bidder participation, averaging 57.3%; this compares with the previous record high of 54.4% set in April 2005. However, direct bidder take-down was soft in the last two auctions, and averaged just 4.7% as compared to 10% in the previous four auctions. The combined buy-side participation declined to 59% in August from a record 64% in April, but was still well above the average 53% in the auctions held in 2013. The bid-to-cover ratio of the auction dropped to 2.48 from 2.70 in



April, but the auctions came through on both occasions by an average 2.2bp. Dealer inventory in 2- to 6-year TIPS has been net negative since late October, and were short about \$400 million as of December 3.

#### 5-year TIPS auction statistics

|                | Size (\$bn)   | Primary Dealers | Direct Bidders | Indirect Bidders | Cover Ratio | Stop-out Yield | 1PM WI Bid    | BP Tail     |
|----------------|---------------|-----------------|----------------|------------------|-------------|----------------|---------------|-------------|
| <i>1yr Avg</i> | \$16.67       | 39.0%           | 7.9%           | 53.1%            | 2.57        |                |               | -1.3        |
| <b>Aug-14</b>  | <b>\$16.0</b> | <b>40.2%</b>    | <b>3.5%</b>    | <b>56.3%</b>     | <b>2.48</b> | <b>-0.281</b>  | <b>-0.270</b> | <b>-1.1</b> |
| Apr-14         | \$18.0        | 35.7%           | 5.9%           | 58.4%            | 2.70        | -0.213         | -0.180        | -3.3        |
| Dec-13         | \$16.0        | 41.1%           | 14.3%          | 44.5%            | 2.54        | -0.375         | -0.380        | 0.5         |
| Aug-13         | \$16.0        | 53.7%           | 8.1%           | 38.2%            | 2.18        | -0.127         | -0.139        | 1.2         |
| Apr-13         | \$18.0        | 46.1%           | 7.8%           | 46.1%            | 2.18        | -1.311         | -1.385        | 7.4         |
| Dec-12         | \$14.0        | 40.4%           | 10.7%          | 49.0%            | 2.70        | -1.496         |               |             |
| Aug-12         | \$14.0        | 50.3%           | 15.2%          | 34.4%            | 3.11        | -1.286         |               |             |
| Apr-12         | \$16.0        | 54.9%           | 9.1%           | 36.0%            | 2.58        | -1.080         |               |             |
| Dec-11         | \$12.0        | 41.7%           | 9.4%           | 48.8%            | 3.01        | -0.877         |               |             |
| Aug-11         | \$12.0        | 35.7%           | 17.1%          | 47.2%            | 2.49        | -0.825         |               |             |
| Apr-11         | \$14.0        | 57.8%           | 2.7%           | 39.5%            | 2.57        | -0.180         |               |             |

Source: US Treasury and Deutsche Bank

#### 10-year TIPS note auction allotments

| Settle Date       | Total (less Fed) | Federal Reserve |           | Dealers and Brokers |            | Investment Funds |              | Foreign and International |              | Other      |             |
|-------------------|------------------|-----------------|-----------|---------------------|------------|------------------|--------------|---------------------------|--------------|------------|-------------|
|                   | \$bn             | \$bn            | %*        | \$bn                | %          | \$bn             | %            | \$bn                      | \$bn         | %*         | \$bn        |
| <i>1 Yr Avg</i>   | 14               | 0               | 0%        | 5.2                 | 38%        | 6.1              | 44.9%        | 2.3                       | 17.1%        | 0.0        | 0.3%        |
| <b>11/28/2014</b> | <b>13</b>        | <b>0.0</b>      | <b>0%</b> | <b>3.9</b>          | <b>30%</b> | <b>7.0</b>       | <b>53.6%</b> | <b>2.1</b>                | <b>16.2%</b> | <b>0.0</b> | <b>0.1%</b> |
| 9/30/2014         | 13               | 0.0             | 0%        | 5.5                 | 43%        | 5.8              | 44.7%        | 1.6                       | 12.4%        | 0.0        | 0.3%        |
| 7/31/2014         | 15               | 0.0             | 0%        | 5.7                 | 38%        | 6.5              | 43.5%        | 2.7                       | 17.8%        | 0.1        | 0.5%        |
| 5/30/2014         | 13               | 0.0             | 0%        | 3.6                 | 28%        | 7.1              | 54.4%        | 2.3                       | 17.6%        | 0.0        | 0.2%        |
| 3/31/2014         | 13               | 0.0             | 0%        | 5.9                 | 46%        | 4.3              | 33.4%        | 2.7                       | 20.5%        | 0.1        | 0.4%        |
| 1/31/2014         | 15               | 0.0             | 0%        | 6.2                 | 42%        | 6.0              | 39.9%        | 2.7                       | 18.0%        | 0.1        | 0.5%        |
| 11/29/2013        | 13               | 0.0             | 0%        | 4.4                 | 34%        | 4.2              | 32.4%        | 4.4                       | 33.7%        | 0.0        | 0.2%        |
| 9/30/2013         | 13               | 0.0             | 0%        | 6.1                 | 47%        | 4.6              | 35.8%        | 2.2                       | 16.8%        | 0.1        | 0.5%        |
| 7/31/2013         | 15               | 0.0             | 0%        | 5.3                 | 36%        | 5.8              | 38.6%        | 3.7                       | 24.9%        | 0.1        | 0.8%        |
| 5/31/2013         | 13               | 0.0             | 0%        | 4.3                 | 33%        | 5.9              | 45.2%        | 2.7                       | 21.1%        | 0.1        | 0.5%        |
| 3/28/2013         | 13               | 0.0             | 0%        | 5.8                 | 44%        | 6.0              | 46.0%        | 1.2                       | 9.5%         | 0.0        | 0.1%        |
| 1/31/2013         | 15               | 0.0             | 0%        | 5.5                 | 37%        | 8.0              | 53.4%        | 1.5                       | 9.8%         | 0.1        | 0.3%        |

\* Percentage as of total less Fed SOMA  
Source: US Treasury and Deutsche Bank

#### Ten-Year TIPS Auction Allotment

The allotment share to investment fund investors increased to 53.6% in November from 44.7% in September (44.9% one-year average). Foreign and international investor share also increased to 16.2% from 12.4%, but remained below the one-year average 17.1%. The combined share allotted to the two investor class of 69.8% was the highest in the year, and compares with the average 62% over the period.

Alex Li 212 250-5483



## AUD & NZD inflation market outlook

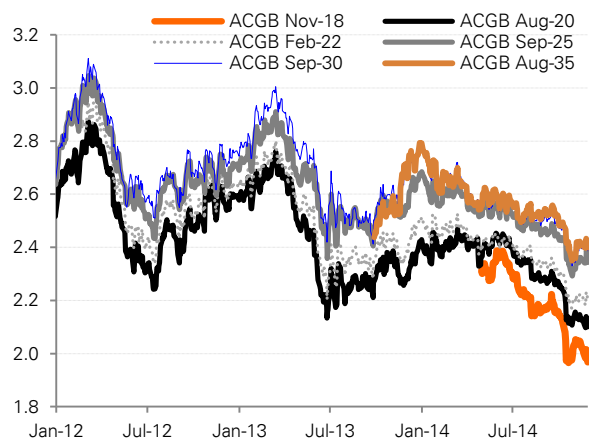
### ACGB breakeven curve steepening to continue into 2015

- ACGB breakevens are tracking to finish 2014 40bp+ narrower than in January. Real yields are also lower – although much of the nominal yield rally in the second half of the year has been taken up as breakeven compression rather than significantly lower real yields.
- The breakeven curve is considerably steeper as realised CPI and inflation expectations have softened. Carry has fallen and will likely become negative during 2015.
- We think that the breakeven curve will steepen further during the first half of 2015, but the steepening pressure may begin to ease if inflationary pressures rise as we expect during the second half of the year.
- Real yield differential to offshore markets have compressed since the beginning of the year, especially against TIPS. This might reduce marginal offshore demand for ACGB linkers, but we don't think that ACGB linkers are necessarily "rich".

#### 2014: Lower real yields, and even lower breakevens

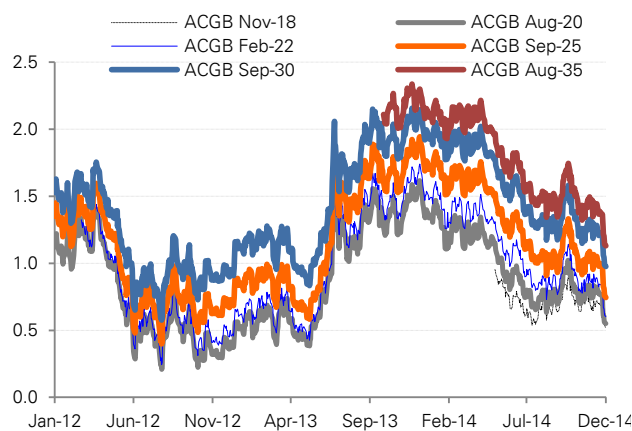
Calendar year 2014 has seen broad declines in Australian Government bond breakevens. After beginning January at close to six month highs breakevens across the curve have fallen to be on par with levels last seen in September 2013 – or even longer in the case of shorter maturity lines.

ACGB linker breakevens



Source: Deutsche Bank, Reuters

ACGB real yields



Source: Deutsche Bank, Reuters

The fastest declines in breakevens have been since September. Greater discussion about the impact of continued falls in commodity prices – especially oil – and sluggish inflation in Europe have weighed on short term inflation sentiment at a time when low realised inflation is already softening the outlook.

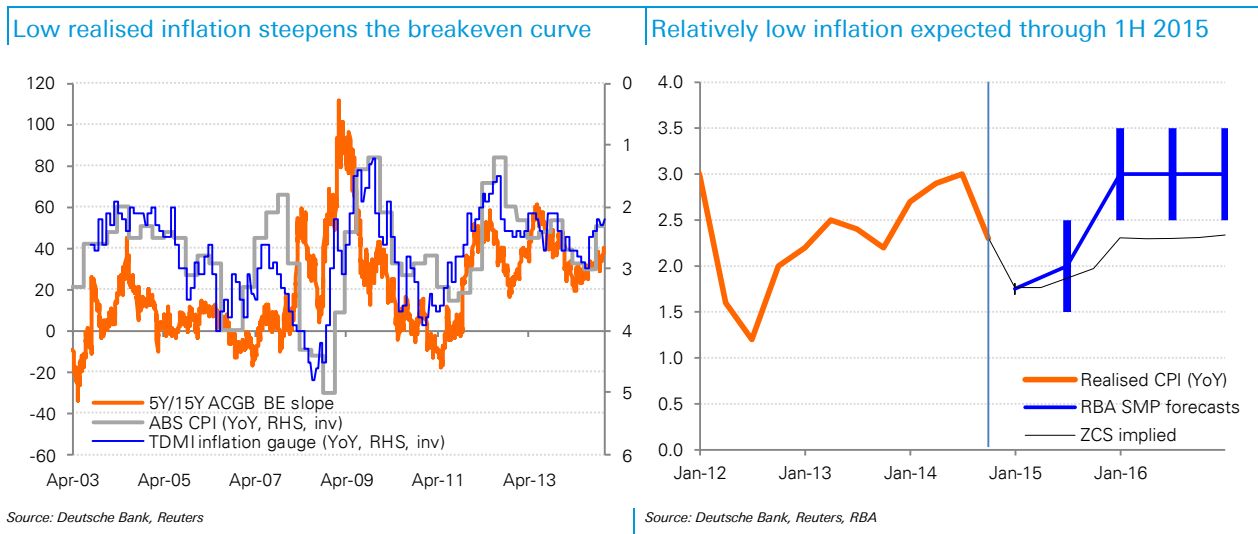
On a real yield basis, ACGB linkers have made significant gains since January, although net moves since July have been close to flat. Most of the nominal yield rally since then has been translated into narrower breakevens rather than lower real yields.



### Slowing inflation impulse has steepened the breakeven curve

The key dynamic within the Australian inflation curve during 2014 has been the slowing QoQ inflation impulse. Since the 1.2% qoq print in Q3 2013, successive prints have been progressively lower and as of Q3 2014 CPI is running at 0.4% qoq or 2.3% yoy – and the recent extension of commodity weakness has also kept inflation expectations going forward relatively low.

The ACGB breakeven curve flattened significantly through the first half of 2014, but as inflation expectations have softened during the second half of the year the breakeven curve has steepened.



Source: Deutsche Bank, Reuters

Source: Deutsche Bank, Reuters, RBA

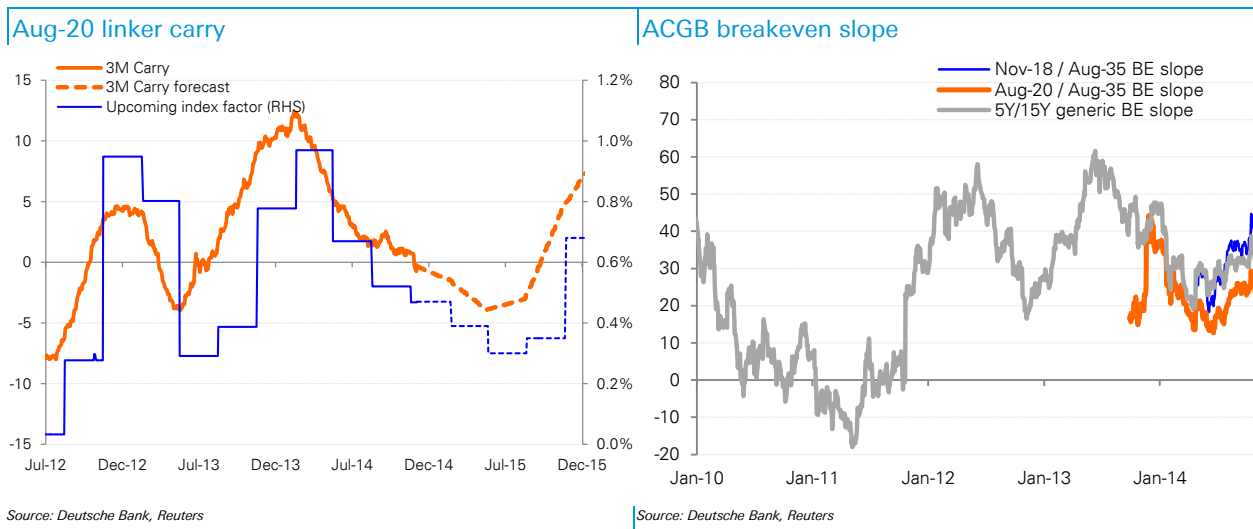
### Q4 2014 CPI likely to be soft, but inflation likely to pick up in H2 2015

In the short term we think that inflationary pressures in the Australian economy remain modest. Although the last direct impacts of the carbon tax repeal will come through in the Q4 2014 CPI, indirect impacts will continue. Lower oil will also dampen the CPI in Q4 '14 and possibly Q1 '15.

Through 2015, inflation is expected to rebound. In the November monetary policy statement, the RBA forecasts a 1.75% yoy print for Q4 2014 to be a low point. They are looking for headline inflation to print at 1.5-2.5% yoy in Q2 '15 before continuing to rise to 2.5-3.5% by Q4 2015. Low commodity prices – especially oil – are likely to be supportive of lower inflation through 2015, but this will be countered by increases in tradables inflation if the currency weakens. This is one of the reasons that the RBA's CPI forecast profile shows a rebound in the second half of 2015, and our own economists have similar projections. Short dated inflation swaps also reflect a rebound in CPI during the second half of 2015, although not as quickly as the RBA anticipates.

### Falling CPI impacts carry costs

Lower realised inflation has an impact on the cost of carry on a linker position. The relatively high (in outright terms) Q3 and Q4 2013 prints have now been fully paid through to investors, and the Q1-Q2 '14 prints (0.6% and 0.5% respectively) are now driving the nominal cashflows of linkers. Headline inflation remained steady through Q2 and Q3 of 2014, but if Q4 2014 inflation prints around 0.2-0.3% as the market expects, it will weigh significantly on linker carry for coupons paid during Q2 2015



Carry on most ACGB linkers at present is around zero or marginally positive, whilst breakeven protection (ie the cost of a long linker / short nominal position, funded via repo) tends to be negative. Assuming unchanged yields and repo rates, if CPI prints at 0.3% in Q4 '14 and Q1 '15 before beginning to rise, 3M carry on the Aug-20 linkers would drop toward -5bp. In basis point terms, carry costs are more volatile for shorter duration linkers.

This is not as low as the carry seen during early 2012 when the Q4 '11 (0.0%) and Q1 '12 (0.1%) prints were being accrued. This is because we're not expecting CPI to slow as much as did at that time, but also because the funding costs (ie repo) are lower relative to real yields (for much of that period, the cash rate was at 4.25%). However, we think the likely dip in carry next year will be enough to dent demand, especially for the shorter dated linkers, and we think it will contribute to a steepening of the breakeven curve because the holding cost of front end breakevens will be relatively high.

#### Breakeven steepening likely to continue

We think that the breakeven curve steepening that we have seen during the past six months will continue into 2015 due to continued weakness in realised inflation, subdued expectations, and the increasingly negative carry cost of linker positions especially at the front of the curve.

Our generic measure of 5Y/15Y ACGB breakeven slope has increased from +20bp to +40bp since the lows of mid-2014. In early 2012 and mid-2013 – previous periods of low CPI and poor carry on shorter dated linkers – it was as steep as +60bp. 2030 and longer bond breakevens trading around 2.40% and these may find some support from breakeven buyers at these levels.

We recommend a Aug-20 / Aug-35 breakeven steepener. Their key risk is that inflation expectations accelerate quickly in the early part of 2015.



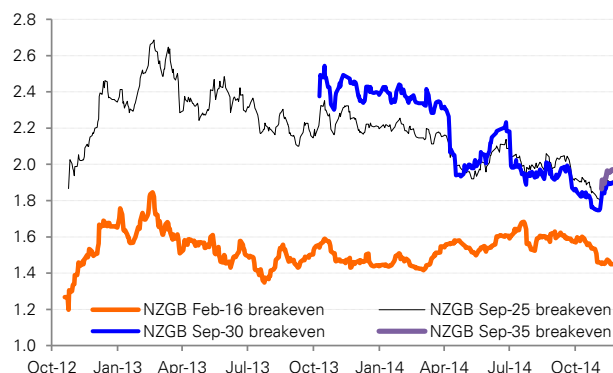
## NZGB breakevens likely to turn around in 2015

- NZGB breakevens have narrowed significantly through 2014. Low realised CPI – NZ headline inflation is running at 1.0% yoy to Q3 – is a significant reason for this.
- Unlike Australia, the NZ breakeven curve doesn't have much slope but the current market structure makes breakeven spread trades impractical.
- We think inflationary pressures will build through 2015 and are looking for higher breakevens in NZGBs, both outright and against ACGBs. High real yields remain a significant driver of offshore demand for NZGB linkers and we think this will continue.

### NZGB breakevens fall with low NZ inflation rate

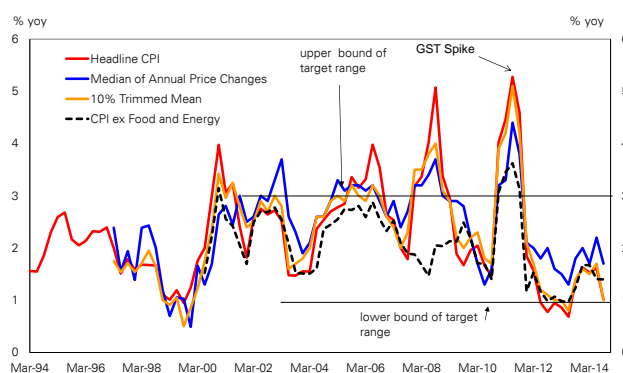
NZGB breakevens have weakened significantly during 2014, with 2025 and longer breakevens 30-50bp weaker over the year as a whole. Currently, breakevens on both bonds are below 1.9%.

NZGB breakevens



Source: Deutsche Bank, Reuters

New Zealand key inflation measures



Source: Deutsche Bank, SNZ

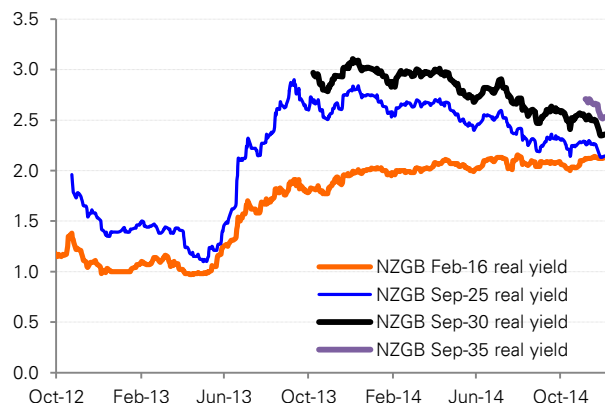
Low realised inflation in New Zealand has been one reason for this. Year-on-year CPI inflation in NZ has not printed above 1.6% since the fourth quarter of 2011 and as of Q3 '14 annual inflation is running at just 1.0%.

Despite the low recent CPI prints there is not a significant slope in NZGB breakevens. One factor behind this is that although new issue NZGB linkers now cover 2025-2035 maturities, nominal bonds are limited to the 2023 and 2027 maturities, so practical breakeven trades are limited because in a simple breakeven sense all three trade against the same comparator (although we quote breakevens against an extrapolation of the nominal curve).

NZGB linkers do, however, continue to see good support from offshore investors. Relatively high real yield was a significant factor, in our view, in demand for the new Sep-35 issued via syndication in November.

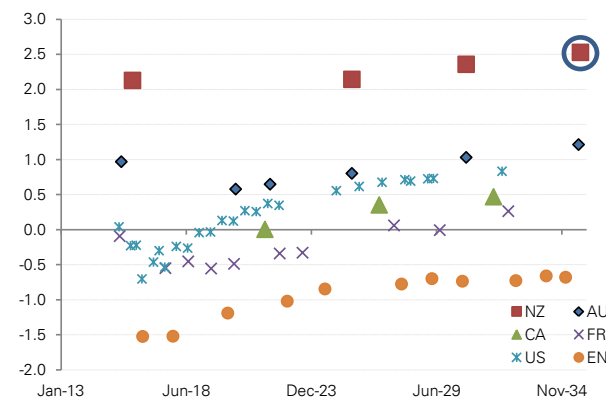


### NZGB real yields



Source: Deutsche Bank, Reuters

### Global real yields

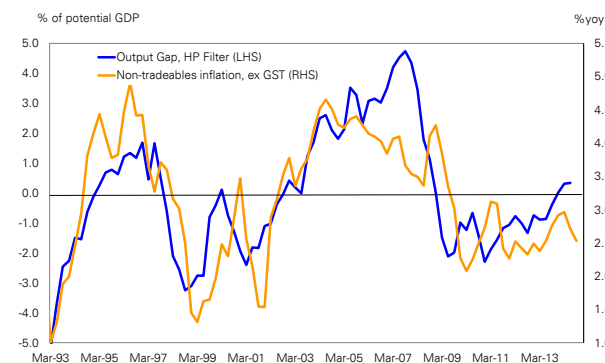


Source: Deutsche Bank, Reuters

### NZ inflation expected to rise in 2015, breakevens will rise with it

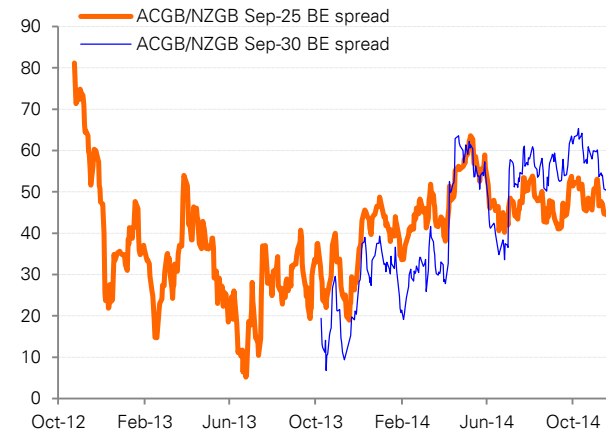
Our economics team is expecting the CPI to record an increase of about 0.1% qoq in Q4 (seasonally a weak quarter for the CPI). This would result in a steady year-ended inflation rate of 1.0% yoy – 0.3pps below the forecast made by the RBNZ in the September MPS. Notwithstanding the soft inflation readings over the past two quarters we still expect to see a marked rise in inflation over 2015, with tightening labour market conditions putting upward pressure on non-tradable inflation and a weakening exchange rate expected to see a reversal of the tradable sector deflation that has played a key role in generating the low inflation outcomes seen in recent years.

### Non-tradables prices and the output gap



Source: Deutsche Bank, SNZ

### ACGB/NZGB BE spreads



Source: Deutsche Bank, SNZ

For NZGB linkers, we think this is positive for breakevens and although we expect they will remain low for much of Q1 we do expect them to rise through the year as inflationary pressures rise. We think that the real yield differential to the rest of the world will support this.

Given the low base that NZGB breakevens are coming off, we think there remains scope for a narrowing of the ACGB/NZGB breakeven spread. The RBA and the RBNZ have different long run inflation targets – 2-3% for the RBA and 1-3% for the RBNZ – so NZGB breakevens should tend to trade a little cheaper, but the differential should tend to be narrower than the peaks that were seen in early 2014. We retain a long NZGB Sep-30 breakeven against ACGB Sep-30



breakeven trade, targeting a decline in that spread to +50bp. (note that the trade is on a simple breakeven basis, where the current spread is +63bp.

As noted, the NZ linker curve doesn't have any appreciable slope and we think that breakeven curve trades aren't practical until there are more long duration nominal lines on issue.

*Kenneth Crompton (+61) 2 8258 1361*



## EMEA inflation market outlook

**The I/L-bond outlook remains challenging but current valuation provides attractive medium-term opportunities.** Overall, despite a significant decline in short end B/Es in 2014, the inflation backdrop remains challenging: While in Israel and Poland spot inflation is very low and price pressure should remain in deflationary territory for the next few months in South Africa and Turkey price pressure is also expected to drop further. Hence it is not a surprise that B/E levels are close to historical lows and inflation premia low across the region.

Despite the risk of further disinflation shocks current valuation makes overweighting I/L-bonds selectively attractive. We favour to overweight I/L-bonds in the short end in Israel, in the short end and belly in Turkey and in the long end in Poland. Given the recent spike in B/Es in South Africa we turn neutral for now and recommend waiting for better entrance level to overweight I/L-bonds.

**Israel - overweight I/L-bonds in the belly of the curve with B/E target at 1.80%** - We still believe that the inflation target of 2.0% remains credible and it should be reached by at least mid-16. The outperformance of the long-end compared to countries with similar low inflation pressure implies in our view that the recent low inflation pressure is expected to only remain a short-term phenomenon and markets participants in Israel also still believe that the inflation target of 2% remains credible. We see I/L-bonds in the belly of the curve as attractive to overweight. Current valuation looks attractive vs. a) historical averages, b) other parts of the curve and the c) CBs medium term inflation target of 2.0%.

**Poland - Overweight Polgb Aug-23 (B/E target 2.0% / stop 1.0%) and add an overweight in Polgb Aug-16 if B/Es fall below 0.8%.** Despite risk for further near-term deflation shocks we continue to see valuation in long end B/E as an attractive entrance level to position for wideners given a) their relative resilience against near-term downside surprises in inflation and b) low valuations against (i) historical averages, (ii) the NBP's medium-term inflation target (2.5%) and (iii) core-Europe B/Es.

**South Africa - Remain neutral but start overweight I/L-bonds with B/Es below 5.30%** Although we over-weighted I/L-bonds a couple weeks back, the recent FX weakness and higher domestic rates caused B/Es to spike trading 35bps higher and very close to our target for end H1-15. Based on DB forecasts, current levels in short-end B/Es will be broken to the downside in the next inflation print and spot inflation should remain below current levels until at least end-15. Although in the medium term we still see current B/E-level in particular in the belly of the curve as quite attractive we would turn a bit more cautious for now and dissuade from overweighting I/L-bonds across the curve.

**Turkey - Overweight I/L bonds in the belly and long end of the curve with target at 7.50%.** While B/Es in other EMEA countries are trading close to their all time lows B/E levels in Turkey remain still well above their historical lows. This can to a large extent be explained by the still high spot inflation and the historically high sensitivity to FX weakness. Compared to our DB inflation profile until end-16, B/Es in Turkey provide the lowest inflation premia across the region. Hence, despite the downside risk in the near term due to an expected drop in spot inflation in early 2015 and the possibility of additional further global disinflation shocks, we see current levels as quite attractive to overweight I/L-bonds in Turkey.



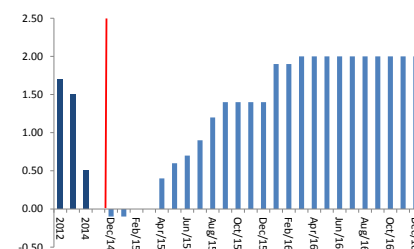
## Israel – waiting for the inflation turnaround

**Inflation outlook 2015 – Is the worst behind us?** Inflation has been much lower than we had anticipated over the past year, turning negative in the last couple of months, reflecting a combination of earlier sustained currency strength, lower food prices, and perhaps a moderate negative output gap. While we expect CPI to end the year in negative territory (-0.1%) the average inflation for 2014 is expected at 0.5% following 1.70% and 1.50% in 2013 and 2014, respectively. In addition, inflation expectations have also fallen sharply as the headline rate has dropped. One-year-ahead expectations are now below the lower edge of the 1-3Y inflation target, which the Bank of Israel thinks reflects the one-off impact of reductions in water and electricity prices that will reduce the headline rate by 0.5% in January. But medium-term expectations are also in the lower half of the target range. There is thus a risk that the current deflationary environment could become entrenched, especially if the economic fails to recover along the lines that we expect.

We think inflation will start to correct naturally in response to the depreciation of the shekel in the late few months and as the economy begins to pick-up. But this is not given. Ironically, the success of the Bank of Israel (BoI) in establishing its inflation-targeting credibility in recent years will have reduced the impact of currency movements on domestic prices. Even looking just at tradable prices, we find that the rate of pass through is only around 15%. Moreover, the sharp drop in oil prices will add to the deflationary headwind, reducing the headline rate of inflation by at least 0.5ppts if current oil prices are sustained. In addition some cuts in administered (utility prices) scheduled for January next year should further reduced the headline rate by a full 1ppt.

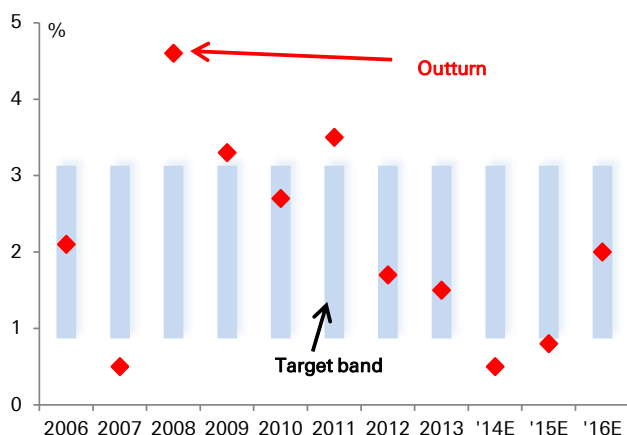
Hence, we're not anticipating a rapid return to 2% before 2016 when the impact of oil and administered price cuts should be dropping out of the figures. And even this is contingent on some further FX weakness. **We expect CPI to average 1.4% in 2015 before increasing to 2.0% on average in 2016.**

DB CPI forecasts (YoY %)



Source: Deutsche Bank

Inflation target and actual outturns in previous year (YoY)



Source: Deutsche Bank

CPI details in Israel

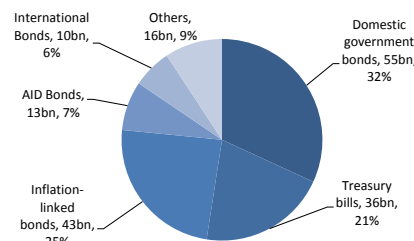
| CPI Details                          | Share | Oct-14 | Sep-14 | 3m Average | YTD   | 2013  | LT    |
|--------------------------------------|-------|--------|--------|------------|-------|-------|-------|
| CPI excl Housing, Fruit & Vegetables |       | -0.9%  | -1.2%  | -1.0%      | -0.1% | 1.0%  | 1.6%  |
| CPI                                  |       | -0.3%  | -0.3%  | -0.2%      | 0.6%  | 1.5%  | 2.0%  |
| Housing                              | 25%   | 2.2%   | 2.1%   | 2.1%       | 2.4%  | 3.0%  | 2.9%  |
| Transport & Communication            | 21%   | -0.7%  | -2.1%  | -1.6%      | -1.4% | -2.6% | 1.2%  |
| Food incl Fruit & Vegetables         | 17%   | -3.1%  | -2.4%  | -2.0%      | -0.2% | 5.0%  | 3.2%  |
| Education, Culture & Entertainment   | 12%   | 0.5%   | 0.7%   | 0.7%       | 1.4%  | -0.8% | 0.6%  |
| Housing Maintenance                  | 10%   | 0.0%   | 0.0%   | 0.1%       | 1.6%  | 4.1%  | 3.3%  |
| Health                               | 5%    | 0.2%   | 0.0%   | 0.1%       | 0.7%  | 1.6%  | 1.8%  |
| Miscellaneous                        | 4%    | -0.7%  | -0.3%  | -0.3%      | 1.7%  | 5.4%  | 2.6%  |
| Furniture & Home Equipments          | 4%    | -3.8%  | -3.3%  | -3.6%      | -3.3% | -1.4% | -1.5% |
| Clothing & Footwear                  | 3%    | -1.0%  | -0.1%  | -0.7%      | -0.6% | -1.4% | -1.6% |

Source: Deutsche Bank, Haver Analytics



**I/L-bond overview** – With 25% (43bn) of the total amount of outstanding government bonds the share of I/L-bonds is by far the highest in the refinancing mix of countries across the region. In addition, with 14 bonds outstanding across different maturities Israel provides a very balanced I/L-bond curve with maturities reaching from 6 months to 27 years.

Share of outstanding government bonds in Israel – in USD

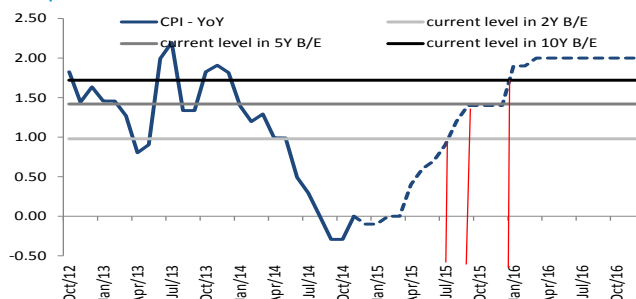


Sowell urce: Deutsche Bank

**B/E development in 2014** – B/Es have continuously edged lower over the course of the entire year on the back of poor activity data and very subdued spot CPI both resulting in the Bol cutting its main policy rate by another 75bps to a new record low at 0.25%. Whiles long-end B/Es underperformed the short-end in the first half of the year the contrary was the case in the latter half. In fact, while 2Y B/Es sold-off by more than 100bp to a new record low at 0.75% by the end of Nov, 10Y B/Es sold-off by only 70bp in the same time period reaching its lows at 1.65%. In fact, when compared to Polish 10Y B/Es - a country with similar spot inflation and an inflation-target of 2.5% - we see that long-end B/Es in Israel outperformed Polish B/Es by more than 60bps since the beginning of the year. Since the trough by late-Nov B/Es in Israel have stabilized somewhat across the curve and experienced a surprisingly strong rebound. 2Y B/Es are back to 1.00%, 5Y B/Es at 1.40% and 10Y B/Es at 1.70%.

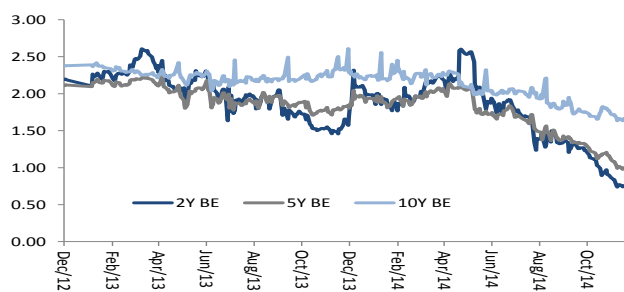
**B/E recommendation** – Overweight I/L-bonds in the belly of the curve with B/E target at 1.80% - **Rationale:** We still believe that the inflation target of 2.0% remains credible and it should be reached by at least mid-16. The outperformance of the long-end compared to countries with similar low inflation pressure implies in our view that the recent low inflation pressure is expected to only remain a short-term phenomenon and markets participants in Israel still believe that the inflation target of 2% remains credible. Hence, we believe I/L-bonds in the belly of the curve provide value to overweight. Current valuation looks attractive vs. a) historical averages, b) other parts of the curve and the Bol's medium term inflation target of 2.0%. **Risks:** Similar to Poland, the inflation outlook in the near term remains challenging. Despite record low valuation in B/Es, near term deflation shocks could further weigh on current levels. In fact, comparing current levels in short-end B/Es with DB forecast, we see that expected spot inflation will remain below current level until at least Q3-15. Hence we dissuade from a risk-return perspective into overweighting I/L-bonds in the short-end. In addition, long-end B/Es have shown a surprisingly strong resilience compared to B/Es in other countries with similar low inflation pressure (US, Europe, Poland, Sweden). Given current spot inflation well below levels in 10Y B/Es, the outperformance compared to shorter B/Es and B/Es in other countries, and last but not least the recent general rebound across the curve since early December, we also remain cautious on long end B/Es.

CPI profile relative to B/E levels



Source: Deutsche Bank, Haver Analytics

B/E declined in 2014 but strong rebound in December



Source: Deutsche Bank

Robert Burgess, (+44) 20 754 71930  
 Christian Wietoska, (+44) 20 754 52424

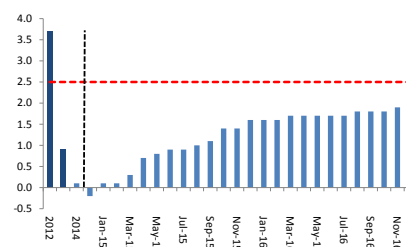


## Poland – waiting for the inflation turnaround...

**Inflation outlook 2015 - Inflationary pressures are lacking.** As is the case across Central Europe, inflation in Poland has been very low in 2014. The main reasons for the drop in Polish headline inflation this year (0.1% on average) versus the previous 5-year period (3% on average) are weakness in the food component and the rent and energy component. The weak food inflation has been driven by a strong harvest, weak growth of global agricultural commodity prices and also some impact from the Russian ban on food imports (imports from Poland constitute 4% of total Russian food imports). Meanwhile, the weakness in the rent and energy component has been driven by the decline in global energy prices.

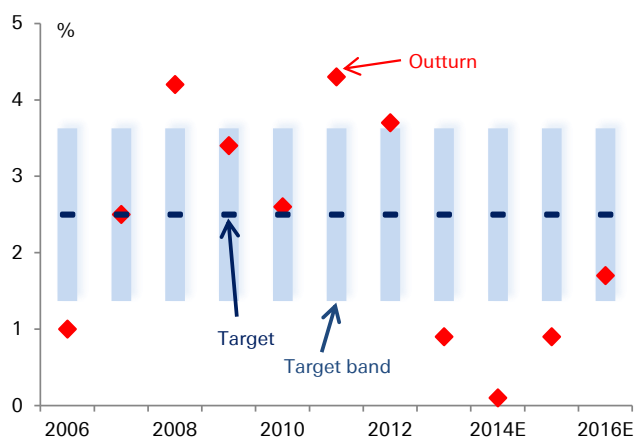
From this low base and aided by improving domestic demand (combined with tightening labour market conditions), inflation is expected to turn around next year. Food inflation, which is mean-reverting, is also expected to begin gradually turning around in early 2015 (as some of the effects of the above-mentioned supply shocks fade). However, despite our constructive outlook for Polish growth and activity in the coming year, this pickup in inflation is expected to be a very gradual one and inflation should remain subdued by historical standards; continued weakness commodity prices, subdued cost pressures and low imported inflation from the euro area will continue to represent a drag on headline CPI. As a result, we expect headline inflation to remain contained below 1.5% (the lower bound of the NBP's tolerance band around its 2.5% target) through 2015. This pattern of relatively low, but very slowly rising inflation is expected to continue into 2016 as well. **We forecast average YoY CPI to print at 0.1% in 2014, before rising to 0.9% in 2015 and 1.7% in 2016.**

Expected inflation profile for Poland



Source: Deutsche Bank, Haver Analytics

Inflation target and actual outturns in previous year (YoY)



Source: Deutsche Bank, Haver Analytics

CPI profile in Poland

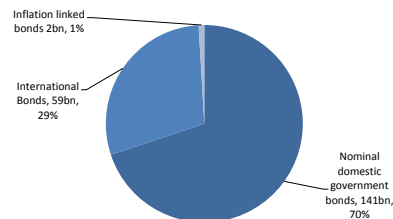
| CPI Details                 | Share | Nov-14 | Oct-14 | 3m Average | 2014 YTD | 2013  | LT    |
|-----------------------------|-------|--------|--------|------------|----------|-------|-------|
| Core CPI                    |       | 0.2%   | 0.7%   | 0.5%       | 0.7%     | 1.2%  | 1.6%  |
| CPI                         |       | -0.6%  | -0.3%  | -0.4%      | 0.1%     | 0.9%  | 2.6%  |
| Food                        | 24%   | -2.2%  | -2.0%  | -2.1%      | -0.5%    | 2.0%  | 3.5%  |
| Housing                     | 21%   | 0.6%   | 0.7%   | 0.7%       | 1.6%     | 1.9%  | 4.9%  |
| Transport                   | 9%    | -3.0%  | -3.2%  | -2.6%      | -1.8%    | -1.8% | 3.1%  |
| Recreation&Culture          | 8%    | 0.1%   | 0.0%   | 0.3%       | 1.1%     | 2.8%  | 0.7%  |
| Restaurants & Hotels        | 6%    | 1.3%   | 1.4%   | 1.3%       | 1.4%     | 2.2%  | 3.4%  |
| Alcohol & Tobacco           | 6%    | 3.6%   | 3.6%   | 3.7%       | 3.8%     | 3.5%  | 4.2%  |
| Misc Goods&Services         | 5%    | -0.5%  | -0.2%  | -0.3%      | -0.2%    | 0.7%  | 1.3%  |
| CPI: Health                 | 5%    | 0.7%   | 0.7%   | 0.5%       | 0.3%     | 1.8%  | 2.5%  |
| Clothing & Footwear         | 5%    | -4.6%  | -4.7%  | -4.8%      | -4.7%    | -4.9% | -5.2% |
| Furnishing, House Equipment | 5%    | 0.0%   | -0.2%  | -0.1%      | -0.1%    | 0.8%  | 1.4%  |
| Communication               | 4%    | -0.4%  | 4.0%   | 2.5%       | -0.3%    | -8.3% | -1.1% |
| Education                   | 1%    | 1.3%   | 1.2%   | -1.2%      | -4.7%    | -0.3% | 2.0%  |

Source: Deutsche Bank, Haver Analytics



**I/L-bond overview** With Polgb Aug-16 and Polgb Aug-23 Poland has only 2 I/L bonds outstanding. Compared to the 220bn (USD) outstanding in total government bonds the inflation-linked bond market in Poland is therefore with a total volume of USD 2bn or 1% of the outstanding amount of government bonds relatively small.

Share of outstanding government bonds in Poland – in USD



Source: Deutsche Bank, Bloomberg Financial LP

**B/E development in 2014** - B/Es have seen an impressive sell-off over the course of 2014. While 2Y B/Es sold-off by 100bps since the start of the year 10Y B/Es have even dropped by more than 125bp and reached a new all time low at 1.10% by end November. Since then B/Es have stabilized somewhat but remain with 1.00% in 2Y and 1.30% in 10Y at a very low level.

**B/E Trade recommendations** – Overweight Polgb Aug-23 (B/E target 2.0% / stop 1.0%) and add an overweight in Polgb Aug-16 if B/Es fall below 0.8%.

Outstanding I/L bonds in Poland

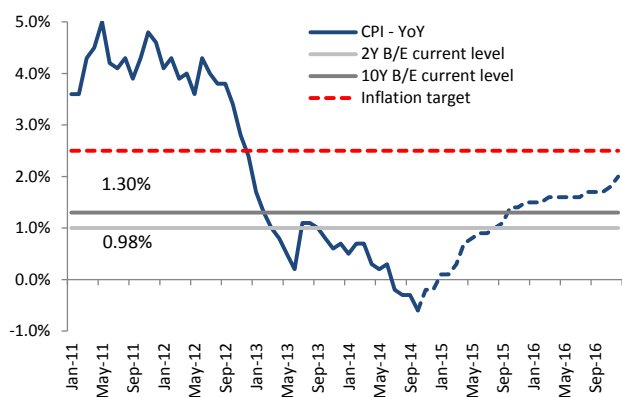
| IL Bonds             | Coupon | Amount in Zloty | Amount in USD | Time to Maturity | B/E inflation | Inf. prem |
|----------------------|--------|-----------------|---------------|------------------|---------------|-----------|
| POLGB 3 08/24/16     | 3.00   | 3.7             | 1.1           | 1.86             | 0.98          | -10bp     |
| POLGB 2 3/4 08/25/23 | 2.75   | 2.6             | 0.8           | 8.86             | 1.30          | -150bp    |

Source: Deutsche Bank / Inflation prem. is calculated based on current valuation and DB forecast for inflation / B/Es based on constant maturity curve in nominal government bonds

**Rationale:** We continue to see valuation in long end B/E as an attractive entrance level to position for wideners given a) their relative resilience against near-term downside surprises in inflation and b) low valuations against (i) historical averages, (ii) the NBP's medium-term inflation target (2.5%) and (iii) core-Europe B/Es.

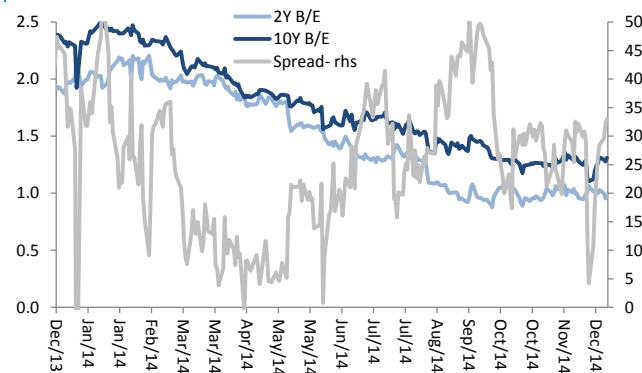
**Risks:** Despite the significant drop in short end B/Es and the fact that valuations are historically low, the inflation backdrop remains challenging: spot CPI is very low and should remain in negative territory for at least another couple months while, in addition, in our base case inflation profile the current level in 2Y B/Es will not be reached until Q3-15 and in 10Y B/Es not until Q4-15. In fact, based on our inflation profile for 2016 inflation until Jun-16 would average 0.9% YoY which compares to an even lower level than currently seen in short dated B/Es (June is the last month for the 2Y B/E to take into account given the 3m lag). Despite our view of a gradual turnaround in inflation over the next few months the risk remains high of further inflation disappointments in the near term given recent weakness in food inflation and falling oil prices. Hence, we dissuade from positioning into B/E wideners in the short-end for now and would wait for valuation to fall below 0.8%.

CPI profile relative to B/E levels



Source: Deutsche Bank, Bloomberg Financial LP

Historical development in Polish B/Es – Long end I/L-bonds outperformed in recent weeks



Source: Deutsche Bank

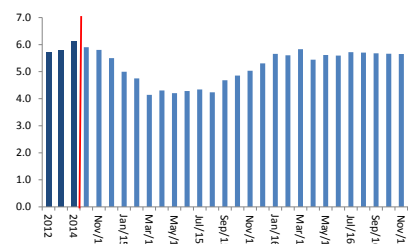
Gautam Kalani, (+44) 20 754 57066  
 Christian Wietoska, (+44) 20 754 52424



## South Africa – turn neutral on I/L-bonds given recent jump in B/Es

**Inflation outlook:** The last year or so has turned up as one of the most surprising inflation cycles in South Africa’s history. Despite the exchange rate depreciating by more than 30% over the last three years, inflation mostly surprised to the downside as inflation expectations remained anchored around 6%. Exchange rate pass through was particularly mild in this cycle, and several retailers have focused on price competitiveness as a means to vie for market share. After registering a peak of 6.6% in June of 2014, headline inflation eased quite sharply to print 5.8%YoY in November. Food inflation and rising fuel prices were the main culprits pushing up headline CPI, while core inflation struck 5.8% very recently. Clothing and footwear, personal care products and vehicle price inflation have seen notable increases due to exchange rate pressures, but these increases were fairly mild compared to previous cycles.

DB CPI forecasts (YoY %)

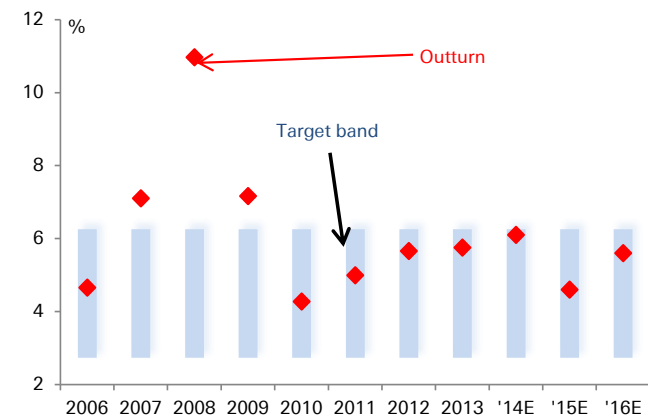


Source: Deutsche Bank

The outlook for 2015 has improved significantly thanks mainly due to the sharp moderation in oil prices and a bumper maize harvest, which will reduce the vulnerability to exchange rate pressures and any unforeseen changes to global food price dynamics. We see headline inflation receding to 4.6% on average, though this should mask a relatively stubborn core inflation cycle which should average around 5.5% next year. Very low oil prices will also result in unflattering base effects in the second half of the year. In addition, the near doubling in the electricity price tariffs around July will also accelerate inflation momentum in the second half of the year, pressuring headline inflation up towards 5.3% by year-end. We see inflation settling near 5.6% in 2016.

Pass through has certainly surprised to the downside and is probably halve the conventional 20% coefficient. A weak exchange rate coupled with above-inflation wage increases has pushed core inflation higher, but the weakness in the economic cycle, underpinned by relatively low asset and credit growth have partly counteracted these forces. Renewed exchange rate pressures and concerns over additional electricity tariff adjustments pose some of the biggest risks to the outlook next year.

Inflation target and actual outturns in previous year (YoY)



Source: Deutsche Bank, Haver Analytics

CPI details in South Africa

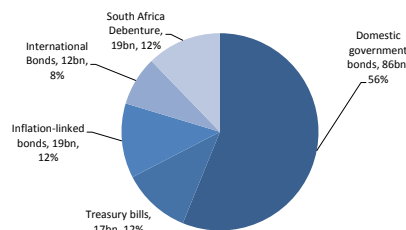
| CPI Details                    | Share | Nov-14 | Oct-14 | 3m Average | 2014 YTD | 2013 | LT    |
|--------------------------------|-------|--------|--------|------------|----------|------|-------|
| Core CPI ex Food and Gasoline  |       | 5.8%   | 5.7%   | 5.7%       | 5.6%     | 5.2% | 5.0%  |
| CPI                            |       | 5.8%   | 5.9%   | 5.9%       | 6.2%     | 5.8% | 5.0%  |
| Housing & Utilities            | 23%   | 5.7%   | 5.7%   | 5.7%       | 5.7%     | 5.7% | 5.3%  |
| Food & Nonalcoholic Beverages  | 18%   | 7.4%   | 7.9%   | 8.0%       | 8.1%     | 5.7% | 6.7%  |
| Transport                      | 16%   | 4.6%   | 5.1%   | 4.8%       | 6.8%     | 6.2% | 4.1%  |
| Miscellaneous Goods & Services | 14%   | 6.9%   | 6.7%   | 6.8%       | 6.7%     | 7.0% | 5.3%  |
| Alcoholic Beverages & Tobacco  | 5%    | 7.7%   | 6.8%   | 6.8%       | 6.3%     | 7.0% | 8.0%  |
| Household Contents & Equipment | 5%    | 1.9%   | 2.1%   | 2.3%       | 3.1%     | 3.2% | 3.3%  |
| Clothing & Footwear            | 4%    | 6.4%   | 6.0%   | 6.0%       | 5.3%     | 3.2% | 1.1%  |
| Recreation & Culture           | 4%    | 2.7%   | 2.6%   | 2.7%       | 2.7%     | 3.4% | 1.0%  |
| Restaurants & Hotels           | 3%    | 9.0%   | 9.0%   | 9.0%       | 8.4%     | 6.7% | 7.3%  |
| Education                      | 3%    | 8.8%   | 8.8%   | 8.8%       | 8.8%     | 9.0% | 8.0%  |
| Communication                  | 3%    | -0.9%  | -1.9%  | -1.3%      | -0.6%    | 1.1% | -0.4% |
| Health                         | 1%    | 6.0%   | 6.1%   | 5.9%       | 5.3%     | 4.7% | 6.2%  |

Source: Deutsche Bank, Haver Analytics



**I/L-bond overview** – With 9 I/L-bonds issued and a total volume of USD 19bn outstanding the I/L-bond market in South Africa plays an important role in the government refinancing needs. It account for 12% of the total amount of government bonds outstanding and six of the bonds have a maturity of more than 10 years.

Share of outstanding government bonds in South Africa – in USD



Source: Deutsche Bank, Bloomberg Financial LP

**B/E development in 2014** – On weakness in FX and an increase in spot inflation B/Es increased in the first quarter of 2014. While 10Y B/Es started the year at around 6.40% they moved to 6.80% by mid-April. Since then B/Es gradually declined on the back of stabilization in the rand and fell by more than 100bps across the curve. In fact, while the very long end remained quite resistant the following sharp drop in oil-prices moved B/Es further down with 10Y B/Es reaching the lowest level since mid-13 (5.80%) while 2Y B/Es even fell to the lowest level in over 2 years (5.20%). Since then B/Es saw a sharp correction following a sell-off in domestic rate markets and another sharp depreciation wave in FX. 10Y B/Es are now trading with 6.25% again well above the SARB inflation target of 6%.

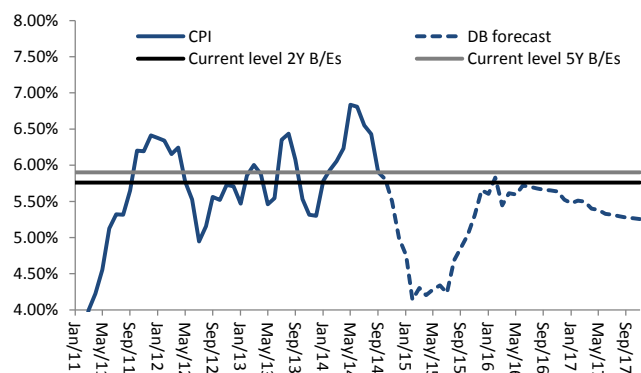
I/L-bonds outstanding in South Africa

| I/L Bonds (SACPI) | Coupon | Amount in Rand | Amount in bn USD | Time to Maturity | B/E Inflation |
|-------------------|--------|----------------|------------------|------------------|---------------|
| 2 1/2 01/31/17    | 2.50   | 17.5           | 1.5              | 2.38             | 5.76          |
| 2 3/4 01/31/22    | 2.75   | 22.8           | 2.0              | 7.38             | 6.02          |
| 5 1/2 12/07/23    | 5.50   | 33.2           | 2.9              | 9.23             | 6.16          |
| 2 01/31/25        | 2.00   | 23.4           | 2.0              | 10.38            | 6.32          |
| 2.6 03/31/28      | 2.60   | 25.9           | 2.2              | 13.54            | 6.67          |
| 3.45 12/07/33     | 3.45   | 35.3           | 3.0              | 19.23            | 7.09          |
| 2 1/4 01/31/38    | 2.25   | 27.6           | 2.4              | 23.38            | 7.38          |
| 2 1/2 03/31/46    | 2.50   | 12.1           | 1.0              | 31.54            | 7.68          |
| 2 1/2 12/31/50    | 2.50   | 21.2           | 1.8              | 36.30            | 7.48          |
|                   |        | <b>219.0</b>   | <b>18.8</b>      |                  |               |

Source: Deutsche Bank, Bloomberg Financial LP/ B/E based on constant maturity curve in nominal government bonds

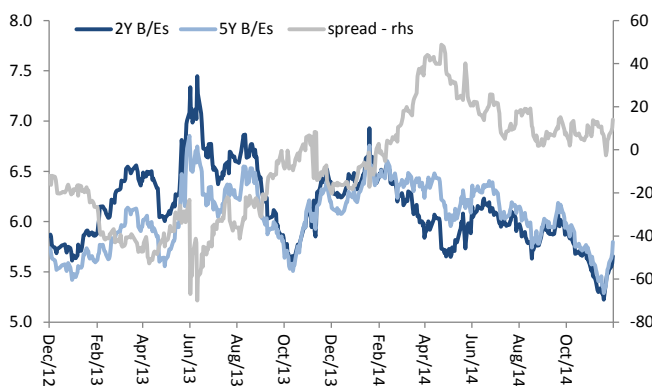
**B/E recommendation** – Remain neutral but start overweight I/L-bonds with B/Es below 5.30% **Rationale:** Over the recent weeks we have argued that further improvements in the inflation profile, continuous weak activity data, declining food inflation and in the medium term DBs optimistic view on the ZAR could further weigh on B/Es in H1-15. However, we also highlighted that this had already been well reflected in B/E valuations. Hence, we recommended in our EM 2015 Outlook in early December from a risk/return perspective to overweight I/L bonds in the short end and belly of the curve at those levels. However, on the back of the recent FX weakness and higher rates, B/Es spiked somewhat trading 35bps higher. In fact, based on DB forecast current levels in short-end B/Es will be broken to the downside in the next inflation print and spot inflation should remain below current levels until at least end-15. Although in the medium term we still see current B/E-level in particular in the belly of the curve as quite attractive, we would – given the recent move rally in B/Es – turn a bit more cautious for now and dissuade from overweighting I/L-bonds across the curve. We remain neutral but recommend to overweight I/L-bonds (<=10Y) with B/Es below 5.30%.

CPI profile relative to B/E levels



Source: Deutsche Bank, Haver Analytics

B/E development relative over recent months



Source: Deutsche Bank

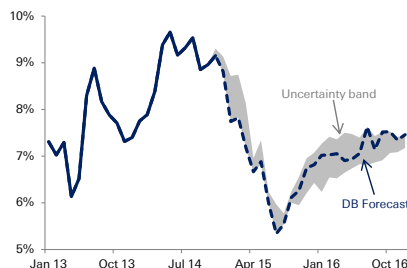
Danelee Masia, (+27) 11 775 7267  
Christian Wietoska, (+44) 20 754 52424



## Turkey – attractive valuation in I/L- bonds despite short term disinflation risks

**Inflation outlook:** 2014 has not been kind to Turkey on many fronts, including inflation. The CBT is set to miss its 5% target for the fourth year in a row as the headline CPI is expected to end the year at around 9%, well above the Bank’s upper band (7%). Rampant food prices stoked by last summer’s drought and sizable FX pass-through from the lira’s 25% slide against hard currencies since early 2013 are the main culprits. Starting from such an adverse base, we are poised for a strong disinflation over the course of 2015, particularly in the first half of year. There are five drivers behind the forthcoming decline: i) strong base effects, especially towards mid-2015 pushing headline number below 6%, ii) an expected mean-reversion in food price inflation, iii) dwindling effect of earlier FX-pass through, iv) the ongoing global commodity price disinflation, and v) lingeringly soft demand conditions. While a slight acceleration is likely toward end-2015 with output gap getting less negative and base effects turning unfavorable, headline CPI is set to remain within the CBT’s comfort zone.

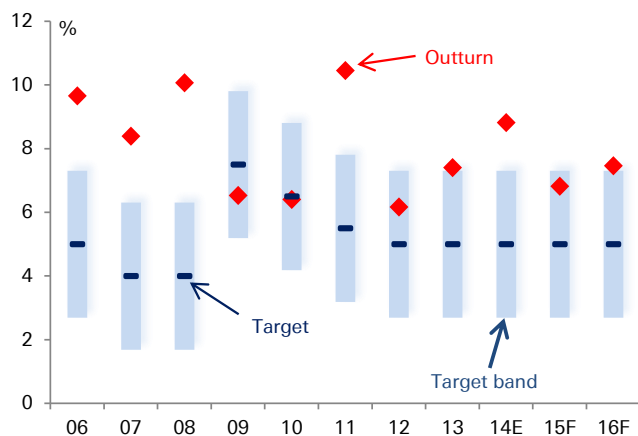
DB CPI forecasts (YoY %)



Source: Deutsche Bank, Haver Analytics

Risks, tough, are tilted to the upside. First, we pencil in around 2-3% TRY depreciation over the course of 2015 with the CBT’s liquidity tools and flat yield curve strategy effectively dampening excessive pressure. Any sharp weakness in the lira beyond this range, however, could potentially derail the forthcoming disinflation. Second, mean-reversion behavior in food prices could take place more slowly with over 1.5mn Syrians currently taking refuge in Turkey putting some sticky upward pressure. And third, further declines in global oil prices could be reflected less on local prices due to the profit issues. **We forecast CPI to average 6.8% in 2015 and 7.3% in 2016 following 7.4% and 8.9% in 2013 and 2014, respectively.**

Inflation target and actual outturns in previous year (YoY)



Source: Deutsche Bank, Haver Analytics

CPI details in Turkey

| CPI Details                                      | Share | Nov-14 | Oct-14 | 3m Average | 2014 YTD | 2013  | LT    |
|--|-------|--------|--------|------------|----------|-------|-------|
| core CPI   |       | 9.0%   | 9.0%   | 9.1%       | 9.2%     | 6.3%  | 6.9%  |
| CPI  |       | 9.2%   | 9.0%   | 9.0%       | 8.9%     | 7.5%  | 8.4%  |
| Food and Non-alcoholic Beverages                 | 24%   | 14.4%  | 12.6%  | 13.6%      | 12.6%    | 9.1%  | 9.2%  |
| Transport  | 18%   | 5.1%   | 6.9%   | 6.5%       | 10.6%    | 6.8%  | 8.3%  |
| Housing, Water, Electricity, Gas and other Fuels | 17%   | 7.6%   | 7.9%   | 6.9%       | 5.6%     | 7.2%  | 9.9%  |
| Furnishings, HH Eqpt, HH Routine Maintenance     | 7%    | 8.1%   | 7.8%   | 8.4%       | 8.4%     | 4.9%  | 6.1%  |
| Clothing and Footwear                            | 7%    | 9.7%   | 8.8%   | 9.0%       | 7.9%     | 6.4%  | 4.7%  |
| Restaurants and Hotels                           | 6%    | 14.3%  | 14.3%  | 14.4%      | 13.2%    | 9.3%  | 11.6% |
| Alcoholic Beverages and Tobacco                  | 5%    | 4.8%   | 4.1%   | 4.1%       | 3.7%     | 15.2% | 14.4% |
| Communication                                    | 5%    | 1.6%   | 1.3%   | 1.4%       | 1.0%     | 5.2%  | 2.0%  |
| Miscellaneous Goods and Services                 | 4%    | 8.8%   | 9.1%   | 8.6%       | 6.9%     | 5.0%  | 9.7%  |
| Recreation and Culture                           | 3%    | 5.9%   | 8.0%   | 7.5%       | 7.5%     | 2.5%  | 5.1%  |
| Health   | 2%    | 9.3%   | 9.9%   | 9.5%       | 8.4%     | 2.7%  | 3.4%  |
| Education  | 2%    | 8.3%   | 8.0%   | 8.0%       | 9.2%     | 7.1%  | 8.5%  |

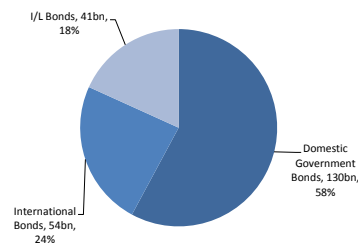
Source: Deutsche Bank, Haver Analytics



**I/L-bond overview** – With 13 IL-bonds issued and a total volume of USD 41bn outstanding Turkey has one of the largest IL-bond markets in the world. It accounts to almost 20% of the total amount of government bonds outstanding.

**B/E development in 2014** - Over the course of 2014, B/E in Turkey have continued to be very volatile. While 5Y-8Y B/E started the year at around 6.0% they gradually edged higher and reached the peak in Aug at >8.0% on the back of a few higher-than-expected inflation prints and concerns that the Russian ban on food could put further pressure on domestic food priced in Turkey (Turkey not included in sanctions which increased risk of additional food exports to Russia). However, in Q4-14 B/E experienced a sharp decline driven by stabilization in the lira and the falling oil price. The H2-14 trough was reached at ~6.50% by end-Nov followed by another spike caused by a November inflation print above 9.0% and stronger US data leading to weakness in FX. B/E in the belly of the curve are currently trading with 6.80-7.0% close to the upper end of the CBT inflation comfort zone (7.0%).

Share of outstanding government bonds in Turkey – in USD



Source: Deutsche Bank, Bloomberg Financial LP

**B/E recommendation** – Overweight I/L bonds in the belly and long end of the curve with at target at 7.50%. **Rationale:** While B/E in other EMEA countries are trading close to their all time lows, B/E levels in Turkey remain still well above their historical lows. This can to a large extent be explained by the still high spot inflation of above 9.0% (well above the inflation target of 5.0%) and the historically high sensitivity to FX weakness. Compared to our DB inflation profile until end-16, B/E in Turkey provide the lowest inflation premia across the region. Hence, despite the downside risk in the near term due to an expected drop in spot inflation in early 2015 and the possibility of additional further global disinflation shocks, we see current level as quite attractive to cautiously overweight I/L-bonds in Turkey.

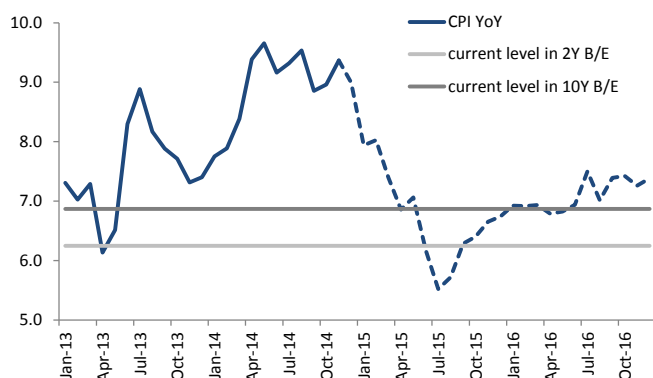
I/L-bonds outstanding in Turkey

| Inflation linked bonds | Coupon | Amount in Lira | Amount in USD | B/E inflation |
|------------------------|--------|----------------|---------------|---------------|
| TURKGB 4 04/29/15      | 4.00   | 7.2            | 3.1           | 7.29          |
| TURKGB 2 1/2 05/04/16  | 2.50   | 2.5            | 1.1           | 6.07          |
| TURKGB 3 1/2 02/20/19  | 3.50   | 8.1            | 3.5           | 6.72          |
| TURKGB 4 04/01/20      | 4.00   | 7.7            | 3.4           | 6.89          |
| TURKGB 3 01/06/21      | 3.00   | 7.5            | 3.3           | 6.81          |
| TURKGB 3 07/21/21      | 3.00   | 7.2            | 3.2           | 6.83          |
| TURKGB 3 02/23/22      | 3.00   | 9.8            | 4.3           | 7.01          |
| TURKGB 2 10/26/22      | 2.00   | 10.2           | 4.5           | 6.81          |
| TURKGB 1 05/03/23      | 1.00   | 5.6            | 2.4           | 6.47          |
| TURKGB 3 08/02/23      | 3.00   | 8.1            | 3.5           | 6.87          |
| TURKGB 2.8 11/08/23    | 2.80   | 5.5            | 2.4           | 6.34          |
| TURKGB 2.4 05/08/24    | 2.40   | 5.7            | 2.5           | 6.19          |
| TURKGB 2 09/18/24      | 2.00   | 2.6            | 1.2           | 6.17          |

Source: Deutsche Bank, Bloomberg Financial LP / B/E based on constant maturity curve in nominal government bonds

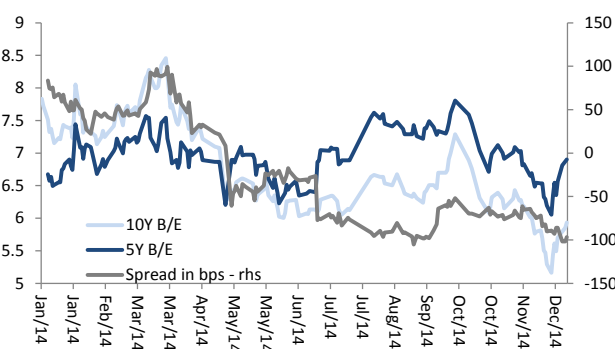
Given spot inflation still well above the upper end of the CBTs inflation comfort zone, our economists view that the medium term “sticky” component to overall inflation is at 6.0-6.5%, the risk of further weakness in the lira and on the domestic front the risk of more aggressive easing by the CBT than justified by the current inflation profile, we recommend to overweight I/L bonds in the 2Y-5Y part of the curve. In the near term, we see the upside limit in B/E at 7.50% which provides value of around 60-70bp from current levels.

CPI profile relative to B/E levels



Source: Deutsche Bank, Haver Analytics

B/E development relative over recent months in Turkey



Source: Deutsche Bank

Kubilay Öztürk, (44) 20 754 58774  
Christian Wietoska, (+44) 20 754 5242



DB Inflation Forecasts

|        | Euro area     |       |       |                    |       |       |             |       |       | France            |       |       | UK    |       |       |
|--------|---------------|-------|-------|--------------------|-------|-------|-------------|-------|-------|-------------------|-------|-------|-------|-------|-------|
|        | Headline HICP |       |       | HICP excl. tobacco |       |       | HICP xefat* |       |       | CPI excl. tobacco |       |       | RPI   |       |       |
|        | Index         | % m/m | % y/y | Index              | % m/m | % y/y | Index       | % m/m | % y/y | Index             | % m/m | % y/y | Index | % m/m | % y/y |
| May-14 | 118.1         | -0.1  | 0.49  | 117.44             | -0.1  | 0.42  | 113.4       | -0.1  | 0.7   | 126.27            | 0.0   | 0.6   | 255.9 | 0.1   | 2.4   |
| Jun-14 | 118.2         | 0.1   | 0.50  | 117.57             | 0.1   | 0.43  | 113.5       | 0.1   | 0.8   | 126.22            | 0.0   | 0.3   | 256.3 | 0.2   | 2.6   |
| Jul-14 | 117.4         | -0.7  | 0.38  | 116.78             | -0.7  | 0.34  | 112.6       | -0.8  | 0.8   | 125.81            | -0.3  | 0.4   | 256.0 | -0.1  | 2.5   |
| Aug-14 | 117.6         | 0.1   | 0.37  | 116.91             | 0.1   | 0.33  | 112.9       | 0.3   | 0.9   | 126.38            | 0.5   | 0.4   | 257.0 | 0.4   | 2.4   |
| Sep-14 | 118.1         | 0.4   | 0.31  | 117.43             | 0.4   | 0.27  | 113.5       | 0.5   | 0.8   | 125.88            | -0.4  | 0.2   | 257.6 | 0.2   | 2.3   |
| Oct-14 | 118.0         | -0.1  | 0.38  | 117.35             | -0.1  | 0.33  | 113.6       | 0.0   | 0.7   | 125.92            | 0.0   | 0.4   | 257.7 | 0.0   | 2.3   |
| Nov-14 | 117.8         | -0.2  | 0.26  | 117.10             | -0.2  | 0.21  | 113.5       | -0.1  | 0.7   | 125.70            | -0.2  | 0.3   | 257.7 | 0.0   | 2.2   |
| Dec-14 | 117.8         | 0.0   | -0.08 | 117.11             | 0.0   | -0.14 | 113.9       | 0.4   | 0.8   | 125.78            | 0.1   | -0.0  | 257.9 | 0.1   | 1.8   |
| Jan-15 | 116.3         | -1.2  | -0.20 | 115.61             | -1.3  | -0.28 | 111.9       | -1.7  | 0.8   | 124.89            | -0.7  | -0.1  | 256.8 | -0.4  | 1.7   |
| Feb-15 | 116.7         | 0.3   | -0.20 | 115.97             | 0.3   | -0.27 | 112.3       | 0.4   | 0.7   | 125.27            | 0.3   | -0.4  | 258.3 | 0.6   | 1.6   |
| Mar-15 | 118.0         | 1.1   | -0.02 | 117.29             | 1.1   | -0.09 | 114.1       | 1.6   | 0.8   | 126.17            | 0.7   | -0.1  | 259.3 | 0.4   | 1.8   |
| Apr-15 | 118.2         | 0.1   | -0.03 | 117.46             | 0.1   | -0.09 | 114.3       | 0.2   | 0.7   | 126.22            | 0.0   | 0.0   | 260.6 | 0.5   | 1.9   |
| May-15 | 118.3         | 0.1   | 0.17  | 117.56             | 0.1   | 0.10  | 114.4       | 0.0   | 0.9   | 126.35            | 0.1   | 0.1   | 261.2 | 0.2   | 2.1   |
| Jun-15 | 118.4         | 0.1   | 0.16  | 117.67             | 0.1   | 0.09  | 114.5       | 0.1   | 0.9   | 126.52            | 0.1   | 0.2   | 261.4 | 0.1   | 2.0   |
| Jul-15 | 117.7         | -0.6  | 0.20  | 116.92             | -0.6  | 0.12  | 113.6       | -0.8  | 0.9   | 126.06            | -0.4  | 0.2   | 261.3 | 0.0   | 2.1   |
| Aug-15 | 117.8         | 0.1   | 0.21  | 117.08             | 0.1   | 0.15  | 113.8       | 0.2   | 0.8   | 126.51            | 0.4   | 0.1   | 262.4 | 0.4   | 2.1   |
| Sep-15 | 118.4         | 0.5   | 0.27  | 117.66             | 0.5   | 0.20  | 114.6       | 0.7   | 0.9   | 126.24            | -0.2  | 0.3   | 263.2 | 0.3   | 2.2   |
| Q3 14  | 117.7         | -0.4  | 0.4   | 117.0              | -0.4  | 0.3   | 113.0       | -0.4  | 0.8   | 126.0             | -0.2  | 0.3   | 256.9 | 0.4   | 2.4   |
| Q4 14  | 117.9         | 0.1   | 0.2   | 117.2              | 0.1   | 0.1   | 113.6       | 0.6   | 0.7   | 125.8             | -0.2  | 0.2   | 257.8 | 0.4   | 2.1   |
| Q1 15  | 117.0         | -0.7  | -0.1  | 116.3              | -0.8  | -0.2  | 112.8       | -0.7  | 0.7   | 125.4             | -0.3  | -0.2  | 258.1 | 0.1   | 1.7   |
| Q2 15  | 118.3         | 1.1   | 0.1   | 117.6              | 1.1   | 0.0   | 114.4       | 1.4   | 0.8   | 126.4             | 0.7   | 0.1   | 261.1 | 1.1   | 2.0   |
| Q3 15  | 118.0         | -0.3  | 0.2   | 117.2              | -0.3  | 0.2   | 114.0       | -0.4  | 0.9   | 126.3             | -0.1  | 0.2   | 262.3 | 0.5   | 2.1   |
| Q4 15  | 118.7         | 0.6   | 0.7   | 118.0              | 0.6   | 0.7   | 114.8       | 0.7   | 1.0   | 126.5             | 0.2   | 0.6   | 264.2 | 0.7   | 2.5   |
| 2013   | 117.2         |       | 1.4   | 116.6              |       | 1.3   | 112.1       |       | 1.1   | 125.4             |       | 0.7   | 250.1 |       | 3.0   |
| 2014   | 117.7         |       | 0.4   | 117.1              |       | 0.4   | 113.0       |       | 0.8   | 125.9             |       | 0.4   | 256.1 |       | 2.4   |
| 2015   | 118.0         |       | 0.2   | 117.3              |       | 0.2   | 114.0       |       | 0.9   | 126.2             |       | 0.2   | 261.4 |       | 2.1   |
| 2016   | 119.5         |       | 1.3   | 118.8              |       | 1.3   | 115.3       |       | 1.1   | 127.5             |       | 1.1   | 269.3 |       | 3.0   |

Next release

\*HICP excluding energy, food, alcohol and tobacco  
Source: Deutsche Bank

Nov: 17-Dec

Dec: 14-Jan

Nov: 16-Dec



DB Inflation Forecasts

|              |        |       |       | US CPI |  |  |  |
|--------------|--------|-------|-------|--------|--|--|--|
| Headline CPI |        |       |       |        |  |  |  |
|              | Index  | % m/m | % y/y |        |  |  |  |
| May-14       | 237.90 | 0.3   | 2.1   |        |  |  |  |
| Jun-14       | 238.34 | 0.2   | 2.1   |        |  |  |  |
| Jul-14       | 238.25 | 0.0   | 2.0   |        |  |  |  |
| Aug-14       | 237.85 | -0.2  | 1.7   |        |  |  |  |
| Sep-14       | 238.03 | 0.1   | 1.7   |        |  |  |  |
| Oct-14       | 237.43 | -0.3  | 1.7   |        |  |  |  |
| Nov-14       | 236.08 | -0.6  | 1.3   |        |  |  |  |
| Dec-14       | 234.75 | -0.6  | 0.7   |        |  |  |  |
| Jan-15       | 234.66 | 0.0   | 0.3   |        |  |  |  |
| Feb-15       | 235.26 | 0.3   | 0.2   |        |  |  |  |
| Mar-15       | 236.04 | 0.3   | -0.1  |        |  |  |  |
| Apr-15       | 237.15 | 0.5   | 0.0   |        |  |  |  |
| May-15       | 237.77 | 0.3   | -0.1  |        |  |  |  |
| Jun-15       | 238.19 | 0.2   | -0.1  |        |  |  |  |
| Jul-15       | 238.40 | 0.1   | 0.1   |        |  |  |  |
| Aug-15       | 238.82 | 0.2   | 0.4   |        |  |  |  |
| Sep-15       | 239.17 | 0.1   | 0.5   |        |  |  |  |
| Q3 14        | 238.0  | 0.1   | 1.8   |        |  |  |  |
| Q4 14        | 236.1  | -0.8  | 1.2   |        |  |  |  |
| Q1 15        | 235.3  | -0.3  | 0.1   |        |  |  |  |
| Q2 15        | 237.7  | 1.0   | 0.0   |        |  |  |  |
| Q3 15        | 238.8  | 0.5   | 0.3   |        |  |  |  |
| Q4 15        | 238.7  | 0.0   | 1.1   |        |  |  |  |
| 2013         | 233.0  |       | 1.5   |        |  |  |  |
| 2014         | 236.7  |       | 1.6   |        |  |  |  |
| 2015         | 237.6  |       | 0.4   |        |  |  |  |
| 2016         | 242.3  |       | 2.0   |        |  |  |  |

Next release

Source: Deutsche Bank



# Appendix 1

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Additional information available upon request

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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**  
Group Chief Economist  
Member of the Group Executive Committee

**Raj Hindocha**  
Global Chief Operating Officer  
Research

**Marcel Cassard**  
Global Head  
FICC Research & Global Macro Economics

**Richard Smith and Steve Pollard**  
Co-Global Heads  
Equity Research

**Michael Spencer**  
Regional Head  
Asia Pacific Research

**Ralf Hoffmann**  
Regional Head  
Deutsche Bank Research, Germany

**Andreas Neubauer**  
Regional Head  
Equity Research, Germany

**Steve Pollard**  
Regional Head  
Americas Research

## International Locations

### Deutsche Bank AG

Deutsche Bank Place  
Level 16  
Corner of Hunter & Phillip Streets  
Sydney, NSW 2000  
Australia  
Tel: (61) 2 8258 1234

### Deutsche Bank AG

Große Gallusstraße 10-14  
60272 Frankfurt am Main  
Germany  
Tel: (49) 69 910 00

### Deutsche Bank AG

Filiale Hongkong  
International Commerce Centre,  
1 Austin Road West, Kowloon,  
Hong Kong  
Tel: (852) 2203 8888

### Deutsche Securities Inc.

2-11-1 Nagatacho  
Sanno Park Tower  
Chiyoda-ku, Tokyo 100-6171  
Japan  
Tel: (81) 3 5156 6770

### Deutsche Bank AG London

1 Great Winchester Street  
London EC2N 2EQ  
United Kingdom  
Tel: (44) 20 7545 8000

### Deutsche Bank Securities Inc.

60 Wall Street  
New York, NY 10005  
United States of America  
Tel: (1) 212 250 2500

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