Inflation-Linked Bond Outlook

October 2016

SPECIAL TOPIC

Market developments

Bank of Japan (BoJ) new monetary policy framework

Following a comprehensive review of its Quantitative and Qualitative Easing (QQE) with a negative interest rate framework, on September 21st the BoJ unveiled a radical change in its monetary strategy. The BoJ left the current monetary stance untouched: the Policy Rate was left unchanged at -0.1% and the BoJ did not commit to a more rapid expansion in the size of the monetary base. Instead, the BoJ announced a new framework of "QQE with yield curve control", which is intended to strengthen what went before ("QQE" and "QQE with a negative interest rate"). The new framework has two elements: "yield curve control" and an "inflation-overshooting commitment".

Yield curve control

The BoJ now has a target for the long-term interest rate, defined as the 10 year JGB yield, which it intends to keep at more or less its current level ("around 0%"). In passing, the fact that the BoJ has pinned a long term nominal rate whilst announcing a commitment to overshoot its inflation target should not be downplayed. The straitjacket of the targets for expansion in the monetary base and the average maturity of purchases have been removed with the BoJ giving itself more freedom in how it delivers this yield cap. It still expects to match the current pace of increasing its stock of JGB purchases by ¥80 trillion a year on average, but there is clearly more flexibility now. When forming a view of the appropriate level and slope of the yield curve the BoJ will consider both the extent to which a decline in JGB yields is passed through into the real economy ("translates into a decline in lending and corporate bond rates" and "the effects …. on economic activity") and the negative impact on the functioning of the financial system.

The BoJ added two important market operations to its toolkit to achieve the yield cap: first, fixed rate purchase operations to help it pin yields; second, fixed rate refinancing operations stretching out 10 years (rather than the current one year). The latter is potentially important because it provides soft guidance about the future path of the policy rate.

Inflation-overshooting commitment

The inflation overshooting commitment is the most important element of the BoJ's announcement. The BoJ has pledged to continue expanding its monetary base until inflation (measured in terms of CPI excluding fresh food) is above the 2% target and stays there "in a stable manner". To be clear, there is no formal price level path target here to quantify that commitment (overshoot by how much? for how long?), but still it is a powerful statement of intent.

This commitment to over-shoot the target is intended as shock therapy for inflation expectations. The BoJ believes inflation expectations in Japan are backward-looking – that is, expectations have been driven and depressed by disappointing short-term developments in prices which in turn have held back reflation. The BoJ hopes that its pledge to overshoot the target in the future backed by a commitment to continue expanding the monetary base will restore that forward looking expectation mechanism, helping the BoJ to achieve "the price stability target of 2 percent at the earliest possible time" as it continues to promise to do.

Near-term implications

The BoJ's new framework is impressive, but the failure to match words with deeds and long standing questions about the efficacy of unconventional monetary policy could blunt the impact of the announcement. The BoJ pledged to make policy adjustments as appropriate, and stated its intention to cut interest rates further if necessary. This is a reference to both the short-rate and the long-rate target so the acid test of the new framework is whether the BoJ is willing to cut the short-rate and lower its long-rate target in response to developments which challenge its ambition to overshoot its objective.

The new framework can also be viewed as one step closer to monetary financing. Borrowing costs are now pinned down at zero should the Ministry of Finance decide to engage in a more meaningful fiscal expansion.

The outcome of the comprehensive review was the moment of truth for the BoJ: would it keep fighting to achieve price stability or throw in the towel? The BoJ passed its test. The European Central Bank (ECB) is up next, although we are skeptical that the ECB will countenance such a radical move given its institutional and legal constraints.

TIPS Market Outlook

At the end of the first quarter, we were extremely constructive on TIPS as an asset class, given dovish rhetoric from the Federal Open Market Committee (FOMC), reduced concerns about a Yuan realignment, recovery in risk assets, a softening dollar, rising commodities prices and upside surprises on core inflation. Since May, our enthusiasm for the asset class has diminished following the FOMC's evident preference for raising rates at the earliest opportunity, and resurgent worries over global growth. Still, we believe there is upside, both on real yield and breakeven inflation rates, given the global backdrop of financial repression, current level of actual inflation (which exceeds the current level of breakeven inflation rates) and the Federal Reserve's (Fed's) determination to return inflation towards target.

US ECONOMIC DEVELOPMENTS & OUTLOOK

Output growth and employment

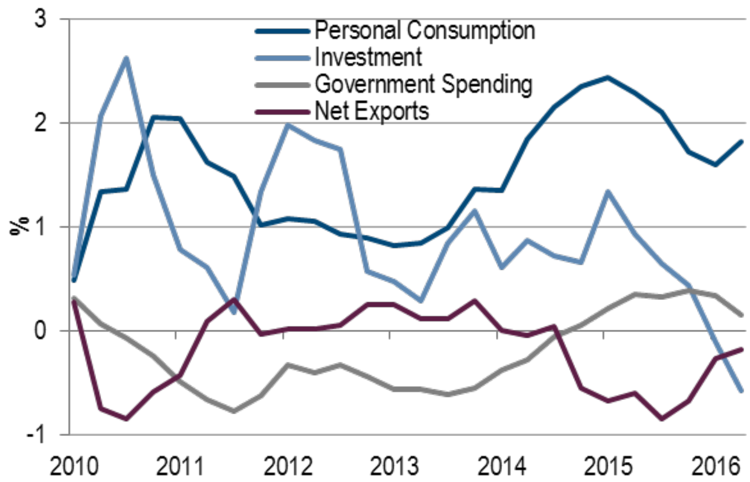
At the beginning of this year, we set out our view that the US economic expansion would likely slow from the 2.0% – 2.5% pace that the US has enjoyed for the last few years. In our July Outlook piece we suggested that 2016 GDP growth could be as low as 1.25% to 1.50%, slightly below our 1.60% estimate of potential growth, and well below the FOMC's 2.0% estimate. We pointed to a number of potential headwinds conspiring against the US economy:

(i) The delayed impact of the dollar's trade-weighted appreciation in 2015 on net trade;
(ii) Relatively tight financial conditions, as regulatory pressures continue to impact credit provision;
(iii) Slowing global growth that reflects both structural forces in China and the Eurozone;
(iv) A decline in energy-sector investment as a result of depressed oil prices; and
(v) A decline in corporate earnings, reducing funds available for investment and hiring.

GDP data confirm that the first half of 2016 was pretty poor for the US economy. GDP grew by only around 1.1% annualised. Of course, the headline numbers can be deceptive, as a slowdown in inventory accumulation detracted meaningfully from the overall GDP numbers – which means that final domestic demand remained relatively firm. But it is also true that non-residential investment has continued to slow, such that it is no longer contributing meaningfully to GDP growth. This picture of slowing non-residential investment is corroborated by business confidence surveys that have also shown a loss of momentum, which is perhaps unsurprising given gradual deterioration in earnings growth.

With investment no longer contributing to GDP growth, US economic momentum is now ever more reliant on consumption, which has been supported by solid gains in both employment and household sector net wealth. Although payrolls data can be very volatile on a monthly basis, the 6-month average for monthly employment gains has declined since February by around 50,000 jobs to 175,000 new jobs per month. Given the moderation in output data, this is still a solid pace of employment growth, but we expect it to slow towards 100,000 per month in coming quarters. Given the resilience of the labour market so far, it is therefore also somewhat worrying that the most recent retail sales numbers have softened, and that residential investment actually detracted from GDP in the second quarter. Indeed, residential investment has to date failed to firm to the degree that one might have forecast based on demographic, employment, housing inventories and the reduction in mortgage rates. Should employment gains moderate in line with ISM and PMI business surveys, we could therefore see softening on the consumption and housing construction fronts, which would cause us concern. The bottom line is that the primary driver of the US economy right now is the household sector. Although households are not overly levered and the cost of credit is low, access to credit is restricted, and consumption is vulnerable to a softening labour market or volatility in financial markets.

Chart 1: Contributions to GDP Growth (4Q Moving Average)



Source: Federal Reserve Bank of St. Louis, as of June 30, 2016

What we could not have foreseen at the start of the year were the additional stresses on financial markets and business confidence that would come from June's surprise UK referendum result on the question of whether to remain in the European Union. Beyond the economic impact, the Brexit result serves to highlight a global phenomenon in which electorates are choosing to reject the status quo, and are opting for more extreme solutions to problems posed by immigration, the unequal distribution of gains from globalisation and international trade, widening economic inequality and falling trend growth. In the United States, the starkest illustration of this political backlash is the nomination of Mr. Trump to lead the Republican ticket in November's presidential election. Given the potential for significant disruption to the global economic and geopolitical landscape should Mr. Trump win November's election, we have to add political risk to our list of headwinds facing the US economy.

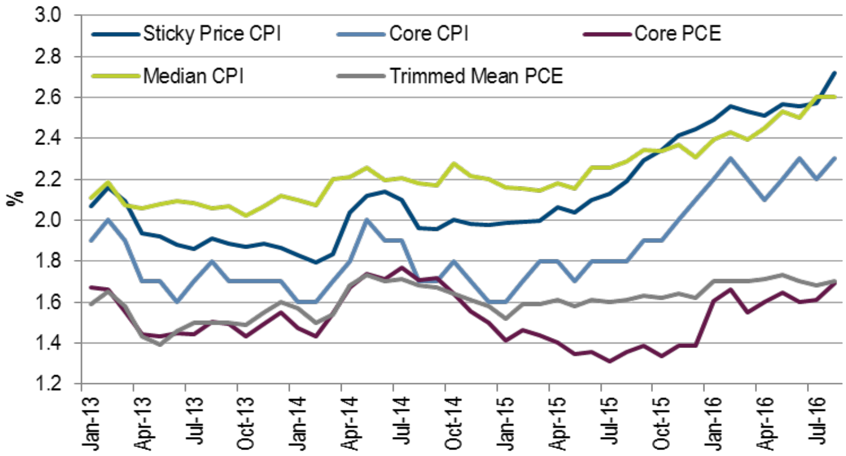
Inflation

On the inflation front, the international backdrop remains clearly disinflationary. Both the Japanese and Eurozone economies are failing to revive domestic inflation, and are each contemplating new measures to provide further stimulus to their economies.

On the domestic front, inflation prospects look healthier. Recall that in late 2015 the FOMC had described many of the factors holding back inflation as transitory because of the decline in energy prices and the strength of the US dollar. The US dollar has been reasonably stable for months, energy prices rebounded modestly since January's low point, and both these factors have permitted base effects to work through the data.

Although PCE inflation remains below the FOMC's 2.0% objective, a number of measures of underlying, or 'core', inflation have continued to gently firm. Although the pace of increase has been slower than the FOMC has forecast. As of August 2016, year-over-year core PCE was running at 1.70%, trimmed mean PCE at 1.7%, core CPI at 2.3% and sticky CPI at 2.7%. These numbers are equal to or slightly higher than at our July Outlook, but do not (in our view) allow the FOMC to yet declare victory on its inflation mandate.

Chart 2: Inflation Figures

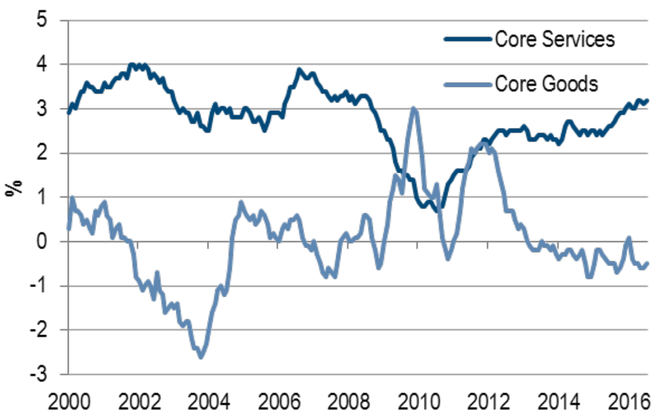


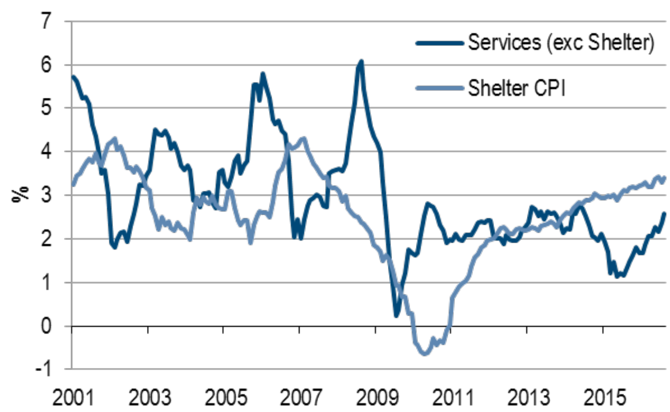
Source: Bloomberg, as of August 31, 2016

Digging into the details of the inflation data shows large divergences between sectors. Shelter service inflation (currently running at 3.4% year-over-year) has been strong for some time, but arguably reflects a shortfall of housing inventory due to weak construction activity, limited mortgage financing availability and changes in household preferences on renting versus owning. Goods prices, meanwhile, have remained extremely soft as a result of US dollar strength and declines in internationally-traded commodities prices, and continue to detract from overall inflation.

The best gauge of domestically-generated inflation, in our view, is the non-shelter services category, which should be most impacted by unit labour costs, which are in turn largely driven by wage pressures. This category has clearly firmed in 2016. Non-shelter services costs (comprising mostly of education, medical care, transport and recreation services) were growing at 2.6% in August 2016, versus a pace of 1.8%year-over-year in March 2016 and 1.13% in May 2015. This is an encouraging development, but clearly a trend we need to see continue in order to offset the deflationary impact of weak core goods prices, and to support inflation expectations. It is far from assured, given that the labour market continues to show limited wage growth despite several indicators showing that the labour market is tightening.

Charts 3 & 4: Core Inflation and Services & Shelter CPI





Source: Bloomberg, as of August 31, 2016

Our forecasts indicate that as long as the US dollar does not strengthen further and as long as commodities stabilise, then headline inflation should also gradually normalise towards the FOMC's CPI inflation target of 2.4% by early 2017. Note that this forecast is lower than our July forecast because of modestly lower crude oil prices. But our confidence that US inflation is unquestionably and sustainably moving back to the FOMC's objective is limited. First, the international backdrop remains deflationary and the global economy is vulnerable to further shocks (such as a 'hard Brexit' or a China debt crisis). Second, the US economic expansion appears to be slowing somewhat, and the economy is particularly dependent on the consumer. It will be difficult to drive inflation higher if growth slips below trend such that spare capacity is not reduced further. Third, both survey and market-based inflation expectations have softened, and it will be imperative that this trend reverses in coming quarters. The FOMC has its part to play in demonstrating its commitment to eliminating all possibility of deflation.

Monetary Policy

The reader may, by now, be familiar with our view of the FOMC's communication over the last 18 months or so. Frankly, the FOMC's constant 'flip-flopping' over the last year has merely served to confuse investors about the FOMC's reaction function, and cost them credibility. Over the last 18 months, the Committee has swung repeatedly between arguing for normalisation of policy on the one hand, and the need for caution on the other.

When the FOMC first hiked rates in December 16, 2015, they did so on the basis that:

(i) The US economy had made sufficient gains on the employment mandate,
(ii) that the economy would not be materially impact by turbulence in the global economy, and
(iii) that the Committee was "reasonably confident" that inflation would return to target.

The December 2015 statement noted, however, that "the Committee will carefully monitor actual and expected progress toward its inflation goal" in assessing whether to enact additional hikes (our italics), suggesting that progress on inflation was a precondition for additional rate hikes.

We considered the FOMC's December hike as premature for a number of reasons:

- We disagreed with the FOMC's estimate of the neutral policy rate, and therefore their assessment of the easiness of monetary policy.
- We disagreed with the FOMC's concerns over possible financial stability risks from low rates.
- We were troubled that the FOMC would contemplate hiking rates before inflation had returned to target. Our view was that the FOMC should have waited to see higher actual (rather than forecast) inflation before hiking. Furthermore, we judged that the FOMC's impatience to hike rates signalled a lack of tolerance for any inflation overshoot (either in its forecasts or in actuality), indicating that the FOMC in fact does not view their inflation target as symmetric.
- We felt that the FOMC was significantly overestimating the US economy's resilience to the global downturn, and the risks associated with China's transition (including the risk of a sudden CNY revaluation).
- We disagreed with the FOMC's concern about a sudden acceleration of inflation from the closing of the output gap, which could require sharper rate hikes later.
- We also took a much more pessimistic view on the stability of inflation expectations, pointing to depressed TIPS breakeven inflation rates and inflation surveys. We were particularly concerned at the FOMC's dismissal of very low breakeven inflation rates as being attributable to liquidity distortions and inflation risk premia, rather than any decline in inflation expectations.

In March, NY Fed President Dudley and FOMC Chair Yellen materially changed their assessment of downside risks, and emphasized that policy normalisation should proceed with "particular caution", indicating a shift to a risk-management approach. Chairman Yellen justified the decision by referencing:

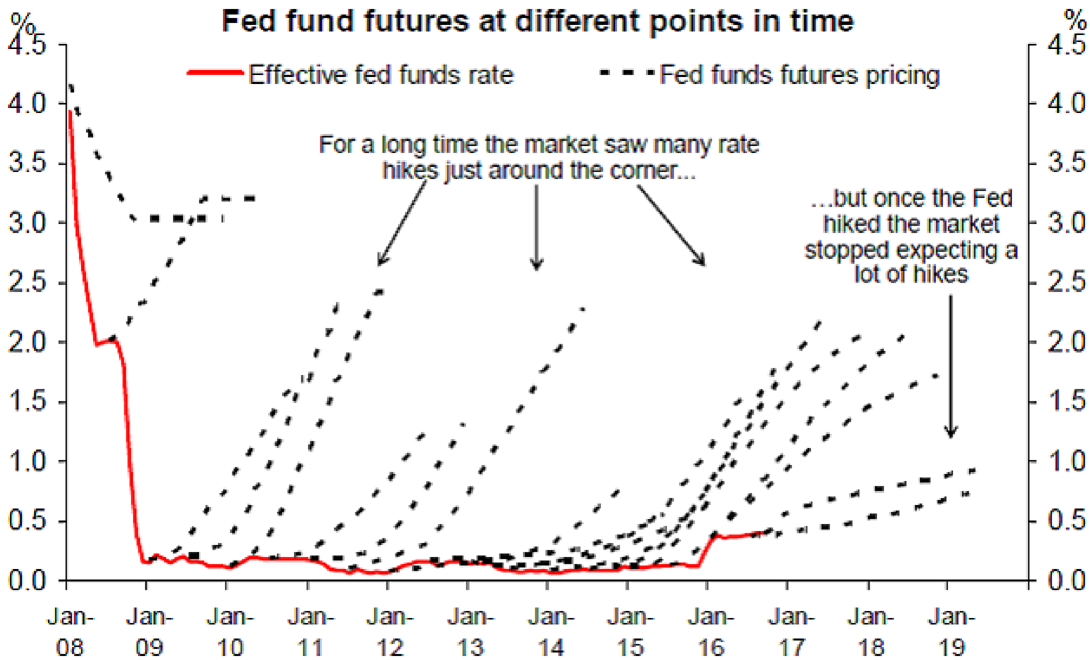
(i) Downside risks from global economic and financial developments;
(ii) Concerns over the Chinese authorities' ability to manage their economic transition and associated financial turbulence;
(iii) The fragility of inflation expectations – an acknowledgement of declines in inflation expectation surveys and breakeven inflation rates;
(iv) Concerns that recent firming in core inflation may not be sustainable, and
(v) Recognition that policy options are asymmetric, should additional accommodation be required.

This shift towards an approach that placed great weight on risk-management considerations was, in our view, entirely justified. Yet, since Yellen's speech in March, senior FOMC members twice signalled their intent to nevertheless raise rates (specifically, ahead of both the June and September meetings), only to back down as the decision approached. Furthermore, both in June and in September, the Committee took the opportunity to reduce their estimates of the long-run neutral policy rate, as well as the long-run trend rate of GDP growth. In effect, by lowering the neutral rate, the FOMC acknowledged that policy has been less accommodative than it perceived, while still indicating that it remains impatient to raise rates to this new, lower neutral level.

Given the all-too frequent reversals in policy guidance, we have to conclude that the FOMC is either (i) inconsistent in its reaction function at the Committee level; or (ii) overly sensitive to fluctuations in asset prices, and unappreciative of its own influence on financial markets. Certainly, our observation is that the FOMC has been (unjustifiably) impatient to normalise policy, and used periods of (Fed-induced) market calm to signal its intention to raise rates in an attempt to reprice front-dated yields. At this point, we have to assume this behaviour will continue, and that the FOMC will again likely signal its intent to raise rates ahead of the December meeting.

One striking phenomenon is that investors, through painful experience, have learned to mostly ignore FOMC guidance. The following chart (from Torsten Slok at Deutsche Bank) illustrates how market pricing for the path of policy rates has evolved over the last few years. The FOMC, meanwhile, has gradually acknowledged that the path of rate hikes will be extremely shallow, and that rates will not rise very much. But it has lost much credibility in the process and the market still remains more pessimistic than the FOMC on the path of rates.

Chart 5: Fed Fund Futures



Source: Deutsche Bank, as of September 28, 2016

TIPS Market Outlook

Notes on portfolio positioning and performance in Q3 2016

Since July, the TIPS portfolio has maintained its core exposure: a combination of an overweight in forward real yields and forward breakevens. The trade rationale is simple: either (i) breakeven inflation rates are too depressed and real yields are appropriate, so that evidence of firming inflation will eventually widen breakevens; or (ii) narrow breakevens are correct in anticipating very low inflation, and thus real yields are too high, and the latter will decline as the FOMC softens its policy stance. Correspondingly, our positions have broadly been as follows:

1. Net overweight 10-year breakeven inflation (BEI); given extremely depressed valuations of long-dated forward BEIs.
2. Overweight TIPS (real) duration, because of attractive valuations, and as a means to hedge the BEI exposure against lower nominal yields.
3. 5s / 10s BEI steepener (i.e., underweight 5-year BEIs versus 10-year BEIs as a means to hedge lower energy prices).

In late first quarter, a number of catalysts fell into place for the TIPS market, prompting us to dramatically increase our position sizes in both TIPS BEIs and duration. Specifically, we felt that the Treasury's reduction in TIPS issuance, combined with a more dovish FOMC stance (as set out by Yellen in her policy speech in March), a partial recovery in energy prices, the start of strong seasonal inflation accretion, and some improvement in core inflation prints provided a very strong backdrop for TIPS as an asset class. At one point in April, our BEI and real yield overweight positions were 8 months each.

Hence, the portfolio started second quarter with sizeable overweight positions in both duration and BEIs. Dovish Fed communication meant that from mid-February to late April, 10-year BEIs widened from 1.20% to 1.72%. Our positions therefore performed well in April (adding 10.4 bps of alpha on the US TIPS portfolio), as investors returned to risk assets. However, when the FOMC unexpectedly turned hawkish in May (signaling it might raise rates at the June meeting), TIPS performed very poorly, with 10-year BEIs narrowing back to 1.57% and 10-year TIPS yields rising from 0.12% to 0.28%. Correspondingly, both duration and breakeven overweight positions fared badly (detracting 18.5 bps of alpha in May). In June, a poor payroll report and the surprise result in the UK referendum on whether to leave the EU led to a sharp rally in nominal Treasuries and a further narrowing of TIPS 10-year BEIs to a low of 1.37%. Although we had trimmed our position sizes in May after the FOMC's change of stance, the remaining BEI overweight underperformed. Our real yield overweight, though, performed well and mostly offset losses on BEIs, such that overall excess performance for June was a modest -1.6 bps. Overall, then our positions in the second quarter detracted from performance, as our constructive stance on the asset class was challenged by an inconsistent FOMC and a surprise result in the UK's 'Brexit' referendum.

The third quarter was better from an alpha generation perspective, and the TIPS account added 11.6 bps of excess performance. The TIPS portfolio commenced the quarter on a cautious footing given the FOMC's hawkish reversal and the surprise Brexit vote had taken BEIs all the way back to 1.37%. Still, we maintained a core 3.5 month BEI overweight given the value. Although 10-year BEIs only recovered to the 1.41% to 1.50% range, the position benefitted from strong inflation accretion, even as crude oil prices retreated from $49 to $41 pb. On the duration front, a strong non-farm payroll report and an easing of Brexit concerns prompted us to take profit on and trim a defensive 6.5 month long duration exposure. Overall, we generated 7.9 bps of alpha on the month.

August meanwhile was as calm a month as we can remember. As expected, the Bank of England announced a rate cut and the resumption of asset purchases in order to head off downside risks from 'Brexit'. The Fed chose not to raise rates after the Brexit surprise. With central banks looking to dampen market volatility, 10-yr TIPS yields traded in a very tight 0.04% to 0.12% range in August, with BEIs also barely moving. There was little to report in the TIPS market, except for a steady richening of off-the-run old 10-year securities (in which we held an overweight). With yields rising slightly, duration detracted from performance. BEI exposures added to performance, our security selection trades (overweight in off the run securities) added to performance. Overall, August excess performance was a small 0.4 bps.

As the calendar turned to September and investors returned from vacation, so did market volatility! Speculation mounted that the BoJ might announce either an abandonment of its QE program, or look to generate a steepening of the JGB curve in order to help its banks. With the potential for reduced purchases of long-dated JGBs, Japanese yields moved higher. Speculation also mounted that the FOMC might announce a rate hike at its September 21 meeting (although ultimately hawkish guidance again proved to be a false signal). Hence 10-year nominal yields rose from 1.56% to 1.74% by mid-September, also dragging TIPS yields higher. Ultimately, the BoJ did announce important changes to its monetary policy framework, but those changes involved targeting 10- to 20-year JGB yields around 0.0% yield. On the same day, the FOMC announced it would keep its policy rate unchanged, and further lowered its guidance for the long-term neutral policy range. With central banks remaining on a path of accommodation, global yields once again declined and BEIs found buyers. We used higher yields early in the month to add to our TIPS duration exposure, increasing it from 4.5 months to 5.5 months, before trimming it to 3 months once yields fell. Overall, September was a profitable month, and we added 3.3 bps of excess performance.

US TIPS existing exposures and strategies

Breakeven inflation rates

At the end of June, following Brexit, 5-year / 5-year forward BEIs (5y5y fwd BEIs) slumped back to February's depressed valuations, trading around 1.50%. Investor concerns about the global economic and political backdrop post-Brexit, as well as over central banks' commitment to their inflation targets, diminished investor appetite for inflation protection. Since June, 5y5y fwd BEIs recovered to around 1.80%, as Brexit spillovers appear to have been limited (so far), the BoJ adjusted its monetary policy framework and the FOMC once again declined to follow through on its threat to raise policy rates.

Throughout the third quarter, we maintained a minimum core overweight position of at least 3 months in BEIs. The valuation argument for being overweight long-dated BEIs in the 1.50% to 1.80% range is hard to dismiss, since core CPI continues to run at 2.3% year-over-year, and data suggests that the labour market continues to gently tighten. Fundamentally, we continue to believe that 5y5y fwd BEIs should trade around 2.0%. This level would be below the 2.25% - 2.75% range that they traded in between 2010 and 2014, which would be appropriate given reduced market liquidity and a disinflationary global backdrop. But for the widening to occur, we need a catalyst.

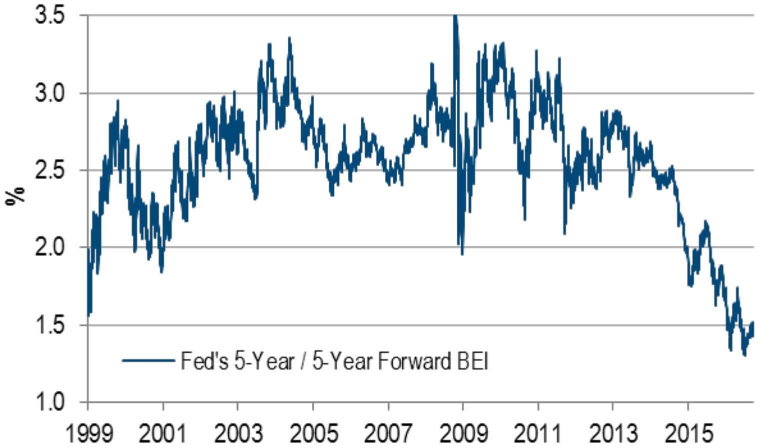
FOMC promises to follow a shallow rate hiking path are not sufficient. In our view, the FOMC should not be hiking until both actual inflation and inflation expectations recover to target. The FOMC lost significant credibility over the year with their constant communication reversals. By reducing their estimates of the neutral rate, the FOMC also effectively admitted that policy has not been as accommodative as they calibrated.

The catalyst for wider BEIs will probably have to be hard evidence of stronger core inflation data, ideally via higher non-shelter service costs, for which we need to see solid evidence of rising wages. The FOMC would also need to commit to not immediately respond with higher rates. BEIs could also be supported by strength in risk assets, a weaker US dollar and gains in commodities prices – all of which could all go in the wrong direction if we see renewed concern about CNY currency depreciation, negative shockwaves from Brexit or an Italian banking crisis. The ideal scenario for BEIs would be for the FOMC to commit to allow inflation to overshoot the target for some time – in other words to switch from inflation targeting to price-level targeting. That prospect seems unrealistic at present, but it is worth noting that the BoJ has just adopted that very framework (albeit perhaps too late).

We see enormous value in BEIs when compared against actual and future inflation prospects, but are concerned that the FOMC's loss of credibility means we are without a catalyst that can drive 10-year BEIs much above 1.70% for the remainder of the year. Most investors are already overweight BEIs, so there is limited room to add exposure. At the same time, inflation accretion is set to turn negative at the turn of the year, which often brings sellers of BEIs.

We are currently positioned around 4.0 months overweight of 5y5y fwd BEIs. Expressing the trade in forward starting format should in theory provide some protection against a pullback in crude prices, which may have peaked at around $50 pb.

Chart 6: US 5-Year / 5-Year Forward Breakeven Inflation



Source: Bloomberg, as of September 30, 2016

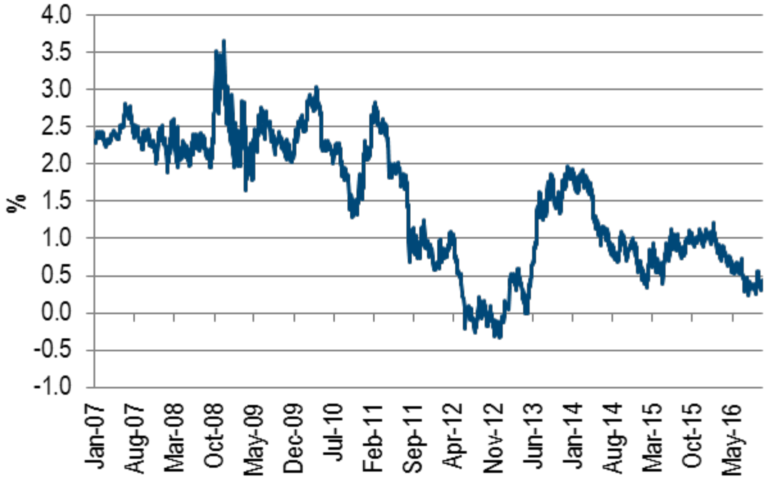
Duration:

When gauging value in TIPS real yields, our favourite metric to look at is 5-year / 5-year forward real yields (5y5y fwd RY). We see outright fundamental value in 5y5y fwd RY at 1.25% (a level roughly 25 to 50 bps below our estimate of trend GDP). Meaning 1.25% is a yield level where we would be comfortable holding a significant real yield duration overweight, independently of any position in BEIs. We think 5y5y fwd RY could trade as low as 0.0%, where we would be comfortable establishing a significant duration underweight. At time of writing, the 5y5y fwd RY is trading at around 0.40%, broadly unchanged from the end of Q2, although it has traded between 0.10% and 0.55% during this period.

In our July outlook, we argued that the magnitude of asset purchases by the ECB and BoJ, in combination with negative policy rates, was displacing investors out of JGBs and Eurozone sovereign bonds, forcing investors out to longer maturities or into US Treasuries in order to find positive yield. In July and August, the combination of post-Brexit flight-to-liquidity buying and heavy buying of Treasuries by Japanese investors (typically on a currency-hedged basis) helped to generate a significant bull flattening in Treasuries, and 5y5y fwd RY reached a low of 0.10%. This was a little shy of our earlier objective of 0.0%, but at the time we felt that yields could fall even further, so we maintained our duration overweight.

At this juncture, with the BOJ looking to reduce JGB purchases, one could expect less buying of Treasuries by displaced JGB investors, and in any case the JPY-hedged ASW levels on US Treasuries are no longer as attractive. In addition, we anticipate more term premium to be priced in as we approach the US election, which should also put some upward pressure on long-dated yields. Correspondingly, we currently regard 0.10% as a lower bound for 5y5y fwd RY, and would be flat duration exposure at around 0.25%. Scenarios under which we could see 5y5y fwd RY fall below zero include: (i) if the FOMC adopted price-path targeting (unlikely); (ii) a risk-off scenario, such as re-intensification of Brexit concerns; or (iii) a Trump victory at the election, which we would regard as increasing the odds of a 'stagflation' backdrop. Our current exposure is around 3.25 months of duration overweight.

Chart 7: 5-Year / 5-Year Forward Real Yields



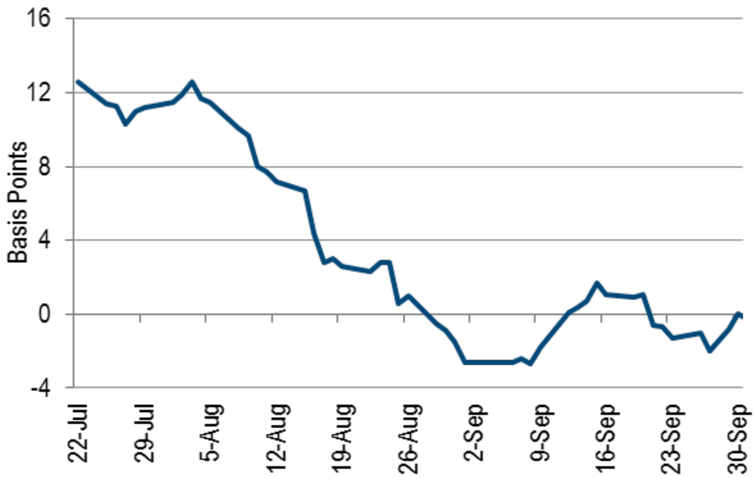
Source: Bloomberg; data as of September 30, 2016

Security selection

We note that on-the-run issues have tended to trade at relatively richer levels than usual this year. The new 04/2021 5-year benchmark and new 07/2026 10-year benchmarks have traded at particularly rich levels to the once-off-the-run issues, even versus when they were trading on a 'when-issued' basis (i.e., before auction). However, in August we began to see old 10-year TIPS richen versus the benchmark. The move was reportedly triggered by heavy buying of 2023s and 2024s by an official institution. At the same time, we saw the benchmark premium for newly issued 07/2026s versus the once-off the run bond declined.

We used the richening in old 10-year TIPS to take profits on our overweight in that sector, and switched around 6 months of exposure into the 04/2021 and 07/2021 benchmarks.

Chart 8: TII 04/21-07/23-07/26 Yield Curve 'Butterfly' Spread



Source: Bloomberg; data as of September 30, 2016

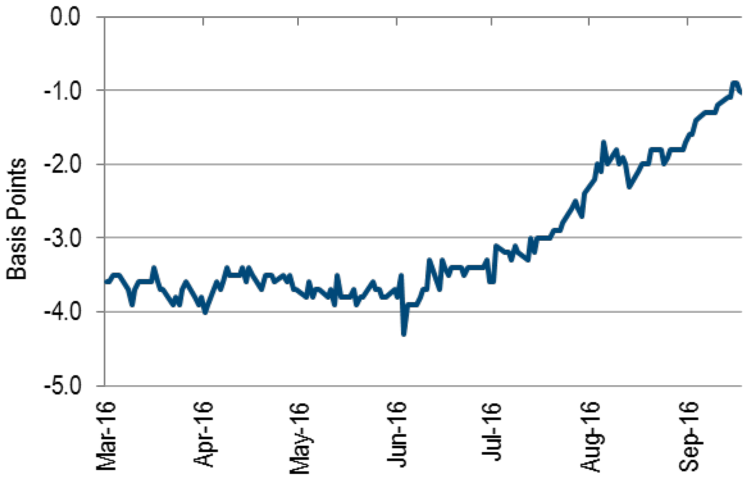
One strategy that we have used repeatedly in recent years has been to buy an off-the-run security before it enters a new maturity sector, and therefore becomes eligible for a TIPS sub-index. We again used this strategy in 2016, buying overweights in 01/2021s and 07/2021s ahead of those bonds' entry into the 1- to 5-year TIPS index. As customers struggled to source these aged issues, the bonds went from being relatively cheap to extremely rich levels on the curve. We sold our entire holding of 01/2021s and 07/2021s in the second quarter 2016, but demand persists, indicating the securities are clearly 'locked away' by accounts that are not sensitive to relative value.

In Q3, we began to see 01/2022s begin to richen up, in anticipation of their entry into the 1- to 5-year TIPS index next January. Correspondingly, we took advantage of the improved pricing to switch into other securities.

In Q3 we also maintained overweight in off-the-run 01/20207s, a relatively illiquid (and cheap) bond that will enter the 1- to 10-year TIPS index in January 2017 and should therefore richen up towards year end. In recent weeks we noted demand from dealers for these bonds, and already see them richening versus similar maturity TIPS.

Finally, in Q3 we also saw increased interest in off-the-run 30-year TIPS. The market intelligence we have gathered is that interest in older 30-year TIPS increased following the enormous richening in UK real yields after Brexit, which prompted many UK pension plans to switch into US TIPS for higher yield, with transactions generally done on a maturity-matched basis. We used the richening in off-the-runs to switch considerable amounts of off-the-run 02/2042s and 02/2044s into benchmark 02/2046s.

Chart 9: TII 02/2046 – 02/2044 Yield Spread



Source: Bloomberg; data as of September 30, 2016

In terms of current relative value positioning, we are currently underweight off-the-runs in the 7- and 30-year sectors against relevant 5-, 10- and 30-year benchmarks. We are, however, significantly overweight 01/2027s (high-coupon old 20-year TIPS), which should outperform as they enter the 1- to 10-year index in January 2017. Overall, our defensive stance reflects our caution as we head into year-end. Liquidity typically dries up and off-the-runs typically underperform as dealers look to tidy up balance sheets.

Yield curve positioning

Given our structural overweights in duration and BEIs as well as our cash constraints, we are forced to have some curve flattening exposure (as we have to sell short-dated TIPS to raise cash for investment in longer-dated securities with more duration). In our duration exposure, we have purposefully established our overweights in a 5-year 5-year format, which in theory eliminates exposure to swings in energy prices.

On the nominal yield curve front, we opened a 5s / 10s / 30s butterfly in Q2, expressed via futures contracts. The aim of the position was to underweight the rich 10-year sector. Ultimately, the trade did not perform, as yields remained compressed and we closed the position in mid-July, taking a very small loss.

Ahead of the September FOMC meeting, given the hawkish Fed rhetoric, we were concerned that the FOMC might raise rates and trigger a 'risk-off scenario'. In order to hedge the risk in the portfolio, we established a modest 5s / 30s nominal curve flattener, taking the view that long-dated yields could actually fall if equity markets responded negatively to a rate hike. Ultimately the FOMC (wisely) chose to wait to raise rates, and we closed the position at a small loss in late September.

Over the quarter, yield curve and security selection trades washed out and net contribution to excess returns was approximately flat.

US TIPS summary

- The labour market still demonstrates evidence of slack, and momentum in job gains will decelerate towards 100,000 per month as the economy slows towards1.6% trend growth in 2016 and 2017. Wage growth will remain modest, and higher unit costs are likely to be absorbed in part by profit margins, such that pass through into prices will be limited.
- Despite some firming of domestic inflation pressures in shelter and other services, international developments and inflation expectations still matter for US inflation prospects. There is a risk that inflation expectations are becoming unanchored, meaning the FOMC needs to reinforce its credibility on inflation and keep rates on hold.
- The December rate hike was premature, and subsequent signals of further rate hikes have cost the FOMC credibility. Yellen was right to state in March that the FOMC should exercise caution in raising rates further. Although the FOMC is once again hinting at a rate hike in December, this will depend on the outcome of the US elections. Assuming that Clinton wins, we maintain our view that the next rate hike is probably not in the cards until mid-2017 at the earliest, and the Fed 'dots' will continue to come down towards market pricing.
- We think the FOMC is underestimating the tail risk of an external shock as China attempts to restructure its economy. We would not be surprised if the FOMC actually cut rates should global risks flare up. Brexit and a potential banking crisis in Italy are also obvious threats to investor confidence and global growth.
- Treasury yields should not rise dramatically. We would be surprised to see US 10-year Treasury yields rise above 2.00% in the next six months, although a Trump presidential election victory could raise term premia and steepen the yield curve. Our baseline scenario for the next six months is that yields should remain low given negative net supply of sovereign bonds and central bank financial repression. FOMC policy rate hikes would likely appreciate the US dollar, short-circuiting any rise in yields. TIPS 5y5y fwd RYs may fall as low as 0.0%. We remain overweight real yield duration.
- TIPS BEIs offer value, but lack an obvious catalyst to widen meaningfully given the FOMC's damaged credibility. We are modestly overweight 5y5y fwd BEIs at 1.62% and target 1.80%. Reduced TIPS supply, core inflation above 2.0% and positive inflation accretion should be supportive, but the FOMC's bias to hike rates and short-circuit higher inflation remains a significant obstacle to a marked widening in BEIs.

UK

Following our notes on Brexit in the previous write-up, in this note we would like to once again review the immediate economic and political impact of the vote and evaluate what we have learned about the likely long run repercussions three months on after the United Kingdom's momentous decision to leave the European Union (EU).

The post-Brexit political landscape

As we expected, Prime Minister Cameron resigned as soon as the result of the referendum was announced, triggering a leadership contest for the role of leader of the Conservative Party and Prime Minister. The outcome of that contest was not set to be announced until early September, but thanks to a bout of fratricide among the two main pro-Brexit contenders and the implosion of the third, the contest rapidly turned into a coronation for Theresa May.

The referendum result has also had a significant impact on the main opposition party: the Labour Party. Its leader, Jeremy Corbyn, was already deeply unpopular with his own MPs. The referendum result was the straw that broke the camel's back. The outcome of the referendum arguably turned on the large numbers of traditional Labour voters who supported Brexit and many MPs pinned the blame on Corbyn's lukewarm endorsement of the case for Remain and his limited participation in the campaign. Large numbers of Corbyn's Shadow Cabinet resigned or were sacked; the overwhelming majority of the parliamentary party supported a vote of no confidence in him and eventually managed to trigger a formal leadership contest. Although Corbyn's huge popularity among the party membership allowed him to eventually win the contest, the British public does not share the same enthusiasm for him or his policies.

The only other major electoral force is the Scottish National Party (SNP). Given that Scotland voted to remain in the EU, Brexit therefore provides the SNP with a justification for another referendum on Scottish independence. However, Scotland will struggle to overcome the inconvenient truth that its fiscal deficit was in double digits in 2015-2016. So long as oil prices remain at current levels it may be difficult to convince a majority of Scots that they can afford to go it alone.

The bottom line is that there is no effective parliamentary opposition to Theresa May's government allowing her to drive the domestic agenda on Brexit so long as she is able to keep her own party united. However, that will prove easier said than done. Theresa May inherited a wafer thin parliamentary majority from her predecessor. It only takes a handful of her MPs to rebel and she is at risk of losing votes in the House of Commons. In these circumstances the fervently pro-Brexit Tory MPs know they have leverage over the Prime Minister and may seek to use it to influence her negotiating strategy.

In order to neutralize the internal party problem, Theresa May has chosen committed Brexiteers to manage the negotiations with Europe and the departmental briefs that are critical to making Brexit a success – David Davis is the Secretary State for Exiting the EU; Liam Fox is Secretary State for International Trade; and Boris Johnson is Foreign Secretary – on the basis that her Eurosceptic MPs may not trust her with the negotiations but they should trust their own. She also emphasized that "Brexit means Brexit", and has set a time table to trigger Article 50 by the end of March 2017.

The blueprint for Brexit

Theresa May's speech at the Conservative party conference held on October 2 sets out her plans on how the UK will negotiate its exit from the EU:

- Article 50, a process which settles the fundamental questions of the divorce, will be triggered no later than the end of March 2017.
- A "Great Repeal Bill" will be introduced to revoke the 1972 European Communities Act (ECA), the law that gives the EU powers in the UK. This bill will convert existing EU laws into UK legislation, which then can be amended by the UK parliament. This bill will be included in the next Queen's Speech, which sets out the UK's legislative program for the coming year.

- While May pledged to negotiate the best trade deal for the UK, she also indicated she would give priority to limiting immigration. The UK's desire to control immigration is incompatible with retaining its Single Market membership, as EU officials insist that the UK cannot enjoy the privileges of Single Market access if it does not allow the free movement of labour.

In addition, the Brexit department headed by David Davis has identified 4 red lines when it comes to Brexit talks: there will be no compromise on immigration, budget payments, lawmaking and freedom from EU jurisdiction.

There are two sides to every negotiation, and the discussions over Brexit are no different. There is a perception in some quarters that the UK will be able to negotiate favorable terms because the UK is such an important export market for European companies. However, one could equally argue that Europe has no incentive to offer the UK a generous deal otherwise it creates a precedent encouraging other member states to follow in the UK's footsteps. Thus far, there is little evidence that Europe is willing to let the UK have its cake and eat it too.

For example, Commission President Jean-Claude Juncker was crystal clear that there would be no compromise on the trade-off between trade and migration. Likewise, Council President Donald Tusk argued that there was a consensus within Europe that the UK would not be allowed to sidestep the agreed protocol and negotiate before triggering Article 50.

Economic impacts

Economic data released over the past few months might have suggested Brexit to be far less disruptive than first feared. The composite PMI indicator collapsed in July from 52.4 to 47.5 – a level last seen in March 2009. However, the series bounced back the following month, climbing back to a respectable 53.6. On top of that retail sales (excluding fuel) rose 1.5% on the month in July – a figure subsequently revised higher to 2.1%. These two facts – the bounce in the PMI and the strength of retail sales – have convinced many people that Brexit was a storm in a teacup.

In our view this is an optimistic reading of the near-term outlook. Retail sales do appear to be strong, and that is not entirely surprising: a cheaper currency boosting spending on the UK high street via positive net tourism ought to be one of the silver linings of Brexit. Nor is there any great cause for concern in the unemployment data. However, the picture is not uniformly rosy. At this juncture it looks like both the manufacturing and construction sectors will contract on the quarter. Indeed, the entire production sector would be set for contraction were it not for a change in the timing of maintenance work in the North Sea, which has led to a transitory surge in activity. The fate of growth in the third quarter will ultimately hinge on activity in the services sector. Our best guess is that this sector will show modest growth in the third quarter: enough to prevent a contraction at the aggregate level but not enough to prevent a meaningful slowdown in headline growth.

The short-term hit to demand does appear to have been more modest than anticipated. We think there are three reasons why the rise in uncertainty was dampened following the Brexit vote, which in turn has softened the immediate damage to the economy. First, the vacuum of power at the top was rapidly resolved and, moreover, a pragmatic politician who was notionally a supporter of the Remain campaign emerged as the winner. Second, the new Prime Minister has not (yet) triggered Article 50. Had the formal negotiations already begun in earnest, then companies would have been forced to engage with the reality of Brexit and that might have triggered changes in investment and employment decisions. Third, the tone as much as the substance of the policy interventions by the Bank of England's (BoE's) interventions may have helped to calm concerns across the country.

We think it is too early to reach the conclusion that Brexit is less detrimental to the UK's economy than feared. The rhetoric we heard from the Conservative party convention has so far suggested the government is leaning more towards a hard Brexit, where emphasis on sovereignty over issues such as immigration and legislation will likely come at the expense of less preferential access to the Single Market. The UK's intention to move away from the "Norway model" to a more bespoke approach in its negotiations with the EU will likely result in a more prolonged period of higher uncertainty, which in our view will risk bringing more harm to the UK economy, at least in the next few years' time.

Monetary policy response

The BoE's initial response to the outcome of the referendum was to put in place extensive liquidity facilities to ensure that UK financial institutions did not come under stress in funding markets. One week on and the Governor was sending pretty clear signals that monetary easing was in the pipeline. Two weeks on and the Bank's Financial Policy Committee used up what room for maneuver it had on the regulatory capital regime by cutting the countercyclical capital buffer to zero. After a modest disappointment in July, when no monetary stimulus arrived, the Bank's Monetary Policy Committee (MPC) announced a package of measures in August: a 25 bps cut in Bank Rate, the creation of a long-term funding mechanism for banks, £60 billion of gilt purchases and £10 billion of corporate bond purchases. Finally, the Bank signaled that a further cut in Bank Rate down to an effective lower bound just above zero was likely in the next few months.

The flow of good news on the state of the economy triggered a re-pricing of sterling assets. That spread between 10-year US Treasuries and Gilts is now back to around 80 bps. We think it is too early to rule out the BoE doing more at this juncture for three reasons:

- First, we still believe that there will be a significant loss of momentum in demand which will keep the option of doing more on the table.
- Second, the BoE did not have a particular pessimistic assessment of the outlook for growth in its August forecasts, at which time the Committee expected it would need to cut Bank Rate further to the effective lower bound.
- Third, further downside news relative to those projections – which is certainly possible as we move into 2017 – should lead in short order to more asset purchases which will drive down yields at the long end, precisely because Bank Rate should be at the lower bound by this point.

However, we agree there is no immediate pressure on the Committee to significantly upscale the policy response given the uptick in the data. As for the medium term outlook, the MPC is sitting on the fence, at least for the time being.

Fiscal policy response

The new Chancellor Philip Hammond will present his first Autumn Statement on November 23. He will have little good news to report.

The public finances are not in great shape. Hammond will likely have to announce that his predecessor's projections are already offside (thanks to disappointing numbers over recent months and the fact that a key welfare reform in the budget was abandoned within hours of being announced) even before he gets to the implications of Brexit.

While lower gilt yields reduce the cost of servicing the UK national debt, this silver lining takes a long time to materialize precisely because the maturity of the debt is so high. But after that we have to factor in the increase in spending on benefits thanks to higher imported inflation, the increase in welfare spending and reduced tax receipts thanks to weaker growth and the structural weakness of tax receipts thanks to the damage caused by Brexit – all of this before we factor in any change in the fiscal stance.

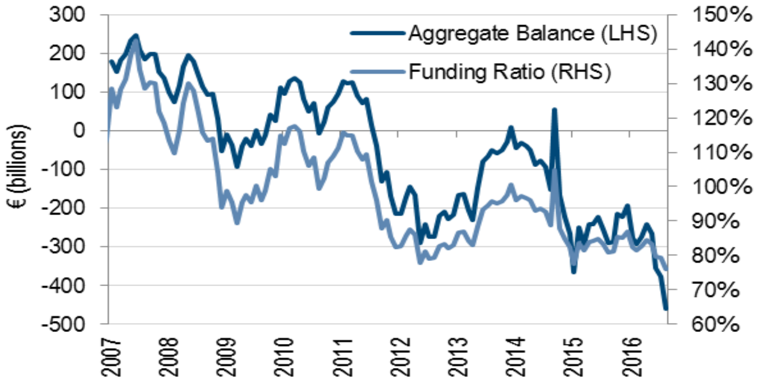
The case for a significant increase in infrastructure investment is strong, given low borrowing costs and puzzlingly weak productivity growth, and we anticipate plenty of talk about investing in the UK's post-Brexit future. However, we are skeptical about the speed with which those words get translated into action (see the endless delay over expanding airport capacity in the South East). The Chancellor may be tempted by a cut in corporation tax with an eye to countless debates that will take place next year in boardrooms about whether to locate in the UK or not, but one wonders what that will do to the tone of the Brexit discussions with those on the receiving end of this move. As the former Director General of the World Trade Organization noted, a foray into fiscal competition is 'not the right way psychologically to prepare' for negotiations over tax and trade.

In short, whether Hammond only announces a one or two year pause in fiscal consolidation, or a pause plus a significant discretionary stimulus, there will be a significant increase in borrowing given the outlook of the UK's fiscal situation. We therefore expect the profile of government borrowing to be revised higher over the forecast horizon. That means increased issuance of gilts, which more or less offsets the impact of QE on yields via the quantity channel. If the market has not fully digested the consequences of Brexit for issuance then there could be pressure on yields to rise.

Pension Deficits

The significant decline in gilt yields has led to renewed concerns about the state of UK pension funds and the affordability of the existing Defined Benefit (DB) schemes. The chart below shows that UK pension funding ratios, according to the UK's Pension Protection Fund's PPF 7800 index, have worsened further since our last write up. The aggregate deficit ratio has fallen to 76%, while the estimated aggregate deficit has increased to £459.4 billion, a size equivalent to roughly 20% of the UK's annual GDP. The pressure on companies to close pension deficits and therefore maintain/increase pension contributions will have the result of (i) lower dividend payouts to shareholders, (ii) reduced investment in the underlying business, (iii) and a decrease in the likelihood of the company to make acquisitions or to be acquired. These negative impacts of pension deficits to businesses are well known and the government has been trying to reform pension regulations in order to reduce the burden on companies and raise business investments. But so far efforts have focused on only future pension benefits rather than the existing liabilities.

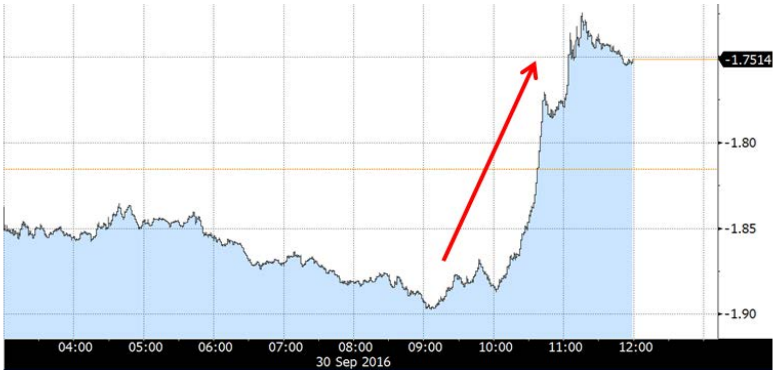
Chart 10: Historical Aggregate Balance (assets less s179 liabilities) and Funding Ratio of Schemes in the PPF Universe



Source: Pension Protection Fund, as of August 31, 2016

The pension deficit issue has gained significant attention from the media recently, with numerous reports highlighting the "crisis" situation the DB schemes are facing and how detrimental pension deficits could be to UK companies. Tata Steel is a case in point. Its significant pension liability has been an obstacle for potential buyers to take over the failing company. The UK parliament's Pensions Select Committee has been working on proposals to provide some relief for struggling DB schemes. While these proposals are still in their infancies, and will unlikely have significant impact on pension liability hedging activities in the near term, an Financial Times (FT) article (https://www.ft.com/content/55579acc-855b-11e6-a29c-6e7d9515ad15#axzz4LkMJ0vPp) covering this particular topic triggered a close to 20 bps intra-day sell-off in long-dated real yields on the day when it was published. This price-action in UK real yields on September 30 is a good example of how jittery the market is, and how stretched valuations make long-dated UK real yields vulnerable to sharp and volatile moves on any remote idea of a fall in marginal pension hedging demand.

Chart 11: UK 30-Year Intra-day Real Yield on September 30, 2016



Source: Bloomberg, as of September 30, 2016

But the news on pension regulations is not one-sided. While it makes sense to provide some breathing room to companies on the pension liability front when they are facing Brexit uncertainties, it is equally important to ensure employees' pension benefits are protected. Following the BHS pension debacle (where BHS's leadership failures led to a collapse of the company, leaving behind a massive pension blackhole), the Work and Pensions Committee is also looking into how the beneficiaries of DB pension funds can be better protected (probably with more, rather than less, regulations). At the same time, the UK Pension Regulator views the fear of a "pension crisis" as overblown. It pointed out that over half of FTSE350 companies spend more in paying dividends than in deficit recovery contributions (ratio 6x in 2010, now at 11x); in other words, there is no DB scheme affordability issue. It also pointed out that the deficit numbers being discussed in the media are calculated on a "buy-out" basis assuming the worst discount rate. By contrast on an aggregate basis pension schemes invest in a wide range of asset classes which should be able to generate returns that are superior to the negative real yields used in the liability calculations.

Our view is that the recent liability-driven investment (LDI) flows have probably pushed real yields too low too quickly, and with conventional issuance coming back in October and index-linked Gilts syndication scheduled for November, we like being tactically underweight in long-dated UK real yields in anticipation of concession being built ahead of supply. Over the longer-term, however, given (i) the Pension Regulator is dismissive about DB schemes being in crisis, (ii) any proposals involving reduction in pension benefits apply to a wide range of DB schemes (rather than just the struggling schemes) is not going to rest well with grey voters, and (iii) politicians have bigger problems on their plates right now as they prepare for Brexit. Any changes on pension regulations on net will likely lean towards providing more protection to pensioners rather than alleviating the responsibilities of the schemes' sponsors. This in turn suggests that the imbalance between supply and demand in UK index-linked real yields will continue for quite some time.

UK Index-Linked Gilts exposure

While it is difficult to quantify the long-term economic impact from Brexit on the UK until the trade negotiations take shape, the uncertainty itself is severely detrimental to business investment and consumer sentiment in the near term. Telecom and financial companies are already talking about plans to relocate, and businesses in general will put any investment and hiring plans on freeze. The plunge in the British pound will lift prices of goods that are determined by global prices (including petrol, air fares, imported goods), eating into consumer disposable income when job security is also now at risk and UK households have done very little in deleveraging their balance sheets since the financial crisis. Although economic data releases so far have surprised to the upside, we expect economic data to remain volatile during this uncertain time, and the specter of a hard Brexit (with less advantageous access to the Single Market and a loss of "passporting rights" for the financial sector) to remain the main concerns for Gilts investors.

In duration, we think Gilt yields will likely remain low for an extended period of time, given our concerns about the UK's growth outlook and our expectations that the BoE will look through a currency-related rise in inflation and remain accommodative. Our duration strategies in the portfolio, however, have been tactical in nature, as we are cognizant that the worsening fiscal situation and the associated higher government borrowing needs could prompt a temporary reverse of recent strong Gilts performance. At the same time, although our view is that pension regulation changes involving the alleviation of schemes' sponsors responsibility is difficult to come by and the imbalance between supply and demand in the Gilts market will likely remain, the stretched valuations suggest that long-dated UK real yields could be susceptible to sharp corrections on any hints of increased supply or a hiatus in LDI flows. Recall that the UK index-linked market was under a dark cloud for more than half a year in 2012 when the Consumer Prices Advisory Committee launched a consultation on the RPI calculation methodology, which created some uncertainties for pension investors and therefore kept them on the sideline. Given the upcoming Autumn Statement and long-dated conventional and index-linked Gilts supply scheduled for the next few months, our preference is to take advantage of tactical opportunities surrounding these events.

In yield curve, our general bias is to maintain a steepening exposure. Our expectation is that the currency could fall further on concerns over a hard Brexit, and the associated weakening of the British pound as well as concerns over higher trade tariffs could give UK inflation a lift higher in the near term. The prospect of higher inflation accretion in the near term, combined with expectations of at least one more rate cut to come and no rate hikes in the foreseeable future, should provide support to shorter-dated real yields. On the other hand, longer-dated Gilts could come under pressure if the market becomes more concerned about the UK's ballooning fiscal deficits, or if the pension reform story starts to gain more traction.

In BEI, we expect the theme of currency depreciation to overwhelm concerns about a decline in the Retail Price Index (RPI) due to lower housing prices in the near term, which should be supportive to shorter-dated BEI, while the movement in longer-dated BEI will be more influenced by near term supply and LDI flows. We have recently taken profit on our long 10-year BEI position, and we expect the supply cycle in the next few months would provide opportunities for us to re-establish the trade. Recent LDI flows have created a "squeeze" which pushed real yields lower and BEIs higher. We anticipate some BEI profit-taking flows (which may push BEI rates lower) to come in the next few weeks, as investors may use the October conventional syndication as a liquidity event to switch out of their real yield exposures into nominals. LDI investors also typically like to sell shorter-dated real yields to extend into longer maturities around large long-dated real yield supply. The DMO will be selling a linker with a maturity longer than 30 years in its November syndication, which may bring opportunities to re-enter a long 10-year BEI position at better levels.

Eurozone

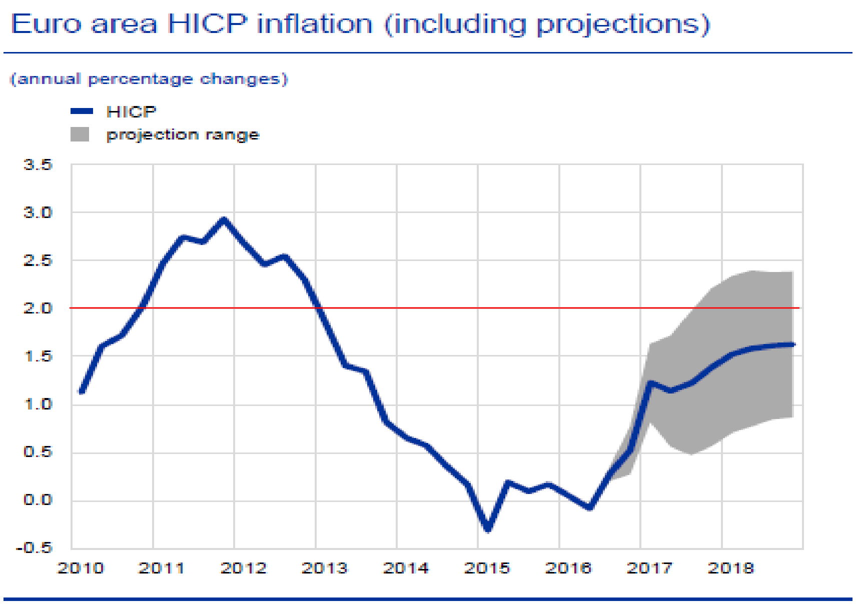
Inflation

The panic over low prices may soon pass. With WTI crude prices stabilising in the range of $40 to $53 pb over the last couple of quarters, headline inflation in the Eurozone is finally looking to rebound from the current very close to 0% level to around 1.25% during the first half of 2017. But of course the forecasted rebound in headline inflation is mostly a result of the energy "base effects", where the previous sharp decline in energy prices will fall off the yearly inflation calculation. Development in core inflation has been far from reassuring – core inflation has been hovering around 1% for much of the past 2.5 years, and printed at a meagre 0.8% in the past 2 months. Unfortunately, core inflation could prove hard to resuscitate. We reiterate the reasons below:

1. Until significant progress is made on closing the output gap, labour market slack is likely to continue to drag down on wage growth and therefore underlying inflation.
2. The weakness of inflation will likely further depress wages via second round effects.
3. The transient support to core inflation from rising import prices (thanks to the past fall in the euro) will soon fade.
4. Some Eurozone countries may drive through structural reforms that could prove deflationary in the short run, squeezing wages and profit margins.
5. The nominal side of the economy remains vulnerable to a slippage in inflation expectations.

We are sceptical that core inflation can rise rapidly in the Eurozone, absent a meaningful reflation in global trade prices. Indeed the ECB's September economic projections show headline inflation at 1.6% and core inflation at 1.5% by the end of 2018. As it is somewhat a stretch to call these inflation numbers close to the Bank's target of "close to 2%", one could reasonably argue that the projections suggest that the ECB Governing Council is not doing enough. Although it is worth keeping in mind that they are conditioned on very low bond yields and therefore, to some extent, already a factor in the continuation of purchases beyond March 2017. Moreover, these projections are still on the optimistic side: the projections anticipate wage growth rising from 1.2% in 2016 to 2.2% in 2018 despite the fact that the decline in labour market slack thus far has not unlocked any uptick in wages, as the projections document acknowledges.

Chart 12: ECB's latest inflation projections



Source: ECB, as of September 2016

ECB needs to do more

The ECB will need to inject additional stimulus if the Governing Council wishes to drive inflation back up to 2% "without undue delay". And with the depletion of eligible securities for the ECB's asset purchase programs caused by a rapid decline in bond yields, some changes to the existing asset purchase program are required for its smooth continuous implementation. In the September meeting, the ECB did nothing to change its monetary policies. However, we should not leap to the conclusion that the Council is about to give up; rather we infer that the Council was simply not ready to face up to the inevitable just yet. As President Draghi put it: the focus was on implementing the March package "for the time being" and, as for doing more, the ECB has tasked committees to evaluate various stimulus options to ensure the continued smooth implementation of ECB QE when yields are low and purchases may have to continue for many months to come.

The current purchase program is notionally set to run until March 2017 with the critical proviso "or beyond, if necessary, and in any case until the Governing Council sees a sustained adjustment in the path of inflation consistent with its inflation aim". We expect the Council to make good on that forward guidance and extend the purchase program, most likely for another 6 months. The extension in the duration of the program will require a change in the modalities of the program. We see a number of main options, outlined below.

1. Deposit rate cuts or lifting the self-imposed restrictions on buying assets below the deposit rate floor:

   There does appear to be something of a consensus within the Governing Council that cutting rates further at this juncture would not be appropriate, given that further rate cuts could be quite damaging to banks. However it is worth keeping in mind that Draghi and his key lieutenants believe they still have room to cut if they need to. Our view is that deposit rate cuts will likely be kept in reserve for moments of crisis and/or episodes of marked euro appreciation. It seems to us that buying bonds below the deposit rate floor could also have some of the same side effects on the net interest margin of those banks that have loans with interest rates tied to wholesale market rates. Buying bonds below the deposit rate floor may be deemed as undesirable although it is clearly on the agenda.

2. Buying other assets:

   Another way to ease the scarcity constraints that the ECB is facing is to expand the set of assets that the ECB currently purchases under its QE program. Equities and bank bonds have often cropped up in market participants' discussions when pondering what other assets could be included in the program. While these have not been ruled out as an option, extending the scope of the QE program will increase the risk profile of the ECB's balance sheet and therefore are deemed undesirable. Buying bank bonds will also create moral hazard problems, particularly when the ECB is also in charge of regulating the banks.

3. Relaxing issue, issuer, and maturity limits:

   The easiest way to solve the German bund scarcity problem is to allow the Bundesbank to buy a larger share of the non-CAC bonds. We suspect that increasing the issue limits will be part of the package that is announced in December. Relaxing the issuer limit may also be considered, as the ECB has been buying less than what is implied by the capital key where Portuguese bonds are concerned (as the ECB already owns bonds from Portugal in the Securities Markets Programme portfolio, which brings total ECB holdings to the 33% limit). Finally, the ECB may relax the upper end of the maturity constraint and give central banks the option of buying beyond 30 years. Relaxing the maturity limit alone, however, will not solve the German bund scarcity problem as the longest German government bond currently has a 30-year maturity.

4. Tilting away from the capital key:

   The ECB could introduce flexibility within the system so some National Central Banks (NCBs) can buy less and others more from month to month, depending in part on the current level of bond yields (indeed, this flexibility is already being exploited). Going off the capital key would raise some legal questions as increasing bond purchases in more highly debt-laden countries could be seen as debt financing. The mechanics of going off the capital key therefore need to be structured carefully to avoid blurring the lines between monetary policy and monetary financing.

None of these options are particularly palatable. But given the lack of momentum in inflation, which threatens the ECB's ability in meeting their inflation target, our expectation is that the ECB will announce a combination of some of the options listed above and extend their easing program by December this year.

Taper Talks

On October 5 a Bloomberg story grabbed the market's attention. The headline read: "ECB said to build taper consensus as QE decision time nears". Other market commentators also jumped in and opined that an "ECB Taper Tantrum" is underway. Our interpretation is that the Bloomberg story was misunderstood, and if there is an emerging consensus within the ECB about tapering, it is about how to exit QE when the time is right; not about whether to taper now.

The minutes of the September meeting released the day following the Taper story support our view that any talks about a possible early tapering of QE are overstated. The minutes indicate that the ECB remains committed to continue the asset purchase program beyond March 2017 and until inflation returns to a sustainably to target. Moreover, the minutes made clear that "market expectations of additional monetary policy measures" were already reflected in the technical assumptions underlying the ECB's September economic forecasts (which show an inflation undershoot in the forecasting horizon). Given the ECB's chief economist Peter Praet's view that the lack of convincing upward trend in inflation remains an ongoing source of concern, it is way too early for the ECB to even think about tapering now.

Peripheral markets

Despite positive developments on the political front in Spain, the peripheral markets remain jittery on the back of near term risks coming from Portugal and Italy.

The yield spread between Portuguese and German government bonds widened about 75 bps since mid-August, as investors are increasingly cautious ahead of the rating agency DBRS's decision (to be announced on October 21) on Portugal's sovereign credit rating. Recall that DBRS is the only one (out of four) rating agencies that still assigns an investment grade rating to Portugal, keeping their bonds eligible for the ECB QE program. A one-notch downgrade, or even putting the country's credit on "negative outlook", could lead to further underperformance in Portugal. Many investors may no longer want to own these bonds once the embedded "ECB put" is removed or at risk. While this should be an idiosyncratic event with the impact concentrated on Portuguese bond valuations, we observed that episodes of Portugal underperformance have somewhat spilled over to Italian bonds.

But of course, Italy has its own issues too.

Italian Prime Minister Renzi has tied his career to the constitutional referendum which is scheduled to take place on December 4. The recent decline in Renzi's public acceptance could lead to a defeat of the referendum, which in turn could potentially put much needed structural reforms in Italy to a halt. This will be bad news to Italy given the economy is already in a fragile state. Economic growth is flat lining and output is still far below the pre-crisis peak. Two recessions in a decade have damaged the productive capacity of the economy, and Italy is lagging behind the rest of the periphery on the competitiveness front. Italian banks' balance sheets are too fragile to support the economy and the tailwinds of lower oil prices and looser fiscal policy will soon abate. So far the ECB's QE program has kept borrowing costs low for Italy, but its formidable debt burden remains unsustainable in a low nominal growth environment. We also note that Italian retail investors, who have been the avid supporters to their sovereign debt in past years, are already taking advantage of the ECB QE program to quietly exit their positions in Italian debt and move money abroad. Uncertainties surrounding the constitutional referendum, and whether or not the ECB would go off the capital key in its QE purchases will likely keep Italian debt under pressure at least in the near term.

Eurozone inflation linked bond exposure

The long-term fundamental backdrop remains challenging for BEIs. As explained in the previous write-up and above, we continue to see many headwinds for inflation to rebound meaningfully in the longer-term. Long-dated forward BEI rates have largely priced in our based case scenario, with the 5-year / 5-year measure hovering between 1.25% and 1.4% in the last few months. While the pessimistic inflation outlook keeps a lid on how high BEI can rise, the ECB's QE purchases in inflation-linked bonds have also taken out a lot of net real yield supply from the market, keeping a floor on how low BEI can fall. Given the range-bound market environment, we preferred to focus on tactical opportunities in Eurozone BEI strategies in the past quarter, and will likely continue to do so in the next three months.

Chart 13: Eurozone 5-Year / 5-Year Forward Breakeven Inflation

Source: Bloomberg, as of September 30, 2016

In yield curve, as the ECB chose not to remove the floor of acceptable nominal yields in its QE program, de-emphasized the use of deeply negative deposit rates in its March meeting, and kept its policy unchanged throughout the second quarter, the mechanics where QE increases the directionality between the levels of yields and the shape of the curve remains. With the yield floor still in place, as interest rates decline, more bonds (German bonds in particular) will become unavailable for the ECB's purchase program, forcing the national central banks to extend to longer maturity sectors and therefore flatten the yield curve. We therefore maintained a flattening bias in the core Eurozone curve in the third quarter. The size of the position was reduced given the curve has already flattened significantly, and given the uncertainty about how the ECB will change the modalities of its QE program to address the bund scarcity issue. Our flattening bias in core real yield curves detracted slightly from performance in the third quarter as supply concession ahead of the new 30-year French ILB OATei 2047 led to underperformance in longer-dated real yields on the curve.

Looking ahead, while it remains uncertain which option the ECB may adopt, we think the risk is for the German curve to steepen once the German bund scarcity is addressed. The German yield curve will flatten if the ECB chooses to only relax the issue limit (as the Bundesbank will be able to buy more longer-dated German bunds while shorter-dated bunds will likely remain ineligible given the yield level constraint). In the case where the ECB chooses to go off the capital key, the core yield curve will likely steepen meaningfully as this implies the Bundesbank will not be forced to go down the term structure. Similarly, if the yield floor for the public sector purchase programme (PSPP) is removed, the German curve would also steepen. As such, we have hedged our core real yield curve flattener with a nominal 5s / 30s steepener.

In the peripheral real yield curve, our holdings are concentrated in the intermediate sector of the curve, as this part of the curve offers the most attractive carry and roll-down. We have reduced our holdings at the 30-year sector of the Italian curve, as we are cognizant of potential supply indigestion following the recent 50-year Italian nominal bond issuance, where inventory overhang could pressure longer-dated maturities in Italy for some time.

Our views on peripheral versus core yield spreads have turned more cautious since the beginning of the year. A potential expansion of the ECB's sovereign purchases, particularly if the ECB decides to go off the capital key to address the QE capacity issue, should bode well for peripheral bonds. But with peripheral spreads already at multi-year lows, the additional yield pickup might not be sufficient protection against political risks. In the near term, concerns about Italy potentially rejecting the constitutional reform referendum in December, and the subsequent change in the government as Renzi will likely have to step down in that case, bode poorly for Italian sovereign bonds. While investors have so far been blind to Italy's deteriorating fundamentals due to the liquidity support from the ECB's QE program, a setback in Italy's reform efforts, and worries about a change in leadership from Renzi to the Five Star Movement could bring Italy's unsustainable fiscal situation back on investors' radar.

But of course we learned from June's price action, where peripheral bonds rebounded quickly from the Brexit political contagion scare, that despite the political uncertainties and the lack of improvement in economic fundamentals, the "search for yield" theme dominates in a world where the pool of positive yielding securities of sound credit quality is declining at a rapid pace. We are currently flat in our allocation to peripherals in the portfolio given the upcoming referendum, but we will consider entering into an overweight in peripherals if their spreads widen meaningfully in the next few months.

Disclosures

Opinions expressed are current as of the date appearing in this document only. This document is confidential and may not be reproduced or redistributed, in any form and by any means, without FFTW's prior written consent.

"BNP Paribas Investment Partners" is the global brand name of the BNP Paribas group's asset management services. The individual asset management entities within BNP Paribas Investment Partners if specified herein, are specified for information only and do not necessarily carry on business in your jurisdiction. For further information, please contact your local Investment Partner.

This document is provided for your reference on a private and confidential basis to discuss an existing or potential advisory relationship. You are invited to meet with FFTW to discuss any of the information provided herein or otherwise, including any and all terms (including fees) that may apply to the relationship.

This document is not to be construed as an offer to buy or sell any financial instrument. It is presented only to provide information on investment strategies and current financial market trends. The analyses and opinions contained in this document are those of FFTW, and are based upon information obtained by Fischer Francis Trees & Watts from sources which are believed to be reliable. FFTW provides no assurance as to the completeness or accuracy of the information contained in this document. Statements concerning financial market trends are based on current market conditions, which will fluctuate. Investment strategies which utilize foreign exchange may entail increased risk due to political and economic uncertainties. The views expressed in this document may change at any time. Information is provided as of the date indicated and FFTW assumes no duty to update such information. There is no guarantee, either express or implied, that these investment strategies work under all market conditions. Readers should independently evaluate the information presented and reliance upon such information is at their sole discretion.

Fischer Francis Trees & Watts, Inc. is registered with the US Securities and Exchange Commission as an investment adviser under the Investment Advisers Act of 1940, as amended.