

2016 Rates Outlook

On Track to Higher Yields?

Even if you're on the right track, you'll get run over if you just sit there. – Will Rogers

After many quarters spent debating liftoff, and with two weeks to spare, the Fed pulled away from zero rates via a new, technical hiking process (whereby rates are dragged up, almost by decree, to where the Fed pays/sets rates). Although the Fed appears to be downplaying the shift of one (or even a few) hikes as something not to be overblown (as US rates are still low by historical standards), but the official move away from zero has had an effect, likely signaling to investors that it is time to change tracks away from the US easing-bias gravy train (and the easy money trades it has facilitated). Such a message coupled with the Fed's divergence from other central banks (many of whom are still easing) makes for an exciting (but also challenging) 2016 as markets adjust to this new path.

Subsequent Fed hikes likely will feel like "Groundhog Day" as market participants debate the next hike just as feverishly as they did the liftoff; we expect market participants to continue to be on edge until we zoom past the second hike station. Although the Fed likely feels victorious post liftoff, across the pond, the BoE seems to be nowhere nearer to hiking versus this time last year. Meanwhile, we expect the ECB to provide another round of easing, as it cannot claim "mission accomplished" on reflating the eurozone economy. The BoJ's QQE keeps chugging along into its third year, with some last-minute tweaks, yet we believe there is a risk that 2016 brings that program to the end of its tracks, as we see BoJ tapering ahead.

Collectively, we see risks for the majority of rates to start off the year rolling to the south, as the macro backdrop does not suggest conditions will turn fast with the flipping of the calendar. The real test for bond markets (which are seeing flows from one region offset by flows from another) is the point when Fed hikes will force balance-sheet talks while other CBs may start shying away from QE-easing, putting all rates on track to higher yields. For now, with the neutral rate for DM economies poised to remain low and other sovereign yields at their lows due to global QE stimuli, investors should not expect long-term rates in the DM rates space to sell off meaningfully just yet.

Happy holidays and a prosperous new year! – Nomura Rates Strategy Teams

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Fixed Income Research

George Goncalves

george.goncalves@nomura.com
+1 212 667 2254

Andy Chaytor

andy.chaytor@nomura.com
+44 20 7103 1202

Naka Matsuzawa

naka.matsuzawa@nomura.com
+81 3 6703 3864

Vivek Rajpal

vivek.rajpal@nomura.com
+88 43 36555

Additional Contributors

Stanley Sun, Andrew Ticehurst, Michael Chang, Penglu Zhao, Tracy Jin, Norbert Aul, Christophe Duval-Kieffer, Pooja Kumra, Anne Asbjorn, Neale Vincent, Naokazu Koshimizu, Ryoko Tada, Albert Leung, Prashant Pande, Jens Nordvig, Charles St-Arnaud, Mario Robles

See back cover for Global Rates Strategy Team contact information.

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Executive Summary

US: It will likely be a tale of two curves and halves. The much-anticipated hiking process finally under way should keep US front-end yields pressured higher, while the long-end will remain driven by cross-rates flows as well as term premium adjustments. Timing is tricky, but after a sustained move higher in yields, we see US long-end rates rallying back if a negative FCI feedback loop forms in the midst of hiking. In the second half, if by choice (or by force), global QE support is viewed as peaking and/or the Fed balance-sheet reduction story is on the table, then the adjustment in rates can shift quickly to the back-end. As we wait for bond vigilantes to awaken from their slumber, the market will obsess over “pace and terminal” until then. Meanwhile the Fed may soon realize that a 1% FF level or higher could be hard to maintain given all the unconventional tightening.

- **Curve:** We look to trade curve via putting on flatteners as a potential risk-off hedge when markets get complacent, while putting on steepeners when the curve forwards get to levels seen near the flattest of prior cycles. We will also trade more micro curves stemming from the TN launch and richness in futures.
- **Inflation:** With the Fed hiking despite softening oil prices, we see room for real yield curves to flatten, potentially even more so than nominal counterparts. Very cheap BEI levels offer attractive inflation hedges, especially when positive carry returns. We are cautiously constructive on TIPS ASW and look to buy on dips.
- **Swap spreads:** After a tumultuous year in swap spreads, we expect further normalization of belly spreads. It is one of our stronger views into 2016, where we believe a combination of higher rates and less corporate IG issuance could turn the tide. We do not believe 5-10y spreads should trade negative on a long-term basis. Any widening of MBS or the return of convexity hedging could drive belly spreads wider, or at least outperform on the spread curve. Although it was an imperfect hedge in 2015, any sort of run on bond funds (it acts like convexity and drives credit spreads wider) will also help our view.
- **Agency:** We expect the belly to tighten more than the front-end in agency/swap spreads. But the persistent imbalance of liquidity between the front-end and back-end could potentially hurt the belly spread when market volatility spikes. Still, we expect at least into 1Q, agency/swap spread-of-spread curve to flatten.
- **Money markets:** A new uncapped RRP will almost by decree guide short-term interest rates up. Longer term, the question of a large balance sheet remains by relying on this new tool. Hence, we believe that as the Fed gets rates higher (in and around 1%), it should resort to natural attrition of the Fed's balance sheet to permanently extinguish excess reserves and prevent market participants from viewing the Fed RRP as an alternative asset that they can easily substitute forever.

Euro area: While the ECB's policies managed to avert deflation risks in 2015, the objective to reflate the economy has not been met. Our baseline expectations are the ECB will have to revise its inflation projections again with further monetary policy action (more QE or deposit rate cut are possible) in the offing for 2Q16, while continued tightening of financial conditions for the real economy could entail earlier action.

- **Duration and Curve:** We think low rates in the euro area are set to prevail, and we set our 2016 forecasts below the forwards for most parts of the curve in 1H16. However, we judge the yield lows in 10y Bunds are behind us, as we do not expect pronounced scarcity pricing. Further ECB action, in particular on rates in 1H16, should benefit the front-end, leading to steepening risk.
- **Swap spreads:** Core EGB spread wideners have been a key “QE positioning” trade. Negative German net-net supply, Bunds should outperform over swaps.
- **EGB spreads:** The resilience of peripheral paper to the volatility displayed in other risk assets (equity and credit) still renders the risk-adjusted carry of peripheral paper attractive, supporting somewhat tighter spreads.
- **Money markets:** The ECB's disappointing December policy package led to a pronounced sell-off, and money markets had priced out rate cut possibilities completely. In our opinion, speculation about further rate cuts will remain the main driver of money market rates and curves in 2016.

UK: Structurally, the UK market continues to be between Treasuries and Bunds as the Fed and the ECB move monetary policy in opposite directions, but ahead of both, we think, in the business cycle. In terms of monetary policy, we still see the tendency for the MPC to look for reasons to delay the hike. Into Q1, we think duration risks are skewed bearishly and see some steepening pressures emerging. In the second half of the year, a Brexit referendum likely looms, but we do not see it as a key driving force for Gilt performance in the near term.

Australia: We look for moderate but modestly sub-trend GDP growth and continuing low inflation. This provides scope for another RBA rate cut in 2016, though this may well come later than our long-standing February call. We suggest buying dips, particularly in the front part of the curve, reflecting a continuing low-for-long theme on short-end rates and noting that this strategy provides positive carry and roll and portfolio insurance to boot. Long-end rates will likely be more volatile, in part reflecting shifting Fed thinking, but should be only modestly higher by mid-2016. We are also generally constructive on spread product, partly on a relative supply view, and suggest accumulating mid-curve semis and SSA on market weakness.

Japan: We expect the JGB market to fall sharply in 2016 as the BOJ follows in the wake of the Fed, ending its easing program and shifting to a tightening stance. Similar to the US, the Japan team feels next year can be roughly divided into two stages, with the July Upper House election as the turning point between them. The focus in the first half of the year will be on signs of a recovery in the manufacturing industry and a halt in the decline in oil prices, as well as the reduction in BOJ easing expectations. In the first half of 2016, we see the JGB curve flattening (10yr and 20yr yields at 0.20% and 0.90%, respectively), irrespective of fundamentals, on a combination of USD basis and the boost in the BOJ's JGB purchases aimed at offsetting an increase in redemptions of its JGB holdings. In the second half of the year, we expect the side-effects of the BOJ's QQE to be a key issue again, fuelling talk of a QE exit. We expect Prime Minister Abe to officially declare an end to deflation and signal the transition to the second stage of Abenomics on the basis of the results of spring wage negotiations (three straight years of wage hikes) and the elimination of the impact of cheap crude on CPI data. This will be an important step in spurring talk of a QE exit, which we believe will be led by the government, rather than the BOJ, since the government is not as committed to the 2% inflation target, but is more concerned about further JPY weakness. In anticipation of the government's actions, we expect investors to shed portfolio holdings and rush to hedge, leading to a market downturn led by the 5-10yr space, and 7yrs in particular. The primary risks are that (1) ongoing deterioration of economic conditions would force the BOJ to take additional easing measures, and (2) the BOJ would carry out Operation Twist while tapering QE. Bottom-line, we expect the BOJ and the government's interests to align so that talk of a QE exit takes more concrete shape after the Upper House election.

AeJ: We expect Asia central banks to decouple from the US, either by staying on hold or cutting further in 2016. This should provide opportunities in the front-end rates of many Asia markets, such as Thailand, Korea and Malaysia. Similarly, we also look to receive in countries where we believe the monetary tightening premium currently priced into the curve will not be realised, such as Malaysia. On Indonesia bonds, we have turned more neutral after being underweight, given attractive real yields and expected monetary easing. While we expect most front-end Asia rates to be capped, we do see term premiums rising in some countries as the Fed enters a rate hike cycle. The catalysts for higher back-end rates could be the fiscal situation (bond-supply driven), capital flows or simply valuations. Higher bond supply is expected in 2016 in countries such as Thailand and Malaysia. The yield curve could also steepen to reflect risk premiums related to capital outflow concerns in countries such as Malaysia and Thailand.

Mexico: We continue to see value in Mexican rates (TIIE and Mbonos) in the long end of the curve in 2016. Mexico's cyclical and structural factors should still favor the long-end of the TIIE curve. Monetary actions (at par with the US Fed) are likely to provide financial stability in the short and medium term, supporting our view of finding value in long-dated tenors. We believe that the local yield curve has built an excess premium that, in our view, is unjustified. This is particularly true for the 5y to 10y sector of the curve, which vis-à-vis US swaps, the spread seems unjustified, based on our 2016 macro assumptions for both countries. This premium building process vs. the US in local assets also provides a good carry and roll profile of receiving local rates. This is an important feature, especially if the rally we anticipate takes longer than expected to arrive.

Trade themes on watch into 2016

US: Early on there is still room for the curve to flatten, either on the back of front-end moving up or via the long-end outperforming driven by FCI risk-off. We look to find good entry points for strategic flatteners (and to receive long-dated forwards) over the course of 2016. Risks for flatteners are changes in sentiment around CB balance-sheets. The US contract can cheapen on the fly and on ASW from current extremes, helped by the new TN futures launch, which could steer liquidity away. Also given our bias of a lower neutral rate in this cycle, on dips we like 5s on the fly. With the carry profile improving next year, it makes TIPS BEI attractive as an inflation hedge. We also expect USD spreads to normalize further and belly spreads to stay in positive territory as we move further from zero. The Fed keeping its balance sheet elevated, hence, term premium contained, should further help agency outperform swaps. In USD vol, we believe the cheapness of short-dated vol skews (and richness of receiver skews) on two-year tail appears stretched and we expect some normalization. US intermediate expiry receiver skews on long tails have been well bid too, driving vol skews to their multiyear lows. On a cross-rates perspective, given the historical extreme in US/CAN 10-year spreads, we see value in fading it when the spread remains in the 80-90 bps extreme.

Euro: We keep an eye on 5y-30y DBR/EUR IRS steepeners in Q1. In the meantime, we stick to our regression-weighted receive 10y (230%) vs. 5y (100%) & 30y (130%) EUR IRS butterfly. At current levels, we find receiving 3f1y Eonia at attractive levels. We continue to like strategic core EGB swap spread wideners in 5-10y and stick to our 7y Bund ASW wideners. We are also in favor of many EGB spread trades discussed in greater detail on pages 50-61. On a cross-rates perspective, we trade the 10y Bund/UST spread from a tactical stance and although we expect policy divergence to set in (and more ECB easing ahead) doesn't mean the spread needs to rise more. In long-dated EUR forward vol, we recommend owning 5y3y2y forward vol via midcurve / swaption calendar spread with positive carry. We also see value in owning cheap short-dated EUR 6m5y5y midcurves against swaptions to express a short correlation view. We favor EUR vega steppener by being long 15y20y ATMF payers against 5y5y ATMF payers.

UK: Strategically, we continue to favour paying 5f5y UK vs. US and EUR fly. Aside from that, we retain cross-market shorts outright and vs. euro area in the 5y segment, as well as long 5y ASW going into Q1, and we would recommend holding shorts in 5y breakevens against these trades. We take off 10s30s flatteners for some gains, believing that Q1 could see some steepening pressure emerge on the curve. UK upper-left vol can outperform on an earlier-than-expected BoE hike, and we favor expressing this view by being long GBP 9m2y straddles against 9m10y at flat vega and modest positive carry.

Australia: We expect to see some steepening in the yield curve, say 3s10s in 2016. Longer-end underperformance and some steepening pressure could also come from other sources, in particular increased supply, tailored to the long end of the curve. We continue to advocate accumulation of semi-government bonds over Commonwealth bonds when spreads widen. Last, we also favor 3m fwd1s3s swap flatteners.

Japan: The going "out the curve" changes made to the BoJ's QQE program will support flatteners at the start of the year. However, given our expectation for QQE exit talks to start over the course of the year, it will be challenging for JGBs to remain supported. We favor being short the intermediate sector as a strategic view in such a regime.

AeJ: We like long 5y CNH CGBs and opportunities to receive front-end of swap curve. In India, we recommend entering long 5yr bond and look to enter long 5yr bond vs 5yr swap spread. We see value in 3s10s and 2s5s Korea IRS steppeners and look to enter 1y outright receive, as well as Thailand 3y NDIRS receivers and 2s5s steppeners. In Malaysia, we like receiving 1s3s10s and 1s2s5s and look to initiate outright receivers in 2s and 3s. In Singapore, we recommend 2s5s flatteners and receiving the belly of the SGD curve through 2s5s10s/3s5s10s flies. Last, but not least, we like paying 10y IRS and 2s5s IRS steppeners in Hong Kong.

Mexico: We have conviction in relative value strategies that benefit from receiving local rates TIIE in the 5y sector on a relative basis vs. US swaps. Such strategies should benefit from spread compression in coming months and could accelerate if the MXN remains well behaved and thus provide room for Banxico to decouple from the US Fed shadow and follow its own interest rate path. If this decoupling occurs, it should allow for opportunities to receive rates in a relative basis (vs. shorting US Swaps) initially, and then give way to outright receivers in local TIIE IRS as Banxico's path becomes clearer.

Cross Rates View

2015 Recap: After debating liftoff all year, we finally get on the policy divergence track

Heading into 2015 we expected the eventual launch of policy divergence (see [2015 Rates Outlook: A Year of Policy Divergence](#), December 19, 2014) but only after a long fight due to numerous risks that the US was dealing with did we finally see the “negative forces burn out, allowing the Fed to be able to win back the narrative and gradually hike rates.” We eventually got a version of this outcome, but truth be told we thought the Fed would have been better off waiting to see even better conditions and hike with conviction. Prior to the Fed’s liftoff, we were of the view that the underlying economic fundamentals remained weak, so why rush? Now that we have moved away from zero, we still believe the path will be shallow, as the FOMC appears to emphatically agree, given all of its gradual talk.

In retrospect, 2015 was another eventful year where some of the tail risks we listed in our top 10 risks of 2015 actually panned out (notably lower oil prices and FX reserve selling of bonds – see page 11 for our 2016 and beyond risks). US rates were held hostage by strong displacement effects from ECB-driven flows (see [link](#)) as well as China’s devaluation (see [link](#)), in addition to overall duration and curve movements being whipsawed as Fed hiking expectations evolved. Corporate pre-funding ahead of the Fed liftoff had another high volume year and played its part in crowding out other fixed income assets. Long-end supply contributed to steepening pressure from time to time, hence keeping US curves in a range after any flattening due to Fed expectations.

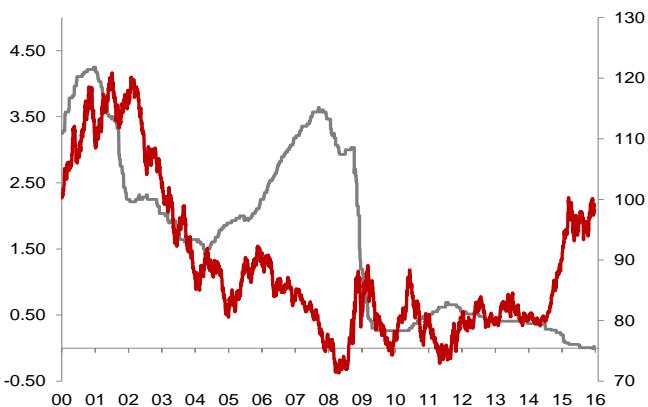
In Europe, Bunds made a historical low in the second quarter to only see a massive unwind as markets adjusted to the asymmetries of the ECB QE program (see [link](#)). Meanwhile, the dollar-bloc nations surprised with cuts as the BoC reacted to the Canadian economy’s weakness (driven by low oil prices) and the RBA and RBNZ both cut rates (RBNZ multiple times, due to the slowdown in the region led by China). Lastly, Japan rates did what they always do when they are at low rates: they rallied to even more extreme valuations.

Also in 2015, risk markets experienced major turmoil with Chinese equity falling about 45% from peak to trough, and the slump in global commodities affecting all asset class valuations (equity / bond / currency) in the rest of EM (e.g., Russia, Brazil). Heightened concern over global growth (especially in China, which had for years been the main growth engine) spilled over into the US and likely drove the sharp August correction in the S&P 500. Despite equities’ recovery by the end of October, the new fear of terrorism given the Paris tragedy again kept investors on edge. Overall, many investors saw their investment returns dwindle, with position unwinds amid low conviction adding to market volatility in 2015.

Fig. 1: G10 Average policy rate vs. dollar index at extremes

Global easing strengthens the dollar and acts as tightening

— G10 Average Policy Rate — USD (DXY Index, RHS)



Source: Nomura and Bloomberg

Research analysts

Global Rates Strategy

George Goncalves - NSI
george.goncalves@nomura.com
+1 212 298 4216

Stanley Sun - NSI
stan.sun@nomura.com
+1 212 667 1236

Andy Chaytor - Niplc
andy.chaytor@nomura.com
+44 20 7103 1219

Naka Matsuzawa - NSC
naka.matsuzawa@nomura.com
+81 3 6703 3864

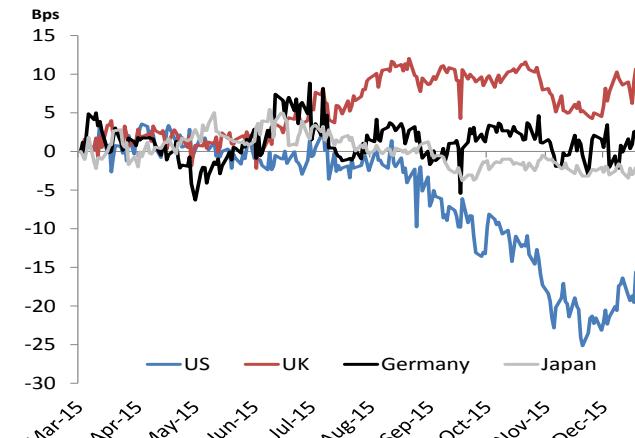
Norbert Aul - Niplc
norbert.aul@nomura.com
+44 20 7103 0063

Penglu Zhao - NSI
Penglu.Zhao@nomura.com
+1 212 667 9516

Pooja Kumra - Niplc
pooja.kumra@nomura.com
+44 20 7103 7236

Fig. 2: G4 swap spreads no longer flocking together in 2015

The change in 5-year spreads since March 2015 shows US as outlier



Source: Nomura and Bloomberg

The start of policy divergence actual came with a rush under zero

G10 policy rates (including the Fed and using the Euro deposit rate) started 2015 on average around 20 bps and got as low as -1 bps (with many countries going negative dragging the average lower) but ended the year at a small positive 3 bps after the Fed hike. However, excluding the Fed and using IOER, US policy rates are now 47 bps versus the rest of the average from the G10 cohort, the highest since early 2008. In fact, such effects are much more pronounced from the currency as the DXY index is now the highest since the early 2000s (Fig. 1). The strengthening of the dollar (vs. G7 as well EM) acts as tightening from the trade channel in a world where almost everyone else is easing. This in our view is one of biggest fundamental differences between the current Fed hiking cycle and prior ones. Tightening has occurred long before Fed liftoff via currencies (and was first brought about via Taper, as we have argued), which can be observed in various asset prices. In that context, there is little wonder commodities fell under pressure given they are priced in dollar terms and US credit products (e.g., high yield saw spread widening as dollar strength picked up in 2H15).

Historical USD spread tightening, with 3yr below zero an extreme

One of the biggest surprises in 2015 was the persistent tightening of USD swap spreads across the curve, to record negative levels. At the extreme, 3yr UST was trading cheap to 3yr swaps, unfathomable for most investors (us included). Although there was a retracement since then, 5yr spreads remain hovering in slightly negative territory, something we believe is unsustainable. Our analysis of the implications of the move can be found on pg 11, but it is worth noting that the sharp tightening of swap spreads was mostly just a US phenomenon (Fig. 2), which makes us believe the triggers/drivers could also be US-centric. In a nutshell, we believe EM reserve managers selling USTs was the last straw that flooded dealer balance sheets with unwanted paper ahead of September quarter-end. Adding to the pain was the corporate prefunding deals ahead of the Fed's liftoff. We expect both factors to have less of an impact over the course of 2016, so one of our key 2016 views is the normalization of spreads.

A year of differentiating returns across G7 bonds and risk assets

G7 government bonds delivered positive return in 2H16, reversing from the 1H selloff. Global bonds were very much supported by the easing stance out of ECB and the well-telegraphed Fed liftoff, but the most important tailwind likely came from the pressure emerging from the credit markets as well as renewed pressure in global commodities during 2H16. Within G7, it is little surprise that USTs had the smallest gain given the Fed's tightening stance, followed by Australia, whose currency has been under pressure given the commodity move (which likely deterred investor demand). Looking across assets, the best performing was USD and the worst was commodities (by a wide margin and followed by HY credit). The first year of mediocre S&P 500 return, after years of stellar performance, poses an interesting question for asset allocators into 2016.

Fig. 3: G7 Government bond total return

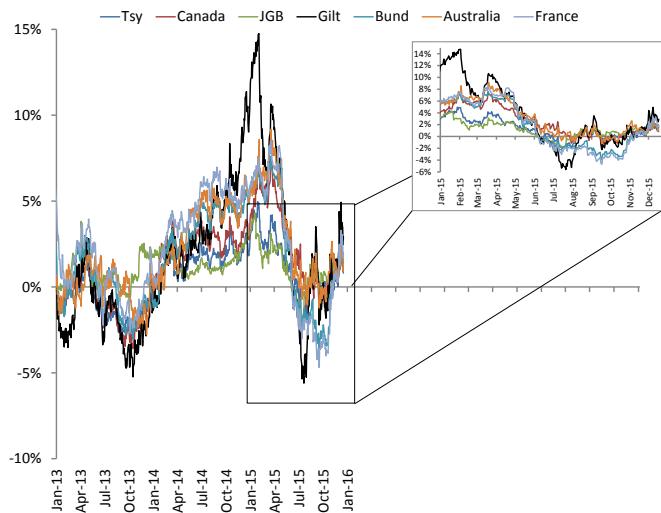
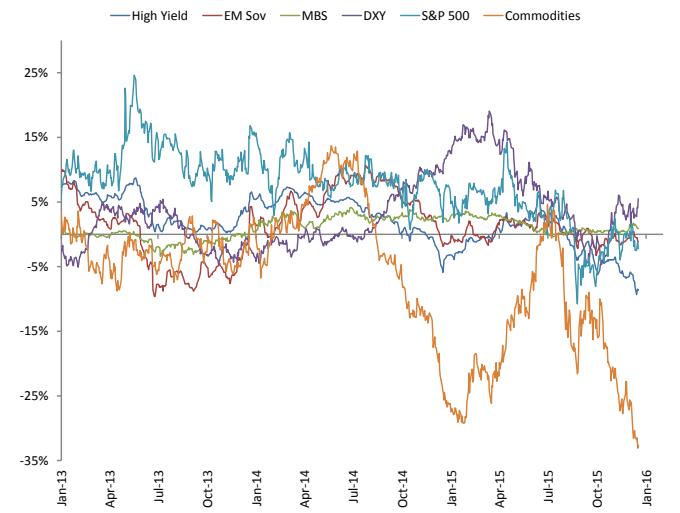


Fig. 4: USD asset class total return



2016 Outlook: On Track to Higher Yields?

After many quarters of debating liftoff and with two weeks to spare, the Fed finally pulled away from zero rates via a new technical hiking process (where rates are dragged up, almost by decree, to where the Fed pays/sets rates). Although the Fed is trying to downplay the shift of one (or few) hikes as not to be overblown as US rates are still low by historic standard, the issue is that the official move has a signaling effect, where we have changed tracks and are pulling away from the US gravy-train terminal (along with all the easy money trades that it facilitated). In our view, subsequent Fed hikes will feel like "Groundhog Day" as investors debate the next hike just as feverishly as liftoff itself, where we expect market participants to remain on edge until well past the 2-hike station.

Although the Fed must feel victorious post liftoff, across the pond the BoE seems to be nowhere nearer to getting on track to hiking now versus this time last year. Meanwhile, we expect the ECB to provide another round of easing as it cannot claim "mission accomplished" on reflating the eurozone any time soon. The BoJ's QQE keeps chugging along into its third year with some last-minute tweaks, yet there is a risk that 2016 brings that program to the end of its tracks too with our call for BoJ tapering ahead.

According to our collective views, we actually see risks for the majority of rates to start off the year heading south again as the macro backdrop does not suggest conditions will turn fast with the flipping of the calendar. The real test for bond markets (which are seeing flows from one region offset flows coming out from another) is that there will come a time where Fed hikes will force balance-sheet talks while other CBs shy away from easing. Such an outcome, coupled with changing fiscal policy (and risks of fiscal dominance setting in down the road), is likely the only time when we can see rates staying permanently on track to even higher yields than what markets can imagine.

G4 yields divergence to likely continue at least in 1H16 . . .

Once the dust settle after year-end, investors will be back in the saddle and looking forward to an exciting 2016 where markets continue to adjust to the regime of the Fed diverging from other central banks (many of which are still easing). We expect US rates to maintain bearish momentum into the first half of 2016, as market participants will keep establishing positions for a hiking cycle by likely switching gears to "sell on strength" strategies, instead of "buying on dips," which we have advocated and profited from in 2015. Although BoE hikes are not on the immediate horizon, there could be pressure for Gilts to sell off in early 2016 following the US move. In contrast, the two central banks still on easing paths should continue to keep their rates anchored. We believe the ECB's objective to reflate the economy is still a work in progress, as shown by the inflation market's pessimism.

EU and US long-term inflation expectations have been struggling (Fig. 5), yet we are bullish on 5y5y inflation in both EU and US, albeit for very different reasons. In the EU, we believe the ECB's bias for more easing should remain intact as long as inflation expectations stay low, while in the US, we see 5y5y as a cheap hedge for any upturn in CPI coming from both improving seasonals, base effects and collectively the potential positive surprise that may result in 1H16.

Essentially, our base case is the ECB will need to take further monetary policy action (more QE or deposit rate cut are possible), likely in 1H16. Hence, we think low rates in the euro area are set to prevail for now. Similarly for JGB yields, we expect BoJ's QQE to add tailwinds while the JPY basis likely provides a boost from the foreign buyer base.

The theme of rates divergence, in G4 and dollar-bloc, could also be illustrated in how curves may behave in the New Year. If we are right about higher US rates led by Fed hiking expectations (and by front-end mechanically ratcheting up in response to actual hikes via RRP/IOER), US curves should bear flatten more times than not as the Fed gets further from zero, while the UK curve may bear steepen without imminent BoE action.

Interestingly, the ECB could keep EU front-ends well bid via potential further deposit rate cuts deeper into negative territory, likely leading to bull steepening risk. Therefore in the US versus Euro rates space, we believe being short the US front-end vs. Europe makes more sense in 2016 versus doing the typical 10-year Bund/UST country spread, while the yield grab in JGBs from both domestic and foreign (i.e., FX-swapped) investors may keep the Japan rates biased for an early bull flattening.

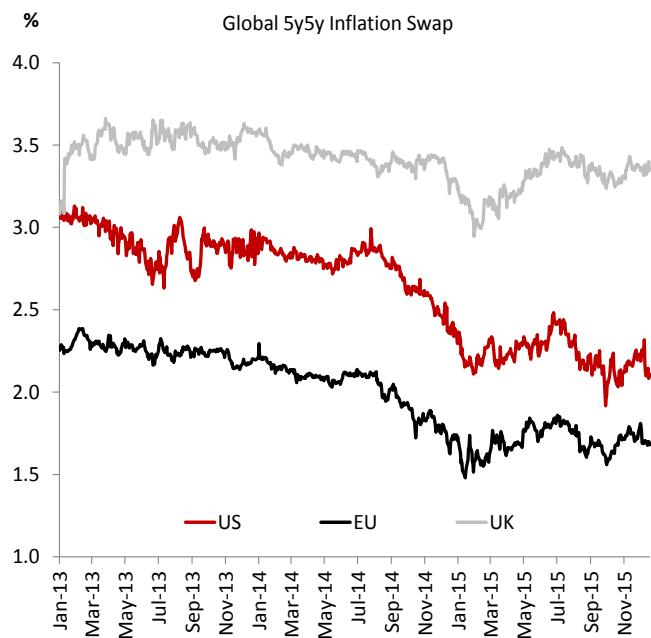
... followed by some convergence in 2H16?

Any deviation among G4 rates will not last forever given investors are always on the lookout for stretched valuations. Granted, any additional actions from the ECB hinges on how fast Eurozone's economies rebound. Between the Fed and BoJ, however, we see the potential for convergence, at least to some degree, in 2H16, as the common theme of central bank policy unwind starts to emerge in both markets.

Both USTs and JGBs exhibit favorable seasonals into the summer as per the respective sections (see page 36 and page 68). Notably, the positive seasonals for USTs/JGBs starts in July, a tad earlier than the G4 average (Figure 6), although we should caution that seasonal trends do not always pan out, especially in a world where central bank policy divergence could alter investors' behavior. In 2016, in particular, we see the risk of a short-lived summer rally in both markets, as discussions about BoJ taper as well as the Fed's balance sheet may potentially resurface on investors' radars.

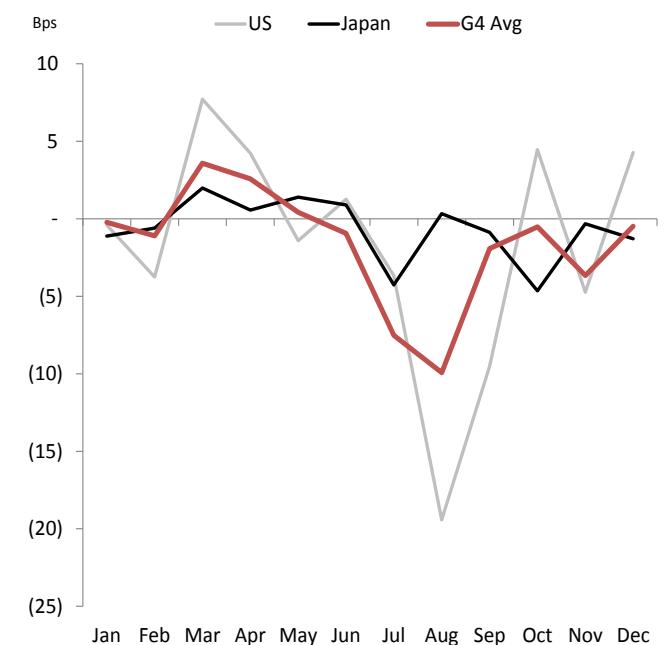
In Japan, we believe that the initiation of a QQE exit may be fueled by the government, rather than the BOJ, since the government is not as committed to the 2% inflation target, but is more concerned about further JPY weakness. Any such rhetoric might ignite market speculation about the Fed's QE unwind policy as well, given how the Fed is using unconventional tightening (and paying the system a rate versus just setting it) in order to deal with the balance sheet (which carries its own set of political issues). All told, we see market chatter around central bank balance sheets as a potential driving force toward higher yields (likely term premium driven, hence steeper curves too) in 2H16. But until then, with neutral rates in G4 likely poised to stay low, the global growth picture still bleak without the EM engine and sovereign yields floored due to global QE, one shouldn't expect long-term rates in the dollar-bloc to sell-off meaningfully just yet. Enclosed we highlight our macro drivers, policy views and trade ideas in rates. Good luck in 2016.

Fig. 5: EU and US long-end inflation expectations have been underperforming (outright and vs UK). We expect a rebound for both, albeit for different reasons, into 1H16.



Source: Nomura, Bloomberg

Fig. 6: G4 government bonds exhibit favorable seasonals into the summer, especially US and Japan, likely followed in 2016 by central bank policy unwind concerns resurfacing



Source: Nomura, Bloomberg

Cross rates market score card – Setting shorts in CAD, UK & EUR?

Figure 7 depicts our cross market rates score table across the major developed economies we track. Our analysis compares Nomura's economic forecasts versus recent economic performance and market expectations on three key metrics: growth, inflation, and monetary policy. For each country, a high overall score represents a strong economic outlook (generally bearish for rates), and vice versa for low overall scores.

In the US, we expect a significant pick-up in headline inflation if energy prices stabilize and the labor market continues to improve, which will keep core on track. Solid consumer fundamentals and pent-up demand for housing should also continue to support aggregate demand, going up against the strong dollar and still overall low oil price that may continue to weigh on the economy next year (via capex and credit). Net we expect moderating growth of about 2.2% in 2016 (vs. 2.5% in 2015). Based on our views, we expect the next rate hike in June but the risk is a faster hiking pace given the FOMC SEP projection curve is much steeper than market expectations. Consistent with the score cards, we do see the likelihood of US rates rising higher next year.

Even though the UK's ranking is on par with the US, the growth and inflation picture will likely look more solid in 2016. Structurally the BOE remains in between the Fed and the ECB in the monetary policy cycle, but ahead of both, we think, in the business cycle. This leaves us with a strong argument to favor paying 5f5y UK vs. US and EUR fly.

As for Japan, whose weaker wage growth and inflation momentum leads to a lower ranking, we argue for another round of easing likely in April 2016 (see "[Wage talks remain the key for the BOJ](#)", 16 December 2015). The overall macro environment should be still supportive for JGB, especially given the latest BOJ decision to extend its JGB buying maturities (see [BOJ Review: BOJ tweaks QQe programme](#), 18 December 2015).

Euro area again continues to see the lowest ranking in our scorecard, reflecting a continued lag behind most other developed economies. We expect to see a decent pick-up in inflation 0.5% (vs. 0 % in 2015) and a minor slowdown in growth to 1.4% (vs. 1.5% in 2015). While the ECB's accommodative policies managed to mitigate deflation risks in 2015, the objective to reflate the economy has not been met. Consequently, Nomura's baseline expectations are that the ECB will have to revise its inflation projections again with further monetary policy action (see [link](#)), more QE or another deposit rate cut in Q2 2016. This supports our view for a low EUR rate environment to prevail in 2016, and we set our bund forecasts below the forwards for most parts of the curve in H1 2016.

Our base case is not that 10yr Bund yields will return to 1%, but we still recommend pairing any constructive views on EUR rates with cross-market wideners against the US and even more so the UK in 1H16. That said, even though ECB activism and negative net net supply for German calls for bunds to stay supported while QE is in play, any sign of progress in the euro zone makes it a better short on a cross rates basis versus USTs, as long as the Fed doesn't start publicly discussing the balance-sheet reduction until later in the year. If that is the case, long-term USTs are likely to perform versus bunds for the majority of the year given favorable carry and higher yields.

Comparing our economics team forecast versus recent activity, Canada is poised to rebound the most from 2015 despite Fed hikes in the US. It is easy to fall into the trap of shorting rates in countries set to improve and their CB is tightening versus other countries that are not, but we think it is attractive to short Canada versus the US on a relative basis, especially given historically wide 10yr spreads and its score card grade.

Fig. 7: Nomura Global Scorecard: Fundamental outlook is supportive of most economies in 2015, with US in the lead

The overall score (+4 for the US) is based on GDP, CPI, policy rate expectations, yields and curves, where a positive score is bullish for the economy

| Country | 2015 GDP (%) | 2016 Nomura Forecast (%) | Spread | 2015 CPI (%) | 2016 Nomura Forecast (%) | Spread | Policy Rate | 1y1m OIS (%) | Spread (bp) | 6m Chg in 10y Yield (bp) | 6m Chg in 5s30s Curve (bp) | 2016 score | Score vs. 2015 |
|-----------|--------------|--------------------------|--------|--------------|--------------------------|--------|-------------|--------------|-------------|--------------------------|----------------------------|------------|----------------|
| Japan | 0.60% | 1.20% | 0.60% | 0.80% | 0.80% | 0.00% | 0.05% | 0.04% | -0.6 | -18.1 | -7.9 | +2 | ↔ |
| UK | 2.40% | 2.50% | 0.10% | 0.00% | 1.10% | 1.10% | 0.50% | 0.72% | 22.3 | -21.1 | 10.6 | +4 | ↑ |
| USA | 2.50% | 2.20% | -0.30% | 0.10% | 1.30% | 1.20% | 0.50% | 0.82% | 32.3 | -9.3 | -24.4 | +4 | ↔ |
| Australia | 2.30% | 2.40% | 0.10% | 1.50% | 2.10% | 0.60% | 2.00% | 1.94% | -6.3 | -14.8 | -23.4 | +2 | ↔ |
| Canada | 1.30% | 1.80% | 0.50% | 1.30% | 2.20% | 0.90% | 0.50% | 0.73% | 23.5 | -32.8 | -3.0 | +5 | ↑ |
| France | 1.10% | 1.00% | -0.10% | 0.10% | 0.30% | 0.20% | 0.05% | -0.28% | -33.4 | -30.2 | 11.9 | -1 | ↓ |
| Germany | 1.50% | 1.30% | -0.20% | 0.10% | 0.70% | 0.60% | 0.05% | -0.28% | -33.4 | -20.9 | 5.8 | -1 | ↓ |

Source: Nomura, Bloomberg

Ten Risks to Consider in 2016 and Beyond

We explore potential scenarios not priced-in fully by markets (not in any specific order)

1. *EM converges with DM on disinflationary trends:* If the ongoing ‘currency wars,’ lower global growth and the impact of globalization on capital formation leads emerging market inflation rates to converge to the ‘lowflation’ trends plaguing the developed markets, then the risk is this then becomes a self-perpetuating cycle as every country tries to get an ‘edge’ via currency depreciation (as misguided as that policy is in anything but the short-term). This would expose that global growth of recent decades (and the commodity-driven inflation due to EM consumption of raw materials) was indeed mortgaged from the future and that central banks will need to remain loose until inflation sustainably moves up.
2. *Minimum wage hikes in the US/UK cause sugar high in wages:* Non-market based increases in wages could optically lead wages to be higher, such wage increases are not the ‘real deal,’ potentially affecting job formation and leading to lower wages in the long run. CBs reacting to them could risk a policy error.
3. *Foreign flows steepen the curve:* It would be ironic if the ‘great conundrum’ of the last Fed cycle (i.e., FX reserves buying of sovereigns helped keep longer end yields lower than fundamentals) were to go into full reverse in this hiking cycle. FCB selling of FX reserves to defend currencies could lead USTs (and others) yields to rise and the curve to steepen, making things very difficult for the Fed in terms of calibrating the appropriate front-end policy for the economy.
4. *Hike + Twist Lite:* If either foreign flows slow as per point number three (and G4 rates sell off) and/or a more generalized ‘hike tantrum’ takes place due to financial conditions tightening and bond fund redemptions accelerate creating a “bank-run feeling”, if the Fed felt it was losing control of fixed income markets and spreads widen and financial conditions were tightening too quickly but still wanting to ratchet front-end rates higher, it could take the reinvestment flows and invest them right out at the end of the curve to create the optimal reaction from the curve shape to its monetary policy.
5. *Fiscal drag reverses:* Perhaps either geopolitics forces (i.e., military spending) cause more fiscal spending as policymakers finally realize that CB policy cannot create growth (only shift it around in the cycle). This leads to less fiscal drag (maybe even see it reversed) and finally puts the global recovery on track.
6. *CBs behind the curve:* The decision by most CBs to upgrade inflation from a lagging indicator to a leading indicator turns out to be flawed judgment. The market realises CBs are behind the curve, cue a huge bond market sell-off and with the risk-free rate skyrocketing risk markets get hit too. Enter Paul Volcker.
7. *El Nino inflation feedback loop:* A particularly strong El Nino causes a rapid rise in food prices. On a global aggregate level, this leaves a worse inflation / growth pay-off, with segments of EM hit particularly hard and as a result it prevents a rebound in EM area activity from already depressed levels.
8. *China: two-way risks:* China is evidently undergoing a transition from a goods producing economy to one that is more based on serving the services needs of a growing middle class. Such transitions are not without risks. On one hand, there could be some J-curve affect, where the economy further weakens as the transition occurs. Overall we see the risk still skewed to weaker GDP as the credit growth and malinvestment issues will take time to resolve. But if China adjusts faster than market expects, it would re-emerge as a growth engine.
9. *Brexit:* It is likely that in 2016 the British people will be asked in a referendum whether to leave the European Union. One of largest developed economies leaving the European Union is not just a national or even regional issue but one that could have global consequences . . . and polls are currently running 50/50.
10. *Business cycles do die of old age after all:* Even if job growth continues and we get a few signs that wages are improving too, if salary increases are one-offs and the quality of the jobs remains poor, if the Fed progresses methodically with hikes by decree, but the manufacturing and energy sectors never fully recover from the blow of the strong dollar and low oil prices, we could still be setting the US on track to have a garden-variety recession in late 2016/early 2017.

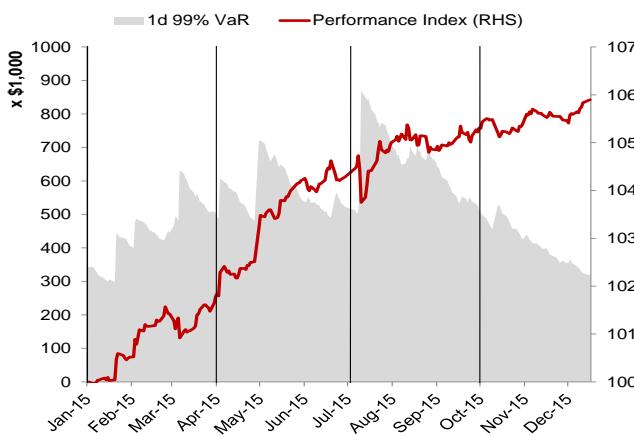
2015 Trade Portfolio Performance Review

Our US rates model portfolio had an overall gain of \$11.5mm on the year, with \$1.6mm profit during Q4'15. Based on working capital of \$200mm, annual returns were 6%, slightly lower than the total performance since tracking started in late 2011. Q4'15 returns equate to a 2.3% annualized return on the quarter, less than what we saw in recent quarters, mostly as the result of our lower conviction ahead of the Fed liftoff event. On a risk-adjusted basis, however, Q4 still saw decent Sharpe ratio and has been the steadiest quarter of the year, in terms of P/L volatility. Also notably, we have kept our max drawdown to a minimum and avoided the sharp swings seen in prior quarters/years. Looking at the entire 2015, we gained the majority of our returns in the 1H15 as we kept fading Fed first rate hike expectations (which kept getting pushed back all year long) and therefore we would add on dips and sought carry trades. Despite a tough start in Q3, we managed to keep a lid on volatility during 2H, as seen by our declining VaR (Figure 8).

Those following our work know that given our view of the US macro data, we really did not believe a December hike made sense (because why rush into it now). But given the change in the jobs data and hawkish Fed rhetoric, we ended up changing our view in time to profit in Q4 via flattener as it became clear the Fed was adamant about hiking before 2015 came to a close. Going forward, this shows us that one shouldn't put on trade ideas based strictly on a macro bias if the central bank is going to be more active.

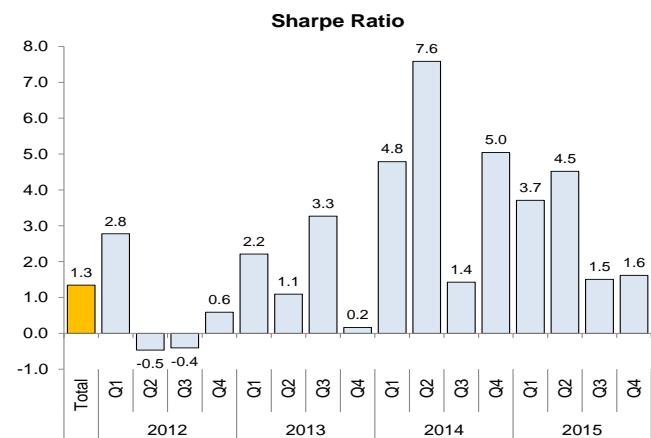
With the uncertainty around the Fed liftoff lingering throughout the year (and the Fed only finally delivering in December), we recommended mostly tactical trades as we waited. In fact 90% of all our trades were tactical instead of strategic, where tactical expressions were responsible for about 83% of our total P/L. Hence, as a result of staying nimble, our trade conviction level and sizing was low and we avoided outright duration expressions while generating returns mostly via range-trading rates and cross-market expressions.

Fig. 8: Portfolio performance and risk levels



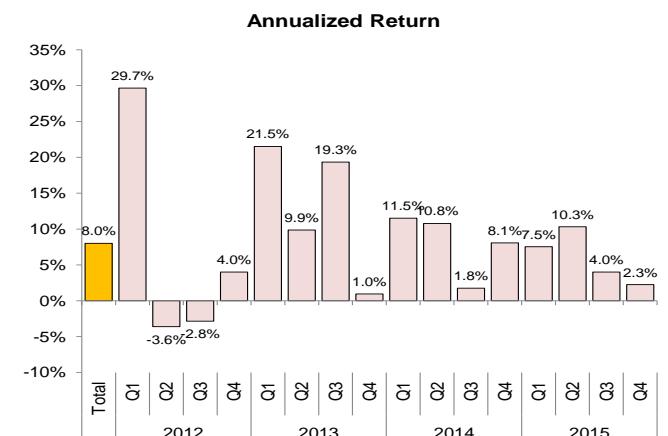
Source: Nomura

Fig. 10: Annualized Sharpe ratios



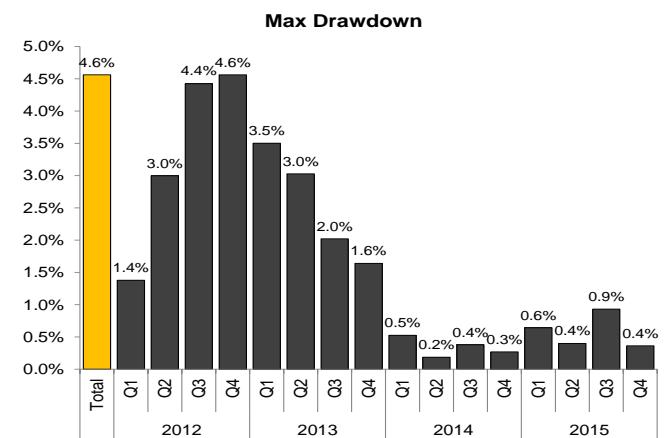
Source: Nomura. Note: Calculated with 40bps risk-free benchmark rate

Fig. 9: Annualized portfolio returns



Source: Nomura. Note: Calculated using daily P&L and a \$200mn capital base

Fig. 11: Maximum portfolio drawdowns

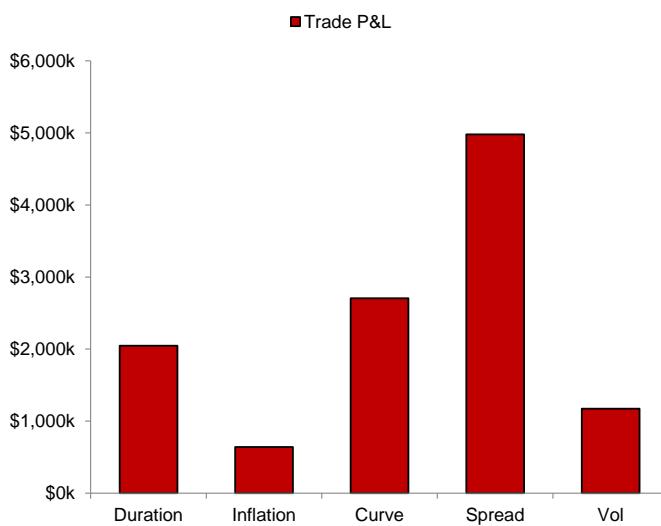


Source: Nomura

A breakdown of portfolio performance across our main risk sectors:

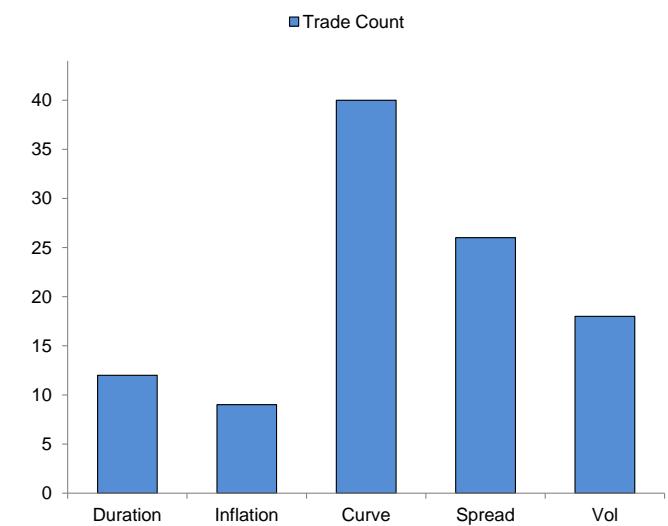
- **Duration:** As stated above, we stayed relatively light in this category given our view of range-bound rates as well as the difficulty of directional trading during ECB QE setup and later in year when we got ready for the Fed. We had the most duration on in Q2, when yields reached the cheapest levels in 2015. We were able to take advantage of the Q2 selloff and managed to perform well in this sector. We kept our long exposures very short-term and tactical, picking optimal points to be long. All told, our two best performing duration trades were receiving 3y2y earlier in the year and receiving 10y10y in the summer.
- **Curve:** This was again our most active risk sector, a tradition now lasting for multiple quarters in this low rate regime. We put on a total of 40 curve trades during 2015, which had a total gain of \$2.7mm. Following the term premium compression into Q1'15, we benefited handsomely from various steepener (via spot, forwards, misweighted flies) earlier in Q2. We then stayed in butterflies as broader curves have stabilized around levels that are much less distorted. Into 2H'15, we tactically put on belly vs. long-end flatteners, e.g., Blues-Golds and 3y2y-10y10y, in preparation for Fed liftoff. We were also in favor of flatteners as a risk-off hedge as equity/credit/commodities market saw jittery ahead of liftoff.
- **Inflation:** We kept the lightest risk in this sector, not surprisingly given the volatility in energy prices. We had the fewest trades in the inflation category, hence the smallest profit. While some of our tactical expressions did not pan out (e.g., in long 1y1y real rates, BEI steepeners and inflation floor), we locked in sizable P/L earlier in the year by being long 30yr BEI and in Q3 by being short 2y3y BEI, capturing two of the large directional moves of the year. Oil's continued struggle in 2015 prevented us from engaging in more BEI longs, even though valuation was getting attractive. Ahead of liftoff, we stayed put (e.g., we didn't put on any inflation trades in Q4), which turned out to be the right call.
- **Spreads:** This was the most profitable category for the year. However, many of the strongest contributing trades were mostly in cross-market space, where we traded USD rates vs. CAD/AUD/GBP rates. Other spread trades also performed well all things considered when comparing UST performance versus swaps and agency curves. In particular, we had success trading the spread curve, i.e., 5s30s swap spread flattener catching the collapse of long-end spreads throughout April and then later in the year, our 2s10s spread steepeners benefiting from the rebound in belly spreads from oversold negative levels.
- **Volatility:** Trades in this sector had relatively small drawdowns while still having decent gains, with a total \$1.1mm added to our overall performance. The delay in the Fed's liftoff suppressed realized vol on front-end rates, which drove the positive performance of some of our trades. Our best performer was 2y 30s/5s ATM cap spread, which capitalized on the curve re-steepening into the Fall.

Fig. 12: 2015 trade P&L by rates risk sector



Source: Nomura

Fig. 13: 2015 trade count by rates risk sector



Source: Nomura

Positioning: 2015 Review and 2016 Outlook

The obsession over for the first Fed hike in nearly a decade and changing nature of foreign flows were the dominant force influencing rates market positioning all throughout the year. As market pushed the liftoff from March to June to September and eventually seeing it realized in December, the specs built up the highest short levels seen since the crisis, mainly concentrated on the long end. Front end ED futures positions, after staying in the positive territory for some part of the year, also began pushing into net shorts, too.

Foreign flow dynamics was the other key factor this year, with low oil prices and most importantly China's FX devaluation sparking a chain of selloffs among EMs and DMs as well, resulting in lower FX reserves in the global FCB system. Meanwhile as central banks' policies continue to diverge in 2016, foreign private investors may become much more crucial for USTs. On the one hand the US yield pickup will keep USTs attractive in the eyes of foreign buyers, but higher FX hedging costs and fear of a faster hiking cycle will result in uneven flows. This changing supply demand story is covered on page 24.

Fig. 14: Quarterly US rates positioning and flows: Investors position for the December Fed hike

| Investor Units Asset Class | Specs (CFTC) Position (10yr equiv., \$bn) | Primary Dealers Position (10yr equiv., \$bn) | Bond Funds Flow (\$bn) | FCB Flow (\$bn) | Japan Flow (\$bn) | Large Domestic Banks Position (\$bn) | Large Domestic Banks Position (\$bn) |
|----------------------------|---|--|------------------------|-----------------|-------------------|--------------------------------------|--------------------------------------|
| USTs | USTs | Taxable Bonds | USTs | Foreign Bonds | USTs/Agencies | MBS | |
| Q4 2014 | -28.9 | 19.2 | -41.3 | -63.6 | -10.1 | 401.4 | 984.1 |
| Q1 2015 | -18.1 | 18.2 | 23.3 | -52.3 | 39.9 | 404.2 | 1,024.7 |
| Q2 2015 | -8.1 | 17.9 | 27.1 | 113.9 | -30.1 | 401.8 | 1,043.8 |
| Q3 2015 | -25.6 | 35.9 | -50.9 | -14.5 | 47.6 | 386.2 | 1,079.1 |
| Q4 2015 | -41.7 | 30.1 | -14.4 | -15.7 | 34.7 | 393.3 | 1,109.8 |
| Q-o-Q Chg | -16.0 | -5.8 | 36.5 | -1.2 | -12.9 | 7.1 | 30.7 |
| Y-o-Y Chg | -12.8 | 10.9 | 26.9 | 47.9 | 44.8 | -8.1 | 125.7 |

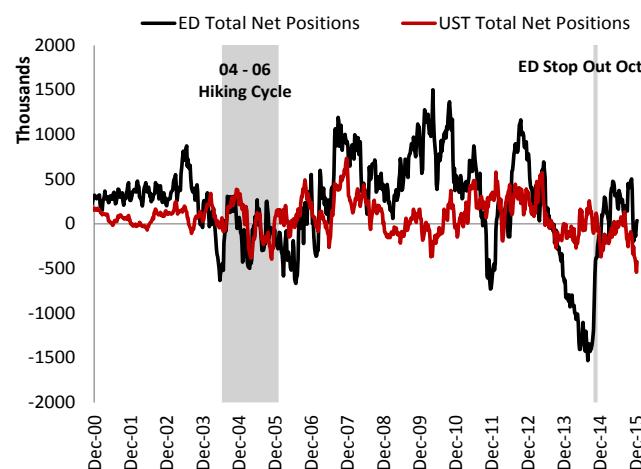
Source: Nomura, CFTC, CME, Federal Reserve, ICI, MOF Japan, Bloomberg

Non-commercial Futures Traders

As of December 15th, specs' aggregate net risks in UST futures sat at -\$41.7bn (10yr equivalents) and in ED futures sat at 37k contracts. However we are now officially in a tightening cycle; most of the UST short interests are concentrated in the WN and FV contracts (see [link](#) for latest CFTC risk breakdown) versus the traditional short-base seen ahead of a hiking campaign. Other UST future contracts also saw decent short interests. Total net contracts in USTs and EDs amounted to -425k and -37k respectively.

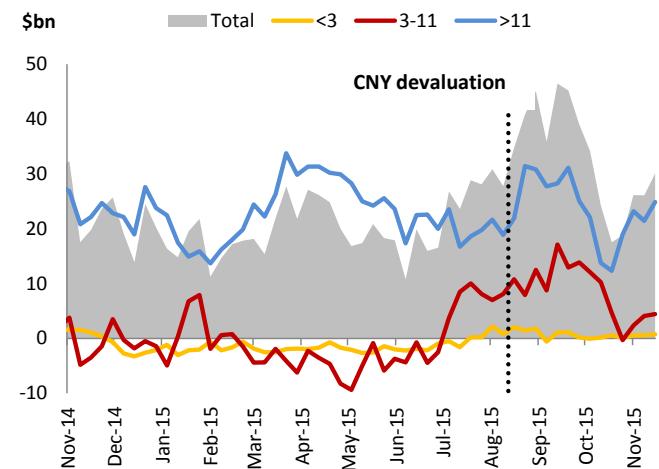
As seen in the Figure 15, in retrospect before the 2004 hike, specs put on -43k net short contracts in USTs and -58k contracts in EDs. A closer look revealed that specs had net long positions in FV and TU heading into the first hike in 2004. This might suggest the specs community at the launch of liftoff has been positioned more bearishly than it was in 2004. Given the Fed is expected to undergo the most gradual cycle in history, in our view shorts will move from the back-end to front-end, but at the same time shorts will not persist indefinitely because in this tightening cycle investors will mind the carry too.

Fig. 15: Specs have built more bearish positions in UST/ED future than in 2004-06 hiking cycle



Source: Nomura, CFTC

Fig. 16: Dealer positions have normalized recently but may still be under pressure into 2016



Source: Nomura, NY Fed

Primary Dealers

Primary Dealers' net positions in USTs rose meaningfully through Q3, likely driven by meaningful net foreign selling that resulted from China FX devaluation, EM capital outflows, reduced petrodollar flows into USTs and heightened concerns over the hiking cycle. The congested positioning on dealers' balance sheets led to cheapening of cash bonds versus swap and futures (see [link](#) for thoughts on swap spreads). Going into 2016, the ongoing regulatory reforms will continue to limit dealers' capacity in warehousing risks. With the potential threat of investor shedding paper a live risk (either in reaction to Fed hikes and/or FX reserve reduction), dealers' balance sheets could remain under pressure next year.

Bond Mutual Fund and ETF funds

Both bond funds and bond ETFs saw healthy inflows in the first half of 2015 (Figure 17). However, the sharp selloff in rates (triggered by Euro sovereign bonds underperforming post ECB QE) sparked the first wave of fund redemptions into the summer months. The concerns over a September hike and widened of IG/HY spreads further weakened retail investors' sentiment and exacerbated the flows out of bond funds. After the Fed skipped the September hike and delivered a string of dovish comments in early 3Q, there was a brief period when both bond mutual funds and ETF funds saw decent inflows. Going into 2016, if yield rises faster than expected and/or spreads widen further as financial conditions reprice after liftoff, bond funds and ETF are key risks to watch ahead.

Large Domestic Commercial Banks

Banks' bids for USTs plateaued in 2015 with y-o-y holding essentially unchanged as most banks have met their LCR threshold. On the other hand, banks steadily bought MBS throughout the year and increased their holdings by about \$130bn. As our SP strategy team expects, if MBS spreads remain attractive in 2016 as yield rises, we may see continued buying interest from the bank community (See [SP Outlook](#) page 33).

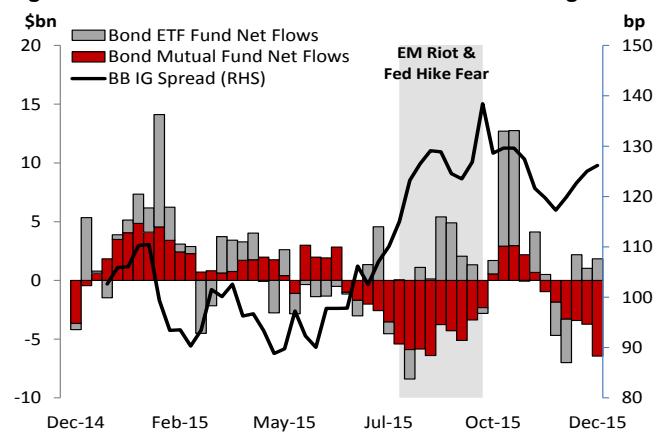
Japanese Investments in Foreign Bonds

Japanese investors were net sellers of foreign debt from April to September, as volatility in DM sovereign bond markets spiked since April and concerns over a Fed hike mounted in the summer. The TIC holding data also painted a consistent picture as the country reduced about \$60bn USTs from the beginning of the year through September. Their interests in foreign bonds picked up later in September as dovish expectations on both the Fed and ECB rose. Given the dollar-funding / FX basis story (see pg 26) will play a role as will yield pickup, we expect Japan to become more selective going forward.

Foreign Central Banks

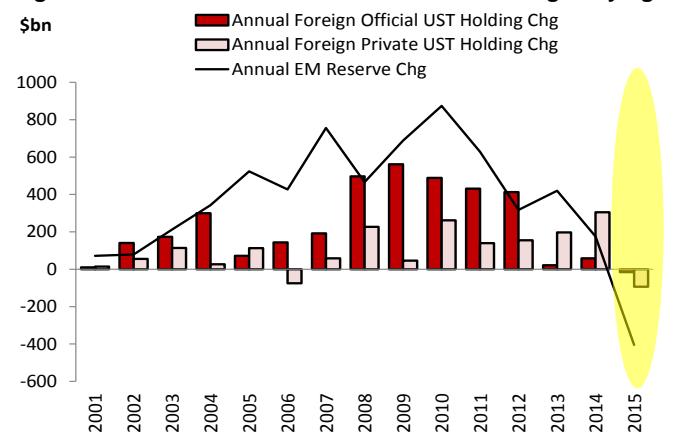
After accumulating foreign reserve for multiple years, weaker global growth and cratering commodity prices saw foreign central banks experiencing significant reserve outflows in 2015. Foreign official buying has been stalled since 2013 as QE tapering and hiking expectation limited their demands. Foreign private in 2015 also started shedding their holdings, probably also driven by the end of QE. Looking ahead, if the divergence in CB policies continues to disrupt FX markets, FCB reserve reduction could be an ongoing theme into 2016, where foreign private will continue to offset any FX reserve declines.

Fig. 17: Bond fund outflows were exacerbated in August



Source: Nomura, ICI, Bloomberg

Fig. 18: EM FX reserve reduction and limited foreign buying



Source: Nomura, TIC

Special Topics

2016 Global Central Bank Views

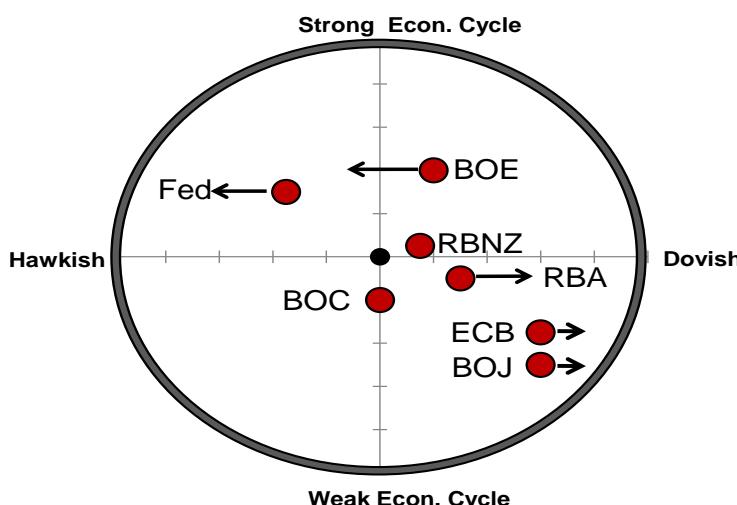
Fed: It finally achieved liftoff (and is diverging from others – see Fig. 19) but we do not believe that a move off zero is the start of a typical Fed tightening cycle. We constantly are reminded that we are living in a world that is dealing with unconventional tightening after years of unconventional easing. As we have argued in the past, the economy has already been dealt multiple salvos of tightening, which will limit how fast and high the Fed eventually goes. First it was the tapering that served as an acute tightening (via the term premia shock in long rates in the summer of 2013). The second tightening is the ongoing dollar strength, which acts like tightening by making the US less competitive and by keeping commodity prices lower, which is affecting financial conditions and credit markets. Lastly, the conundrum unwind is tightening, where FCBs that are forced to defend their currencies (and sell USTs to source dollars) push up US long-term rates in the process. Thus, the new FF rate tightening needs to be gradual (and in conjunction with maintaining an enlarged balance sheet) where the Fed might need to pause at times as it moves slowly from the zero bound to gauge FCI and economic impact. Note that after having retired QE1 and ZIRP, the BoJ took over 6 months in between hikes (see pg 19), and although in past cycles the Fed typically did not wait that long in between hikes it did take 14 months after the conclusion of QE3 taper and nearly 30 months after the taper tantrum to launch liftoff. Thus, this notion the Fed will hike on a predetermined path is inconsistent with recent history. Thus we expect a multistage normalization (with our expectations that the next hike will be June as data needs to turn quickly for the Fed to hike in March, see [link](#)) and that hiking meaningfully above 1% will be a challenge (see pg 33).

ECB: With inflation dynamics remaining weak and a focus on inflation expectations and credibility in meeting its mandate, the ECB will need to remain alert to incoming inflation data as well as how financial conditions unfold. As in early 2015, the focus is on the extent to which the unfolding economic reality – particularly around inflation – matches the ECB/Euro system staff projections. Given our view on the skew of risks around the inflation outlook, our bias remains for the ECB to do more in 2016. While Q2 2016 is probably the earliest the ECB delivers further easing (likely via QE extension/expansion and another deposit rate cut), the Governing Council might need to be fully responsive to financial conditions, and we would not exclude further easing as early as March.

BOE: Unemployment looks set to start 2016 grinding below its level from the peak of the last super-cycle while inflation rises. Together with the Fed's hiking cycle now being realized, this should give the MPC comfort to start raising rates. We expect the first hike in May 2016. By waiting so long, the MPC will have less room to be gradual so we expect it to hike by 25bp per quarter. However, with no clear fundamental anchor of policy to the domestic data or other central banks actions, there is considerable

Fig. 19: Fed finally diverges from other global central banks with the BoE way behind

Note: Quadrants separated based on economic cycle. Dots / arrows is current or projected policy stance



Source: Nomura Note: For current priced-in C.B. policy expectation, please see page 88

uncertainty about the timing. Indeed, we see the risks as increasingly skewed to later, with the UK's probable referendum on EU membership in September making an August start unlikely. By artificially inflating asset prices during this prolonged period of loose policy, the rate of interest that will be sustainable in the long run is being driven down. We expect the hiking cycle to be terminated in 2017 at only 2.0%.

BOJ: It is generally understood that the BOJ will face difficulties maintaining its current pace of JGB purchases (net JPY80trn). This situation is attributable to an increase in maturing bonds in the BOJ's balance sheet (JPY9trn), an expected reduction in FY16 JGB issuance (JPY5rn) and the winding down of public pensions' JGB sales intended to achieve target weightings (which have created an additional JPY20trn in JGB supply), Figure 20). The BOJ decided to address this by taking supplemental measures at its December meeting (extending the maturity of JGBs eligible for its purchases, allowing housing loans and foreign currency-denominated loans as BOJ collateral, among others) and also took steps aimed at bringing the JPY44trn in JGBs lying idle as BOJ collateral into circulation. These measures will prevent the BOJ's operations from hitting a technical impasse in 2016 and ensures their continuation for at least another year.

RBA: We see clear risk of an RBA rate cut in 2016 though acknowledge this may well come later than our long-held February call. In 2016, we believe the RBA will closely watch local activity data to see if better perceived "prospects" for growth come to be realised. It will also closely watch Fed action and subsequent market reaction, particularly in AUD, which has become less of a headwind, but which is not yet at clearly stimulatory levels. Key reasons to cut: RBA has a stated easing bias, with low inflation providing "scope" to cut; we view its upbeat language as a deliberate tilt to talk up sadly missing animal spirits growth in China and Asia is underwhelming; AUD is not yet at clearly stimulatory levels and RBA would likely prefer it lower; local banks have recently increased lending rates independently and may well make further similar moves in 2016; housing is cooling; risk of global market dislocation in 2016 is quite real. Key reasons to hold: recent local activity data has been somewhat better; RBA sees better growth "prospects" and would like time to see how this plays out; RBA likely believes it has limited ammunition and believes that monetary policy is likely less effective currently.

BOC: We expect the Bank of Canada to keep its policy rate unchanged in 2016. The expected fiscal stimulus by the federal government reduces the need for further easing, while concerns regarding household imbalances and its impact on financial stability could be a soft hurdle for further rate cuts. However, risk to the outlook are tilted to the downside, especially given the continued decline in oil prices and the risk that exports could continue to underperform.

RBNZ: We believe that RBNZ will keep rates on hold for some time, but if growth slows or if the NZD remains stronger than expected, it is likely to cut rates further, as it would have a negative impact on growth and inflation. The RBNZ signaled in December after cutting rates by 25bp that if the economy evolves in line with its forecast, no further cut in the policy rate will be needed. However, given the downside risks to the outlook, the policy stance remains slightly dovish, as there is a high probability that the growth and inflation underperform their forecast, leading to more rate cuts potentially.

Fig. 20: DM Central Bank Mandate, Economic Targets and Policy Expectations

Grey area closest to normalizing policy, White on the neutral side and Pink are in full-on easing mode

| Central Bank | Mandate | UR (%) | Inflation* (%) | Inflation Target | Central Bank Inflation Forecast 2% Date | Policy Rate (%) | First/Next Rate Move (Mkt Pricing)** | First/Next Rate Move (NMR Forecast) | Asset Purchase (QE) |
|--------------|--------------|--------|----------------|------------------|---|-----------------|--------------------------------------|-------------------------------------|---------------------|
| Fed | Inflation/UR | 5.0 | 1.3 | 2% | 2018 | 0.25-0.50 | Jul '16 | Jun '16 | - |
| BOE | Inflation | 5.2 | 0.1 | 2% | 2017 | 0.5 | Jan '17 | May '16 | - |
| BOC | Inflation | 7.1 | 2.0 | 2% | At Target | 0.5 | Oct '18 | 2017 | - |
| RBNZ | Inflation | 6.0 | 0.4 | 2% | Q1 2016 | 2.5 | Dec '17 | 2017+ | - |
| RBA | Inflation | 5.8 | 1.5 | 2-3% | Q1 2017 | 2.00 | May '17 (Cut) | Feb '16 (Cut) | - |
| ECB | Inflation | 10.7 | 0.2 | <=2% | 2017+ | -0.30 | 2018+ | 2Q2016 (Cut) | €60 bn/month |
| BOJ | Inflation | 3.1 | 0.7 | 2% | 2H Fiscal 2016 | 0.1 | 2018+ | 2018+ | ¥6.5trn/month |

*Note: Inflation is headline YOY CPI for all countries except the US (Core PCE), Canada (Core CPI) and Japan (CPI ex. Food and Energy).

** Based on latest CBED cumulative hike expectations as seen in the back of this report

Source: Nomura

A number of central banks have raised rates since 2009. Did they keep them up?

There have been a number of central banks in the advanced economies that have tried to raise rates but eventually all ended up with cutting rates to even lower levels (Fig. 21) than before they started hiking. A stark example is the ECB, which had a short-lived hiking cycle in 2011. It hiked then because it feared that inflation would run above its target; however, deflationary forces in the Eurozone were stronger than it expected, which ultimately led to it cutting rates into negative territory and launching QE. It is not just the ECB that rushed into hiking; many of the dollar-bloc nations potentially over-reacted to higher commodity price-based inflation and tightened too soon as well.

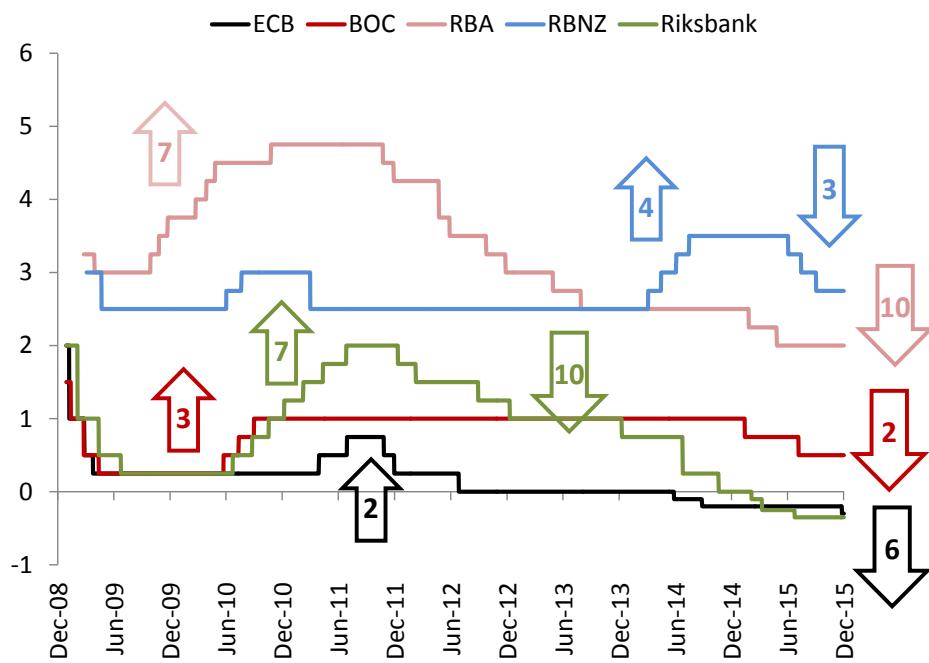
Although most agree that the criteria for moving rates away from the zero bound is upon us, the key question for the Fed is whether the economy is fundamentally strong enough to withstand multiple rate hikes at the pace projected by the current dots. Raising rates too much and then cutting later might do more damage than a gradual approach. Such a reactive approach, like the ECB and others have done, could introduce more disruptive shocks to the economy and likely impede its recovery or even drag it back to recession. Both the Fed and the Bank of England, the two most patient central banks, have enjoyed better recoveries than those who raised and cut rates after financial crisis.

We think it goes without saying that the Fed did not just want to hike now, and then have to cut again so quickly. This is another argument why the Fed should go slower than its current forecasts project. We believe the Fed wants to prolong and ensure that the recovery remains on track so that good inflation (via wages) materializes over time.

At this point, there are no glaring signs to tighten quickly to fight inflation (let alone we have commodity prices that continue to slide lower along with a strong dollar). If the Fed were to overtighten at such low levels of rates, it could run the risk of committing a policy error and as detailed throughout this report the challenges of getting the operational aspect working well means that it should wait a few months at a minimum to see how the plumbing is working before rushing into the second and third hike and beyond.

The second hike in many ways needs to come out as a strong message that the Fed has confidence in the economic outlook because macro variables have improved enough. We see this only taking place by late spring / early summer next year (which is why we have penciled in our second hike taking place in June and only see March as a free option to hike). We also believe that a second needs to be at a press conference.

Fig. 21: Various CBs have tried to raise rates post GFC but have failed to keep them up



Source: Nomura, Bloomberg

What happened when Japan raised rates for the first time post QE1 experiment?

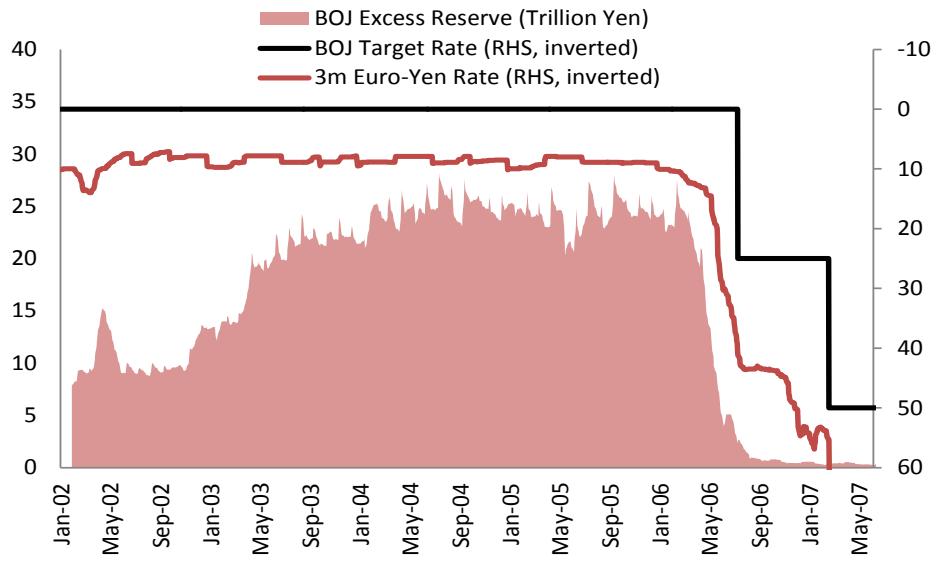
The Japanese hiking experience in 2006 might provide some insights for investors now that the Fed has hiked off zero. One year before the BOJ's first hike, the market already started to price in the tightening cycle. Both front-end and long-end yields trended higher after September 2005 (see Fig. 22). However, unlike the Fed, the BOJ decided to drain excess reserves in the system before raising its policy rate, but the process took longer than the market expected. This was probably interpreted with some dovish sentiment as the long end started to rally into the first hike. On the other hand, the front end stayed elevated, more likely due to sensitivities of front-end paper to the potential risk of a faster pace of hike given the prolonged reserve draining procedure.

This divergence between front-end and long-end yields continued further after the first hike. The 5yr and 1y5y rate even had modest rallies into the second hike. Front-end yields were on track pricing in higher yields into the second hike (Fig. 24). The 1y10yr implied volatilities declined into the hiking cycle, along with the rally in long-end rates.

Given the Fed decided to keep its SOMA portfolio size the same while hiking that should support long-term rates all else equal. Also the expectation for a slower path and lower terminal rate is also supporting flows into the long-end, which should continue for now.

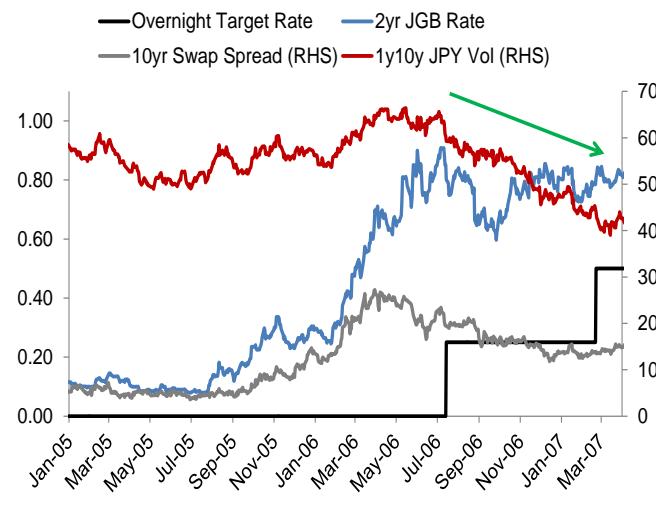
However, as mentioned above, as we approach the 1% level in the FF rate and chatter around shrinking of the Fed's balance sheet surfaces, the US rates market will probably have a different experience versus what happened in Japan. In our view, this means that rates will be more volatile as term-premia ebbs and flows with supply/demand dynamics.

Fig. 22: Japan's QE1 experiment and the BoJ's shallow 2006 hiking cycle



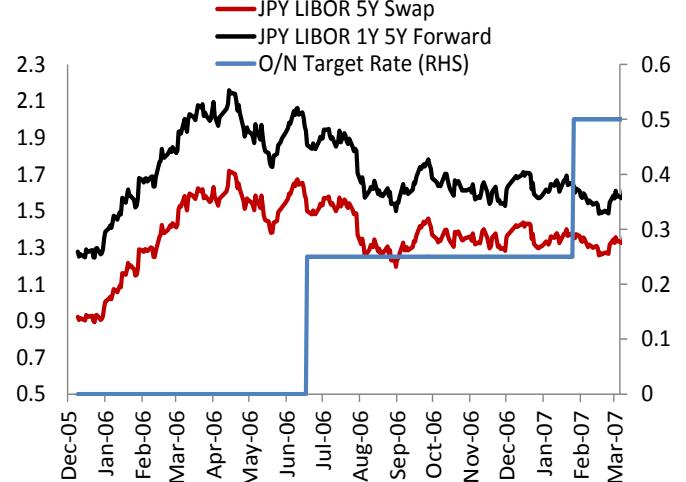
Source: BoJ, Nomura, Bloomberg

Fig. 23: Japan rates reaction into and out of the first hike



Source: Nomura, Bloomberg

Fig. 24: Comparing 5y and 1y fwd 5y and BoJ Policy Rate



Source: Nomura, Bloomberg

2016 Global Rates Volatility Outlook

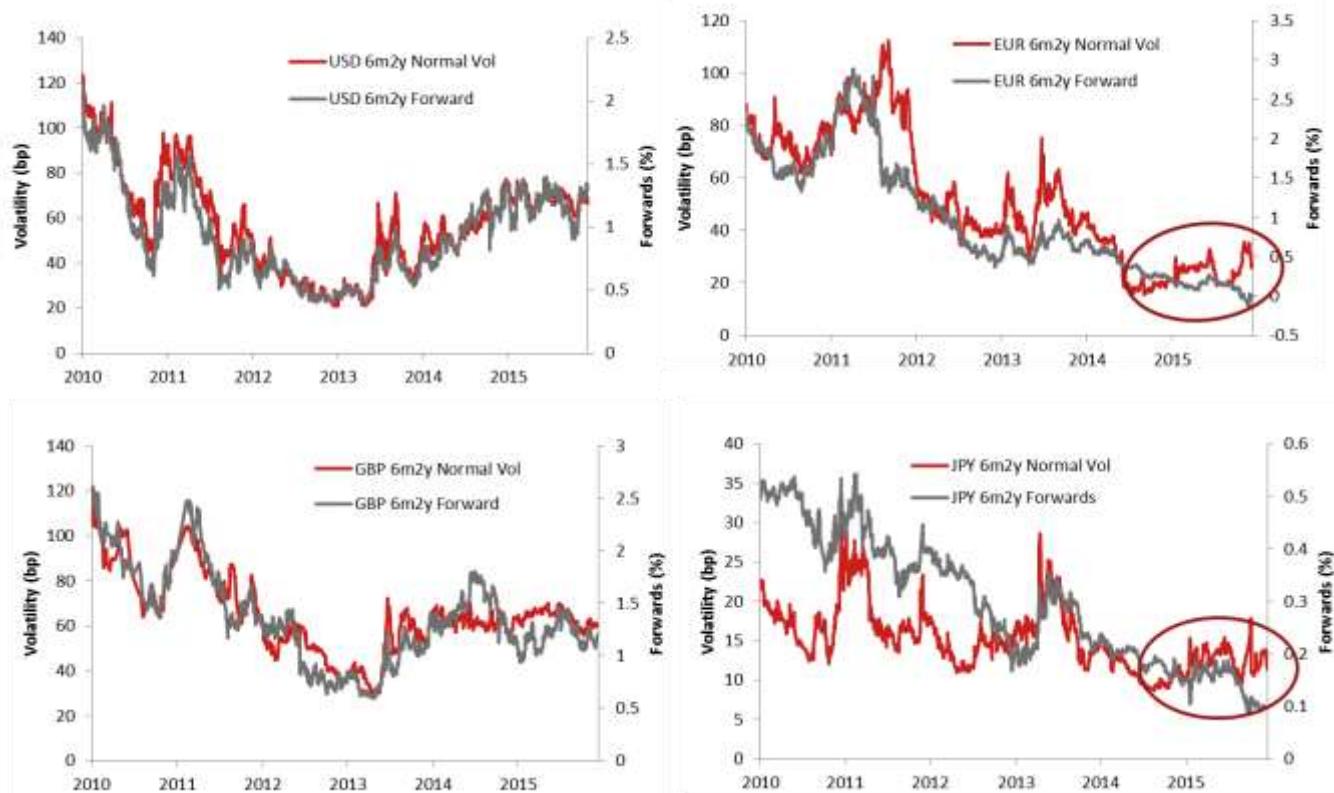
Modestly higher US, UK, EUR vols for very different reasons (see [link](#) for the full report)

Unlike what most market participants expected, 2015 did not see the much-anticipated divergence in global rates volatility between markets that were about to hike for the first time in nearly a decade (USD and GBP) and those that were looking to expand QE (EUR and JPY) or descend far below the ZIRB (EUR). Instead, continuous dovish readjustments in timing and pace of policy tightening have kept US and UK implied vols and skews depressed, while EUR and JPY rates vols have seen bouts of sharp rebounds throughout the year.

Before the Great Recession, higher vol coincided with low rates and steep curves during the trough of the business cycle. The ZIRB and QE changed this entirely and Fischer Black's theory of interest rates as options became the driving influence behind volatility, with rises in volatility linked to higher rates, (and with front-ends pegged, to steeper curves). This relationship continues to prevail in GBP and USD as they move toward rate hikes. While it was the driving force behind EUR and JPY vol until mid-2014, the directionality reversed in EUR (and JPY) mid-2014 as ECB depo rates broke through the zero-interest rate bound and depo rates continue to hit new lows.

Fig. 25: Changing Correlations of Rates and Vol – rising vols with very different conditions

USD and GBP driven by higher rates, EUR driven by negative rates, and JPY set for disappointment



Source: Nomura

Looking forward to 2016, we expect USD, GBP, and EUR rates vols to broadly trend higher but for very different reasons. In contrast, JPY rate vol should remain stagnant in the first part of the year and is likely to under-deliver due to Japan-specific factors. Additionally, we find the relationship between implied vols versus rates in the upper-left to be the most interesting with scope for divergence between EUR and JPY, the two ongoing QE markets.

- In the US, upper-left implied vols should remain well supported against the backdrop of persistent uncertainties around Fed's rate path and data dependency. Strong rate/vol directionality should lead to modestly higher upper-left vol.

- Vols on longer tails can benefit from a possible term premium recovery if the Fed winds down its asset reinvestment program in the middle of 2016 as expected.
- The cheapness of short-dated US vol skews (and richness of receiver skews) on two-year tail appears extremely stretched and we expect some normalization.
- EUR vols have been resilient and buoyed by negative rates. We expect further ECB rate cuts to boost EUR rates vols with zero bound no longer a limitation and increasing downside gap risk. The recent ECB disappointment aside, further cuts will generally boost EUR vol, especially in the ULC.
- Although we are sympathetic with the view that “JPY vols are low and are ripe for a correction,” JPY vols are likely to remain stubbornly low while the 80trn JGB QE purchase target is still in place.
- JPY vols have started to price for an inverse rates/vol directionality similar to EUR vols. But with the zero rate bound unlikely to be breached meaningfully in Japan, we do not expect the implied vol to be realized.
- An unexpectedly early BoE rate hike, relative to market's expectation around year-end 2016 / early 2017, can provide a positive jolt to short-dated left-side UK vol.
- Uncertainty over the looming BREXIT vote will make corresponding foreign and domestic FTQ flows. These in turn will increase demand for gilt front-ends, steepening the curve and increasing gamma. A renegotiation on favorable terms will drop any such short term boost in vol.

Based on the views highlighted above, we recommend the following trade expressions:

- **Long cheap USD upper-left skew with bearish duration bias:** Establish USD 6m2y risk reversal by selling 100mm 6m2y -25bp receiver to buy 100mm 6m2y +30bp payer at zero cost.
- **Long USD upper-left vol and skew with bearish duration bias:** Short USD 6m2y 1x2 payer spread by selling 100mm 6m2y ATMFS payer to buy 200mm 6m2y +25bp payer at zero cost as a tactical mark-to-market trade.
- **Long USD 6m1y10y forward vol at 83bp vol with positive carry:** Long 18m10y ATMFS swaption payer against equal notional of 6m1y10y ATMFS midcurve payer.
- **Long USD bottom right forward vol with attractive positive carry:** Long 12y5y swaption versus 2y10y5y midcurve calendar spread.
- **Monetize richness of the USD skew through 2y2y receiver ladders:** Long USD 100mm 25bp ITM 2y2y receiver, short USD 100mm 2y2y ATMFS receiver and short USD 100mm 87bp OTM 2y2y receivers at zero cost (ref forward: 1.98%).
- **Cheap long-dated forward vol in EUR:** Short EUR 5y3y2y midcurve payers, short 8y2y payers, both struck at current 3y2y forward rates.
- **Cheap short-dated midcurves in EUR (de-correlation):** Long EUR 100mm 6m5y5y ATMFS payers, long EUR 100mm 6m5y ATMFS payers, short EUR 100mm 6m10y payers.
- **Oppose flattening EUR vega surfaces:** Long EUR 100mm 15y20y ATMFS payers, short EUR 291mm 5y5y ATMFS payers, for a take-out of around 475cts, and a carry of 260cts over 1y, and 530cts over 2y.
- **UK upper-left vol outperformance on earlier-than-expected BoE hike:** Long GBP 9m2y straddles against GBP 9m10y straddles at flat vega and modest positive carry.

2016 Global Inflation Outlook

Linkers offer value but with a bumpy start in 1H16 (see [link](#) for the full report)

After a tough 2015, the one asset class that we continue to believe (in general and across the developed rates markets) that offers value is the inflation-linked products. We expect as the clouds part and inflation base effects improve in 1H16 that investors will drive valuations back to more normal levels. However, we won't chase linkers just yet as it will be a bumpy ride. So until we get visibility on when oil is stabilizing, we advocate using supply events and overshoot moves as a time to average into inflation products.

The divergence theme of central bank policies has had a significant impact in the global inflation linkers' market throughout 2015. The start of ECB QE earlier in the year pushed global real yields lower, much more so in EU than US as expected, only to see a sharp reversal in April and May. With the Fed in the process of normalizing rates in the US but the ECB still in QE mode and lower rates further negative, the US long-end real yields have stayed elevated in contrast to EU real rates, which continue to dive into further more negative territory. As a result, US 10yr real yields are not just the highest out of G4 linker markets, but also the only ones still yielding positively (Fig. 26, LHS).

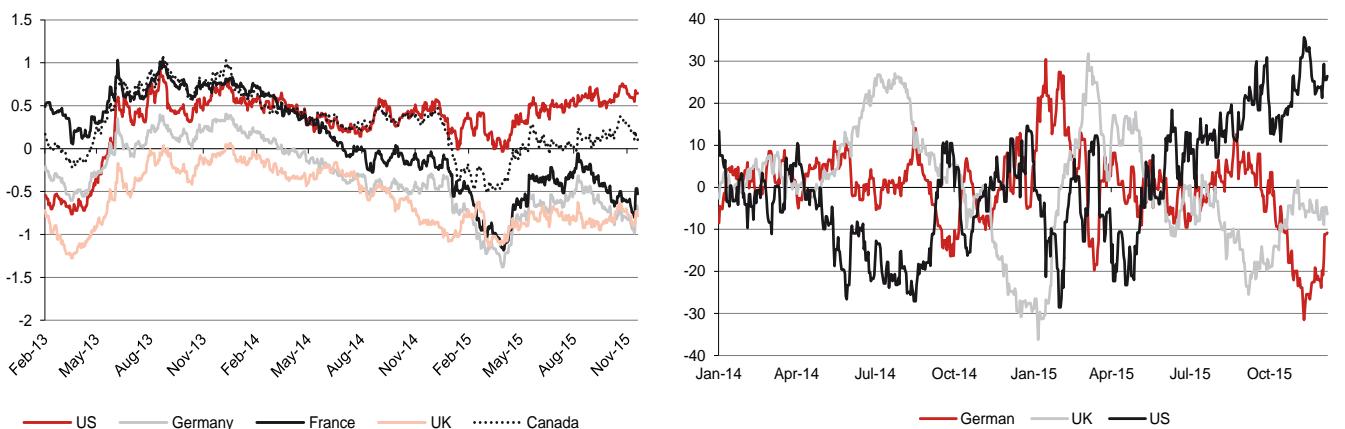
In addition to monetary divergence, the continued downward pressure in energy prices and commodities in general has dampened demand for global IL breakevens (BEIs) and that has driven a wedge between US/EU and UK BEIs, largely due to the lower oil sensitivity in UK. Even between US and EU, the expectation of ECB QE has taken the spread between US and EU cash 10yr BEI to the narrowest since about 2012.

Interestingly, however, EU long-end inflation swap, e.g., 5y5y, did not outperform its US equivalent as much as the cash BEI spread would suggest. ECB's PSPP programs are boosting EU linkers both via inflation expectations and direct purchases, while dealer balance sheet constraints and the tightening of UST swap spreads are keeping a lid on TIPE BEIs vs swaps. We expect such dynamics to persist into 2016, hence prefer to express our BEI long expression via cash IL in EU and IL swaps in the US.

In terms of real yields, we like underweight UK on a cross-market basis. To assess the value of UK real rates relative to other markets, we use our factor model of the global real rate (Fig. 26, RHS). We find that after a period of large deviation from other markets and from the global real rate until the beginning of September, the UK market has started to normalize. What the model implies is that a short position on UK10yr real yields versus some weighted-average of euro and US real yields would have then been a profitable trade. However, such opportunities are gone for now; in other words, short UK real rate positions against US and euro real rates have lower potential at this point.

At the same time, the UK real rates are the closest to "neutral" as seen in our model. This therefore implies that UK real rates serve as a non-biased trading vehicle to express outright view overall for global real rate expressions at the present time. Whereas US real rates are in contrast too far above the neutral model level, and the euro market too deeply below, making outright positioning in US and EU more subject to idiosyncratic changes. That said, given our fundamental views, we believe that US real rates will not remain unhinged forever and offer value for real rate investors looking for higher yields.

Fig. 26: G4 10yr real yields, % (LHS), deviation from the global real rate, pp. of st. dev. (RHS)



Source: Bloomberg, Nomura

Enclosed are our regional inflation views with trade ideas.

- **Europe:** The ECB meeting has had a major impact on valuations and provides attractive entry levels on some PSPP-related trades. It is unlikely the latest ECB meeting signaled a major change in strategy, and the ECB stands ready to counter further downward drift in inflation – we see this as a support for intermediate inflation valuations at the turn of the year, even though we stay away from the front-end for now.
- **UK:** RPI valuations now are almost exactly the same as they were in January 2015, yet RPI inflation is 40bp lower and surprising to the downside. The share of the CPI basket in deflation remains unusually large – despite our forecast for a sharp increase in prices later in 2016, the near-term suggests caution. Investors positioning for normalization on UK nominal rates can hold short positions as a hedge. If inflation rises, short nominal rate positions are likely to benefit considerably through real yield increases. After a sharp correction, the UK real rate is now fully in line with the global real rate cycle, and in our view is the best instrument to express outright real duration views with minimal idiosyncratic interference.
- **Japan:** Core CPI inflation is likely to pick up speed again in FY16, but we expect a delay in reaching the 2% inflation target. 10yr JGBi BEIs are likely kept lower by BoJ purchases of nominal securities and widening USD-JPY basis prompting foreign investors flows into the JGB market. We believe BEIs could begin to rise once 10yr nominal yields begin to rise on a halt in USD basis widening, even without reflationary measures from the government or BOJ, or even if crude oil prices and therefore benchmark CPI remain low, in our view.
- **US:** We see value in long-end real yields and expect the real curve to flatten into Fed hikes while energy market remains volatile. We maintain a mildly positive outlook on Core CPI in 2016; thus we believe BEIs are very attractive inflation hedges, especially when offering positive carry, as a gradual Fed hiking cycle should not hurt BEIs. Lastly, we are cautiously constructive on TIPS ASW, both outright and vs. UST, in a new market regime where both balance sheet availability and liquidity premium are priced higher.
- **Australia:** We look for opportunities to initiate Australian BEI longs. It is, however, not clear Australian BEIs offer superior opportunities to other IL markets, especially given a potentially soft CPI headline report in late January.
- **Inflation Trade Ideas:** Long HICPxT 5y5y, Long BTPei 2041BE vs. Short HICPxT 20yr swaps, HICPxT 2/10y steepeners, Long 10yr USD inflation via ZCIS, Long 30yr TIPS vs. Short 5yr USTs, Long TIPS ASW on dips

2016 Global Supply Outlook

A friendly primary markets dynamic lies ahead (see [link](#) for the full report)

We have come a long way in terms of bond supply dynamics. As seen in Fig. 27, there has been steady improvement in net issuance across G4 government bond markets. In 2016 we expect primary markets to see a continued healthy decline in issuance trends.

- United States:** After a record year of corporate issuance (which crowded out USTs at times), we estimate high-grade net issuance to be slightly less than \$1trn in 2016, down roughly \$300-400bn from the 2015 and 2014 run rates (note this reduction includes FRN issuance, which has been \$164bn for the last two years but now the net issuance is zero). In terms of gross, we don't see much of a decline. Healthy falls in net issuance will likely be visible in the more liquid rate products (USTs, SSAs and Agencies). With US deficits getting smaller and the Treasury most likely to increase its T-bill program's debt outstanding, we project a slightly over \$50bn reduction in longer-term UST issuance (largely via 2-yr and 3-yr auction size cuts).
- Euro area:** Focusing on the 11 largest euro area economies, we expect 2016 gross sovereign bond issuance nominal and linker supply to be marginally lower at around €890-900bn compared with €900-910bn in 2015. Looking at the main issuers, we expect an uptick in German issuance because of its redemption profile, while France should see a similar pace of supply as in this past calendar year. In the peripheral space, Spain's and Italy's issuance are likely to be reduced.
- United Kingdom:** Despite the improving Central Government Net Cash Requirement, we expect increased gilt issuance due to the limited offsetting impact from NSI and bill issuance. Given an appetite for longs, the DMO could increase issuance in the long-end sector and linkers. Overall, we expect gross supply of Gilts for FY16/17 to rise to £135-138bn compared with £127.4bn in FY15/16.
- Japan:** We estimate gross JGB issuance will fall on a "budget basis" in 2016. This could be covered by less super-long JGBs, in our view.
- Dollar-Bloc:** We forecast borrowing needs to decrease by AUD20bn in Australia due to a modest decline in the budget deficit and a significant decline in maturities in 2016-17. In New Zealand, growth is expected to be weaker, but we expect the impact on supply to be limited where we expect a marginal decrease. In Canada, a bigger deficit as well as the commitment of the newly elected government to increase fiscal spending should see issuance to increase by CAD 13bn.

Fig. 27: G4 Net nominal and linker government bond issuance (in local currency terms)

| | Net Issuance (in local currency) | | | | | | |
|-----------|----------------------------------|------|------|------|------|----------|----------|
| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 (F) | 2016 (F) |
| US | 1535 | 1279 | 912 | 843 | 779 | 637 | 396 |
| Euro area | 498 | 375 | 183 | 319 | 259 | 217 | 214 |
| Germany | 70 | 38 | 10 | 16 | 28 | 1 | -9 |
| UK | 128 | 130 | 112 | 102 | 62 | 57 | 67 |
| Japan | 43 | 23 | 27 | 38 | 29 | 35 | 32 |

Net issuance: Mainline bond issuance - Mainline bond redemptions

Source: National treasuries, Nomura

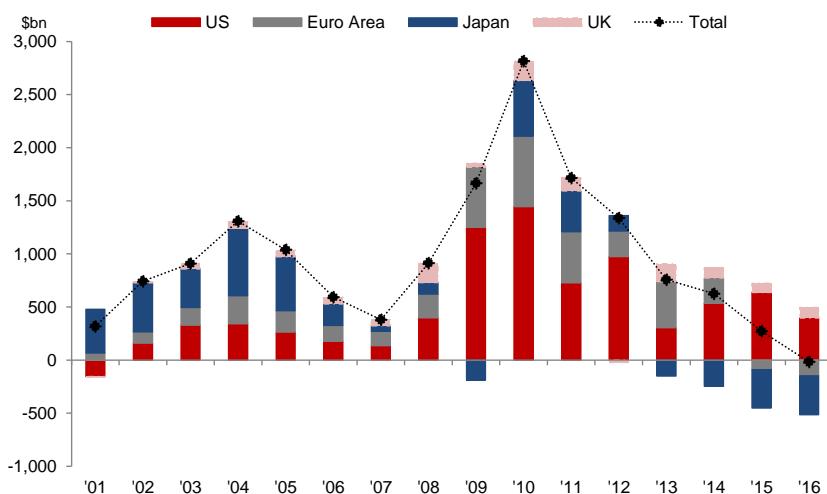
According to standard calculations, net supply continues to improve on a global basis, but when we look across the regions, changes in government bond supply are very unique. Meanwhile, central bank policy continues to shape supply and demand dynamics in the global bond markets. When we add up net issuance and QE purchases, with US long-term debt issuance projected to decline ahead and with the ECB and BOJ conducting QE for another year, aggregate G4 government bond supply for 2016 in net-net terms will likely be negative (roughly -\$30bn versus +\$244bn in 2015) for the first time in our records (Fig. 28).

Unlike the US and UK, the euro area remains in fiscal contraction mode (recall Germany prides itself on balanced budgets). Conducting QE while maintaining a fiscal contraction presents a very different situation versus the US and UK (and currently Japan) QE periods, which were conducted during periods of large budget deficits. One can argue that the US

and UK markets did not experience scarcity pricing when the Fed and BOE conducted their QE's. However, this is not the case in the euro area (and lately in Japan) as net-net supply has been running negative. Based on our supply expectations for the euro area in 2016 net-net issuance (gross supply – bond redemptions - QE purchases) should be around negative €135bn. These effects may be more pronounced, with our economists' bias for a further round of easing from the ECB possibly in Q2 2016 (see [link](#)).

However, because of price action after recent central bank events, even if net issuance continues to be mopped up by the ECB and BOJ (and this displacement effect is helping USTs and Gilt demand as a result) markets may be looking beyond the next year and half and focusing (Fig. 29) on what happens when central banks eventually stop their QE programmes.

Fig. 28: G4 government bond “net-net” supply taking into account G4 QE purchases (past, present and future)



With ongoing QE purchases by ECB and BOJ and US L/T debt issuance declining, net-net supply for G4 will likely be negative for the first time.

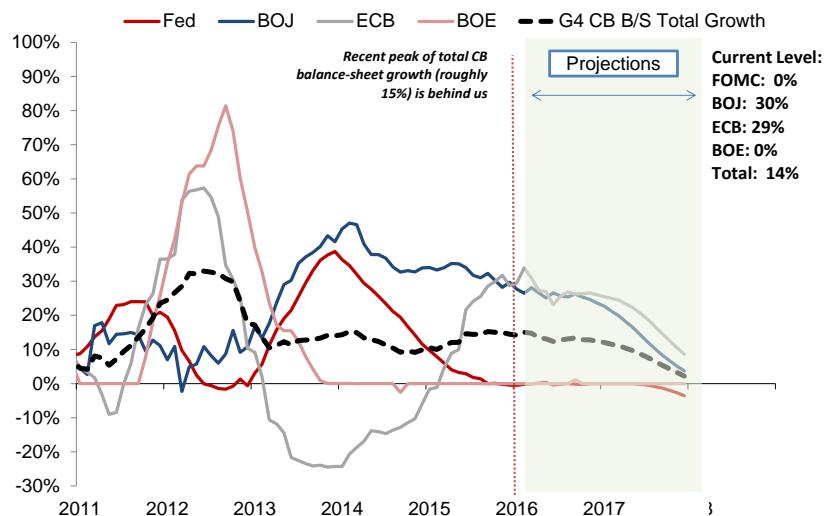
Compared with Japan right now and the US and UK, which run/ran large budget deficits during their QE programmes, the euro area remains in fiscal contraction mode.

Based on our expectations of supply and purchases EGB issuers will have negative net issuance (net of ECB QE purchases) almost across the board.

*Net-Net issuance=Gross bond supply – redemptions – QE purchases (main bond lines only), private sector reinvestments not included. US: nominal, TIPS and FRNs gross supply – redemptions – Fed purchases. Euro area: nominal main EGB supply – redemptions – purchases (nominal based on expectations), UK: nominal supply – redemptions – BOE purchases (cash), Japan: nominal JGB supply – JGB redemptions – JGB purchases (nominal).

Source: Nomura

Fig. 29: Y-o-y percentage change in G4 central bank balance sheets (growth rates slowing in next 18-24 months)



For now the ECB and BoJ's balance-sheet expansion is running around 30% year-on-year (but is set to slow).

The Fed and BoE are likely to keep their balance sheets constant as long as they can while embarking on hikes.

Central bank QE programmes have shifted the optics on supply/demand for years after Great Financial Crisis (GFC), but if peak activity is behind us, deficits need to improve further across the G4 for the friendly net supply environment to keep markets balanced without central bank support.

*Net-Net issuance = Gross bond supply – Redemptions – QE purchases, private sector reinvestments not included
Source: Nomura

FX Basis Blazes Into a New Regime?

Note: This is an updated excerpt from a *Rates Insights* published on 20 Nov 2015 ([link](#)).

There are a number of factors affecting FX basis swaps. We believe that the changing regulatory backdrop that is affecting other asset classes is playing a role (as is the Fed, and the fact that for the first time the markets will get clear central bank divergence).

Traders' incentives to take risk and moods are down and people are not willing "to arb" away anomalies as quickly as during the pre-regulatory regime owing to the costs to capital and regulatory rules in place. The increased hurdles to doing business introduce frictions that have led to relationships once thought of as inconceivable (such as USTs trading cheaper to swaps and FX-implied LIBOR rates above where one can borrow from the Fed's swapline and book a profit), which are in turn affecting the trading world.

Case in point, in Fig. 30, we clearly see how the world has changed. In the past, demand for dollars would be perceived as an acute funding scare in the making, which would push up US swap spreads (in the chart, USDJPY 5y basis is inverted by multiplying negative 1 by the value of the time series). If the old relationship still existed, 5-year US swap spreads would be closer to 30bps versus the negative levels seen during 4Q15.

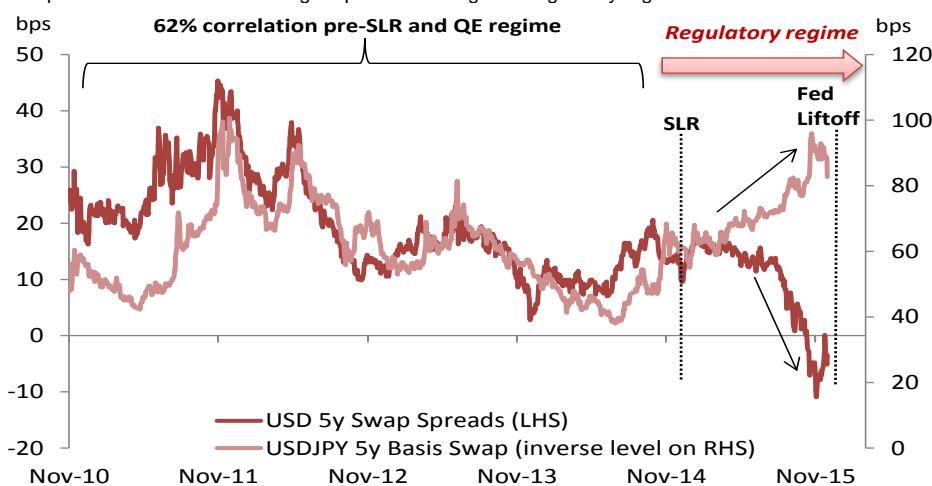
We think the year-end calendar is making the optics fuzzy and the closing of books across the Street (after another tough year for overall macro investors) is creating a higher hurdle for arbitragers to fade these moves, but we expect the turn of the calendar to bring some normalcy to both spreads and FX bases. In addition, the uncertainty leading up to the Fed could have exacerbated the FX basis moves, but now that the first hike is over, that should ease market tensions (especially if the Fed aims to hike gradually and can convince overseas borrowers to avoid hoarding USD funding). That said, as short rates go up, we would expect wider funding spreads to persist and that too would see LIBOR rise eventually, as implied by the FX-adjusted LIBOR series.

Although most DM FX basis swaps for dollars have had the same directionality, there are degrees of differences in terms of magnitudes. As our Japan team notes (see [link](#), p. 4), fear of the Fed starting its hiking cycle (after years of US ZIRP) and the regulatory push to address mismatches in funding risk could have also driven the terming out of dollar-funding in Japan specifically (which seems to be happening, as it is not just 3-month basis that is moving, but also further out the basis term structure, such as 5s and 10s).

In addition, the widening of USDJPY basis is more noticeable than against other currencies because of Japan's greater need for dollar funding (see [link](#)) and due to the wider corporate credit spreads now present between the US and Japan. If 2015 ends up being the peak of US corporate issuance as companies "locked-in" before the Fed and the fear over the first rate hike by the Fed wanes, the USDJPY basis should normalize a bit from that point of view too. Until then, it still makes sense for Japan investors to invest in US credit products and mortgage-related securities, as well as longer-duration USTs (even with the higher hedging costs). However, the structural changes mentioned in this report mean that the hurdle rates may be higher ahead.

Fig. 30: 5y US swap spreads vs. USDJPY 5y basis swap (inverted)

In the past the correlation to funding & spreads was high but regulatory regime has ushered in a new world



Source: Bloomberg, Nomura

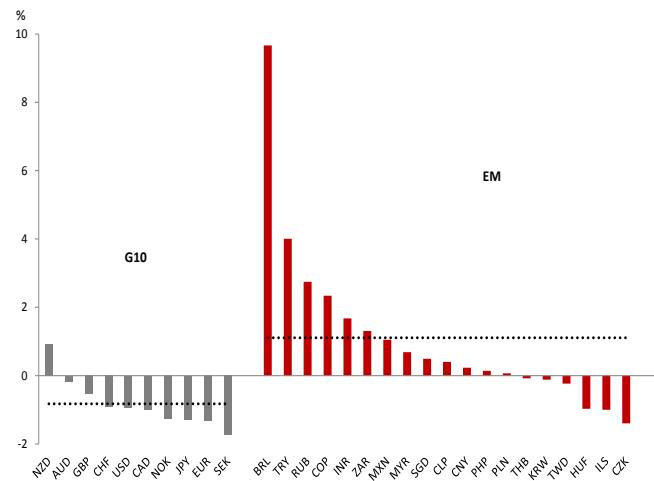
The Case for EM Local Debt

Global Disinflation and Structure of EM Balance sheets point to value in EM Duration

- The last two years have seen significant pressure on EM assets, but EM local rates have generally been resilient. There have been specific areas of tension in local bonds, with Brazil the best example. But most EM local curves have been resilient, despite pressure on EM FX, credit, and equity markets.
- The resilience of EM local debt was particularly impressive in Q3, when selling pressure of EM assets was otherwise fairly indiscriminate.
- Structural global forces continue to be broadly favorable for high-grade fixed income instruments. For example, the FOMC recently recognized that the equilibrium real interest rate (r^*) is lower in this cycle than in past cycles.
- Moreover, China is facing a cyclical downturn, driven by a significant moderation in industrial and property market activity. This is set to be a powerful global disinflationary force over the next few years.
- At the local level, we continue to note that emerging market balance sheets (at the country level) have a very different structure today than they did in the 1980s and 1990s. In particular, the exposure to hard-currency debt looks manageable in most countries. Importantly, this means that currency depreciation does not feed into rising default risk on EM sovereign debt in the way EM markets have typically seen in the past.
- For global investors, the opportunity to take advantage of bond bullish forces (disinflationary and low real yield drivers) in major markets is limited, simply because nominal yields are already at historically low levels (although some would argue that the U.S. may be an exception to this).
- These arguments imply that EM bond markets are an obvious place to look for returns (and hedges) related to a low-growth / low-inflation global equilibrium in coming years.
- For updated on our views related to our EM debt dynamics topic, please see [link](#).

Fig. 31: Real yields comparison

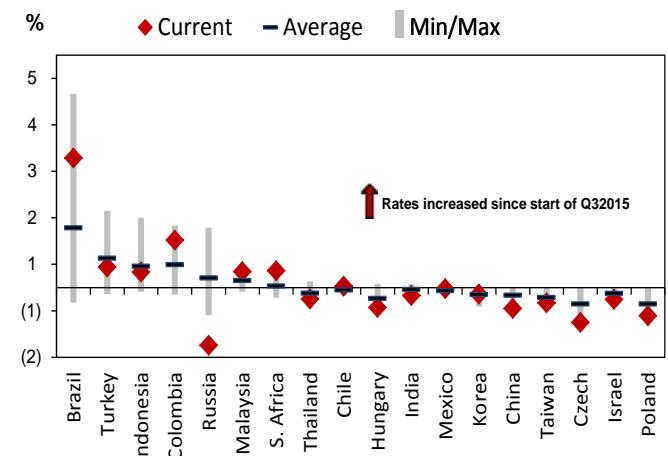
Nominal 2-year swap rates minus consensus inflation expectations



Source: Nomura, Bloomberg

Fig. 32: Local rates in Q3 2015

Shows range during Q3, with 1 July 2015 set to 0. Current is value as of 23 November 2015



Source: Nomura, Bloomberg

Ten-Year Cycle of Credit Crises

Investment strategy after China shock

Note: This is an excerpt from a report published 6 November 2015 ([link](#)).

The three major economic cycles in the economy since the 1980s have all led to recessions following the collapse of asset bubbles and the resulting credit crunches. This was caused by disinflation that took hold in developed economies, which prompted central banks to keep monetary policy easy, resulting in high volatility in asset prices. All of these cycles were marked by a credit crisis that occurred in the seventh or eighth year of the 10-year economic/credit cycle. The underlying circumstances that made the three cases similar were that: (1) there was little room left for the real economy to grow further, and inflation begins to accelerate; and (2) developed economies began to tighten monetary policy, following the US. Also, a precursor shared by all of these cases was: (3) a sharp government bond selloff, particularly in Japan. In the current cycle, these conditions may all be met by 2017 at the earliest and by 2018 at the latest. A credit crisis may be triggered by monetary tightening either in the euro area, or in China, which became a main factor in the current cycle, and may stem from markets that are related to the US corporate sector and/or China, which have fairly strong fundamentals and will likely become overvalued on investor buying.

In all of the three cases, the real economic cycle lasted about 10 years, and financial markets went through three cycles in each of the 10-year periods, each marked by a financial shock that occurred at some point. One to two years after the economic cycle bottomed, a second dip occurred, followed by a third dip four to five years after the trough. While the second dip was primarily caused by factors in the real economy, the third dip was attributed to the financial market. Both the second and third dips led to only a brief slowdown in the real economy, and policy response to the slowdown further fuelled credit expansion.

In contrast, the credit crises coincided with slowdowns in the real economy, which led to a recession through credit contractions. We view this summer's China shock as a third dip in the current cycle, and therefore believe that the real economy will return to a growth trajectory, supported by central bank easing in the euro area and China. Although the energy industry may have entered a credit contraction cycle, this is likely to reduce shale oil production and cause higher inflation in the medium term.

We believe the China shock has ushered the economic/credit expansion cycle into its last stage. As it is likely to be marked by central bank tightening, fixed-income investment may not perform as well as it did in the early and middle stages of the cycle. In contrast, undervalued markets, e.g., those that continue to benefit from central bank easing and assets that have been avoided, may outperform on safe-haven investments.

As we head into 2016, once the ECB ends with easing in the current cycle government bond markets are likely to come under pressure, as the Fed continues its rate hikes. Particularly, the JGB market is prone to a sharp selloff, as it is likely to normalize after a sustained QE period. That said, credit spreads will likely remain relatively unchanged (though yields may rise) on flows from economies where the central bank is still in its easing cycle. Spreads may tighten further in the euro area while the ECB looks to further easing.

US equities, which look overvalued now, are likely to continue rising, while their price-earnings continue to fall. In Japan, price-earnings may continue to rise, supported by BOJ easing. Real estate prices remain undervalued globally, and may begin to attract investor flows in the near term, or may be looked to as safe-haven investments for a potential recession.

Key risks to our scenario include: (1) the US economy entering a recession; and (2) the BOJ keeping its QE policy in place for an unexpectedly long period. If the US economy, a global growth driver, has entered a recession even before the Fed raises rates, that would imply that central bank easing was not effective in supporting cyclical economic/credit expansion. That should give rise to a view that the equilibrium policy rate, i.e., the nominal potential growth rate, is negative. In this case, we would expect corporate business activity to slow substantially, and the global economy to enter a depression.

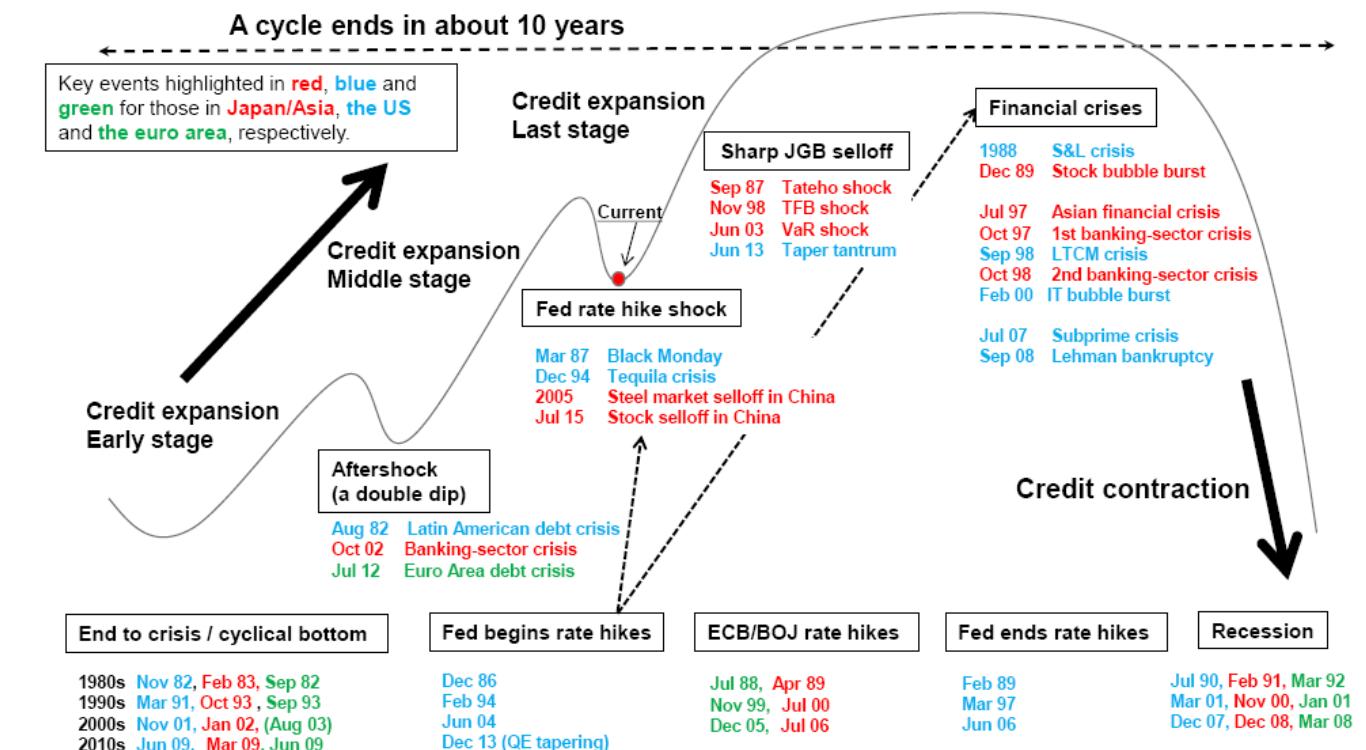
In the second risk scenario, if the BOJ is unable to start discussing a QE exit in 2016, the current policy framework may remain until almost 2018 to give policymakers time to assess the impact of the consumption tax hike to 10%. That should inflate asset prices further domestically, while Fed rate hikes lead to a slowdown in the US economy.

The terms of both Prime Minister Abe and Governor Kuroda will end in 2018, leading to uncertainty over how the government and BOJ exit the current reflationary policies. Depending on crude oil prices, and thus Japan's current account balance (deficit or surplus), concerns over Japan's fiscal sustainability may rekindle, in our view. This may give rise to the risk of a sharp JGB market selloff and a credit crisis, as seen in 1998.

We also note the impact of the shale revolution and new financial regulatory regime, new factors that could make the current cycle look distinct from those in the past. The shale revolution led to increased investor flows into the energy industry, and lowered oil prices, which prompted central banks to adopt dovish policies and fuelled the credit expansion. However, this summer's RMB devaluation shock has caused a credit contraction cycle. Over the medium term, this should improve supply and demand in the crude market, and may lead to higher oil prices. This, in turn, may prompt central bank tightening and credit contraction, which could harm the global economy.

The adoption of new financial regulations may slow the process of credit expansion and thus macroeconomic growth, and could also prolong these cycles. We partly attribute the slow pace of economic recovery in the early and middle stages of the current expansion cycle to newly adopted financial regulations. Although it is difficult to quantify the effects from the regulatory regime, some investors may have avoided derivatives instruments because of their high regulatory risk weights, and/or looked to riskier underlying assets to reduce on balance-sheet items. These trends may lead to an inflation bubble in these markets.

Fig. 33: Mapping of 10-year credit cycle and key events



Source: Nomura

Cross Market Focus

US Rates

2016: A tale of two curves due to unconventional tightening

Front end: With the December liftoff in the rear view mirror, investors and speculators alike are growing excited to see the long-anticipated hiking process under way. Since the technical nature of this tightening regime (via RRP) puts the front-end on high alert along with the historical pattern of the Fed hiking numerous times in a cycle, 2s and 3s could potentially fall under meaningful pressure over the better part of 2016, in our view.

We pencil in a higher 2yr rate in Q1 (Fig. 34) and more importantly, the front end could continue to fall under pressure into Q2, given the risk of two back-to-back hikes in 1H16, which would trigger further curve flattening in a bearish format, in our view. Notably, additional cheapening pressure for the front end in early 2016 could also stem from the increased usage of RRP facility, as the Fed manages the Fed funds (FF) rate in its new range and sends Treasury GC funding costs higher as well. Into Q3, however, we expect the usual positive bond seasonals in the summer to provide some reprieve as 2yr rates stabilize, but Q4 could set up to see another selloff as the market looks ahead to a continuation of the hiking cycle in 2017 once the presidential elections are over.

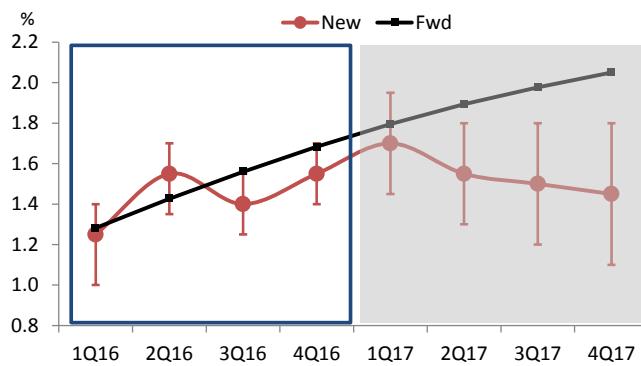
The Fed lowered the dots again, as a signaling tool that the hiking path will be gradual and more tied to the lower R^* (see Fig. 34 for our dot estimation ahead). But we caution against using the Fed's dot plot as a valuation metric given they reflect the expectations of Fed members and they are not the actual target for FOMC policy. In our opinion, we view the FF rate level and actual adjustments in FF rates as being the natural drivers again and not the dots per-se. So unless dots change dramatically (say 3/8 to 5/8 points in either direction) dots relevance will continue to fade as just an academic exercise. Overall we have 2s more at risk in 1H16 and early summer (especially if the Fed delivers back to back hikes) in June/July. If as we expect a faster pace by the Fed ends with a sharp FCI tightening (and that results in them pausing) it could always move to 1/8 hikes if it wants to continue to normalize, but by then 2s would slow their rise as a result.

Bottom line, we believe the higher the 2yr rate gets, the more the market will realize the difficulty of breaching and then staying above 1% on FF will be for the Fed (as listed on pages 33). We expect the attention to start shifting away from hikes and to balance sheet policy, which the Fed has indicated it will revisit when hiking is "well under way." The Fed may stay on hold at that point of the cycle, due to the challenges of starting to unwind the balance sheet with minimal market impact, alongside navigating new hiking tools to keep the economy chugging along at higher rates. As a result, we believe investors could push out hikes into the future, leading to a lower 2yr rates forecast for 2H16 and beyond.

Long end: As we enter a new period of US rates being driven by both the real prospects of multiple Fed hikes and adjustments to term premia (due to supply/demand dynamics changing), it's actually possible that long-term rates will be more interesting and volatile

Fig. 34: Nomura US Rates Forecast – 2-year US Treasury

Rising slightly faster than previously expected before stalling out sooner



Source: Nomura

Research analysts

US Rates Strategy

George Goncalves - NSI
george.goncalves@nomura.com
+1 212 298 4216

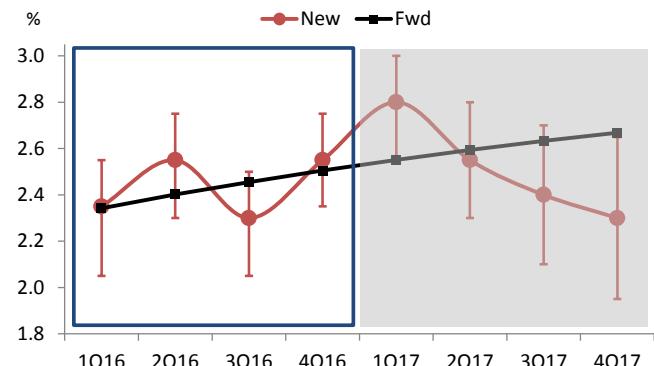
Stanley Sun - NSI
stan.sun@nomura.com
+1 212 667 1236

Penglu Zhao - NSI
Penglu.Zhao@nomura.com
+1 212 667 9516

Tracy Jin - NSI
tracy.Jin@nomura.com
+1 212 667 1642

Fig. 35: Nomura US Rates Forecast – 10-year US Treasury

We expect the back end to swing around more overall in 2016/early 2017



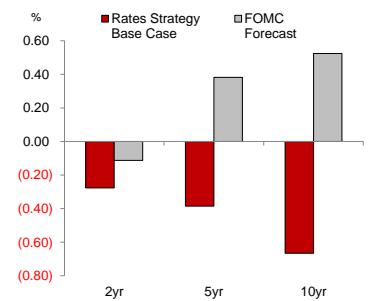
Source: Nomura

than the front end during the first 12-18 months of tightening. This would be in stark contrast to what took place during the 2004-06 period where long-end rates were well contained, as the global savings glut saw foreign investors push out the curve for yield pickup. Foreign investors will continue to be key drivers of USTs (because US yields continue to offer value versus Bunds and JGBs), but the distinct risk now is that a combination of higher funding costs (i.e., think FX basis while Fed is hiking and other CBs are not) and potential FX reserve manager selling or not buying (i.e., think EM-FX in Q3/Q4) would see long-end rates moving around more so than in the last cycle.

As Fig. 36 shows, although spot UST rates are richer than the Fed dot plot, they are still cheap vs. our own estimation. The difference can be accounted for by the potential gyrations in term premium, which has been hovering around zero in the ZIRP world. Typically during a hiking cycle pre-crisis, term premium can average above 100bps while in the post-QE world, we believe it is sensible to pencil in term premium at about 25 and rising to 50bps, as the stock effect of the Fed's balance sheet decays, let alone the prospect of shrinkage. Once the Fed gets rates in the 1% or so target range, talks about balance sheet reduction may resurface. This is when bear steepeners could work, which is why we like 1yr fwd steepeners on any further flattening as long-ends would be at risk.

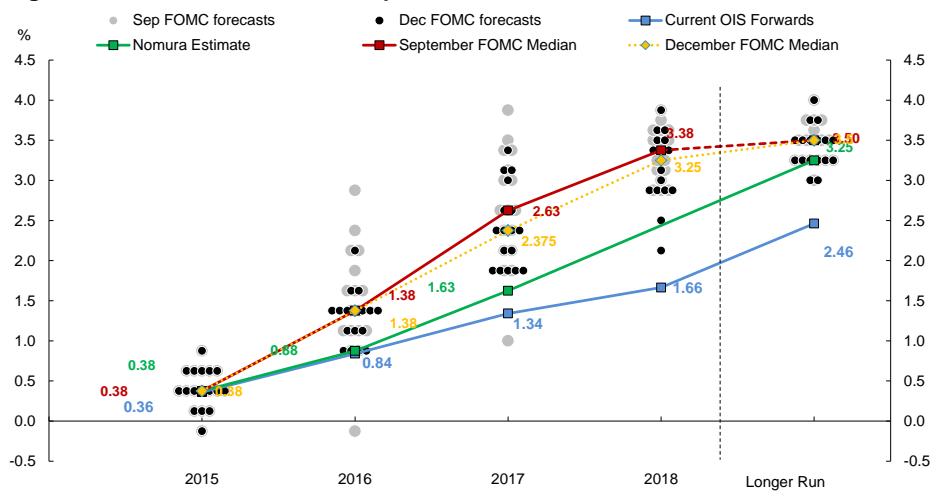
We believe that after the Fed hikes again in H1 and into early H2, there could be a summer rally followed by a taper-like shock afterwards, as investors watch each future FOMC for any exit strategy discussion in late 2016 / early 2017. That said, we ultimately believe the lower R^* neutral rate will cause investors to return in force into the long end but that, along the way, long-end rates will move around a lot. This is consistent with our fundamental-based Yield Metrics (YiM) model, which sees a lower bound of 2% on 10yr UST during 2016, with a potential overshoot to upper bound of 2.90% (Fig. 38).

Fig. 36: Spot rates vs. fair value



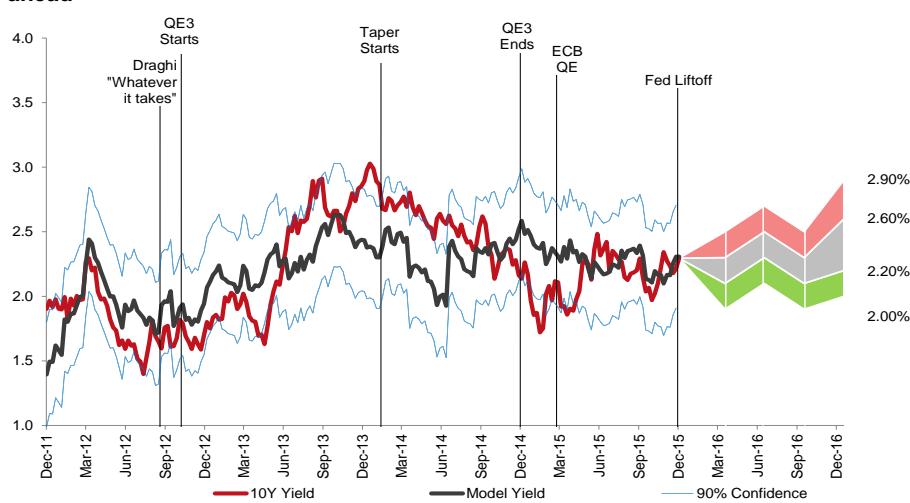
Source: Nomura, FOMC

Fig. 37: FOMC December 2015 Dot plot vs. OIS and Nomura R^* -based dot estimates



Source: FOMC, Nomura, Bloomberg

Fig. 38: 10yr UST vs. Yield Metric model: 2% serving as a strong line of resistance ahead



Source: FOMC, Nomura, Bloomberg

Where do we expect the Fed to take rates up to in this tightening cycle?

We stress that this is not “your parents tightening cycle” so other cycles offer very little guidance, in our view. As we have stated numerous times, getting off of zero should not be equated to a return to old tightening periods, which saw rates rise meaningfully higher.

In our view, the divergence between developed market central banks (with most easing while the Fed attempts to hike) will have the Fed hostage to the dollar movements (see our FX team’s [2016 forecasts](#), which still show the dollar outperforming most ahead).

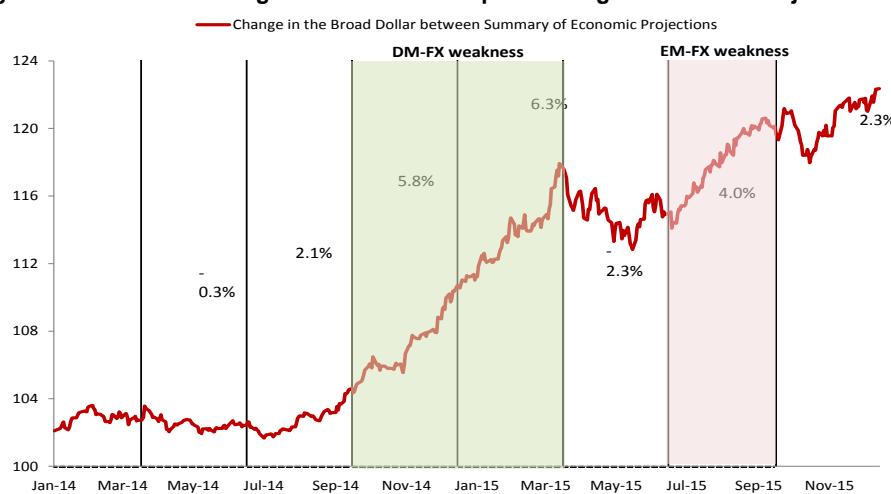
Our rule of thumb is that the Fed will not hike in a given quarter if the dollar rallies more than 3% and realized inflation as well as inflation expectations remain under pressure.

We also argue that the Fed is not as concerned when the market experiences developed markets currency weakness, but the Fed is more likely to react to EM weakness.

The EM channel plays a crucial role in this hiking cycle because, after years of Fed ZIRP and QE policies, the broader EM world has accumulated significant dollar liabilities. A quick rise in US rates with the dollar remaining strong would further weaken EM countries and reduce overall global growth which would still impact the US via import/export forces.

The most important factor is that EM central banks can sell their UST holdings to defend local currencies, which would push up US interest rates, limiting Fed hikes ahead.

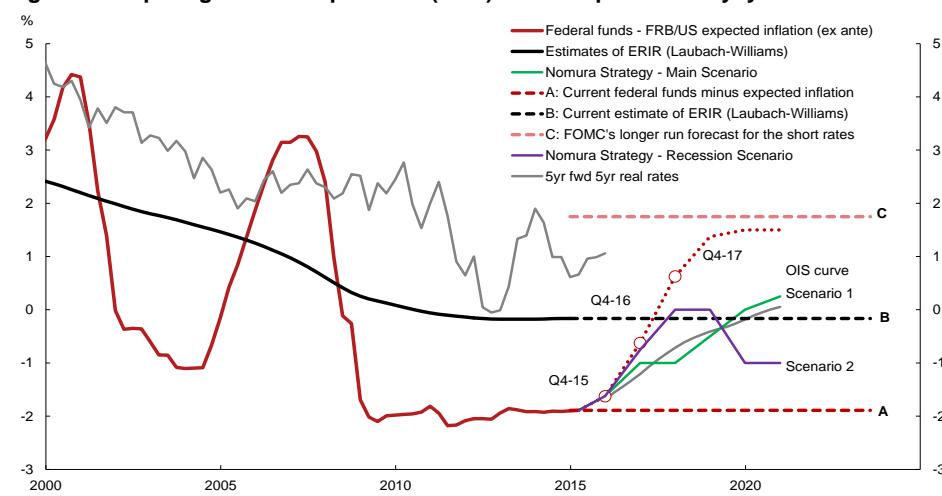
Fig. 39: Central bank divergence will make Fed path hostage to the dollar adjustment



Source: FOMC, Nomura, Bloomberg

In the October minutes, we noticed Fed staffers presented to the FOMC about R^* , the equilibrium real interest rate (ERIR). Our economists have been ahead of the curve on this topic, having written about it earlier this year (see [link](#)), and we have been using this approach to fine tune how high the Fed can raise the Funds rate. We believe Fig. 40 speaks for itself: raise rates too fast may get you bullets that you might then need to use. Instead we argue for a slower pace, and a potential pause at 1% before a push to +2%.

Fig. 40: Comparing R^* versus potential (Real) fed fund paths and 5y5y real rates



Source: Bloomberg, Nomura, San Francisco Fed

In Fig. 41, we list out the top 10 reasons why we believe it will be challenging for the Fed to push up short-rates far, and that as the FF rate gets in and around 1% the Fed could pause and reassess. In addition to the ERIR framework mentioned above and the CB divergence story serving as anchors in the Fed's upcoming new normalization process, we point to the tighter regulatory environment as another reason why the Fed does not need to tighten as much as in prior cycles. Outside of some sectors of the financial system, the banking system itself does not need overtightening by the Fed to wring out excesses. We also think the Fed will carefully monitor how financial conditions evolve, especially if the market starts to push up rates and spreads and that results in massive unrealized and realized losses for the banks. After years of recapitalizing the banks, we doubt the Fed wants to see rate hikes permanently eat into this new hard-earned capital.

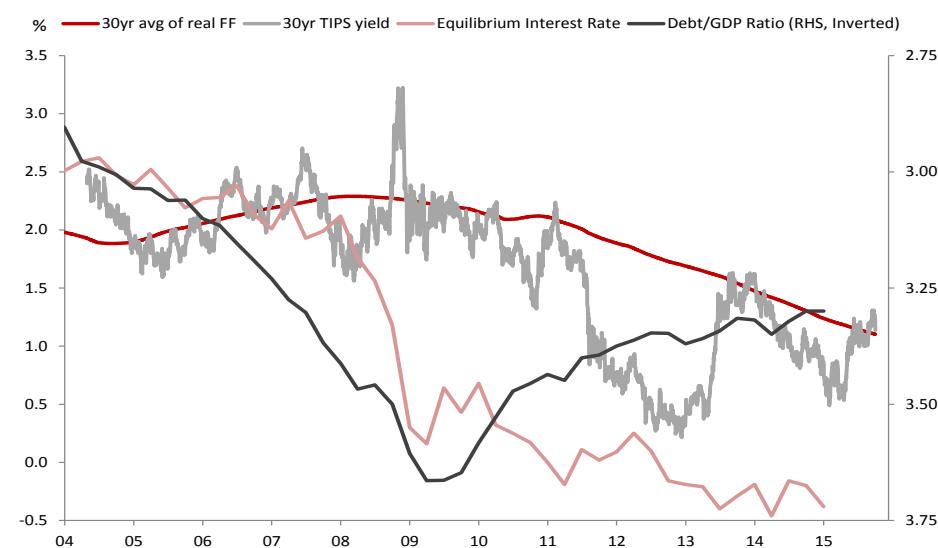
Fig. 41: Top 10 reasons why we believe climbing past and staying above 1% Fed Funds Rate will be challenging this time . . .

| Category | Critical 1-10 scale | Rationale |
|----------------------|---------------------|---|
| cycles | 1 | ERIR argument: The move towards using equilibrium real interest rates as the Fed's guide will see a lower nominal Fed funds rate this time |
| global macro | 2 | As the Fed diverges from RoW by hiking (while others are easing) might need to see BOJ & ECB to stop easing before Fed moves above 1% |
| financial conditions | 3 | Although regulations impact is hard to quantify but its a form of financial markets tightening which requires less Fed hikes versus before |
| financial conditions | 4 | Banks / insurance companies hold assets with embedded low rates (longest stretch of ZIRP in US history since 1930s) so Fed will go slow |
| operational | 5 | Tightening with an enlarged balance-sheet will likely require a stop at 1% and/or sell assets at some point to perma drain excess liquidity |
| operational | 6 | New tools requires using SOMA cashflow for IOER payment going to banking system (US fiscal deficit will rise as will political noise) |
| global macro | 7 | Losing foreign buyers of US fixed income as FX basis gets more expensive will result in less UST buying = TP up and no need for Fed to hike |
| cycles | 8 | Markets need to stop obsessing over the 2004-06 cycle, this cycle probably more like 1999-2000 or 1986-89 pd which were shallower |
| cycles | 9 | 1% was the low before hiking in last cycle and getting there will show Fed's moved from emergency but still accommodative (in their eyes) |
| cycles | 10 | Hiking during the presidential cycle hand-over will slow Fed (especially if the status quo of grid-lock and no real growth drivers continues) |

Source: Nomura

Despite some deleveraging, the U.S. is a levered economy, so interest rate sensitivity remains high (and this is true at the government, corporate and consumer level). The Fed understands that because it created the world we are now living in. Our model suggests that in the post-Volcker era, current debt-to-GDP levels will likely keep long-term interest rates capped around the 3% level. Although the Fed may intend to hike toward 3%, we believe it will ultimately stop short and finish much lower. In Fig. 42 we show that real rates have been steadily declining for years, which have helped support the debt loads weighing on the economy. Even with the Fed moving off of zero, the lower trajectory of actual real FF rates over the last 30-year years and actual lower 30-year TIPS real rates are all consistent with the notion of a lower equilibrium rate ahead.

Fig. 42: High debt-to-GDP constrains the level of long-term real and nominal rates



Source: Nomura, Bloomberg

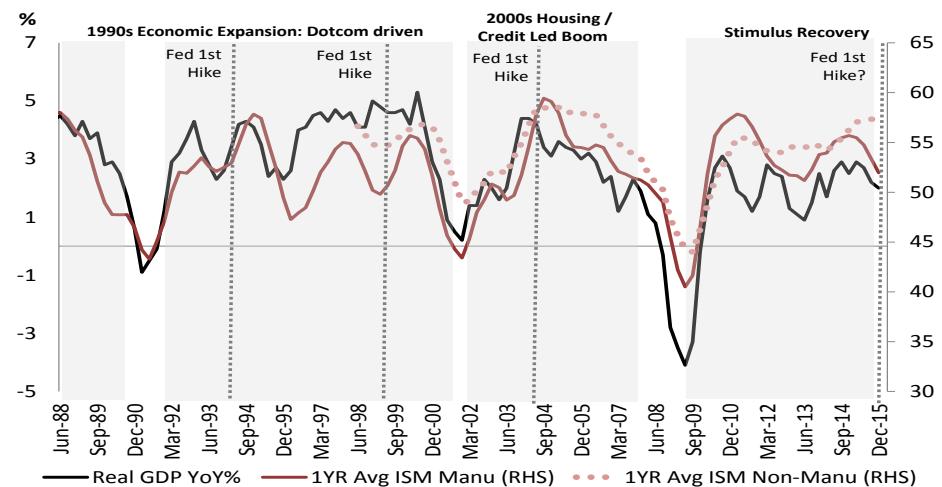
Does the Fed liftoff mean that the economy is doing well? Yes and No.

Fed typically raises rates when the economy is at risk of overheating, and this explains why many bond investors typically believe that there are many more hikes to come after liftoff. It is our view that the Fed is hiking to get off of an emergency rate more so than to embark a major tightening cycle to much higher rates as in past cycles. In our view, the bar to raise rates from zero and getting short-rates closer to the prior cycle low of say 1% is a much more different conversation than a Fed that is about to hike by 300-400bp.

As seen in Fig. 43, if we use the ISM data sets as representative of the current macro environment, we notice that there are two US economies currently in motion. The service sector is doing well but the manufacturing sector is being weighed down by the drop in oil sector capex and the strong dollar effects. A similar divergence also took place in the 2004-06 period (where the Fed's first hike marked the peak in economic activity). Note we do not want to imply that we will end up with the same fate that ended that cycle (the 2007-09 credit crises). Instead, we think the 1999-2000 regime lines up better to what is happening now. Just like then, people now think that the divergence between services and manufacturing is part of a natural selection process and that the "new" economy will eventually take over (i.e., remember dot.com 1.0 did not end well). We do not expect a quick early rebound in 2016 (Fig. 44) just because expectations are so low. Instead it will take time for macro conditions to get strong again for the next hike (but we believe more hikes are indeed in the pipeline as the Fed hikes rates toward 1% by year-end).

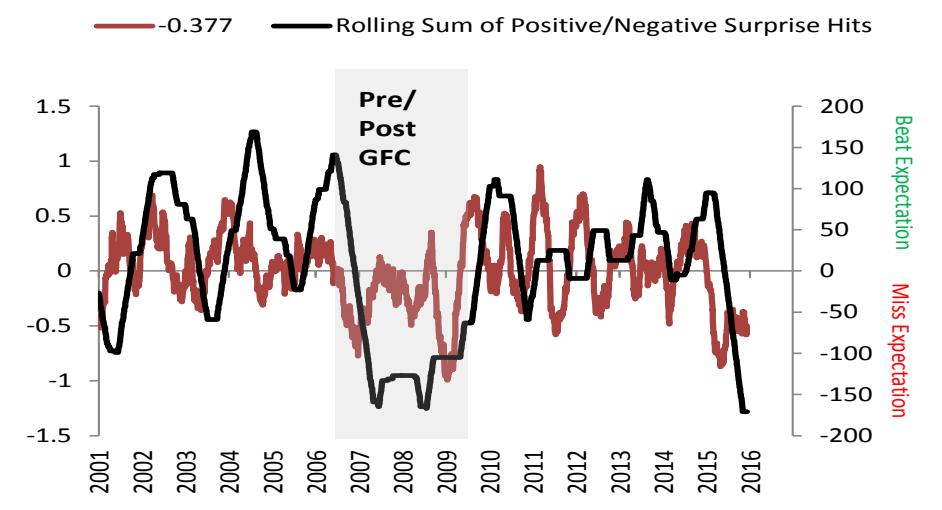
Eventually we see the US economy growing out of the current malaise by early summer next year, but in the years ahead, just as we mentioned in this weekly (see [link](#) pg 4) Fed hikes and the low in the U/R rate and weekly claims data is usually a sign of the end of a business cycle so we see the odds of a garden-variety recession rising along with rates.

Fig. 43: Two-tiered economy: Service sector performing while Manufacturing declines



Source: Nomura and Bloomberg

Fig. 44: Forecasters have overestimated growth in 2015; don't expect a quick snapback



Source: Nomura, Bloomberg

What if Fed tightens but that results in a FCI feedback loop (limiting future hikes)?

Since QE and ZIRP started, the mantra from the equity markets has often been “the Fed is printing money and thus you need to own stocks.” In the bond market, the message has been a bit more nuanced: the Fed bought bonds/drained duration to force investors into rebalancing their portfolio into higher yielding/higher risk assets, and that is what got money flowing into stocks, high yield, emerging markets, etc. Meanwhile, the zero rate environment resulted in corporate issuance taking off (total corporate debt has gone up 50% since 2007) where initially a large swath of that credit was used to finance energy projects (which are now suffering from the oil collapse) and/or lately M&A deals / stock buybacks. Now that the Fed finally tightened, it is a material change of the status quo.

During the twist-operations/QE days, we used to show a chart similar to the one found in Fig. 45, which showed that, as the Fed expanded its duration profile (as seen by its UST maturity profile rising up during QEs) via buying longer-term bonds for its portfolio, risk assets rose. In our view, this is because reducing market duration at large (as they absorbed paper) was a powerful motivator in changing risk behaviors and, as a result of this portfolio rebalancing effect and low yield environment, stocks and credit benefited.

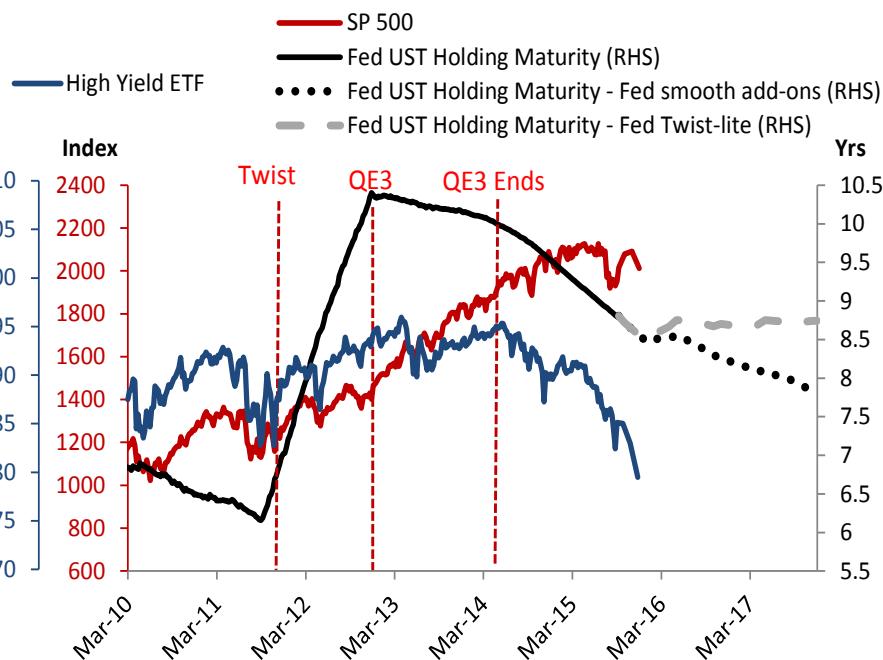
For the better part of the 2015 the S&P 500 has gone sideways with a few highly volatile periods and high yield has been weak. One cannot simply state that the Fed balance-sheet expansion (and the reduction of duration) was the only driver of the market, but if equity valuations became stretched (as many have argued they have become) and earnings stopped rising (which is presently the case), then a reduction in Fed QE-based support could be one of the reasons for the lackluster drive in stocks. One can even go one step further and suggest that, had it not been for ZIRP (and the massive amounts of debt-fueled stock buybacks over fears of a Fed hike, which could explain part of the weakness going on in the credit market) that the overall stock market would be lower.

So this leads to a number of questions/concerns among many investors. If market-based credit growth will slow and earnings are stalling, what drives stocks if the economy isn't firing on all cylinders and the Fed stops so-called “printing money”? This move off zero matters as it could make FCI tighter (especially if hiking results in the wealth effect being partially unwound). At what point does tighter FCI driven by market forces result in the Fed hiking even slower (or stopping) versus what is priced into the forwards?

As seen in Fig. 45, according to our calculations if financial conditions worsen, perhaps the Fed could launch a twist-lite option (described in this report – see [link](#)) as a way to control outsized moves in risk markets by keeping its balance-sheet duration constant.

Fig. 45: S&P 500 and High Yield vs. the Fed's historical UST portfolio maturity profile

The growth of the Fed's balance sheet was often viewed as a leading indicator for stocks since 2009



Source: Nomura, Bloomberg

UST/TIPS

Post Fed liftoff, we think UST yields will likely settle into a higher range, with risks skewed toward rallying especially in 2H'16. We expect the curve to flatten, but it is just as likely to be bull flattener as a bear one. We also recap the TN futures launch.

With a Fed focused on “gradual pace” and “data-dependency,” we believe benchmark UST yields may see range-bound trading even if more hikes materialize. It is not too dissimilar to the “conundrum era” seen during 2004-06 cycle. Only this time the forces keeping a lid on long-end USTs yields would be residual economic slack and other structural factors, rather than foreign buying (if anything, the risk is continued EM selling of USTs given their weaker fundamentals and slump in commodities). Also notably, we expect meaningful volatilities within the year as the market adapts to the new Fed regime of non-zero rates. Our base case calls for higher 10yr UST yields in 1H'16 as investors sell bonds for fear of higher rates, only to see a potential reversal in 2H'16 helped by strong seasonals. As Fig. 46 shows, UST yields have tended to exhibit rallying bias starting in July and the intra-month tendencies are also note-worthy for tactical trading.

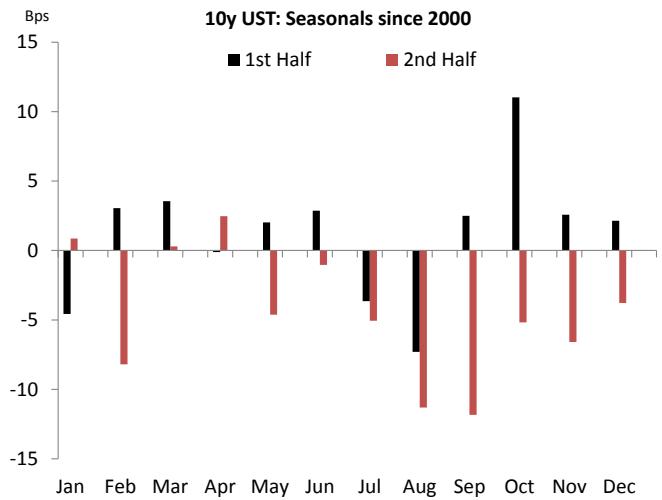
Our view that 1H'16 may see higher yields is also supported by supply dynamics. Not only do Corporates tend to have seasonally busy months in 1H of every year, there will be more UST net supply during 1H'16 than 2H'16 (Fig. 46). It is quite the opposite for TIPS net supply hence arguing for wider BEI bias during 1H as well (more details later).

Related to the supply picture next year, the Fed made clear in its December FOMC statement that it will continue the current practice of reinvesting USTs as auction add-ons. The Fed plans to revisit its reinvestment policies until Fed funds rate normalization is “well under way”. As we discussed here (see [link](#)), there are a few options the Fed may consider to smooth out any potential distortions to current USTs, as a result of chunky sizes of reinvestments starting in February 2016. The Fed has chosen to stay put, at least for now, to not overload the market with information or even worse, send a hawkish message at liftoff. All told, we believe the Fed always has the option to make any tweaks to its reinvestment policies, should any distortions emerge.

In curve land, flatteners have been a popular (and at times crowded) trade, given its historical tendency to materialize post the 1st hike. It is worth noting that the market historically underpriced Fed hikes in prior cycles, which allowed the flatteners to work and hence beat forwards. Without an inflation surprise and if the Fed raises rates only gradually this time around, there is no guarantee flatteners will be profitable taking into account carry, even if spot curves end up flatter.

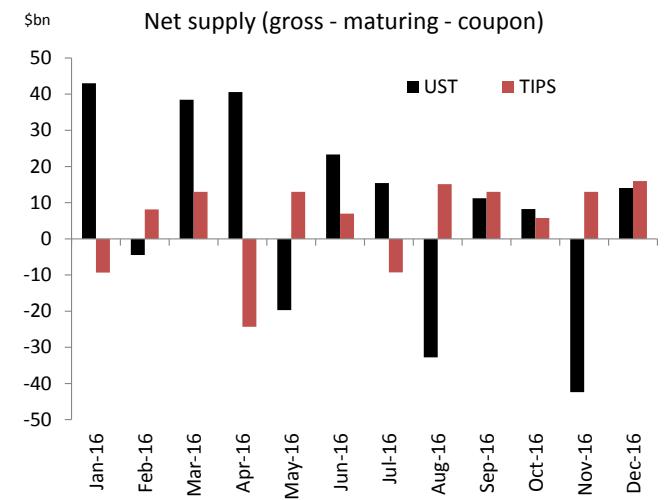
In addition, although we expect to see a flatter curve e.g., 5s30s by the end of 2016, it is just as likely to be bull flattening (e.g., during 2H14) as bear flattening (e.g., during 4Q15). Given all the risks lurking from the rest of the world as well as a lower long-term growth rate domestically, the curve price action may be driven by exogenous factors (e.g., oil) as witnessed throughout 2015 (Fig. 49). Bottom line, we believe it is prudent to

Fig. 46: Bullish seasonals in 2H, with intra-month variation



Source: Nomura, Bloomberg

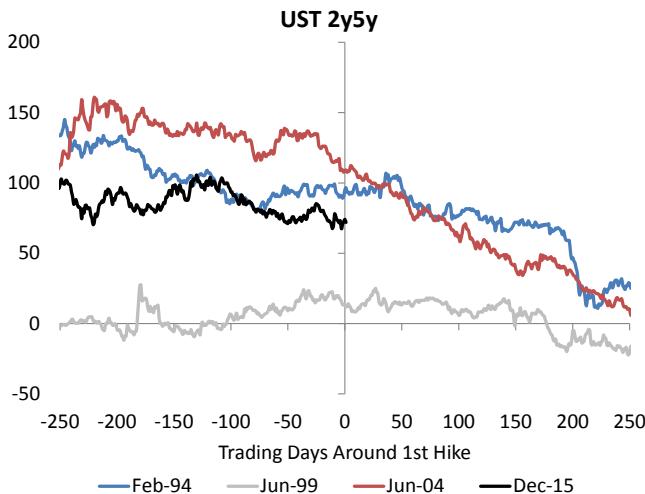
Fig. 47: Large net supply in 1H for USTs, but not TIPS



Source: Nomura, Bloomberg

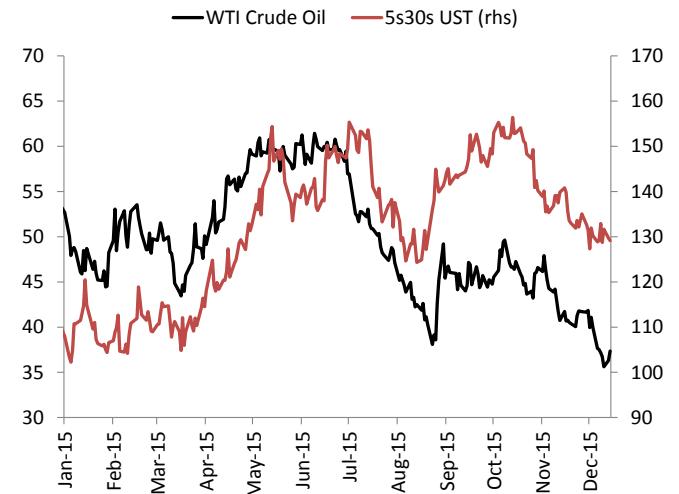
trade curve with a tactical bias during 2016, which means putting on flatteners as a potential risk-off hedge when markets get complacent, while putting on steepeners when the curve forwards get to levels seen near the flattest of prior hiking cycles.

Fig. 48: UST 2y5y in and out of prior Fed 1st hikes



Source: Nomura, Bloomberg

Fig. 49: UST 5y30y at the mercy of oil prices?



Source: Nomura, Bloomberg

The launch of the new 10yr TN contract

The new TN contract will start trading on January 11, 2016. This gives the March 2016 contract about one and half months before the typical calendar roll starts and open interest (OI) shifts to the June 2016 contract. If we look at the WN launch as a historical benchmark (WN started trading on January 11, 2010), the first cycle saw WN OI build up to about 70K contracts with about 15K daily volume. Given a 10yr security tends to trade more actively than the long-end, we can scale up those numbers and recent trends would suggest an equivalent TN open interest and volume of 325K and 195K, respectively (if TN were to match how well WN was received during its debut cycle).

The TN contract lends itself well to the hedge fund/RV /technical-based investors, given the ease of trading off-the-run basis as well as better duration matching in cross-market expressions. This is very different from the WN contract, which had asset managers as the first movers. Fortunately, the richness of the US contract may lead some real money investors to entertain TN, given some investors use a combination of TY and US to replicate the 10yr point. However, if US continues to cheapen as it has lately, we expect asset managers to exercise patience. All told, TN may not garner enough open interest and volume during its first cycle to get real money investors fully involved, in our view. Hence the March 2016 TN CTD, the Aug2025 10yr will likely not enjoy much benchmark premium and has recently started to normalize back towards historical trends.

Past the March cycle, we believe the TN will gain more popularity over time. If we again assume TN will follow the OI/volume trajectory of WN one year after launch, we would see TN OI at 1425K and volume at 500K by January 2017. We believe those numbers will be very optimistic and are tall orders for the TN, mostly because it would represent roughly 54% of TY's OI and 40% of TY's volume. After all, the success of WN had very unique regulatory tailwinds and we believe TN's rise will take more time. Fig. 63 shows the volume of futures contracts vs. the corresponding cash volumes. TY indeed enjoys the highest volume as a % of that of the underlying cash bonds, hence giving potential room for co-existence of both TY and TN. Nevertheless, as we have noted in the past, we believe ultimately any success of TN may come at the expense of TY futures, with their proximity in maturity and overlapping underlying bonds.

Last but not least, the recent selloff has solidified the to-be-auctioned Nov2025 10yr as the CTD for the June 2016 TN, in our view. As a first full-cycle CTD, Nov2025 could likely trade with a sustained premium for the next six months or so.

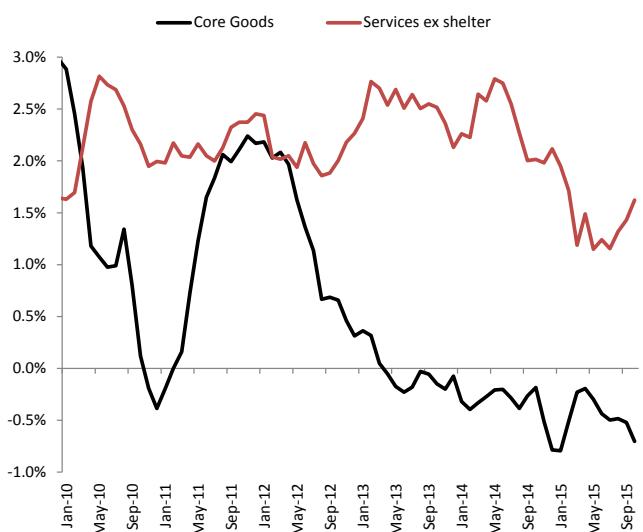
TIPS: Improving carry makes BEIs cheap inflation hedges for 2016

A mildly positive Core CPI outlook, thanks to “services” outweighing “goods”

While headline CPI will be at the mercy of oil price volatility as always, the tug of war between goods and services may largely dictate the 2016 trajectory for Core CPI, in our view. The lagged effects of the stronger dollar should keep a lid on “Core goods” while “Core services,” at a much higher weight, have been boosted by persistent price pressure such as shelter costs. We expect the staggering divergence to remain (Fig. 50) as the underlying factors should continue to be supportive for “services” given a slowly improving labor market.

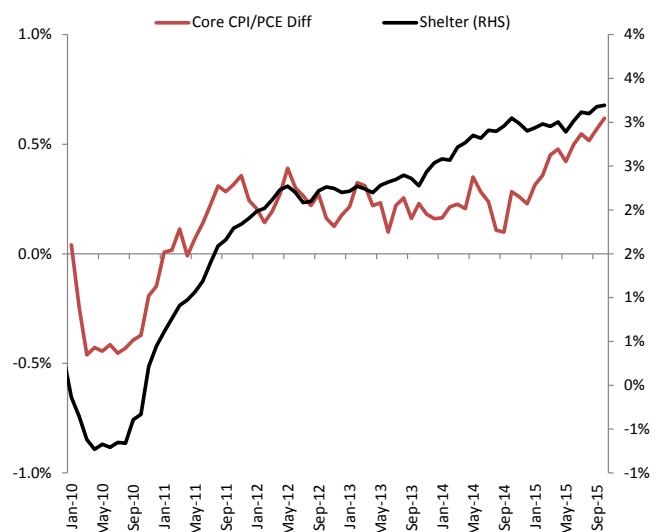
In fact, not only have the “sticky” components such as shelter driven a wedge between “goods” and “services,” they have also contributed to a wide gap between core CPI and core PCE (Fig. 51). If shelter costs remain buoyant next year, the gains in CPI should support TIPS, while the lack of equivalent PCE pressure (i.e., the Fed’s preferred measure) should keep at bay any additional Fed tightening. All told, we expect a mildly positive Core CPI outlook to favor TIPS valuation from here going into 2016. The risk, however, is skewed toward the downside for headline CPI given the recent volatility in oil and other macro risks (e.g., the risks of EM hard landing, EU crisis 3.0, etc.).

Fig. 50: YoY comparison: services outshine even ex. shelter



Source: Nomura, BLS, Bloomberg

Fig. 51: Shelter costs drove much of the CPI/PCE wedge

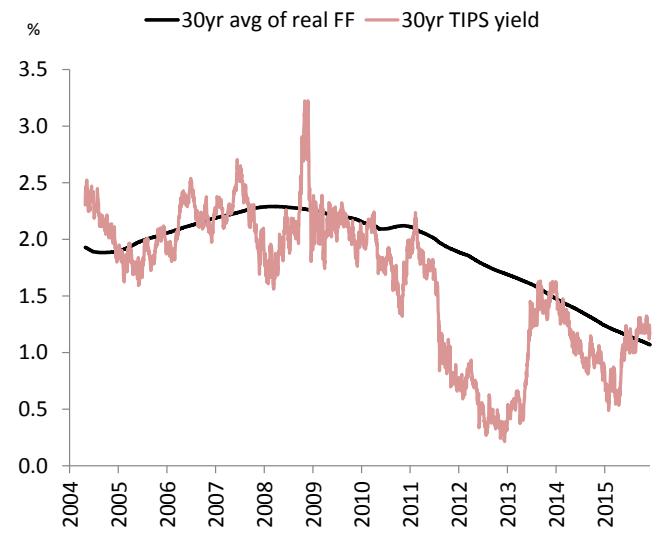


Source: Nomura, BLS, Bloomberg

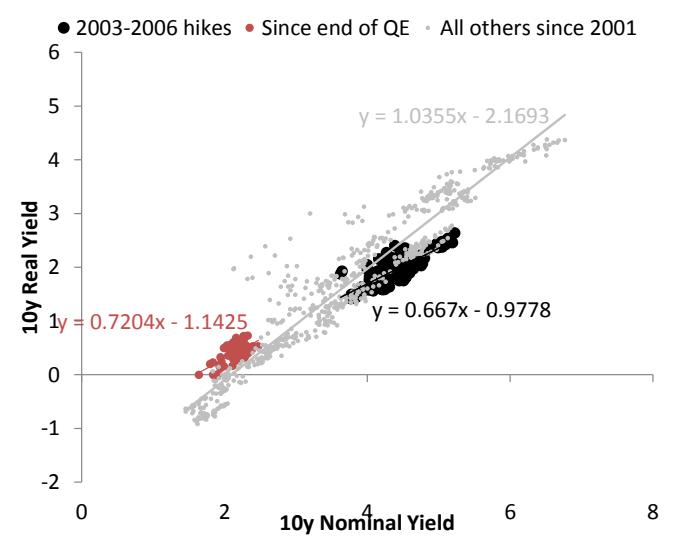
Fed hiking + lower oil prices = flatter real yield curves

Long-end real yields have been attractive for quite some time. We are of the view that the next 30 years should see much lower real growth in the US than the previous three decades, in which case 30yr real yields have much room to rally (Fig. 52) and offer strategic value as an investment. The latest R* (short-term natural real rate) discussion from the Fed presents another framework, where we argue long-end real yields are at large pickups vs. the near-zero R* taking into account term premium estimates. On the flip side, the Fed starting to raise rates may be a concern for real yield investors, but it is worth noting that historically 10yr real yields trade with smaller beta vs. nominal yields when the Fed is tightening (whether via hiking rates or stopping QE, Fig. 53).

As much as we think there is value in owning US real yields outright, real flatteners (e.g., 5s30s) are particularly interesting. With the unique backdrop of Fed hiking even in the face of softening oil prices, real yield curves are likely to flatten more so than their nominal counterparts. Granted, we are only expecting a gradual hiking pace, but the market is still likely to flatten the curve initially as the Fed kicks off the hiking cycle. Investors positioning for any potential risk-off post Fed liftoff should find real flatteners the ideal expression to benefit from both flatter curve and lower oil prices. In addition, the carry profile is also attractive currently for the real flattener, making it an attractive trade heading into the Fed and year-end.

Fig. 52: 30yr real yields offering long-term investment value

Source: Nomura, Bloomberg

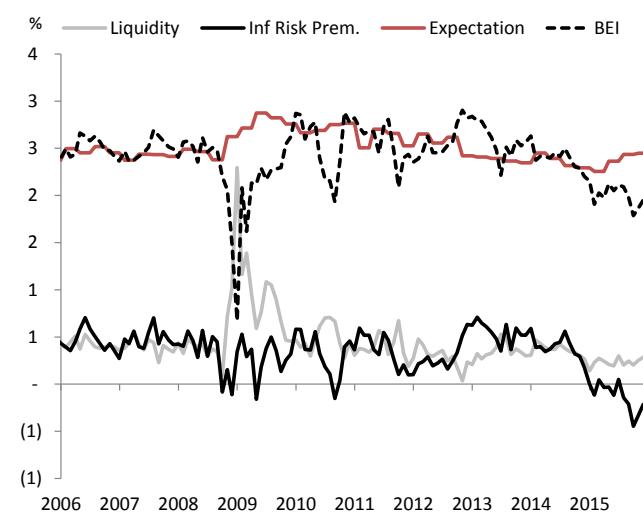
Fig. 53: 10yr real traded with smaller beta during tightenings

Source: Nomura, Bloomberg

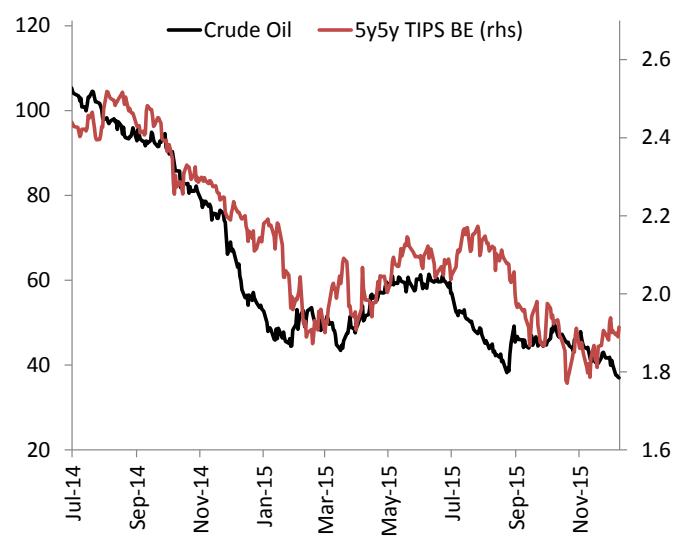
Very cheap BEIs offer attractive inflation hedge, especially at positive carry

We have been patient in initializing BEI longs during Q4'15, as the negative carry profile and energy price uncertainties held back our enthusiasm. The turn of the calendar should be supportive of BEIs in our view, as CPI carry profile starts to get more positive and even oil prices have historically exhibited some seasonal strength during Q1. Hence we will look to buy BEIs as a strategic long early 2016 as we believe current valuations are unsustainable in the long run, given the entire BEI forward curve is under the Fed's 2% PCE target (which puts CPI at about 2.40%). With our aforementioned mildly favorable Core CPI outlook, we believe it is prudent for investors to buy some inflation protection at positive carry, especially when inflation risk premium is priced in the negative territory (see Fig. 54). All considered, we think an "insurance" that carries positively is attractive by any measure.

After the recent volatility in oil prices, further downside in the energy complex may continue to keep investors on the fence about getting full-on bullish BEIs. Long-end BEIs have had an unusually high correlation to oil since its collapse in mid-2014 (Fig. 55), although the trend abated in 2H15. TIPS BEIs have also been correlating well with other fixed income assets such as IG spreads, whose widening could be attributed to energy names under pressure. If our CPI outlook pans out with Core components delivering on-par price pressure as witnessed lately, we believe that should help TIPS outperform and potentially even rekindle investor interest in the asset class (e.g., with hopefully more fund inflows in 2016 than 2015).

Fig. 54: Inflation risk premium still in negative territory

Source: Nomura, Philly Fed PFS, Bloomberg

Fig. 55: Long-end BEIs getting less correlated with oil

Source: Nomura, Bloomberg

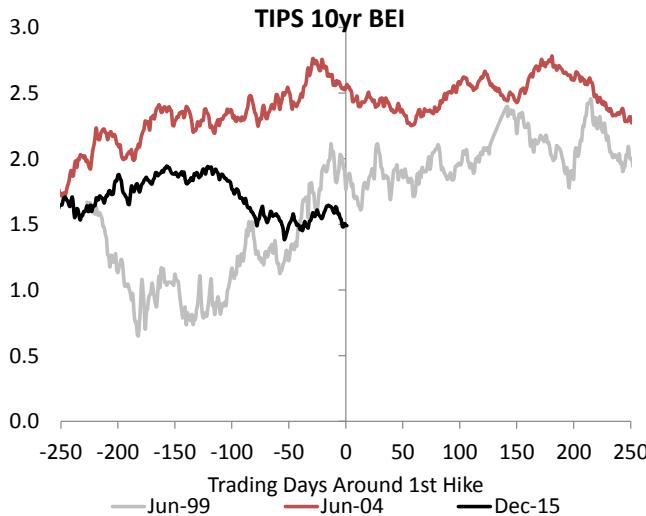
Last but not least, we believe it is important to point out that BEIs have been under downward pressure lately, heading into the Fed's first hike. This is in stark contrast to the previous two cycles (Fig. 56), which saw upward swings in the preceding months as not surprisingly, inflationary pressure likely drove the hiking decisions. Once the Fed hiking cycle was under way, last two cycles saw range-bound BEI in the months/quarters that followed. Hence historical evidence suggests Fed hikes should not be hurting BEIs once kicked off as the market tends to be forward looking. In the same vein, we expect the Fed's current move to be neutral to slightly positive for BEIs, especially given its gradual pace and TIPS's favorable valuation to start with.

Cautiously constructive on TIPS ASW in new liquidity (or the lack thereof) regime

The saga of swap spread tightening in 2015 has left its mark in the TIPS market as well, with TIPS cheapening commensurate amounts on ASW. The theme of balance sheet scarcity and higher liquidity premium should be intact in 2016; hence, we would be cautious about getting long cash BEIs vs. any swap exposure. In fact, we prefer ZCIS as the inflation long and expect the BEI basis to hover in a wider range than observed in 2015. It is worth noting that TIPS liquidity in the secondary market has been hurt to the extent that end users are increasingly using auctions to buy securities. The customer takedowns of all TIPS auctions in 2015 were the highest in recent years (Fig. 57).

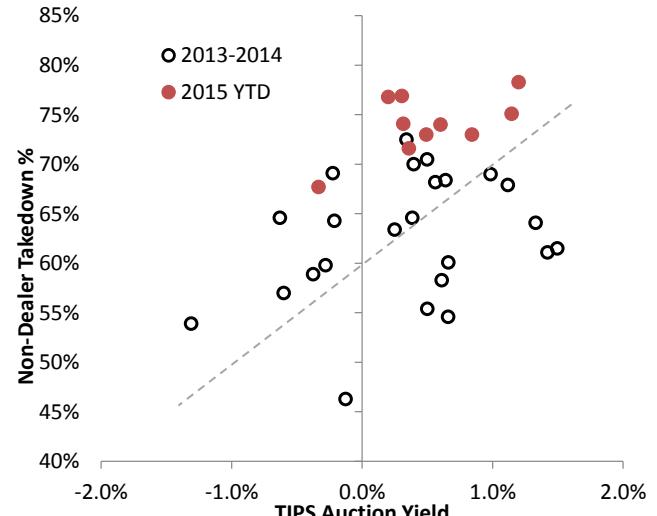
There are some structural tailwinds for TIPS ASW such as regulatory demand for high-quality assets, etc. However, the key difference going forward is that the lack of dealer balance sheet has cheapened almost all high-quality paper and caused dislocations in various markets. For example, the TIPS cheapening on ASW was largely driven by the same trend in USTs and buying front-end TIPS on ASW (hence locking in a yield until maturity) looks just as attractive as buying front-end G3 paper via FX swaps. All told, we are cautiously constructive on TIPS ASW while being cognizant of the new market forces cheapening cash bonds of all stripes, hence only looking to buy TIPS ASW on dips.

Fig. 56: 10yr BEI into and out of prior hiking cycles



Source: Nomura, Bloomberg

Fig. 57: Auctions more becoming liquidity events in 2015



Source: Nomura, Bloomberg, US Treasury

Money Market

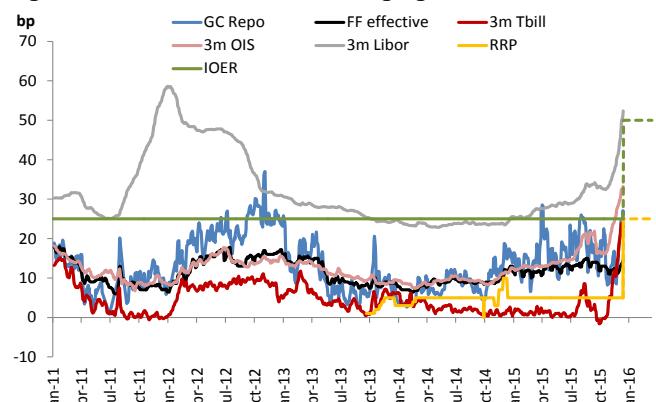
Unlimited RRP program will help the Fed guide interest rates higher.

Pre-crisis, the Fed used to keep the effective Fed funds (EFF) close to the target rate via performing temporary open market operations (TOMOs). For example, the Fed would inject liquidity when the effective FF was too high vs. the target and drain liquidity if too low. In today's world where about \$2.5trn excess reserve sloshes around in the system, TOMOs are no longer effective, hence the birth of the Fed's new hiking toolkit.

As described before ([How will the Fed raise rates](#), April 29, 2014), now that the Fed has moved off zero in the new tightening regime, the Fed will use the IOER and RRP rates band to guide the short-term FF rate higher, with the EFF rate trading within such a band. As RRP caters to a much wider investor base, it should set the floor for other short-term rates in the money market space. Since the introduction of the program in 2013, only T-bill rates have been persistently trading lower than the RRP rate (Fig. 58). This could simply be the result of supply/demand imbalance, where record liquidity has been chasing a shrinking outstanding amount of "risk-free" short-term paper (like T-bills). Thus, the T-bill rate could still trade richer than the RRP rate, given structural forces and regulatory reforms affecting the money markets. That said, a larger RPP also serves as an alternative in the risk-free space. However, it is most likely that uncollateralized rates will be trading higher than the lower band (e.g., 25bp). Given the spread of Federal Fund Effective (FFE) to RRP was about 8-10bp, a conservative estimation of the new FFE should be 33-35bp until the next hike, in our view.

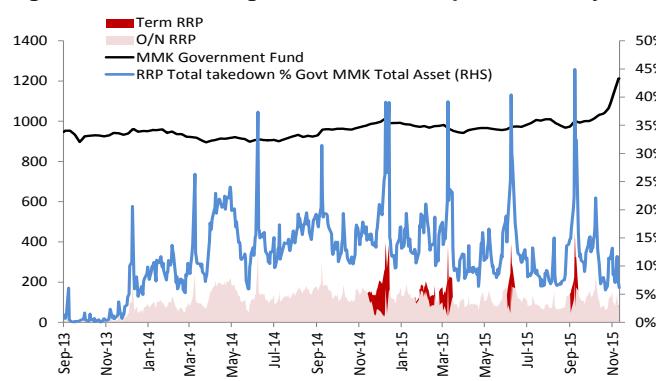
When trying to study RRP size impacts on short rates, we look at the change in balance sheets during the past three QE regimes. We acknowledge that the easing versus tightening response by the markets are definitely not symmetrical and we will need to see how markets react now in the tightening cycle, but a simple regression study shows that every \$100bn increase in the Fed's balance sheet lowered the 3m OIS rate by 0.8bp on average (Fig. 59). As the Fed's holding increased in size during QE3, the marginal effect of QE on the level of OIS rates declined. By the same logic, unless the reserve drains via the larger usage of the RRP, it will be difficult to see how short-term OIS rates will be affected to the same degree as when the Fed was expanding its balance sheet.

Fig. 58: Front-end rates are converging to the new corridor



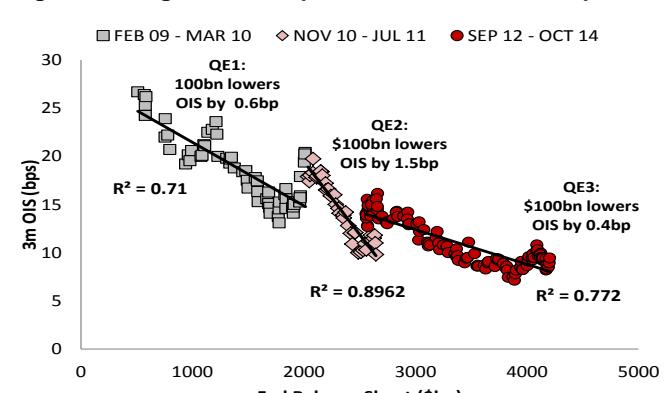
Source: Nomura, Bloomberg

Fig. 60: Total asset of government MMF spiked recently



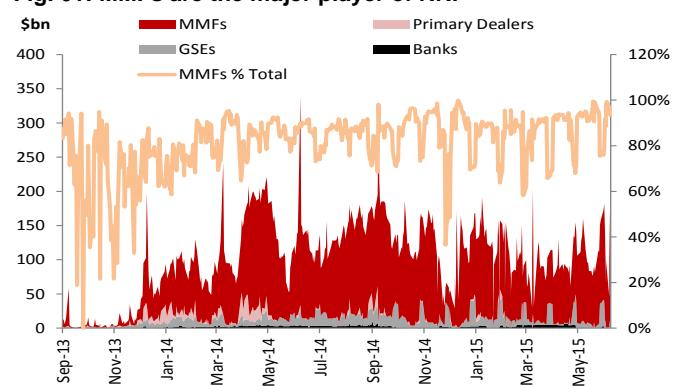
Source: Nomura, NY Fed, ICI Money Market

Fig. 59: QE regime rate response to balance sheet expansion



Source: Nomura, Bloomberg

Fig. 61: MMFs are the major player of RRP



Source: Nomura, NY Fed

Another issue worth noting is the recent spike in government money market fund assets that resulted from SEC reforms. We are likely to see further increases in these funds' net assets next year, as they become compliant before the deadlines. Given that these government money market funds are the major players in RRP, if the size of the community continues to grow, it could lead to higher demand for RRP, which could dampen all front-end rates. Markets will be watching how the new RRP is used and how it drives the FF rate off the RRP floor rate while not disrupting the financial system by draining too much liquidity away.

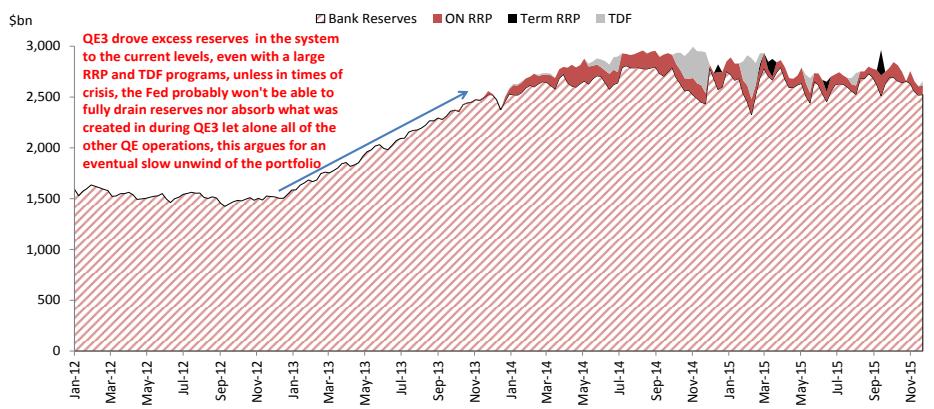
On a more technical note, investors who remember past Fed hikes may recall effective Fed funds drifting higher in the days preceding the FOMC as the market prices in the move of hike before the Fed. However, this was not the case this time around given the interest on reserve balances are now calculated based on daily accruals, instead of two-week averages. Also the ON RRP program happens every day from 12:45pm to 1:15pm EST, so the operation on Fed day (December 16) already happened before the Fed decision. The new range of the FF rate only took effect on the day after.

The old setup of RRP was that of a fixed-rate full allotment if demand falls under the cap, but a competitive single price auction if demand exceeds it. For example, under the current cap of \$300bn for the ON RRP, all bids may be fulfilled at the rate (e.g., 25bp post liftoff) if less than \$300bn bids were submitted. Otherwise, bids will be allocated based on the "stop-out" rate at which the \$300bn cap is reached, resulting in a lower rate. It seems the Fed decided that oversubscribed RRP (which could drive the rate below the Fed's intended lower bound) would be problematic. So it increased the maximum cap of the overnight RRP size to UST SOMA portfolio size. We are surprised the Fed decided to make the program virtually unlimited, especially since some at the Fed had expressed concern for over-usage of RRP during market stress periods, which could see cash rush to the safety of the Fed and RRP is used to its maximum potential.

The only cap for the new program is set on individual RRP user at \$30bn per auction. Although there are currently about 140 participants eligible for RRP, before the hike only 40-50 users were active during normal trading days and around 90–100 total bidders during quarter-end periods. The first day after the hike, we saw about 50 bidders for RRP taking up about \$100bn in usage, a similar amount as before. It will be interesting to see if this dynamic will change going forward when rates are higher, times of stress in the system materialize and/or during quarter-end balance-sheet adjustment periods. Also if banks are not as quick to pass higher rates that money funds are offering we could see this loop strengthen as deposits leaves the banking system back to the govie-only funds.

Longer-term, the ability to absorb the entire amount of reserve creation is an impressive accomplishment for the Fed. The one risk that is not a focus for the market at the moment is what happens when the Fed gets rates normalized, relying on these tools, but then a recession strikes. They will need to ease by offering lower rates, but investors might still accept these lower rates given the safety of having their cash sitting at the Fed. This could cause other short-rates to stay elevated, and spreads in money markets to RRP rates would widen as a result. Which is why in our view, as the Fed gets rates higher (around 1%) it should resort to natural attrition of the Fed's balance sheet to permanently extinguish excess reserves and prevent market participants from viewing the Fed RRP as alternative asset that they can easily substitute.

Fig. 62: Bank excess reserves versus draining tools (RRP versus TDF) and potential



Source: Nomura, Bloomberg

Swap Spreads

Exploring the various factors affecting spreads

One of the year's greatest upsets in rates has been the ongoing collapse of US swap spreads. What we describe as the perfect storm of negative factors hit this sector of the rates market with a vengeance in 2015. We take a look beyond the optics (that clearly show that spread wideners are attractive from a historical standpoint) and try to explain how we got here, what has changed for swap spread dynamics and where to next. As we look to 2016, we believe that a combination of higher rates and less issuance will turn the tide, but between now and then investors will remain tactical in this space.

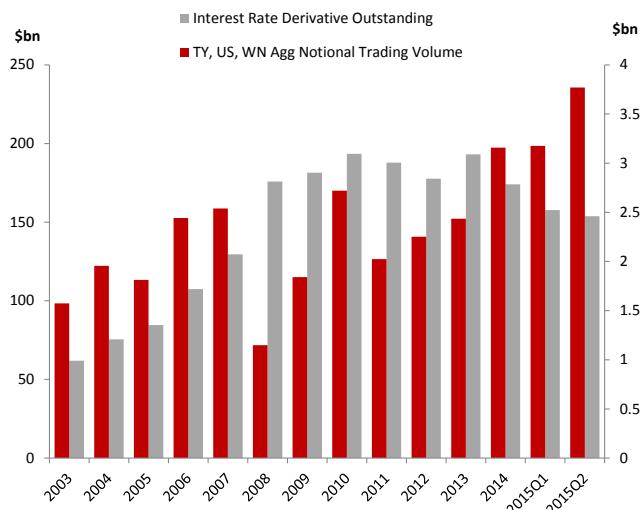
Spread fundamentals: A quick review, and structural changes in hedging activity

Understanding interest rate swap (IRS) spreads typically starts with a review of LIBOR-GC spread. In our introduction to [Understanding Swap Spreads – Fundamental and Quantitative Lenses, April 18th 2013](#) primer report, we provide a stylized trade format of why and how LIBOR-GC affects IRS spreads. However, in a world in which regulator changes have meaningfully driven up the cost of sourcing dealer balance sheets, and following years of excess liquidity and very little need for interbank lending, using the 3-month LIBOR-GC relationship as a floor on swap spreads is problematic, especially further out on the spread curve. As we explained in our primer, we believe that long-dated swap spreads can continue to trade negative on the back of changing expectations of term premia between IRS and government curves, but applying that same framework down the curve has us hard-pressed to believe that tenors like the 10-year, let alone 5-year spreads, would also trade negative.

Other macro drivers that have changed spread behavior are the regulatory environment and the persistence of low rates. Various embedded costs have steered banks away from IRS. For example, when we compare (Fig. 63) interest rate derivatives with futures volumes, we see distinctly less IRS-type trades (which are down 25% from the 2013 peak, according to OCC) versus using UST futures (up 40% in activity during same time). Meanwhile, as we have flagged before, the ZIRP environment has conditioned banks to not worry about hedging their loan books versus the past (Fig. 64).

Fig. 63: USD interest rate derivatives vs. UST futures

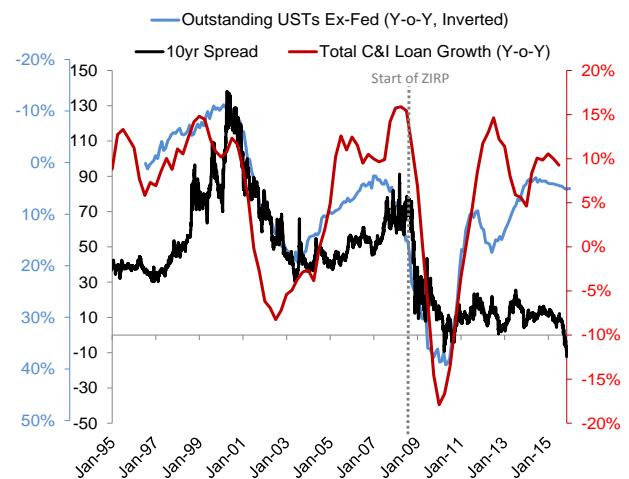
Interest rate derivative market is shrinking while futures volume soars



Source: Nomura, Bloomberg, OCC

Fig. 64: Long-term drivers no longer at work, for now

Neither larger loan books nor less UST issuance is helping widen spreads



Source: Nomura, Bloomberg, Federal Reserve

Fixed income supply and seasonals also on the radar into year-end and beyond

One often-cited driver of spread movement in 2015 was the deluge of corporate issuance. Corporate issuance is setting up for another record year, outpacing historical averages every month in 2015 as corporations rush to lock in cheap funding ideally for operational use, but likely more for M&A deals and stock buybacks, before the highly anticipated Fed liftoff. Also, with the Fed no longer encouraging the "balance sheet" channel effect, investors have preferred to buy IG credit vs. USTs, resulting in a crowding out effect for duration. Thus, issuance has affected swap spreads by keeping government bonds cheaper than normal, and because of fixed-to-float swapping activity.

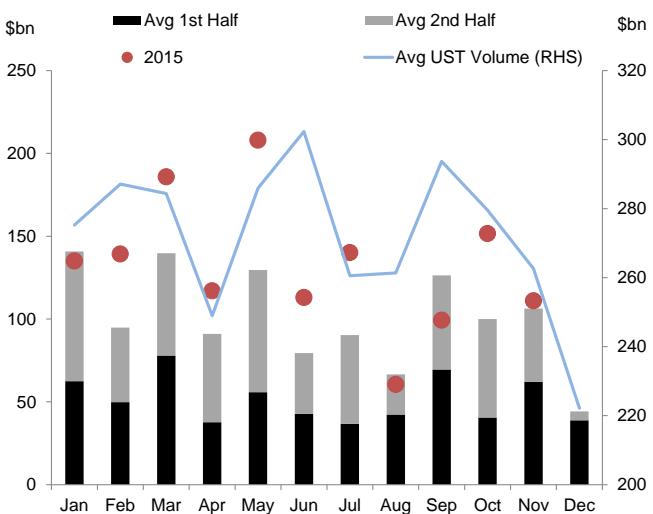
As we head into year-end, it's useful to understand the seasonals in corporate supply as well as UST trading volume in order to pinpoint where spreads may bottom. Corporate issuance typically slows into December, after a busy November, while UST volume also dies down into the holiday season (Fig. 65). The combination increases the possibility for outsized spread movements. Notably, however, November/December corporate issuances are largely front-loaded—i.e., done in the first half of the month. Hence, going into the second half of December, given this “micro-seasonal” observation, we can see the issuance pipeline slow down drastically into the rest of the year, especially after a record year of supply. The Fed finally delivered the December liftoff, which we believe pulled forward last-minute corporate deals that looked to lock in soon-to-be-gone historically low yields. Regardless, swap spreads marched wider, led by the belly, and as issuance pipeline dries up, we see further potential for wideners, albeit somewhat limited by balance sheet scarcity into year-end.

Continuing the micro-seasonals theme, in Fig. 66 we look at 10yr spread seasonals during the first and second half of each month, in the post-crisis world. Notably, the first half of every month has, on average, tended to see spread tightening, wherein persistently low rates since 2010 have allowed spreads to be driven by other factors without high directionality to the level of rates. Such tightening bias may be the result of more corporate supply hitting the market during the first half of each month as well as the issuance of 10yr UST supply usually taking place in the first or second week of the month, in our view. Repo cheapening into the 10yr quarterly auctions may be a large contributor, too, but since tightening does not just happen around refundings, we suspect that broader trends are at play. Therefore, we believe spreads should be seasonally biased to widen for the rest of November, before tightening again during the first half of December (which has historically seen the largest share of its overall issuance take place at the start of the month vs. other months). By the same token, we advocate patience in putting on wideners and look for entry around the second half of Jan'2016.

In prior periods leading up to Fed hikes, non-financial corporates took advantage of issuing debt before higher rates were delivered, then issuance would trail off as the Fed hiked (see [link](#), page 11). So, all things considered, we expect changes in bond supply dynamics as well as seasonal bias of issuance and year-end trading activity to start to introduce some stability to the spreads curve ahead. Looking to 2016, the prospects of lower corporate supply and less primary market net UST issuance should help wideners.

Fig. 65: IG corporate supply and UST volume seasonals

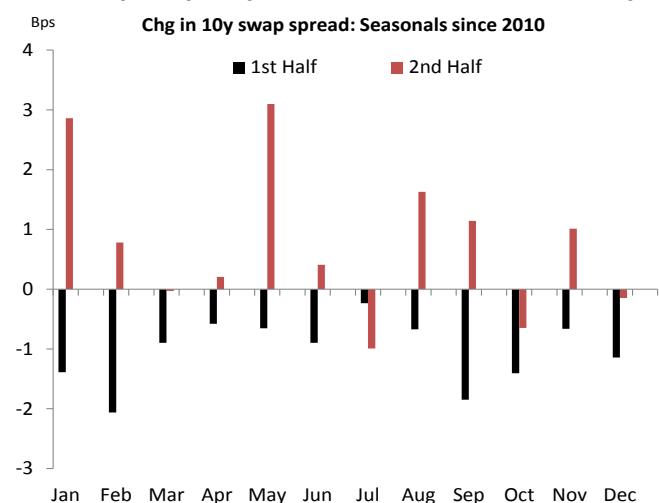
UST volume dies down into Dec. while issuance focuses on 1st half month



Source: Nomura, Bloomberg, NY Fed

Fig. 66: 10yr swap spread micro-seasonals

Persistent tightening during 1H of month while 2H sees more widening



Source: Nomura, Bloomberg

Foreign flows, then positioning were the straws that broke the spread curve . . .

In explaining the 2015 spread story, although thinner balance sheets helped fuel the tightening, the catalyst that exposed all of the fragilities of trading spreads this year was the sizeable selling of USTs from EM-FX reserves, triggered by the China devaluation in late summer as well as the ongoing lower oil prices and less petrodollar recycling into USTs, resulting in a collateral pile-up.

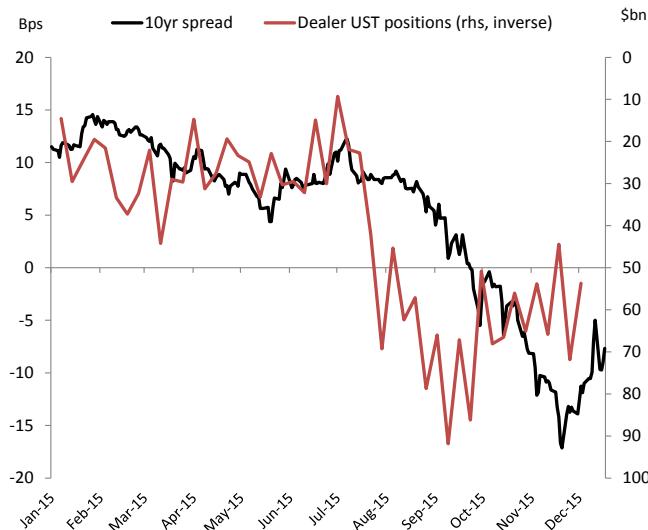
The biggest footprint of the foreign selling of USTs showed up on dealers' net positions in the front end, but using the overall dealer index (Fig. 67), we see a visual correlation between the increase in dealer holdings of USTs (which saw a rapid increase of over \$70bn at the peak of the reserve selling) and tighter/lower swap spreads. Dealers were keeping their stock of UST holdings low this past summer in preparation for a Fed hike (so we do not attribute the rise in dealer positions to dealers wanting to get long the market). Instead dealers were forced to go long USTs as foreign central banks sold paper. This resulted in cash bonds across the curve cheapening versus corresponding swap rate points. The issue was that at the same time that cash government bonds were keeping spreads tight in late August/early September, the overall marketplace was going through a rout in the risk markets, with VIX spiking and credit spreads widening. Many, including us, recommended spread wideners as a credit spread hedge proxy, but the perfect storm of reserve managers selling USTs while risk assets were declining forced stop outs for both macro overlay investors and credit fund managers, in our view.

It's been well televised that the levered macro community has had another difficult year. In many ways we can commiserate with these investor types, which have been grounded in fundamental analysis and always looking to take advantage of dislocations or hedge prevailing trends. One day we can see these hedge funds having the last laugh, as they won't need to keep getting long an index and chasing yield and will be able to deploy capital to fade the excesses that have developed over the years due to central bank activism. However, in the meantime, we are also amazed by the "wash, rinse, repeat" stance of trying to put on similar trades (higher rates, wider spreads) for years, where they have burnt a lot of premium/carry in ED and UST space (Fig. 68) in doing what would be otherwise "the right thing." The right thing, as in, yes, rates have been too low for too long and disconnected from Fed dots, etc. So relating this back to swap spreads and the perfect storm, our hunch is that as spreads collapsed this past quarter, levered investors in swaps needed to source raw hedging material from TEDs (and/or to offset losses by closing down outright shorts and ED puts) in order to unwind their widening risk profile.

Even though we are leaning more on the side that spreads have overshot recently and offer value from a widening point of view, given the battle scars of the last few months, we doubt the marginal investor will have the risk appetite or budget to reinitiate spread widening trades in size before year-end. This presents an opportunity for real money that does not need to borrow balance sheet to average into UST ASWs at attractive levels.

Fig. 67: Positioning was the likely catalyst to tighter spreads

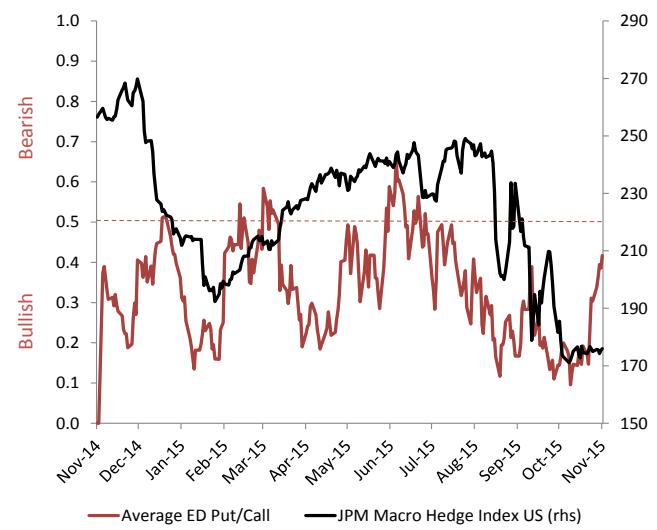
Thanks to global reserve reduction, the ensuing bond selling led to sharp build-up of dealer UST positions, which kicked off the tightening trend



Source: Nomura, Bloomberg

Fig. 68: RPI avg. ED option bias index vs. hedge fund index

It is likely the levered community underperformed as it burnt premium, establishing higher rates and wider spreads trades that did not materialize



Source: Nomura, Bloomberg

New Spread Paradigm, Structural Tightness Could Persist, but There Are Limits

As the market prepares itself for Fed rate normalization, we look back at the 2004-06 hiking cycle, when swap spreads and interest rate directionality had a strong positive correlation. In a higher rate environment, rates' climb had a strong upward pull on spreads, largely thanks to the mortgage hedging community. After the financial crisis, the correlation spiked during the 2009-10 mortgage refinance wave, which, unfortunately, turned out to be last major example of mortgage driven widening (Fig. 69).

Following that brief period of a strong correlation between rate levels and swap spreads, there has been mostly a negative relationship, given the lack of natural payers (due to shrinking GSE portfolios and banks not actively hedging rate risk), and because the Fed has retired convexity from the marketplace by owning a large chunk of the MBS market. (Meanwhile, by continuing to reinvest in MBS, the Fed doesn't allow convexity to rebuild as it naturally would.) Going forward, the hedging flows in swap spreads may have much more to do with inflow/outflow dynamics of asset managers rather than convexity profile of mortgage accounts. The 2013 taper tantrum provides a glimpse of the future should financial conditions worsen and fund redemptions ensue. This is why we believe there should be limited downside to spread tightening, as investor demand would soar for a spread widener if it offers both tail risk protection and attractive positive carry.

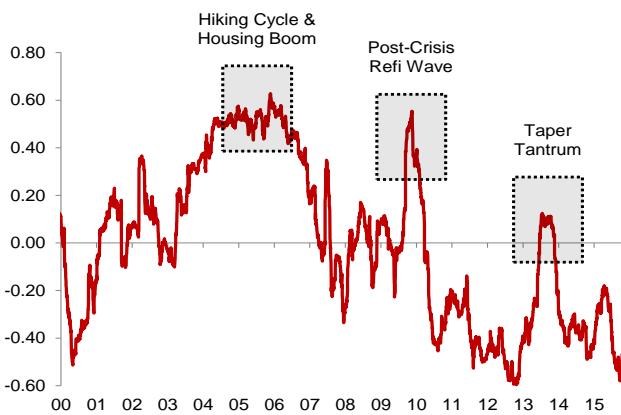
In addition, we believe large and acute dislocations (especially into negative territory for 5s and 10s) will not be sustained for long periods of time, from a fair value perspective, and offer opportunities. In Fig. 70, we refresh our 10yr swap spread model, taking into account inputs, such as the level of rates, corporate issuance trends, FRA/OIS spreads, euro risk premium (as relates to Libor pressures), mortgage basis, 10yr implied vol and the US budget deficit. Not surprisingly, the model is presenting a staggering difference (showing market-based spreads overshot by 6-8 bps tighter) between the current level of 10yr spreads and our model-fitted values. We reckon that one would need to go back to the volatile days of the financial crisis to see such a decoupling from our model.

On the one hand, some of the factors used in the model that were well suited in the past now play much less of a role in driving spreads, e.g., the mortgage basis (given the Fed's large ownership and it being a non-hedger) and US budget (which is more a long-term driver, anyway). Furthermore, there are forward-looking factors that the model may not be able to capture, e.g., balance sheet constraints into reporting dates (i.e., quarter ends) as well as heightened expectation and fears about corporate supply (either to prefund before hikes or for regulatory purposes, e.g., TLAC). Thus, spreads could stay tighter vs. historical levels. Meanwhile, we shouldn't just expect the new levels that were achieved on an overshoot move to be the new norm either. We believe that as the facts change, the factors driving our model will also adjust. We understand many investors are not looking to establish spread longs this late in the year, but if positions are cleaner and our view on the Fed and reduced corporate/UST issuance pans out, now is the time to start averaging into spread longs as a core trade to build upon into early 2016.

Fig. 69: Spread vs. rate relationship may return at higher rates

Post GFC, the lack of natural payers and smaller GSE portfolios have led to the correlation b/w rate and spreads hovering around historical lows

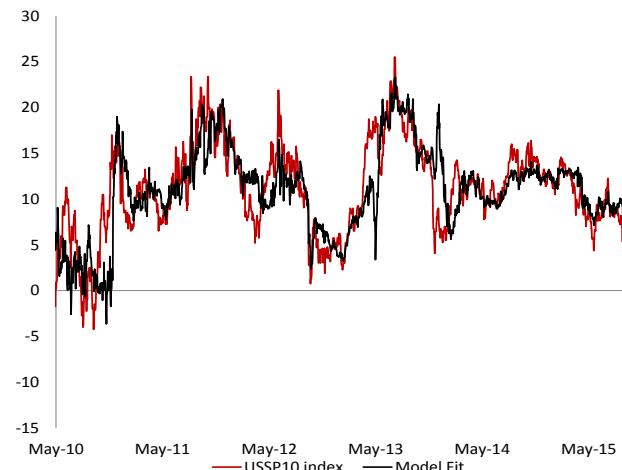
— 6m Rolling Correlation of Spreads vs. Rates (Changes)



Source: Nomura, Bloomberg

Fig. 70: 10yr spreads look stretched to the rich side vs. model

In the new regime, spreads could exhibit persistent tightening bias vs model results; but large & acute dislocations should not be sustained



Source: Nomura, Bloomberg

Conclusion: While ZIRP ushered in low rates and tighter spreads, the imminent move off zero and the need for more active hedging by a market that hasn't experienced a rise in rates should see spreads wider, in our view. All this is taking place against regulatory hurdles (i.e., higher capital charges and balance sheet costs) and the pure economics that funding costs hurt the levered investors (i.e., more costly to borrow banks' balance sheets). Hence, enticing investors to put on long spread trades, likely requires a lot of cushion before they start moving, or unlevered investors need to step in given the underperformance experienced in these exact spread wideners in 2015.

However, in a world of no natural payers and the Fed owning nearly half of the mortgage universe, one shouldn't expect spreads to return to prior levels. The good-old days of permanently wider spreads as rates rise may be a thing of the past, and we think it would require a big risk-off (or return of QE/twist) for USTs to meaningfully outperform swaps.

Meanwhile, even as the Fed hikes (which should slowly bring back active hedgers across a variety of investors), we don't see it as a catalyst for significantly wider spreads (again unless the Fed hikes trigger a risk-off). If the Fed hikes gradually, banks will be flush with liquidity (so less credit risk) and investors won't rush into overpaying for hedges with the expectations any rate rise will be gradual. Having said that, we don't know how markets will react when hikes continue after years of ZIRP given the concerns over credit fund redemptions and even wider credit spreads could still be ahead.

Bottom line, we do not believe 5-10yr swap spreads should trade negative on a long-term basis. We think the recent move was an overshoot and with positioning much cleaner, spread wideners are looking attractive again with the help of an increasingly positive carry profile. Any widening of MBS or the return of convexity hedging could result in 5s and 10-year spreads snapping back to flat or at least outperforming on the spread curve (see [link](#), page 5, for our 2s10s SoS trade idea). Overall, we expect any sort of permanent rebound in spreads to slightly wider levels to be a 2016 story.

Agencies

Supply/demand outlook and valuation on agency spreads

GSE total debt outstanding stood at \$634bn as of September 2015, where FNMA had \$325bn, while FHLMC had \$309bn. Both entities have reduced their debt outstanding by about 10% as of September 2015, and we expect about a 5% more cut into year-end to match their annual portfolio reduction targets of 15%. In the latest strategic plan published by the FHFA in August 2015 (see [link](#)), each agency was required to hold no more than \$250bn in their existing mortgage portfolio by 2018. Given total portfolio holdings of \$370bn for FNMA and \$367bn for FHLMC as of September, we see about 16% annual reductions for the two agencies going forward each year. Hence, similar to last year, we continue to expect negative net issuance for FNMA and FHLMC agency debt into 2016, each by about \$50bn, resulting in year-end balances of \$262bn for FNMA and \$255bn for FHLMC.

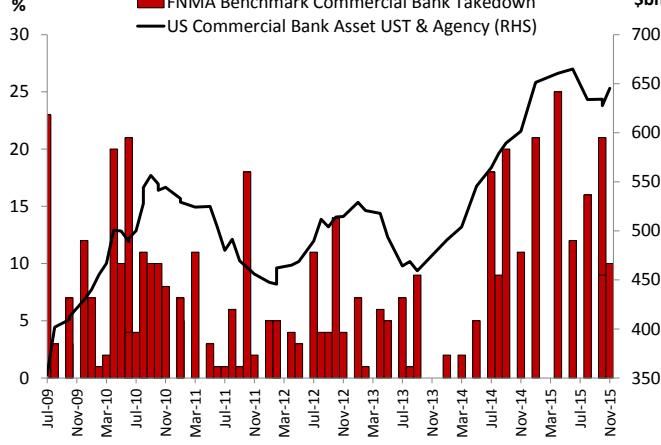
FHLB's debt profile was mostly unchanged over the last two years, where total outstanding declined from \$480bn at the end of 2013 to \$435bn in October 2015. Member banks, to some degree, replaced GSEs' role in providing liquidity to help Americans finance their home purchases as the housing market recovers. We continue to expect FHLB to be a key participant in the home financing system and its net issuance to be slightly negative around \$20bn to \$40bn in 2016. Overall, demand should be supportive for the spreads.

On the demand side, we think much of the banking community's LCR buying has been completed as their UST/Agency holdings plateaued in 2015. However, bank takedowns in benchmark FNMA auctions were still elevated vs. historical average through the course of the year (Fig. 71). On another note, the banking community has also been steadily adding MBS portfolios in 2015, a possible indication of its strong appetite for spread products. Given equivalent risk profiles between agency debt and agency MBS, if interest rate levels remain subdued next year, we could see banks continue to favor agency debt, particularly on the front end.

Demand from foreign investors could be limited next year, especially from foreign official accounts. After aggressively shedding their agency debt portfolios in 2013 and 2014, foreign investors slowed down their pace of selling in 2015 and kept their total portfolio size more in line with the total agency market outstanding (Fig. 72). As we are now in a rising interest rate regime, the diminishing liquidity of the agency market could be a concern for foreign official accounts, which may want to keep a reserve of liquid USD assets for FX intervention if FX volatility resurges higher as a result of future Fed hikes.

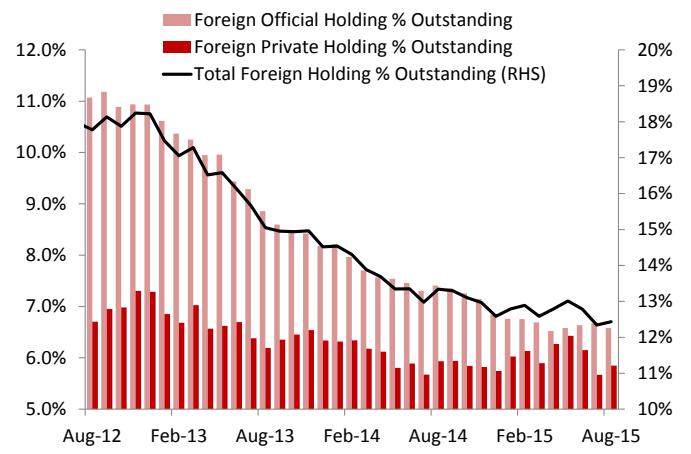
Overall domestic investors will continue to be major players in the agency space and valuations may continue to exhibit divergence between the front end and the rest of the curve. We expect both agencies will still rely on short-dated callables (sub 3yr maturity) as one of their primary funding channels, given its flexibility and greater investor demands. These callables should help improve liquidity conditions on the front end. Further out of the curve, where both bullets and callable gross issuance have been cut the most, may continue to trade at a much wider spreads compared with the front.

Fig. 71: Bank demand for GSE are still elevated



Source: Nomura, FNMA, Federal Reserve

Fig. 72: Foreign ownership stabilized in 2015



Source: Nomura, TIC

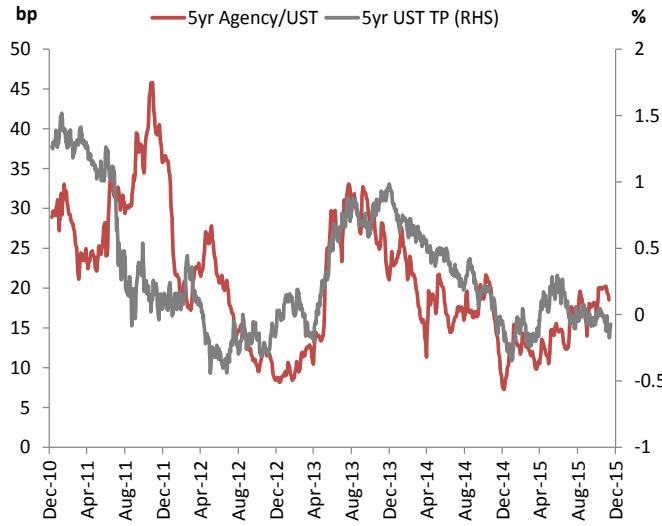
With regard to spread valuations, we expect agency/UST spread to stay contained given the Fed's decision to maintain its reinvestment policies on its large portfolio holdings, which should continue to suppress UST term premium on the long end and support the agency/UST spreads (Fig. 73). If the Fed keeps its promise by delivering "gradual" hikes as the market expects (currently slightly more than two hikes next year), the belly of the UST curve may stay anchored and rise slowly. This may also be supportive for carry trades and agency/UST spreads.

But the risk is if the Fed becomes more hawkish than investors expect, given the OIS market is already pricing for an extremely dovish scenario compared with the Fed's dots. In such a case, the belly term premium may surge the most, leading to steeper agency/UST spread curves. In addition, IG/HY markets may also come under pressure. Given their outstanding expanded significantly during the ZIRP and dealers' balance sheets are increasingly under pressure due to regulatory shifts, IG/HY spreads may be subject to greater volatility in times of stress and likely drag higher the Agency/UST spreads as well, like we have seen in the past couple of sessions.

Compared with swaps, we expect agency to outperform in the first half of 2016. The meaningful widening of agency/swap spreads in the second half of 2015 might have been dominated by the swap moves, as we saw all cash markets underperform (UST/Agencies/IG Credits). It is certainly the case that we had fewer natural payers in the current regime, which could continue to keep widening pressure on Agency/swap spreads. But with declining total net fixed income supply next year (see Global Supply section) and attractive cash versus swap levels, we expect both swap spreads and agency/swap spreads to normalize (see swap spread section for our views).

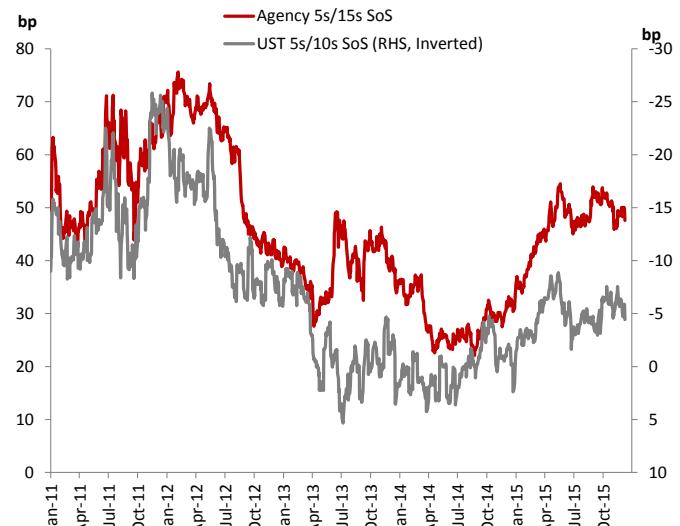
Consistent with our views in swap spreads, we expect the belly to tighten more than the front in agency/swap spreads (Fig. 74). However, the persistent imbalance of liquidities between the front end and back end could potentially hurt the belly spread when market volatility spikes. Nevertheless, we expect at least going into 1Q next year, agency/swap spread-of-spread curve to flatten.

Fig. 73: UST TP will keep a cap on Agency/UST spreads



Source: Nomura, Fed

Fig. 74: Agency/swap SoS curve may flatten into Q1 2016



Source: Nomura, Bloomberg

EMEA Rates

Euro area

Key Market Views

Duration and curve

While the ECB's policies managed to avert deflation risks during 2015, the objective to reflate the economy has not been met. Our economists expect the ECB's inflation trajectory to remain too optimistic going forward and see the skew of risks around the inflation outlook remaining to the downside. Consequently, Nomura's baseline expectations are that the ECB will have to revise its inflation projections again with further monetary policy action (more QE or another deposit rate cut are possible) in the offing for Q2 2016, while continued tightening of financial conditions for the real economy could entail earlier action.

We think the low rate environment in the euro area is set to prevail, and we set our 2016 forecasts below the forwards for most parts of the curve in H1 2016. However, we judge the yield lows in 10yr Bunds are behind us as we do not expect pronounced scarcity pricing. We set our 10yr Bunds forecast at 75bp by end-2016 and expect the trading range in 10yr Bund yields to be similar to H2 2015 between 0.45% and 1%. Our base case is not that 10yr Bund yields will return to 1%, but we still recommend pairing any constructive views on EUR rates with cross-market wideners against the US and even more so the UK.

Further ECB action, in particular on rates in the first half of 2016, should benefit the front-end of the curve leading to steepening risk. With the QE force multipliers for 30yr Bunds out of the picture for now and depo rate cut speculation returning in our view, **we look to engage in steepeners in Q1 next year, with a preference for 5y-30y DBR or EUR IRS**, which provide an additional carry advantage. In the meantime, we stick to our strategic relative curve positioning, expecting 5y-10y curve flatteners to outperform the 10y-30y curve expressed via a **regression-weighted receive 10yr (230%) vs. 5yr (100%) & 30yr (130%) EUR IRS butterfly**.

Cross market

Monetary policy divergence has its limits for UST vs. Bund spreads. The fact that the US and euro area are at different stages of the business cycle is well and truly priced, so now it is more about tinkering around the edges. Thus Bund/T-note trades in 2016 are unlikely to be structural but more likely to be either opportunistic or more situational, i.e., specifically focused on certain curves/forwards, etc.

Where we may be a little more structural is vs. the UK. That is because the UK is priced a long way (over 12 months) behind the US on the rate hiking cycle but is, in our view, ahead in the business cycle. Thus, if looking for cross-market ways to benefit from our Bund forecasts being below the forwards, the UK is a natural short on the other side as we enter 2016. We express this via a **5yr EUR vs. UK IRS wideners, a reds/blues flattener vs. UK swaps (a strong roll-down trade) and long 5f5y EUR along with USD against GBP**.

Money markets

The ECB's disappointing December policy package led to a pronounced sell-off and money markets had priced out rate cut possibilities completely. Even though Mr Draghi refrained from any indication that there would be further deposit rate cuts at the December press conference, he also showed no inclination to floor the deposit rate again. In our opinion, speculation about further rate cuts will remain the main driver of money market rates and curves in 2016. Even in the absence of another rate cut, we consider the roll-down in 3f1y (35bp over one year) and 2f1y (17bp) as very attractive as long as the ECB remains firmly on its balance sheet expansion course. We see outright and roll-down performance potential for money market curves.

At current levels we recommend replacing our 3f1y vs. 1f1y Eonia curve flattener by receiving 3f1y Eonia.

Research analysts

European Rates Strategy

Andy Chaytor - Niplc
andy.chaytor@nomura.com
+44 20 7103 1219

Norbert Aul - Niplc
norbert.aul@nomura.com
+44 20 7103 0063

Christophe Duval-Kieffer - Niplc
christophe.duvalkieffer@nomura.com
+44 20 7103 1202

Pooja Kumra - Niplc
pooja.kumra@nomura.com
+44 20 7103 7236

Anne Karina Asbjorn - Niplc
annekarina.asbjorn@nomura.com
+44 20 7103 6064

Swap spreads

Core European government bond (EGB) swap spread wideners, expressed in various ways, have been a key QE positioning in the approach to and during the ECB's asset purchases. However, with scarcity pricing less pronounced, the external risk via UST swap spread tightening become more relevant. Amid highly negative net-net supply for German paper, Bunds should retain an edge over swaps. We continue to like strategic core EGB swap spread wideners in 5yr to 10yr and stick to our recommended **7yr Bund ASW wideners**, but reduce our target.

EGB spreads

Despite the ECB engaging in QE at the start of this year, the development of EGB spreads against Bund has morphed from a constant compression trend over the past years into more volatile moves. While most peripheral spreads still managed to display a sound ytd tightening against Bunds, the substantial total returns EGB investors may have enjoyed in previous years are a thing of the past. The lower yield environment, combined with the pronounced outright volatility at times emphasised by a structurally deteriorating liquidity situation, changes the potential for EGBs to deliver large returns. However, the resilience of peripheral paper to the volatility displayed in other risk assets (equity and credit) still renders the risk-adjusted carry of peripheral paper attractive, and the EGB spread complex could grind somewhat tighter from current levels. However, in general we prefer the risk-reward in cross EGB positioning.

(Semi-)core: With respect to fiscal metrics and QE-adjusted supply in 2016, we prefer to overweight **Netherlands, Ireland and Belgium against France**. From an RV perspective, we find the 8y-10y sector on the DSL curve relatively cheap, in particular to OATs. Also with the DSTA supply schedule less concentrated in the ultra-long segment while the Bundesbank is expected to launch a new 30yr, possibly in February, we like 30yr DSL vs. Bund tighteners. With respect to the direct credit peers Austria and France, we favour **5y-10y RAGB flatteners boxed against OATs**. Lastly, we expect the **Irish curve to move even closer to the French and Belgian peers** (i.e., tighter and flatter) on the back of favourable macroeconomic and fiscal developments and a supportive supply outlook for next year. We like express the IRISH credit perception improvement via entering **long 200% Irish May30 vs. 100% (BTP Mar 30 & OAT May30) credit barbell**.

Peripherals: BTP vs. SPGB spreads had a jerky ride in 2015. Following inconclusive elections in Spain, this volatility is likely to continue through the Christmas period and possibly into the start of 2016. Structurally, we still consider Spain to be stronger credit vs. its peripheral peers. PGBs were also subject to elevated political uncertainty. However, our central case remains that Mr Costa's government will ultimately be able to respect the EC's fiscal targets, thereby keeping systemic political risk fairly low. Moreover, Portugal remains a key beneficiary of the ECB's QE programme. Therefore, from a strategic standpoint we see significant upside potential for PGBs in the medium term, in particular against sovereign credit peers like Italy and Spain. This is particularly so on the long to ultra-long end of the curve, as political risk is gradually priced out of the PGB curve. We think 4y-30y (5y-15y) PGB flatteners vs. BTP steepeners are at attractive levels to express our constructive view on the PGB curve. In Greece we view par as the right ballpark for GGB 17s and 19s and are targeting a cash price of above 70c for the GGB strip over a two- to three-month horizon.

Macro and monetary policy backdrop: ECB likely to ease again in 2016

Monetary policy has been the key driving force for global fixed income markets over the past few years with fundamentals taking a back seat in particular in the euro area. From this perspective, we expect the ECB's policies to remain the driving factor for euro area fixed income markets in 2016. However, we do not expect such implications for the market as we saw in Q1 2015 on the back of the start of QE.

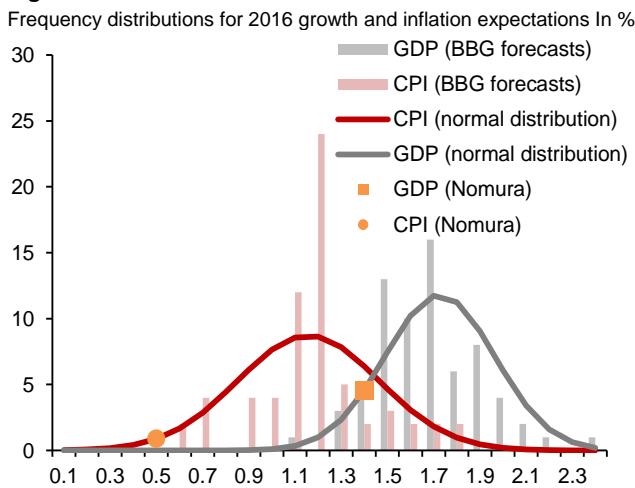
With respect to the macro backdrop for the euro area, our economists expect the region to maintain its modest recovery aided by ECB policy accommodation, but restrained by slow wage growth, debt overhang and external uncertainties (see [Global Annual Economic Outlook](#), 4 December). Against this backdrop, we retain our long-standing caution over the medium-term outlook and Nomura's 2016 euro area GDP forecast remains below the consensus expectation (see grey line in Fig. 75). However, for the ECB's monetary policy stance, the inflation picture remains in the spotlight. While the ECB's policies managed to avert deflation risks in 2015, the objective to reflate the economy has not been met.

ECB to ease again in Q2 2016 . . .

Our economists expect the ECB's inflation trajectory to remain too optimistic going forward, and see the skew of risks around the inflation outlook remaining to the downside (Fig. 76). Nomura's euro area HICP forecast for 2016 is at the bottom end of the analysts' expectations tracked by Bloomberg (see red line in Fig. 75, while the recent drop in oil prices may not be fully reflected in the Bloomberg forecast yet).

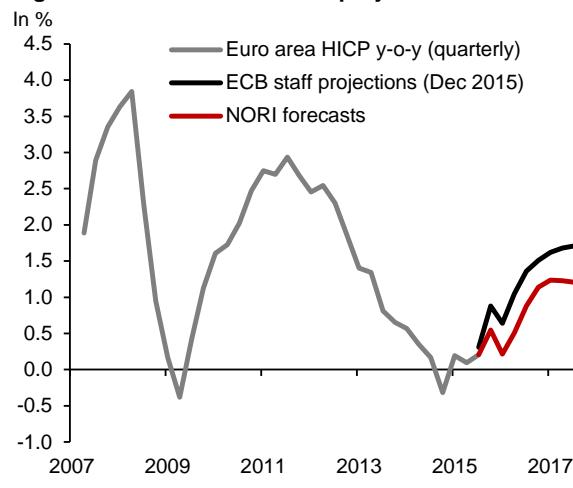
Consequently Nomura's baseline expectations are that the ECB will have to revise its inflation projections again with further monetary policy action in the offing for 2016. In terms of timing, our economists look for further easing in Q2 2016, potentially alongside the "technical review" of the APP in the spring as Mr Draghi hinted in the December meeting.

Fig. 75: Euro area GDP and CPI forecasts for 2016



Source: Nomura, Bloomberg

Fig. 76: Nomura/ECB inflation projections



Source: Nomura, ECB, Bloomberg

While tightening of financial conditions could entail earlier action

However, after the disappointment at the ECB's December meeting basically all asset classes (FI, FX, equities and credit) reversed their trends where the momentum had been fully in favour of the ECB's policies over the past months. Since then, the focus of euro area central bankers has been on justifying the ECB's market-disappointing action. We think that the Governing Council (GC) is backing the ECB decision to the outside world at the current stage not to open up a broader discussion of significant dissent within the GC. However, in our view the consensus decision of the GC probably underestimated how much positive impact Mr Draghi's "verbal easing" over the past few months had already had on the ECB staff forecast update of December.

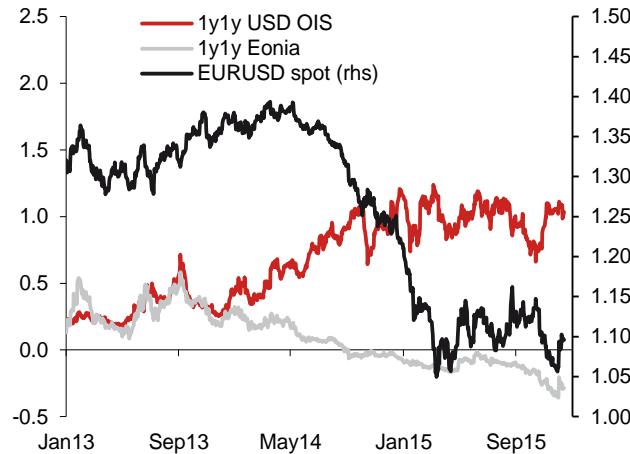
The bottom line is that financial conditions for the real economy have been tightening since the ECB's December meeting via an appreciation of the EUR, lower equity valuations and higher real yields. A continuation of that theme could force the ECB into action as early as the March meeting in our view. This could entail the full arsenal of the ECB measures being deployed, with more QE in size and pace as well as a further deposit rate cut.

On top of that the renewed weakness of energy prices started to weigh on market-based inflation gauges (Fig. 78) and reduce expected base effects at the beginning of 2016 (see [All about the base \(an update\)](#), 14 December). While we do not expect deflation fears to resurface on large scale (see [Inflation Insight - Exit the deflation sheep, enter the inflation monkey?](#), 14 December), concerns voiced by the ECB's chief economist Peter Praet, that the weakness in commodity prices can also feed through into core inflation (see [Economics Insights](#), 19 November) underline our view that a subdued inflation path in the euro area will force the ECB into further easing in 2016.

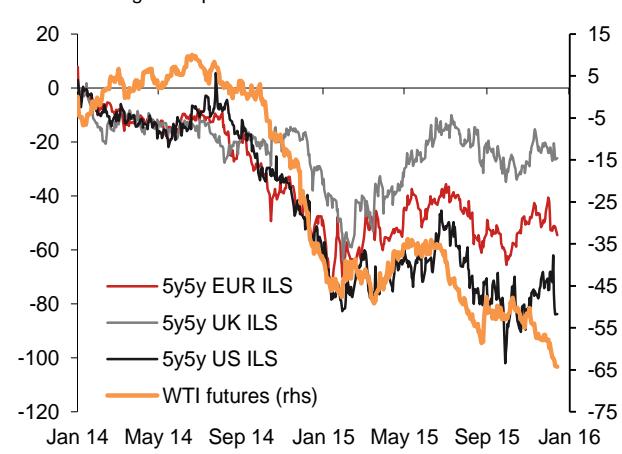
Market pricing for rate cut expectations vanished after the December ECB meeting amid no apparent willingness or consensus view on the Governing Council of how low the deposit rate could go. Despite having had the opportunity to instil the market perception that the ECB can actively foster monetary policy divergence (and therefore a sustained impact on FX), it now boils down to the Fed again while monetary policy divergence has stalled (Fig. 77). This entails the risk that EUR could appreciate again especially if the Fed turns out to be more cautious about a rate hike cycle than the market is anticipating.

Fig. 77: Monetary policy divergence stalled

OIS rates in % and EURUSD

**Fig. 78: Accumulative changes of ILS and oil since 2014**

ILS rate changes in bp and oil in USD



Outright and curve – Low rate environment prevailing, but no pronounced scarcity pricing ahead

The yield lows in 10yr Bunds are behind us and...

The fundamental picture (in particular subdued inflation) and the ECB accommodation should prevent a significant increase in yields in the euro area. While the ECB managed to contain deflation risk, we still judge the central bank's capacity to generate credit, wage and GDP growth as too limited to reflate the euro area economy.

Thus, despite the Fed engaging in a (shallow) rate hike cycle, the low rate environment in the euro area is set to prevail in our opinion, and we set our 2016 forecasts below the forwards for most parts of the curve in H1 2016 (Fig. 79). We are looking for further ECB action in the first half of 2016, which should benefit the front-end of the curve leading to steepening risk, with the ultra-long sector remaining the structural weak spot. However, after the December meeting markets should have become a bit more cautious about the GC's willingness and capacity to engage in substantial further easing in the absence of severe deflation risk resurfacing. Hence we do not expect the market pricing for further ECB easing to get out of hand.

Fig. 79: 2016 Bund forecast trough in late Q1 early Q2

Yield in %

| | | 1Q2016 | | | 2Q2016 | | | 3Q2016 | | | 4Q2016 | | |
|----------|---------|--------------|---------------|-----------|--------------|---------------|-----------|--------------|---------------|-----------|--------------|---------------|-----------|
| Security | Current | NMR Forecast | Forward Yield | Diff (bp) | NMR Forecast | Forward Yield | Diff (bp) | NMR Forecast | Forward Yield | Diff (bp) | NMR Forecast | Forward Yield | Diff (bp) |
| 2yr | -0.34 | -0.40 | -0.30 | -10 | -0.40 | -0.29 | -11 | -0.40 | -0.27 | -13 | -0.35 | -0.26 | -9 |
| 5yr | -0.04 | -0.15 | 0.01 | -16 | -0.10 | 0.05 | -15 | -0.10 | 0.09 | -19 | -0.05 | 0.14 | -19 |
| 10yr | 0.65 | 0.50 | 0.69 | -19 | 0.60 | 0.73 | -13 | 0.65 | 0.77 | -12 | 0.75 | 0.81 | -6 |
| 30yr | 1.43 | 1.35 | 1.45 | -10 | 1.45 | 1.46 | -1 | 1.55 | 1.48 | 7 | 1.65 | 1.50 | 15 |

Source: Nomura

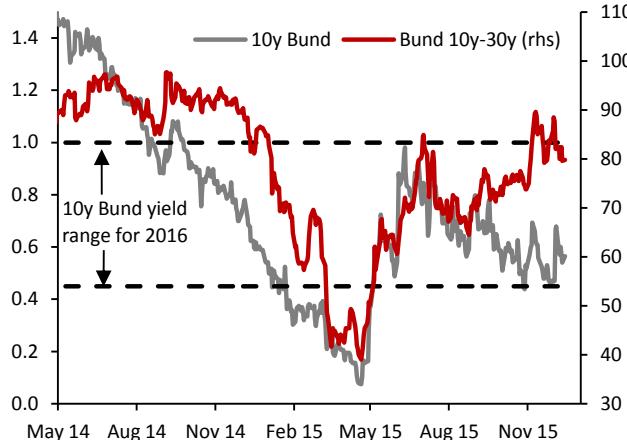
We expect the H2 2015 10yr Bund yield range to prevail in the absence of severe scarcity pricing

Memories of the May/June Bund sell-off should provide a natural floor for long and ultra-long Bund yields and we expect 2016's trading range for 10yr Bund yields to be similar to H2 2015 between 0.45% and 1% (see grey line in Fig. 80). The lower end should be seen during Q1 and into Q2 with ECB easing speculation returning, while we think the higher end will be dependent on the correlation with USTs. Our base case is not that 10yr Bunds will return to 1% yields, but we still recommend pairing any constructive views on EUR rates with cross-market wideners against the US and even more so the UK as we highlight in the cross-market section below.

As we outlined in [Unwrapping the ECB package](#) (27 November), we do not expect to see scarcity pricing, i.e., pronounced bull-flattening of the curve driven by the ultra-long sector as had been the case during Q1 2015 up to April. For that to recur, deflation expectations would have to increase (defining the market perception of how long QE is going to last) to foster the market perception that sustained QE purchases would force the Bundesbank into ultra-long purchases owing to a shrinking QE pool (due to the deposit rate threshold for purchases) while exhausting ISIN limits.

Fig. 80: Yield lows in 10yr Bunds are behind us

Yield In % and curve spread in bp



Source: Nomura, Bloomberg

The ECB has contributed to credibly reduce the market perceptions of deflation risk (see the pricing of deflation floors in Fig. 81) despite the renewed drop in oil prices to multiyear lows, and we do not expect deflation pricing to return (see [Inflation Insight - Exit the deflation sheep, enter the inflation monkey?](#)). Furthermore, QE purchases until March 2017 will hardly force the Bundesbank to acquire ultra-long paper in size given that we estimate the Bund purchases from March 2015 to March 2017 will take out less than 70% of available volume under the current QE design (see Fig. 82, while the 34s to 46s part of the Bund curve represents roughly 18% within the currently eligible Bund QE pool). Thus, a pronounced squeeze in the belly of the Bund curve would be required for the self-reinforcing bull-flattening dynamic to come to the fore again. However, the ECB has been actively managing the QE design (e.g., ISIN limit changes, altering the eligibility pool), and still has flexibility for further alteration if needed. From this perspective, removing the deposit rate floor altogether or increasing the ISIN limits on bonds without "Collective Action Clauses" are potential options (see [Unwrapping the ECB package](#)) that might be discussed in the planned technical QE review in the spring.

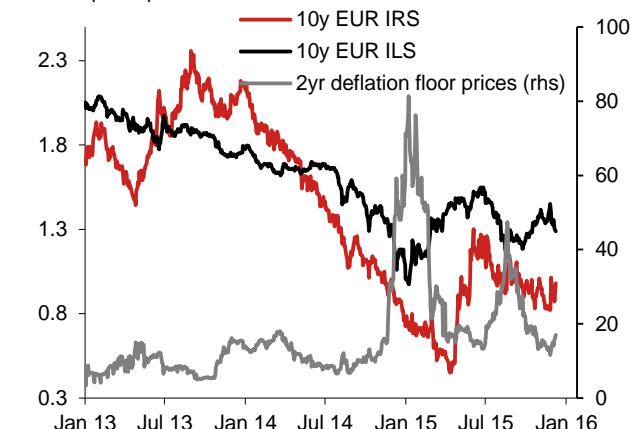
Risks are skewed in favour of steeper ultra-long curves

With the QE force multipliers for 30-year Bunds out of the picture for now, in our view, and depo rate cut speculation returning, we see **steepening potential in the 5y-30y and 10y-30y DBR and EUR IRS curves** in Q1. We expect the decoupling from the previous outright dependency of these curves to intensify in a rally again (Fig. 80), while 30-year paper should remain the weakest link in a pronounced sell-off.

The re-flattening of ultra-long curves may not have run its course yet, with 5-year-30-year EUR IRS still some 10-15bp above the late-October levels when deposit rate cut expectations were fuelled by the October ECB meeting (Fig. 83). Moreover, falling energy prices are affecting the market perception of inflation risk premia. **We look to engage in steepeners in Q1 next year with a preference for 5y-30y DBR or EUR IRS**, which provide an additional carry advantage. In the meantime, we stick to our strategic relative curve positioning, expecting 5-year-10-year curve flattener to outperform the 10-year-30-year curve expressed via a [regression-weighted receive 10yr \(230%\) vs. 5yr \(100%\) & 30yr \(130%\) EUR IRS butterfly](#) (i.e., overweighting the 10-year-30-year steepener to hedge against bearish surprises). As long as the ECB does not have a clear preference for whether further action would entail more QE and/or another deposit rate cut, we expect this kind of trade to work well into renewed ECB easing expectations. We consider current valuations attractive to add to this trade on tactical grounds (Fig. 83).

Fig. 81: Deflation expectations are a fundamental driver of pronounced scarcity pricing

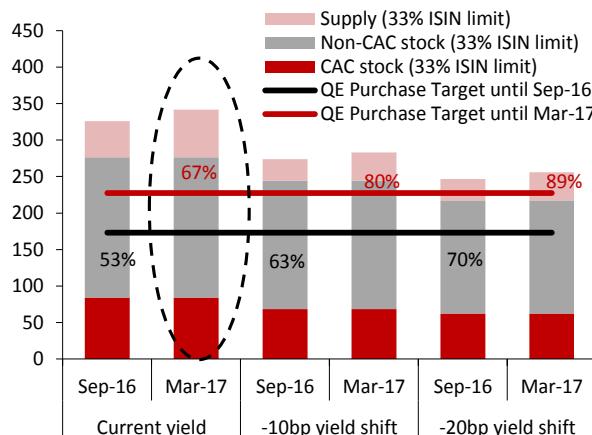
Rate in bp and price in cents



Source: Nomura, Bloomberg

Fig. 82: Available QE pool for German sovereign paper from Mar-15 to Sep-16 / Mar-17

Available 2y-31y QE pool (from Mar-15 to Sep-16 / Mar-17) of German sovereign paper at €60bn monthly APP purchases. Values in €bn and percentage of PSPP purchases relative to available volume. We adjust for the inclusion of sub-sovereign paper in the QE eligibility pool according to relative market size of sovereign, agency and sub-sovereign paper.



Source: Nomura, ECB, Bloomberg

Cross-market – we prefer UK underperformance vs. EUR

Monetary policy divergence has its limits for the UST vs. Bund spreads and . . .

With the year ending with an ECB cut and a Fed hike in the same month, it is natural that cross-market will be a key theme for rates markets as we head into 2016, especially given our house view that the Fed and ECB will continue further in different directions in H1 2016. However, we must not over-sell this difference. While it is clearly important if these two major central banks are moving in different directions, magnitude matters, and there may “only” be 60bp or so further divergence through 2016 in terms of policy rates. On a historical basis, this is not particularly large. Market performance flows from this.

Fig. 84 shows the ytd rolling total return performance for G4 core markets (using Germany rather than a euro aggregate). In a year that has led to these December moves, not only has the divergence between the “tighteners” and “loosener” been modest (the lowest for over 20 years) but Germany has actually underperformed both the UK and US. Perhaps not what one would expect given the rate moves, QE and so on through the year.

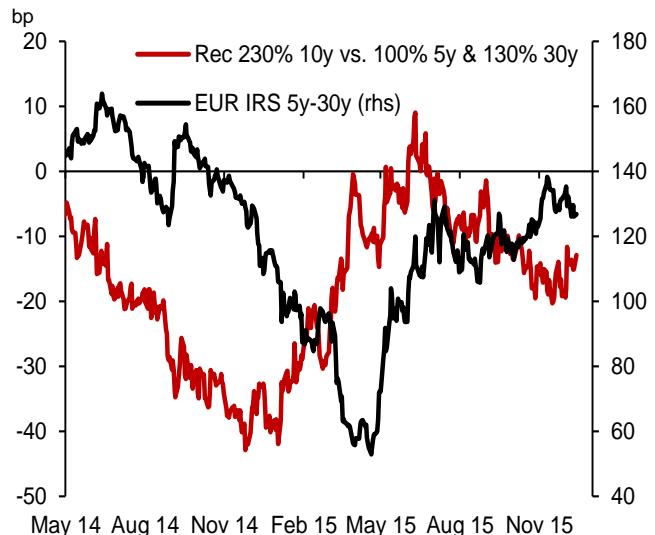
Our view is that the Bund/T-note spread could see some further expansion into Q1 but perhaps only modest in scale, and there may even be some compression back in the second half of the year. The way to think about this then is perhaps a range-trading environment. The fact that the US and euro area are at different stages of the business cycle is well and truly priced, so now it is more about tinkering around the edges. Thus Bund/T-note trades in 2016 are unlikely to be structural but more likely to be either opportunistic or more situational, i.e., specifically focused on certain curves/forwards etc. We go into the year with none of these positions extant.

We prefer UK underperformance trades against EUR and US IRS

We can perhaps be a little more structural vs. the UK. That is because the UK is priced a long way (over 12 months) behind the US on the rate hiking cycle but is, in our view, ahead in the business cycle. Thus, if looking for cross-market ways to benefit from our Bund forecasts being below the forwards, the UK is the natural short on the other side as we enter 2016. We express this via a **5yr EUR vs. UK IRS wideners, a reds/blues flattener vs. UK swaps** (a strong roll-down trade) and **long 5f5y EUR along with USD against GBP** (see [UK: Front-end rates too rich, time to oppose](#), 23 October).

As well as the outright spread moves, we can also look at the betas. In Fig. 85 we show the beta of 10yr euro swaps to US and UK equivalents as well as the 10yr yield itself. The April/May Bund-led sell-off saw the beta rocket higher (the clue is in the name), and while it has come back since then, it has stayed in a higher range even up until the most recent ECB-driven spike. Between January 2014 and May 2015 the average beta was 0.5, since then it has been 0.8. We see the beta in 2016, and especially as we head into Q1, liable to push back lower towards the old range.

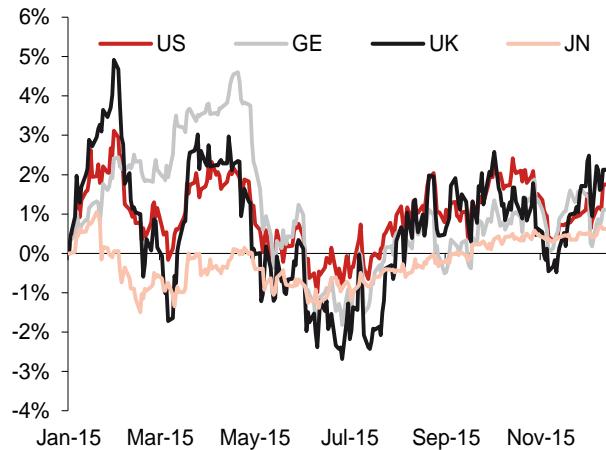
Fig. 83: Trade the structural weakness of the ultra-long segment in the absence of QE scarcity pricing



Source: Nomura, ECB, Bloomberg

Fig. 84: G4 rolling ytd total return in 2015

Bloomberg 1yr+ sovereign index



Source: Nomura, Bloomberg

Money markets – Lower rates and flatter curves

The ECB's disappointing December policy package led to a pronounced sell-off and money markets had priced out rate cut possibilities completely. Even though Mr Draghi refrained from any indication that there would be further deposit rate cuts at the December press conference, he also showed no inclination to floor the deposit rate again. In our opinion, speculation about further rate cuts will remain the main driver of money market rates and curves in 2016.

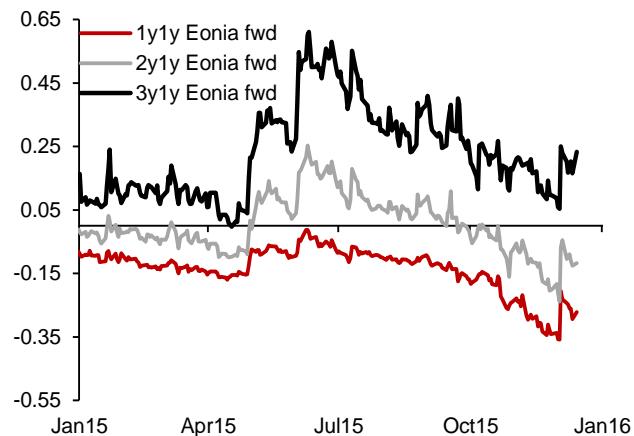
As we outlined above, we still think that a subdued inflation path in the euro area, which is additionally under pressure from the ongoing weakness in energy prices (Fig. 78), will force the ECB into further easing in H1 2016. In particular, if financial conditions for the euro area's real economy continue to tighten (lower equity valuations, higher real rates alongside an appreciating EUR), ECB officials should discuss the options of another rate cut more openly again, which could start as early as Q1 2016.

Even in the absence of another rate cut, we consider the roll-down in 3f1y (35bp over one year) and 2f1y (17bp) very attractive as long as the ECB remains firmly on its balance sheet expansion course. We see outright and roll-down performance potential for money market curves (Fig. 86, Fig. 87). While the very front end of the Eonia curve is starting to timidly price a higher probability for another deposit rate cut, the 3f1y is trading above the highs before the 22 October and after the 3 December ECB meeting.

At current levels, we recommend replacing our 3f1y vs. 1f1y Eonia curve flattener with receiving 3f1y Eonia at 28bp with a target at 15bp and a stop at 33bp.

Fig. 86: Front-end rates to creep lower again . . .

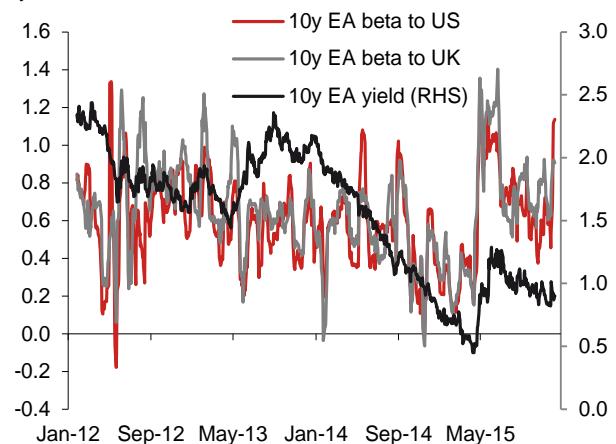
Forward rates in %



Source: Nomura, Bloomberg

Fig. 85: Watch the beta!

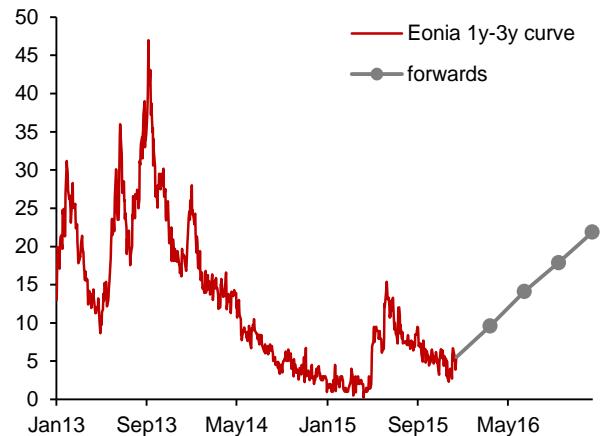
EUR IRS beta vs. UK and US IRS (20 day rolling of weekly changes) and 10yr EUR IRS rate in %



Source: Nomura, Bloomberg

Fig. 87: . . . while money market curves are too steep

Eonia curve and forwards in bp



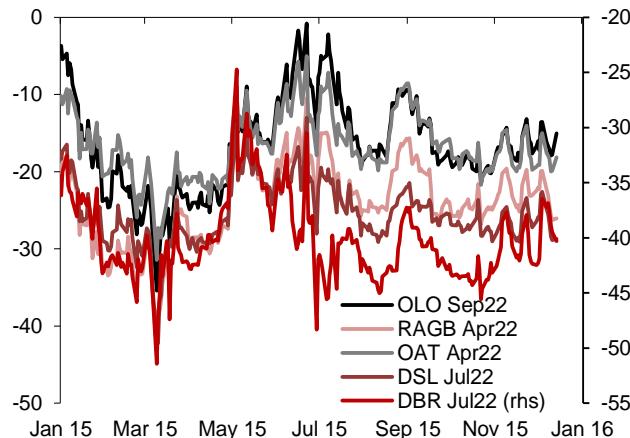
Source: Nomura, Bloomberg

Swap spreads - stick to 5yr to 10yr core EGB wideners

Core EGB swap spread wideners, expressed in various ways, have been a key QE positioning in the approach to and during the ECB's asset purchases. However, with scarcity pricing less pronounced (see above), the external risk via UST swap spread tightening become more relevant. However, the situation in the euro area differs from the US in terms of monetary policy and the risk of foreign reserves selling, in our view.

Fig. 88: Core EGB swap spread rewidening, but new extremes are unlikely over the near term

Par/par ASW spread in bp



Source: Nomura, Bloomberg

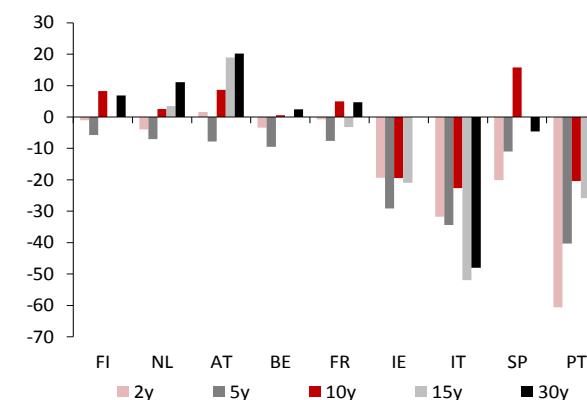
Amid highly negative net-net supply for German paper, Bunds should retain an edge over swaps. Germany's balanced budget approach and its highest capital key allocation result in the most negative net-net issuance (net issuance net of EAPP purchases) of about -EUR107bn in 2016 (see [EGB supply outlook for 2016](#), 6 December). The ISIN limit increase, combined with the larger QE eligibility pool after the ECB's hawkish deposit rate cut, suggests that the Bundesbank can continue to conduct Bund purchases in its preferred maturity segment of 3yr to 10yr (Fig. 89). We still like strategic core EGB swap spread wideners in 5yr to 10yr, and stick to our recommended 7yr Bund ASW wideners (Fig. 88). **However, in the absence of more severe scarcity pricing, we doubt that our previously anticipated 50bp in the DBR Jul22 can be reached, and we lower the target to 45bp.**

EGB spreads – past large spread compression

Despite the ECB engaging in QE at the start of this year, the development of EGB spreads against Bunds has morphed from a constant compression trend over the past few years into more volatile moves. While most peripheral spreads still managed to display a sound ytd tightening against Bunds (Fig. 90), the substantial total returns EGB investors may have enjoyed in previous years are a thing of the past (Fig. 91).

Fig. 90: EGB spreads against Germany ytd

par/par ASW spreads

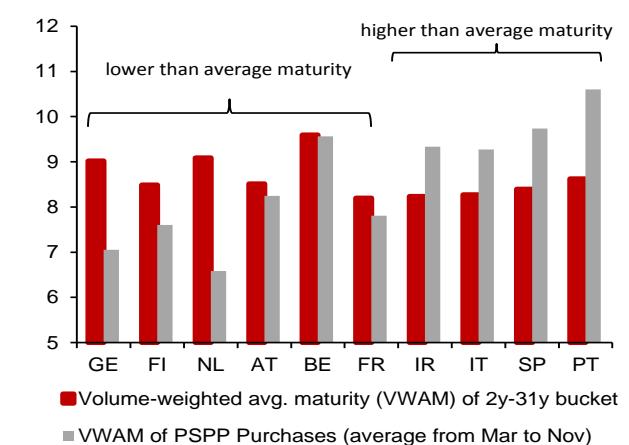


Source: Nomura, Bloomberg

The lower yield environment, combined with the pronounced outright volatility at times emphasised by a structurally deteriorating liquidity situation, changes the potential for EGBs to deliver large returns. However, the resilience of peripheral paper to the volatility

Fig. 89: Volume-weighted 2y-31y avg. maturity of outstanding volume and PSPP purchases

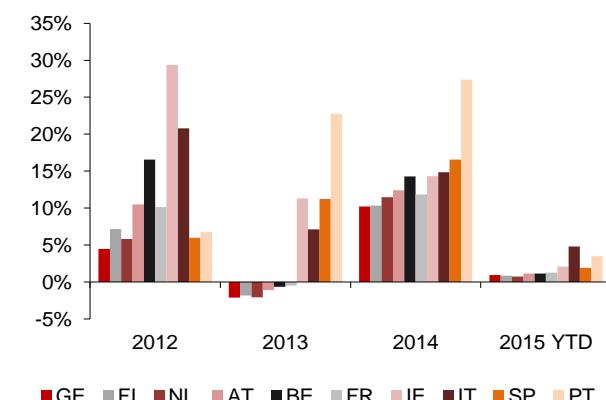
years



Source: Nomura, Bloomberg, ECB

Fig. 91: EGB space ytd total return

Bloomberg 1yr+ sovereign index

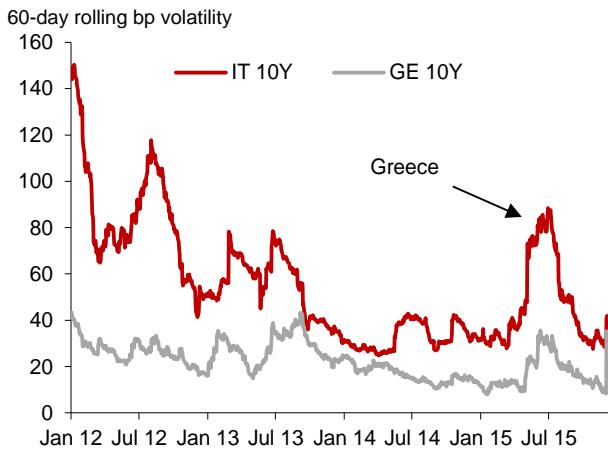


Source: Nomura, Bloomberg

displayed in other risk assets (equity and credit), still renders the risk-adjusted carry of peripheral paper as attractive. This also shows in the realised volatility of peripheral paper which is for 10yr BTPs almost on par with Bunds (Fig. 92), while offering a yield pick-up and carry advantage.

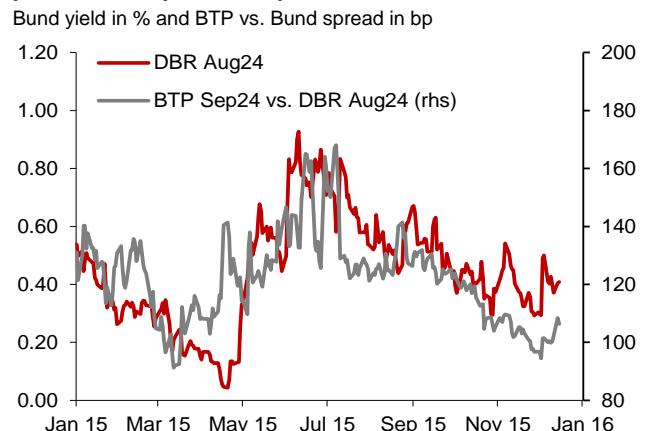
Thus, we see potential for the EGB spread complex to grind tighter from current levels. However, for EGB spreads to tighten substantially against Bunds, QE scarcity pricing would have to intensify, with spillover effects from investors rotating out of very low-yielding core EGBs into periphery (bull tightening) as was the case in the run-up to the QE purchases (Fig. 93).

Fig. 92: Realised vol has retreated for peripherals



Source: Nomura, Bloomberg

Fig. 93: QE scarcity pricing would have to intensify for pronounced spread compression

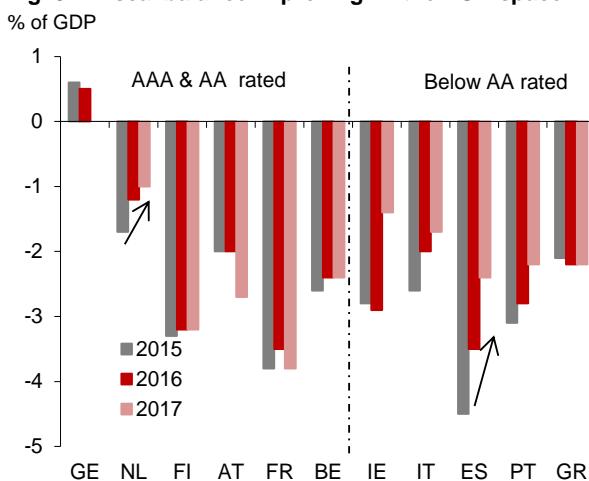


Source: Nomura, Bloomberg

(Semi-)core EGBs

(Semi-)core EGBs are trading at relatively attractive levels against Bunds, especially when compared with peripherals. In terms of fiscal metrics, the **Netherlands, Ireland and Belgium** should have an edge over other (semi-)core peers like France, in our view (Fig. 94). It is also worth noting that, in terms of net issuance in 2016, we see the Netherlands and Ireland followed by Finland and Austria remaining the key beneficiaries of the ECB's QE programme in the (semi-)core space (Fig. 95).

Fig. 94: Fiscal balance improving in the EGB space

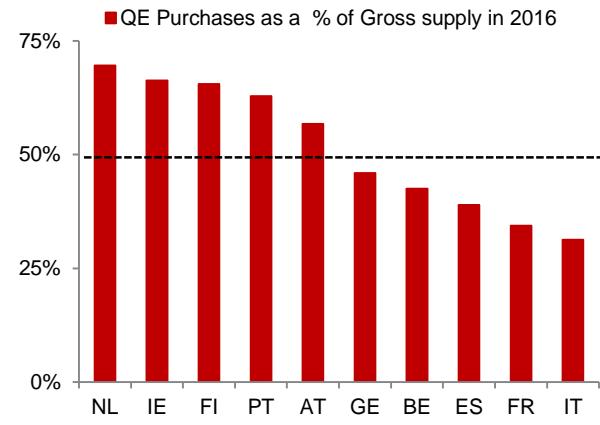


Source: Nomura

The overall spread compression into the last ECB meeting as well as December supply seasonality has supported OAT vs. DSL spread compression across the curve. However, the fiscal metrics as well as the rating picture favour the Netherlands over France. In addition, the supply dynamics support Dutch paper, with the DSTA reducing its DSL issuance by nearly 40% in 2016 ([Link](#)). From an RV perspective, we find the 8y-10y sector on the DSL curve relatively cheap compared with most peers, in particular OATs (Fig. 96).

Also with the DSTA supply schedule less concentrated in the ultra-long segment while the Bundesbank is expected to launch a new 30yr, possibly in February, we also like holding

Fig. 95: QE purchases as a % of gross supply in 2016



Source: Nomura

30yr DSL vs. Bund tighteners. We add long DSL Jan 47s vs. DBR Aug 46s to our trade portfolio with the spread currently trading at 14.5bp targeting a spread of 7bps.

Meanwhile, weakening of **Finland's** macro picture has remained a concern for investors this year. However, we still consider its recent underperformance overdone as compared to its peer's. We continue to see potential in our recommended long 120% RFGB Apr24 vs. 100% OLO Jun24 & 20% DBR Aug24 credit barbell. In fact, we would rather prefer extending this trade using current 10y benchmarks (2025 maturity) with Belgium expected to sell a new OLO26s in early January.

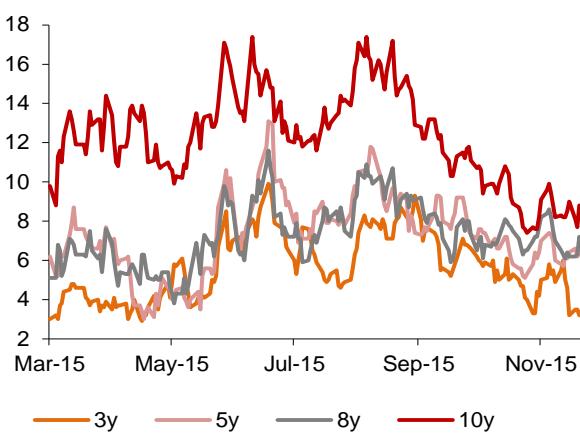
Again in Austria, even though it remains a stronger credit, risks around its banking sector dominated investor sentiment for RAGBs this year. Fundamentals still do not justify RAGBs underperforming so much as compared to levels seen pre QE times. In particular we like expressing our constructive view on the Austrian curve via 5y-10y RAGB flatteners boxed against OATs /Bunds steepeners (Fig. 97). The box spread in both case trades at extreme levels, in our view. **We add (RAGB Jun19s vs. RAGB Oct 24s) flatteners boxed against (OAT May19s vs. OAT Nov 24s) steepeners to our portfolio.**

Ireland – further convergence to OLOs and OATs

Strategically, we remain constructive on Ireland as a credit, and see potential for the Irish curve to move even closer to the French and Belgian curves (i.e., tighter and flatter) on the back of favourable macroeconomic and fiscal developments and a supportive supply outlook for next year. Ireland also remains a key beneficiary of the QE programme, as highlighted above (Fig. 95). Overall, we see little fundamental reason for a meaningful spread between Ireland and France/Belgium besides liquidity considerations.

Fig. 96: OAT vs. DSL spread compression

Yield spreads in bp



Source: Nomura

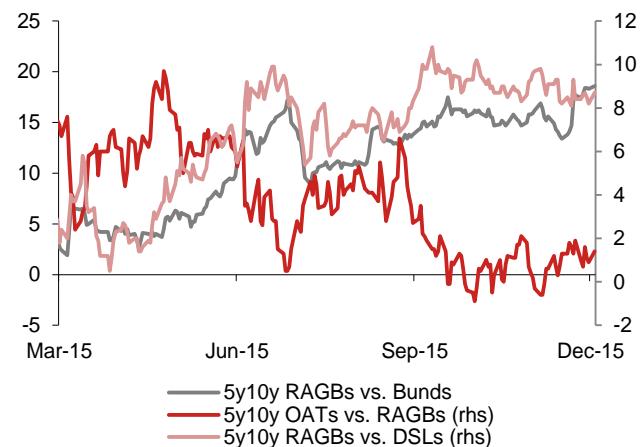
Political risks remain subdued as Ireland heads for its general elections early next year (by April at the latest). Major coalition partner Fine Gael continues to enjoy a healthy lead over radical party Sinn Fein in recent polls. Despite the fact that a weaker majority could arise from the spring elections, Ireland has had ample experience with small-majority and even minority coalition governments running the full course of their mandate since the early 1990s ([Economics Insights - Euro area 2016 Economic Outlook](#), 10 December).

From a valuation perspective, our recommended **5y-15y IRISH vs. OAT yield box has performed well and we still see more potential** in such curve positioning trades (see [European Rates Insights - Ireland: On the way to normalisation](#), 29 September).

We also still like the theme of IRISH outperformance relative to stronger (OAT/BGB) and weaker perceived (SPGB/BTP) EGB credits by means of credit barbells. These kinds of trades hold a more balanced risk-reward, with the short peripheral leg serving as a safety anchor should EGB risk sentiment deteriorate and move the entire EGB spread complex. We like expressing this view via entering **long 200% Irish May30 vs. 100% (BTP Mar 30 & OAT May30) credit barbell** positions, as shown in our trade table (Fig. 98, Fig. 99, Fig. 104).

Fig. 97: 5y10y RAGB curve steep vs. peers

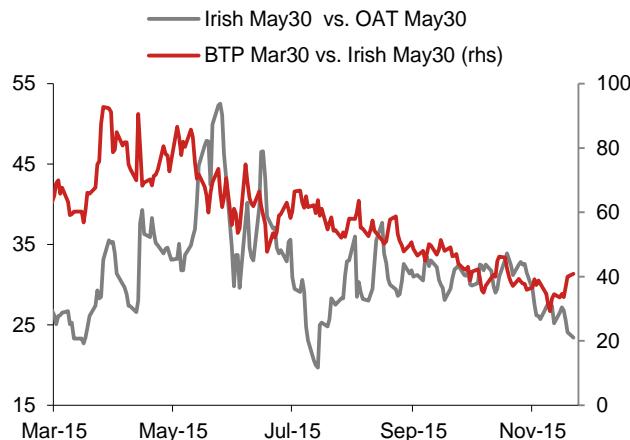
Yield spreads in bp



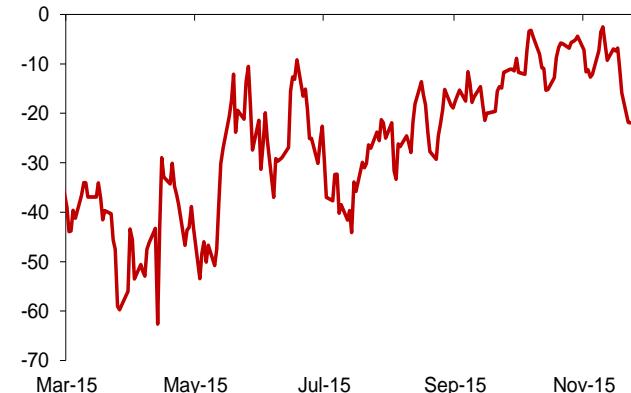
Source: Nomura

Fig. 98: 15y Irish spreads vs. OATs and BTPs

Yield spread in bp

**Fig. 99: 200% Irish May30 vs. 100% (OAT May30 and BTP Mar30) yield fly**

Yield spreads in bp



Peripheral EGBs

Spain vs. Italy – Remain constructive on SPGBs

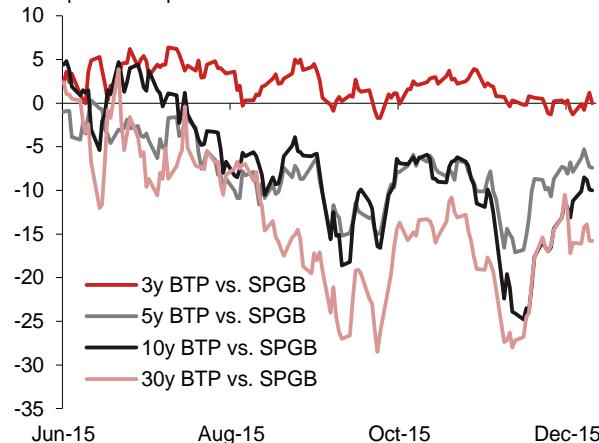
This year BTP vs. SPGB spreads had a jerky ride driven by the political noise in Spain (Fig. 100). With Spain's Socialist party maintaining a lead in the recent polls; risks around the forthcoming elections have declined. With regards to Catalan independence, the outcome of the September elections and the recent rejection of the Catalan pro-independence resolution by the court, noise around Catalan independence should be subdued, in our view (see [European Rates Insights - After the Catalan elections](#), 28 September).

Strategically, we still disagree with the BTP curve trading strongly through SPGBs given Spain's advantage in the macro, structural reform and rating pictures. From this perspective, an important concern for the relative valuation of SPGBs against BTPs has been the lack of domestic demand over the course of the year. However, domestic bank holdings of Spanish paper have stabilised in recent data while Italian banks' BTP holdings been relatively stagnant (Fig. 101).

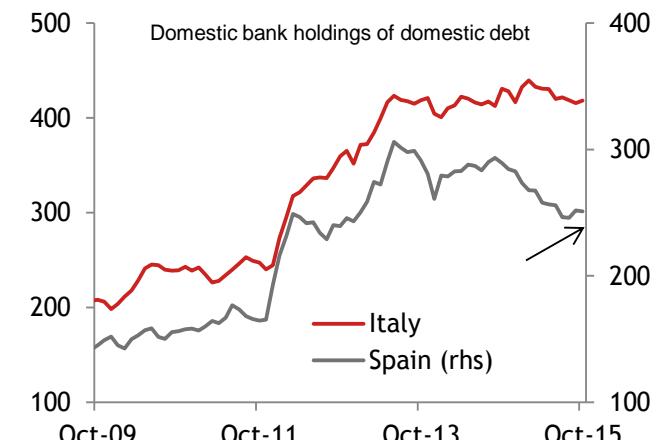
Overall, with systemic political risk having significantly declined and domestic demand stabilising somewhat, we expect to see **SPGB outperformance over BTPs, and we stick to our position in 5yr** (Fig. 104).

Fig. 100: BTP vs. SPGB spreads

Yield spreads in bp

**Fig. 101: Spanish holdings of domestic paper stabilise**

Latest data as of end-October 2015, in €bn

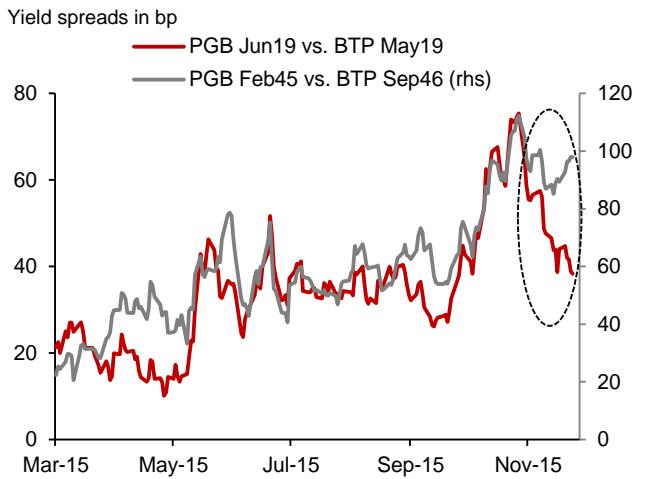


Portugal – Support from the ECB's QE programme

Political uncertainty has been the main theme driving the PGB curve since the October elections. Nonetheless, as we analysed in ([European Rates Insights - PGBs under a Left government](#)), our central case remains that Mr Costa's government will ultimately be able to respect the EC's fiscal targets, thereby keeping systemic political risk fairly low.

As we highlighted previously, Portugal remains one of the main beneficiaries of the ECB's QE programme in peripheral space. Existing PGB holdings of the Eurosystem from the

SMP are exhausting the ISIN limits at the front-end of the target bucket to a large degree. Relatively longer purchases in PGBs should keep the curve structurally flat against SPGBs and BTPs. Therefore, from a strategic standpoint we see significant upside potential for PGBs in the medium term, especially against sovereign credit peers like Italy and Spain. This is particularly so at the long to ultra-long end of the curve, as political risk is gradually priced out of the PGB curve. We express our constructive view on PGBs via adding (PGB Jun19 vs. PGB Feb45) flatteners boxed against (BTP May19 vs. BTP Sep46) steepeners to our trade portfolio (Fig. 102, Fig. 103). In terms of upcoming supply, our expectations of a new 30yr BTP in mid-January should be supportive of this trade.

Fig. 102: Diverging PGB vs. BTP yield spreads.

Source: Nomura

Greece – Buy GGBs on dips

Despite delays in reform implementation that led to a delayed inclusion of GGBs in the ECB's QE programme, we feel comfortable with our directional bullish GGB call. Our positive view on GGBs is not motivated by QE eligibility itself, but rather the positive prospects for gradual political and economic normalisation that will eventually make GGBs QE-eligible. Non-negligible progress in terms of reform implementation since the September elections and still limited systemic political risks support this view (for more details see [Greece: Seeing through the noise](#)). Over a two- to three-month horizon we view par as the right ballpark for GGB 17s and 19s, and are targeting a cash price of above 70c for the GGB strip.

Regarding the path to our projected price targets, the market is still not immune to news that could be interpreted as implying political instability or a higher chance of a confrontation with creditors, while poor liquidity in the GGB market means that any pullbacks could be quite pronounced. Nonetheless, we think that the market should ultimately be able to see through such episodes in the future. Consequently, any dips in GGBs are to be bought in our view, as the Greek government proceeds (even at a sluggish pace) along the path of reform implementation and towards the conclusion of the first review.

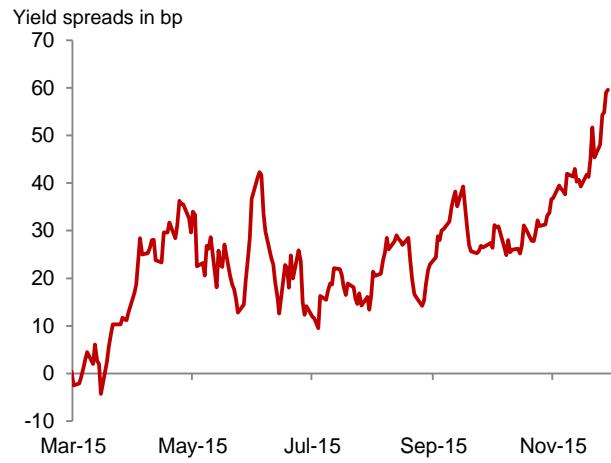
Fig. 104: Euro area nominal trade recommendations

All values in bp, 15 December 2015

| Euro area Trade Recommendations | Opened | Entry | Current | Closed | Target | Stop | 3m carry | Performance* | Status |
|---|-----------|-------|---------|--------|---------|------|----------|--------------|--------------|
| Long 5y Cyprus Feb20 | 24-Apr-15 | 340 | 254.9 | - | 200 | 280 | 20.4 | 138.3 | Hold |
| Pay 5y5y UK vs. US and EUR | 02-Sep-15 | 15 | 47.1 | - | 100/150 | -5 | 0.0 | 32.1 | Hold |
| Buy DBR Jul22 on ASW | 04-Sep-15 | 39 | 39.0 | - | 45 | 35 | -0.1 | 0.4 | Lower Target |
| Receive 10y EUR IRS (230%) vs. 5y (100%) & 30y (130%) | 04-Sep-15 | -7 | -9.2 | - | -25 | -2 | 2.0 | 4.5 | Hold |
| Long GGB Jul17 | 11-Sep-15 | 1130 | 899 | - | 375 | 1450 | 189 | 429.8 | Hold |
| Long 120% RFGB Apr24 vs. 100% OLO Jun24 & 20% DBR Aug24 | 11-Sep-15 | -5.5 | -6.6 | - | -11 | 0 | -0.1 | 0.9 | Hold |
| Long SPGB Oct20 vs. BTP Sep20 | 28-Sep-15 | 14 | 13.7 | - | 5 | 20 | 1 | 0.8 | Hold |
| 5y-15y Irish flatteners vs. OAT steepeners | 29-Sep-15 | 18.5 | 9.2 | - | 5 | 24 | -0.1 | 9.1 | Hold |
| 5y UK vs EUR IRS wideners | 22-Oct-15 | 110 | 120.4 | - | 135 | 99 | -2 | 9.5 | Hold |
| Receiving 3f1y vs. 1f1y Eonia | 04-Nov-15 | 46 | 50.6 | 51.5 | 30 | 55 | 0.0 | -5.5 | Closed |
| Receiving 3f1y Eonia | 15-Dec-15 | 28 | 28 | - | 15 | 33 | 0.0 | 0.0 | Open |
| Long DSL Jan47s vs. DBR Aug 46 | 15-Dec-15 | 15 | 14.2 | - | 7 | 18 | 0 | 0.3 | Open |
| 5y-10y RAGB flatteners boxed against OAT steepeners | 15-Dec-15 | -3 | -3.0 | - | -10 | 2 | 0.2 | 0.0 | Open |
| Long 200% Irish May30 vs. BTP Mar30 & OAT May30 | 15-Dec-15 | -21 | -21.2 | - | -40 | 5 | -1 | 0.0 | Open |
| 4y-30y PGB flatteners boxed against BTP steepeners | 15-Dec-15 | 61 | 60.8 | - | 40 | 70 | -1.3 | 0.0 | Open |

*Accounting for carry, For our closed trade recommendations over the past 12 months, see Link.

Source: Nomura

Fig. 103: 4y-30y PGB vs. BTP yield box

Source: Nomura

UK

There are several themes to consider: How the UK will perform relative to its two big neighbours moving monetary policy in opposite directions. When (and if) there will be a first hike in the UK. In the second half of the year, a Brexit referendum likely looms. We rarely believe we have a 'year-ahead' trade, but the 5f5y fly we have been pushing for the last three months is a good contender. Aside from that, we retain cross-market shorts outright and vs. euro area in the 5y segment, as well as long 5y ASW going into Q1, and we would recommend holding shorts in 5y breakevens against these trades as laid out in '[Inflation Insights – UK: A testing year](#)'. We take off our 10s30s flatteners for modest gains, believing that Q1 could see some steepening pressure emerge on the curve.

Theme 1: No rates market is an island (even Gilts)

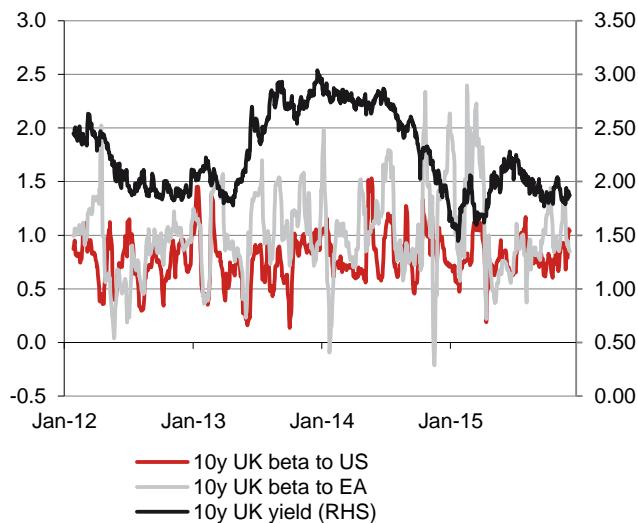
The Gilt market is used to having to bend to the will, to a greater or lesser extent, of its two big brothers – Treasuries and Bunds. What it is less used to is those big brothers pulling in opposite directions. In 2016, we expect easing from the ECB and hiking from the Fed, to complement the moves already seen in December.

We must be careful not to overemphasise the margin of this divergence. Our base case suggests perhaps 60bp of divergence between the Fed and the ECB in 2016. This is not particularly large on a 12-month view. And if we look at what markets have done this year, the total return of 'looseners' (DBRs and JGBs) has been very similar to 'tighteners' (UKTs and USTs), and the latter have actually marginally outperformed.

So we have to be more specific than some Orwellian 'looseners good, tighteners bad' investment strategy. The structural element for us is that the UK is in between the Fed and the ECB in the monetary policy cycle, but ahead of both, we think, in the business cycle. This leaves us with a strong argument to pay intermediate forwards – such as 5f5y – against both those markets, and is a key trade for us as 2016 approaches.

Fig. 105: 20-day beta to US and EA 10y yields

Beta has dropped in H2 2016



Source: Nomura

One more thing to highlight on that front is that as Q1 approaches there may be some steepening pressure on the UK curve (see below), meaning cross-market shorts in 15f15y may make some sense as well as the 5f5y variant.

Theme 2: Waiting for Godot (will 2016 bring the hike?)

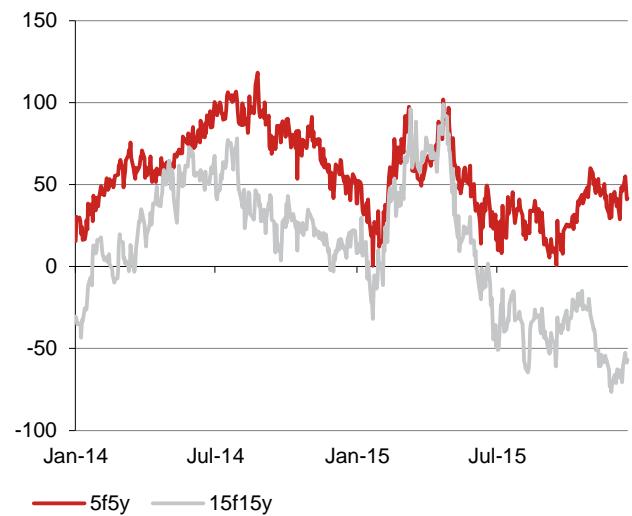
Regardless of the difficulties of dealing with the ECB and Fed going in different directions, at least they are actually doing something. In the UK, we find ourselves with a central bank that believes the exact same policy prescription that was appropriate at 7.9% unemployment rate is valid at 5.2% and falling. That may be a little harsh, but we suspect we are not alone in seeing a tendency for the MPC to look for reasons not to hike.

When faced with that tendency, one is naturally wary of ascribing the standard formula for understanding policy:

the data will do x over the next 12 months, the reaction function of the central bank is y, ergo the policy moves will be z

Fig. 106: 5f5y and 15f15y UK vs. EU and US fly

See 5f5y pushing above 100bp, 15f15y should start moving soon as well



Source: Nomura

because y is not static. That isn't bad per se, of course central banks should not always react the same way, but it does mean that the ability to forecast moves is severely impaired because we are forecasting a moveable x and y to get to z .

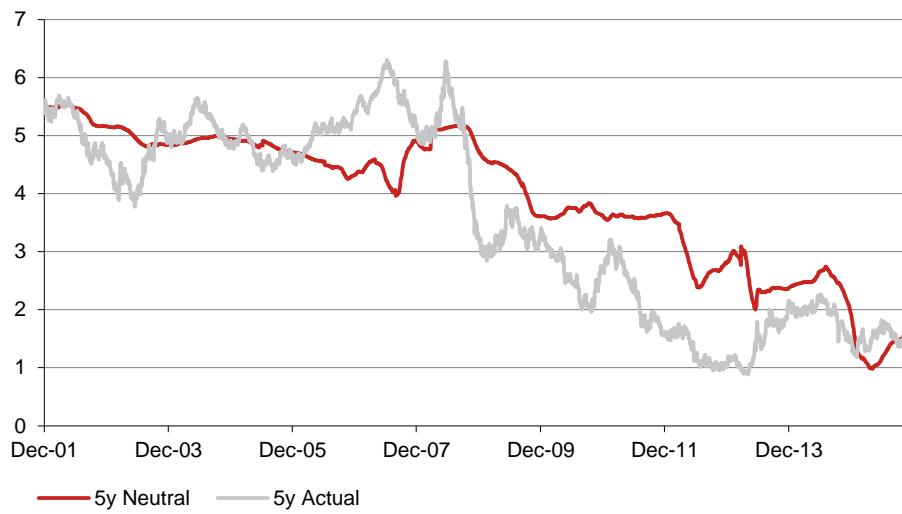
Our UK economists still call for a rate hike at the May 2016 meeting, with two further hikes to follow in August and November ([albeit with the risks skewed later](#)). Paying May, August and November MPC dates should give us pay-off ratios approximating 3-1, which appears attractive, but we believe there is little interest in trying to position ahead of this move.

As we have commented in recent pieces, the main participants in short sterling these days would seem to be momentum, CTA-type accounts (who seem currently long), with positioning on an aggregate basis at extremely high levels.

Our base case is that assuming the MPC does hike in May, it will have required an extremely abrupt move beforehand to get us to pricing that, and we do not see the reason to position for that now; thus, we avoid positions in sub-5y space and await triggers.

Fig. 107: 5y neutral rate = solving 5y for $5f1y / 10f1y = 0$

Market implied neutral rate rising again



Source: Nomura

Theme 3: Brexit and all that jazz

It's hard to talk about the year ahead without mentioning Brexit. We do so with a heavy heart, however, and keep it brief. Why so reluctant? First, we do not have a date yet. We assume September 2016, but that is uncertain. Second, if that date is right, it quite possibly won't be a major concern for Gilts for at least six months. Third, it is unlikely to become much of a concern at all unless the polls show a Brexit as likely or at least very possible. The polls are 50/50 right now (see Fig. 108), but we are not going to read too much into them until the renegotiation is concluded. Lastly and crucially as ever with these political events, the impact on Gilts is unclear. As we stated before the Scottish referendum and the general election, there may be some selling of Gilts on uncertainty by non-residents. But there may be some countervailing buying by residents moving into a safe haven out of risk assets. Therefore, the best we can say is that a Brexit should give a steepening bias to the curve, all other things being equal.

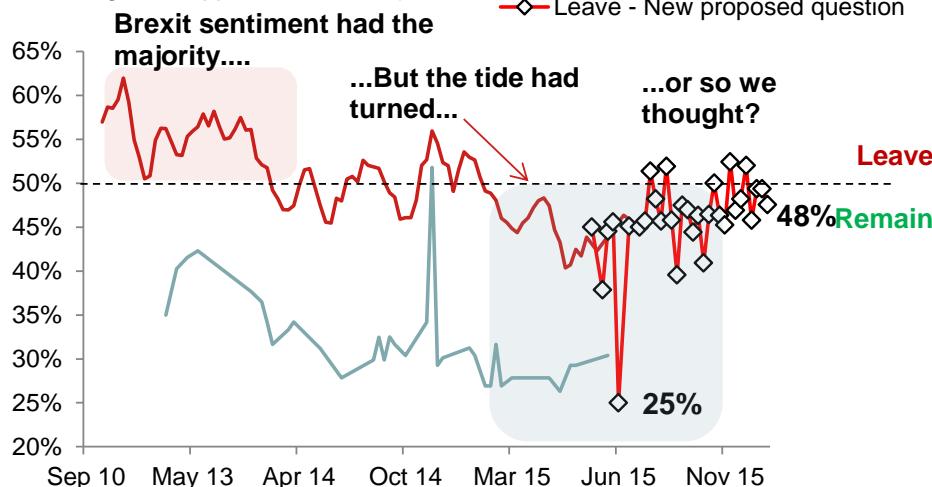
We expect to write much more over the next 12 months on the Brexit, but we do not see it as a key driving force for Gilt performance in the near term.

Fig. 108: History of Brexit polling

50/50 but how much do you trust the polls?

Should the UK Remain / Leave the EU?
 (standard polling vs renegotiated terms
 and Regulator approved Question)

- Leave - Std Polling
- Leave - "Renegotiated terms"
- ♦— Leave - New proposed question



Source: Nomura

Theme 4: Initial Q1 thoughts

Our thoughts specifically on Q1 are that the duration risks into Q1 are skewed bearishly, markets will realise that despite the Fed hike the sun has still risen, and then some 'markets make opinions' takes hold, and we start to imagine that the Fed can do more hikes in 2016 – quite possibly more than it actually eventually manages to do.

The risk against this is that the current oil / high yield concerns intensify. But despite this, we still see a bearish skew on a 2-3 month basis, and if the post-Fed bounce in fixed income can carry on into year-end, there will be some good opportunities to sell.

What about the flattening view which, up until this document, we have been running with? That was premised on LDI buying in Q4 driving the long end flatter. It has just about worked, albeit much more modestly than we would like. But as we enter Q1, we see some steepening pressures emerging.

First, Q1 is not normally a time for heavy LDI buying (though of course the behaviour is far from predictable). Second, we get a decent amount of duration supply next quarter; on the nominal side we get no 20y but two ultras and a 30y auction, and on the linker side we get a new 40y+ linker. In Fig. 109 we show our supply expectations (with assumptions on size, bonds, etc.) in cash terms and DV01 terms. We do not wish to oversell it, but there is an uptick in duration supply (mainly thanks to the linker).

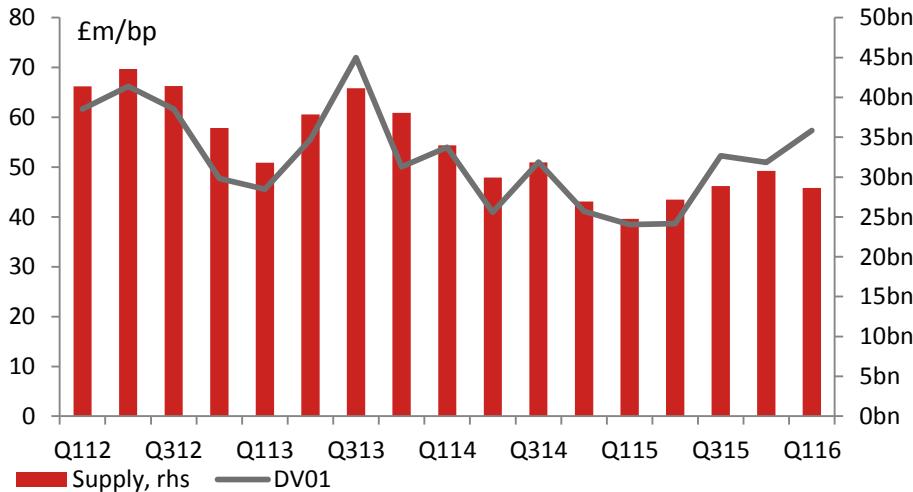
The risk we see is that, when the market was asked by the DMO in November, amid the usual strong LDI demand, what supply it wanted next quarter, it replied "more duration please"...but by the time we get to next quarter that may not be what the market needs.

On top of this, we note that the 22 January-linked coupon flows and extensions are more focused on the belly of the curve, while the recent December ones were more 30y focused.

As we have an outright bearish view, this may take some of the pressure off a steepening and perhaps means more it is about steepening relative to other markets or steepening vs. outright yield moves (i.e., a 15f15y type trade). While we might be taking off our flattener a tad early, we would rather do so for clarity of message, as we do not intend to publish again before January, and in due course we will assess which curve / forward / x-market trades best suit our steepening call.

Fig. 109: Historical supply and Q1 2016 forecast

Uptick in duration supplied



Source: Nomura

Fig. 110: Trade portfolio heading into Q1

All values in bp, 15 December 2015

| UK Trade Recommendations | Opened | Entry | Current | Closed | Target | Stop | Performance | Status |
|---|-----------|-------|---------|--------|---------|------|-------------|--------|
| Pay 5f5y UK vs. US and EUR | 02-Sep-15 | 15 | 44.0 | | 100/150 | -5 | 29.0 | Hold |
| Pay 5y Swaps | 23-Oct-15 | 142 | 147.0 | - | 180 | 124 | 5.0 | Hold |
| 10s30s Gilt flattener | 23-Oct-15 | 75 | 71.0 | - | 55 | 85 | 4.0 | Close |
| Pay 5y UK vs EUR in swaps | 22-Oct-15 | 110 | 118.0 | - | 135 | 99 | 8.0 | Hold |
| Long 1H 21 on ASW | 20-Nov-15 | -9 | -13 | - | -25 | 0 | 4.0 | Hold |
| UK Reds/Blues Steepener vs. EU flattener | 09-Nov-15 | 15 | 7 | - | 75 | -15 | -8.0 | Hold |
| Sstg H6 / U6 steepeners | 02-Sep-15 | 22 | - | 17 | 35 | 17 | -5.0 | Closed |
| Pay 15f15y GBP vs. EUR | 07-Aug-15 | 23 | - | 38 | 60 | 10 | 15.0 | Closed |
| GBP 2s5s steepener vs. EUR flattener | 16-Jul-15 | 24 | - | 19 | 55 | 13 | -5.0 | Closed |
| Short UKTi 19s vs. long UKT 34s | 26-Jun-15 | 394 | - | 350 | 350 | 415 | 44.0 | Closed |
| Long belly in 24s/34s/68s fly | 26-Jun-15 | 50 | - | 60 | 30 | 60 | -10.0 | Closed |
| Short 15f15y UKTi vs. OATei real yield | 09-Jun-15 | -159 | - | -130 | -100 | -190 | 29.0 | Closed |
| Short 30y UK Breaks vs. France | 09-Jun-15 | 187 | - | 160 | 160 | 200 | 27.0 | Closed |
| Short 30y UK breaks vs. US | 09-Jun-15 | 146 | - | 165 | 119 | 165 | -19.0 | Closed |
| 3s20s IRS flattener | 12-May-15 | 105 | - | 103 | 75 | 120 | 2.0 | Hold |
| GBP Reds/Blues Steepener vs. US flattener | 12-May-15 | 30 | - | 20 | 50 | 20 | -10.0 | Closed |
| Blues / Golds Steepener | 13-Feb-15 | 14 | - | 35 | 35 | 5 | 21.0 | Closed |
| Receive belly in 2s3s7s IRS fly | 13-Feb-15 | -25 | - | -40 | -40 | -16 | 15.0 | Closed |
| Long 3f2y UK RPI vs. EUR Inflation swaps | 05-Feb-15 | 160 | - | 190 | 190 | 145 | 30.0 | Closed |
| Short 15f15y GBP vs. EUR IRS | 05-Feb-15 | 57 | - | 90 | 90 | 40 | 33.0 | Closed |
| Long UKTi 19s vs. UKT 45s | 05-Feb-15 | 355 | - | 400 | 400 | 335 | 45.0 | Closed |
| Long UKT Sep-20 vs. OAT Oct-20 | 04-Feb-15 | 88 | - | 103 | 58 | 103 | -15.0 | Closed |
| Long UKT Sep-20 vs. OAT Oct-20 | 29-Jan-15 | 88 | - | 103 | 58 | 103 | -15.0 | Closed |

Source: Nomura

Australia Rates

Australia

Macro backdrop – Moderate growth, benign inflation

We continue to look for moderate, though modestly subtrend, growth in 2016. We see the broad policy backdrop as being close to neutral, and characterised by restrictive fiscal policy, stimulatory monetary policy and an AUD now much closer to fair value, though not yet a clear tailwind. Key macro themes on the downside include our cautious house view on China and Asia more broadly, a cooling housing sector and El Nino risks. On the upside we are watchful for improved animal spirits after the change in leadership in Canberra and are monitoring signs of life in service sectors, including tourism. Finally, we contend that the economy is doing less well than some of the headline data (including for real GDP) suggest, and a declining terms of trade, weak nominal GDP and weak income growth impact our thinking.

Our macro backdrop extends to a relatively benign inflation view. Q3 2015 CPI inflation was surprisingly soft, with key highlights being a decline in regulated utility prices and moderating housing costs, including in rents, likely reflecting rising supply. The data also showed evidence of easing in domestically-generated and service prices, consistent with the sub-trend growth Australia has been experiencing and helping to offset some pick-up in imported prices from a lower AUD. Q4 CPI inflation, due late January should also be modest. The December quarter is seasonally soft for headline inflation, and we estimate fuel prices fell around 5% in the quarter due to lower global oil prices. The longer-term inflation outlook is also supportive for fixed interest, with key features being wage growth around 20-year lows and fierce retail competition. We also remain mindful of the impact of global excess capacity and the structural impact of technology in assisting price discovery (see [Asia 2016 Outlook: Choppier seas ahead](#), 7 December 2015).

Reserve Bank of Australia biased to ease

The RBA has indicated that low inflation provides “scope” to lower the cash rate, but does not, in our view, believe that the economy currently requires additional support, based on recent activity data. We believe that it is appropriate for the market to price in the risk of a rate cut and we continue to forecast a lower cash rate in 2016, while flagging that this may well come later than our expressed view for a move in February. The RBA’s language has been relatively upbeat of late, but we view this as a deliberate tilt aimed at restoring sadly missing animal spirits. Over the past few months, Asian growth has generally underwhelmed, AUD has risen a little despite the further slide in steel and iron ore prices, commercial bank lending rates have risen by around 12bp and the housing sector is showing some signs of cooling. We also see a risk of additional independent rate increases by local banks in 2016.

We acknowledge that the RBA would probably prefer not to cut the cash rate below what it already likely considers to be an unusually low level of 2% and that it would prefer to keep what it likely sees as limited policy ammunition. We think that what the RBA believes the economy most needs is improved animal spirits rather than a lower cash rate. The RBA has also indicated that it would prefer a policy combination which included fiscal spending on infrastructure and a lower AUD. However, it is equally clear that it is beyond a central bank’s capacity to deliver such outcomes. We also remind – gently – that what the RBA might say is sometimes not an accurate guide as to what it might subsequently do. That is to say that, simply, the RBA is a pragmatic institution, and if the facts change then its guidance and actions will change, and not necessarily in that order. Philosophically, the RBA has shown that it is not concerned about giving the market a surprise from its decisions, as it did on a number of occasions in 2015. We are also acutely aware that global markets and the global economy remain in a structurally fragile state and the evolution of financial conditions is quite uncertain as the Fed moves towards historic policy tightening.

The bond market outlook for 2016

In our view, Australian rates markets were largely driven by two sets of factors in 2015: (1) underwhelming domestic and regional growth over much of the year and subsequent expectations regarding – and actions undertaken by – the RBA, and (2) the US bond market and the Federal Reserve. As we entered 2015, slowly building expectations for a

Research analysts

Dollar-Bloc Rates Strategy

Andrew Ticehurst - NAL
andrew.ticehurst@nomura.com
+61 2 8062 8611

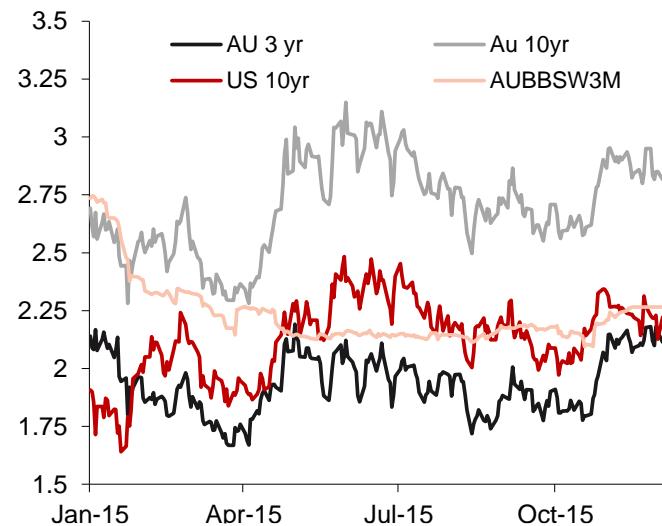
rate cut led to a decline in yields across the front of the curve (Fig. 111). The RBA managed to surprise much of the market with the timing of its two 25bp cash rate cuts in February and May, and further surprised by holding off on further moves over the balance of the year. This lack of policy action towards the end of 2015 led to a rise in yields across the curve. The market is currently pricing in only 10bp of easing by the third quarter of 2016 (Fig. 112), while a majority of local economists forecast no further rate cuts.

In 2016, we expect Australian bonds to again be heavily influenced by the Fed, and the subsequent reaction to Fed action by US bonds and other markets. As we have outlined elsewhere in this report, we expect an extremely gentle tightening cycle in the US, with only two rate moves by the Fed in 2016, accompanied by very gentle, "gradual" language and some lowering of its policy guidance "dots". We believe therefore that Australian 10-year bond yields will be only modestly higher by the middle of 2016, by say 20-30bp. That said, we see potential for volatility in 2016 as the market frets, from time to time, about a more aggressive Fed path. Nevertheless, relative spread differentials between Australian (and US) yields versus continuing lower yields and QE in Europe and Japan should prevent very aggressive rises in local rates.

While Australian bond yields are highly correlated with US yields, the front part of the curve is, naturally, more influenced by domestic and regional factors. This should come as no surprise, as the Australian economy has become increasingly integrated into the regional economy; most of Australia's major export market destinations are within the region, led by (and in order) China, Japan and South Korea. Our below-consensus growth view and expectation that the cash rate will likely be lowered in 2016 lead us to favour a buy-on-dips approach, particularly in the front half of the yield curve. We are currently expressing a relatively constructive and low-for-long theme in the front part of the curve via a 3-month forward 1s3s flattener, initiated back in late October (see [Trade Update](#), 23 October 2015).

Fig. 111: 2015 in Review

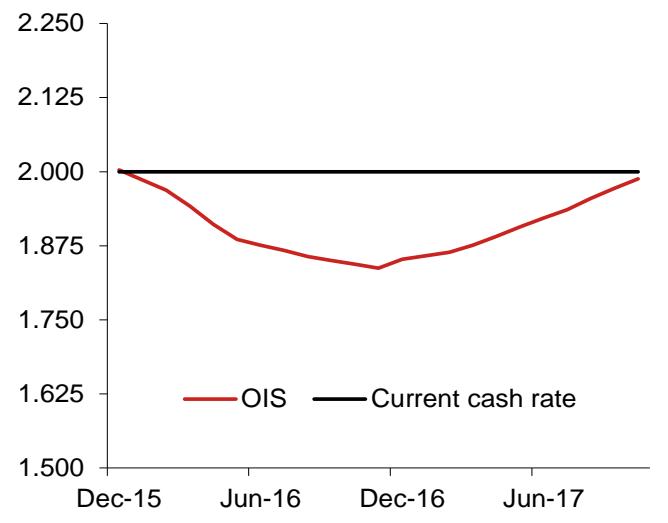
Australian rates driven by the RBA and US bonds



Source: Bloomberg, Nomura

Fig. 112: Cash rate expectations

Only 15bp of easing priced



Source: Bloomberg, Nomura

Combining our short and long end views, we expect to see some steepening in the yield curve, say 3s10s in 2016. Longer-end underperformance and some steepening pressure could also come from other sources, in particular increased supply, tailored to the long end of the curve. The Commonwealth's funding task for 2016-17 will be smaller than in 2015-16, reflecting a modest reduction in the budget deficit and significantly fewer maturities. However, the "new news" is negative, with an increase in the Commonwealth's funding task recently announced and budget deficits revised higher in the 15 December Mid-Year Economic and Fiscal Outlook.

While Commonwealth bond supply will continue to rise over the coming year, we expect semi-government net issuance to be far more modest. We also note the recent very successful long-term lease of NSW's electricity transmission network, Transgrid, which will see the volume of NSWTC bonds on issue decline, and market attention will

increasingly turn to a similar, although larger, NSW transaction, Ausgrid, in the first half of 2016. We continue to advocate accumulation of semi-government bonds over Commonwealth bonds when spreads widen, while noting the potential for commodity price moves to continue to impact on WATC and to a lesser extent QTC spreads.

The SSA supply picture is also quite positive. While funding tasks will be reset to zero with the new year, we note significant SSA maturities in Q1. Current spread levels look relatively attractive and we would favour accumulating mid-curve SSA's on spread widening.

Australian bond-swap spreads have narrowed sharply over recent months, following trends in US and other rate markets. Consistent with our house view for some re-widening of these spreads in the US as we move into 2016 (see [US Rates Insights](#), 10 November 2015), we believe there could be a similar move in Australia.

We are also struck by the differing expected monetary policy paths between the RBA and the Fed. This suggests that positioning for a steepening of the Australian curve versus a flattening of the US curve could also have appeal.

Japan Rates

Japan

Bond investments in latter half of credit cycle

Looking back at the past 35 years from a long-term, global perspective, we find that the economic cycle in the actual economy lasts 10 years, while the financial market's (credit) cycle winds down over three to four years. Shocks stemming from the markets signal turning points in the cycles that then usher in the next stage, a pattern that has been repeated since the 1980s. The China shock, occurring in summer 2015, moved the credit cycle from the middle to the late period.

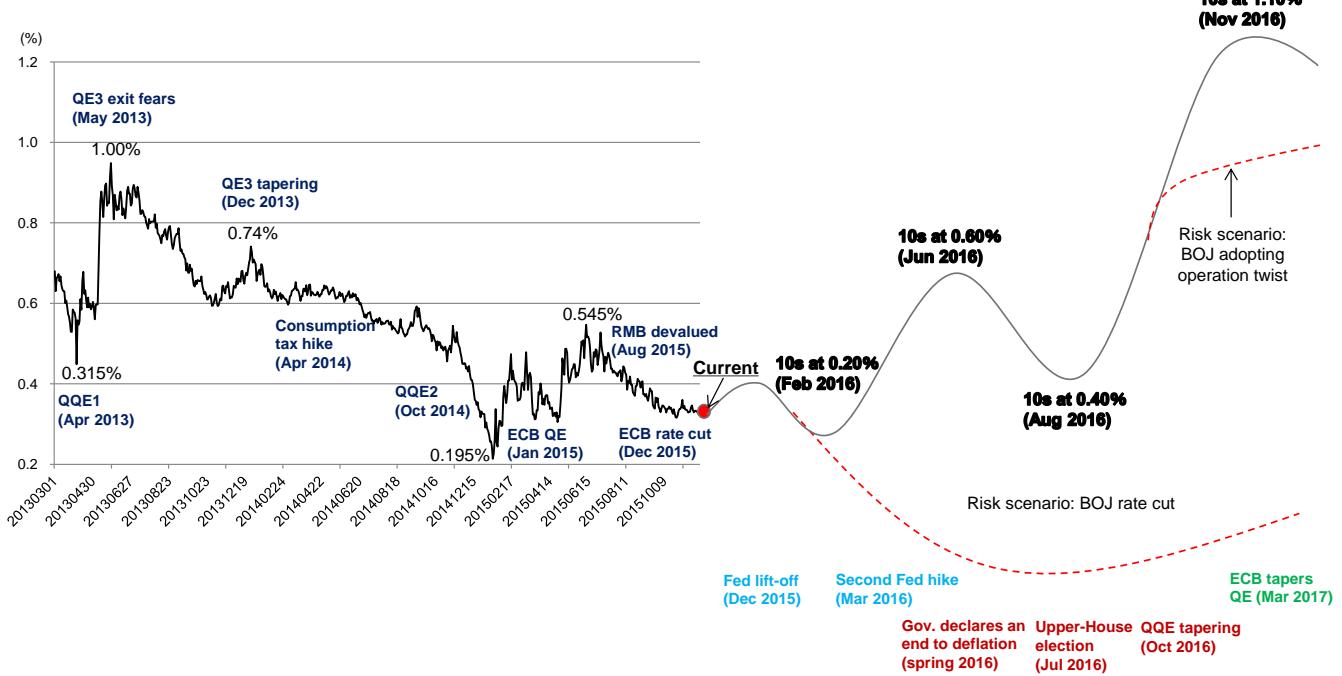
Generating revenue from bond investments in the latter period of a credit cycle is no easy matter. Rallies in the bond market are essentially driven by lower inflation and monetary easing (a drop in the potential growth rate can also have an impact, but this is difficult to predict and examine in real time). In the textbook case, inflation picks up slightly in the latter stage of the credit cycle, and central banks end their monetary easing and shift to tightening. At the same time, at this point it will still be too early for the next economic downturn and monetary easing period to be priced in, even in the case of long-term rates, which are good predictors.

Two stages in bond market separated by July 2016 Upper House elections

In this global market environment, we expect the JGB market to fall sharply in 2016 as the BOJ follows in the wake of the Fed, ending its easing program and shifting to a tightening stance. This can be roughly divided into two stages, with the July Upper House election as the turning point between them. The focus in the first half of the year will be on signs of a recovery in the manufacturing industry and a halt in the decline in oil prices, as well as the reduction in BOJ easing expectations. In the second half of the year, we expect the side-effects of the BOJ's QQE to be a key issue again, fuelling talk of a QQE exit.

Fig. 113: Mapping of expected rate movements under QQE

- The solid curved line represents the rate path in our base case
- The dotted curved lines represent the rate paths in the risk scenarios
- Key events highlighted in red, blue and green are for those in Japan, the US and the euro area, respectively.



Note: 10yr JGB rates indicated in the chart are session highs/lows.

Source: Bloomberg, Nomura

Research analysts

Japan Rates Strategy

Naka Matsuzawa - NSC
naka.matsuzawa@nomura.com
+81 3 6703 3864

Neale Vincent - NSC
neale.vincent@nomura.com
+81 3 6703 3842

Naokazu Koshimizu - NSC
naokazu.koshimizu@nomura.com
+81 3 6703 3887

Ryoko Tada - NSC
ryoko.tada@nomura.com
+81 3 6703 3863

Waning impact of widening basis and decline in additional easing expectations would characterize first half of 2016

In the first half of 2016, the curve would bull flatten (10yr and 20yr yields at 0.20% and 0.90%, respectively), irrespective of fundamentals, on a combination of USD basis and the boost in the BOJ's JGB purchases aimed at offsetting an increase in redemptions of its JGB holdings. The market would enter a downturn around March, when the Fed would raise rates for a second time, and fall at a faster pace from April, the start of the new fiscal year. We expect 10yr and 20yr yields at 0.55% and 1.30%, respectively, at this point. Initially, the super-long zone would lead the downturn as flattening trades are unwound, but lifers would return to JGBs once 20yr yields near 1.20%. The 7-10yr zone would drive the decline as signs of an end to easing emerge.

Themes of excessive JPY weakness & QQE exit would dominate 2nd half of 2016

In May and June, with the Upper House elections approaching, we expect Prime Minister Abe to officially declare an end to deflation and signal the transition to the second stage of Abenomics on the basis of the results of spring wage negotiations (three straight years of wage hikes) and the elimination of the impact of cheap crude on CPI data. This will be an important step in spurring talk of a QQE exit, which we believe will be led by the government, rather than the BOJ, since the government is not as committed to the 2% inflation target, but is more concerned about further JPY weakness. Beginning in the spring, Japanese investors will unwind their hedges in response to a series of Fed rate hikes and higher currency hedging costs, which will in turn accelerate the strong USD/weak JPY trend. The government would intervene verbally in currency markets, and could even directly intervene, while at the same time asking the BOJ to reduce its quantitative easing. Predicting the government's actions, we expect investors to shed portfolio holdings and rush to hedge, leading to a market downturn led by the 5-10yr space, and 7yrs in particular. As we saw just after the BOJ introduced QQE1 in April 2013, 5yr yields and 10yr yields would reach the 0.4% and 1.0% ranges, respectively, as the market prices in an exit.

Operation twist becomes more likely

The primary risks are that (1) ongoing deterioration of economic conditions would force the BOJ to take additional easing measures, and (2) the BOJ would carry out Operation Twist while tapering QQE. The supplemental QQE measures introduced in December 2015 not only enhanced the technical sustainability of QQE in 2016 by bringing the JPY44trn in JGBs currently lying idle as BOJ collateral back into circulation, but they also lowered the likelihood of (1) and raised the likelihood of (2). We have never thought that (1) was a real possibility, but (2) has come close to being part of our main scenario. In the event that the BOJ does conduct Operation Twist, the BOJ would be able to keep long-term yields lower than equilibrium level for some time, even after it reduces its bond purchases. As a result, investors would be able to trade at 10yr yields below 1.0%.

Abe administration is not committed to 2% inflation target

The Abe administration does not want JPY to be as weak as it has been over the past three years. There are three reasons for this. First, the government believes that even if inflation isn't growing at 2% annually, deflation has already ended (according to Abe's statement in a policy presentation in September 2015). Second, the second stage of Abenomics, introduced in September 2015, shifts the focus from the corporate sector to households, and emphasizes a reallocation of the profits companies have generated over the past three years, rather than economic expansion through macro policy. In other words, Abe wants to see a faster pace of investment, acquisitions and mergers, wage hikes, and shareholder returns through share buybacks. Third, experiences over the past three years have strengthened the sense that Japan is not an export-based country, but is instead reliant on foreign income from companies' entry into foreign markets. Weak JPY and inflation would eat into households' buying power, threatening the success of the second stage of Abenomics with its focus on households. Regarding the third point, excessively weak JPY not only makes it more difficult for Japanese companies to buy foreign companies, but also poses a potential political threat since weak JPY leads to the cheap sale of Japanese companies and technology. This is a particularly worrying problem at present as China, like Japan, has determined that entering overseas markets is a way of reinvigorating its own economy, and has issued an ambitious five-year plan to invest the unprecedented sum of USD1trn overseas.

Japan's long-term capital outflow, such as corporate direct investment, has significantly surpassed the current account surplus since the Tohoku earthquake in 2011, creating an environment in which JPY is structurally weak. It is not enough for the government to simply send the vague message that weak JPY is not desirable. Halting the current JPY depreciation would be difficult without more direct policy action, in our view (assuming that the US does not return to monetary easing). Initially, we expect the government to intervene verbally in currency markets, and then follow this up with a market intervention. Around this time, the BOJ's QQE exit would take concrete shape.

Once fears of strong JPY end, commitment to 2% inflation also wanes

No one has offered a clear explanation as to why 2% inflation is the ideal level for Japan, particularly given that inflation was just over 1% even during the bubble in the 1980s. There is one fundamental reason that the government and BOJ made this their joint target in 2013: they could not allow JPY to strengthen more than levels at that time. Since other major countries had set targets of 2%, if Japan had set a lower target, the government would have to put with JPY strengthening every year by this incremental difference. However, now that Japan fears rather than welcomes weak JPY, few politicians are calling for additional easing to reach 2% inflation.

Supplemental measures make purchase operations more viable

It is generally understood that the BOJ will face difficulties maintaining its current pace of JGB purchases (net JPY80trn). This situation is attributable to an increase in maturing bonds in the BOJ's balance sheet (JPY9trn), an expected reduction in FY16 JGB issuance (JPY5trn) and the winding down of public pensions' JGB sales intended to achieve target weightings (which have created an additional JPY20trn in JGB supply), Fig. 114). The BOJ decided to address this by taking supplemental measures at its December 2015 meeting (extending the maturity of JGBs eligible for its purchases, allowing housing loans and foreign currency-denominated loans as BOJ collateral, among others) and also took steps aimed at bringing the JPY44trn in JGBs lying idle as BOJ collateral into circulation. These measures will prevent the BOJ's operations from hitting a technical impasse in 2016 and ensures their continuation for at least another year.

Fig. 114: BOJ purchase operations and main JGB market sellers

| | BOJ | JGB issuance | Banks | Public pensions | Lifers | Foreign investors | Household s | Others | (JPYtrn) |
|--------------------|-----|-----------------|-------|--------------------|--------|----------------------|----------------|--------|----------|
| 2013 | 51 | -48 | -13 | 2 | 3 | -3 | -3 | 10 | |
| 2014 | 59 | -36 | -21 | -13 | -2 | 9 | -3 | 8 | |
| 2014 H1 | 49 | -37 | -11 | -7 | -2 | 0 | -2 | 10 | |
| 2014 H2 | 68 | -34 | -32 | -18 | -3 | 17 | -4 | 6 | |
| 2015 (forecast) | 80 | -33 | -32 | -13 | 1 | 10 | -5 | -8 | |
| 2015 H1 | 78 | -32 | -24 | -6 | 1 | 2 | -5 | -12 | |
| 2015 H2 (forecast) | 82 | -34 | -40 | -20 | 1 | 18 | -5 | -4 | |

Notes: 1) Calendar-year basis. 2) Figures for half-year periods are annualized. 3) Net changes excluding Treasury bills. 4) Broker-dealers account for a large part of "others."

Source: BOJ, Nomura

Flattening trades on speculations of extension of eligible maturities

At the same time, the curve is already flattening on heightened speculation that the BOJ will further increase the weight of longer-dated JGBs in its purchases. This is because the extension in the average maturity of its JGB purchases means that if it looks like short and intermediate yields will fall deeper into negative territory, the BOJ now has room to respond by favoring long and super-long JGBs in its operations. This is similar to the problem the ECB faced in March-April 2015. By clearly specifying the minimum yield at which it would buy (deposit facility rates), the market could easily predict when the ECB would shift its operations to long and super-long bonds. This resulted in anticipatory buying and flattening that bore no relationship to fundamentals. Two months later, this flow suddenly reversed itself on a minor trigger (in this case, an unexpectedly high CPI inflation print in Germany). We expect the BOJ to put up with short and intermediate rates even deeper in negative territory to some extent so that it avoids the ECB's mistake. The BOJ recognizes that buying in the super-long zone at levels that exceed 100% of new issuance would cause marked distortions in the market, particularly given that investors tend not to shed super-longs from their portfolios. The BOJ will increase its operations beginning in January 2016 to offset higher redemptions of its JGB holdings, but the maturity breakdown is the same as the December average.

Fig. 115: Monthly JGB issues and BOJ purchases

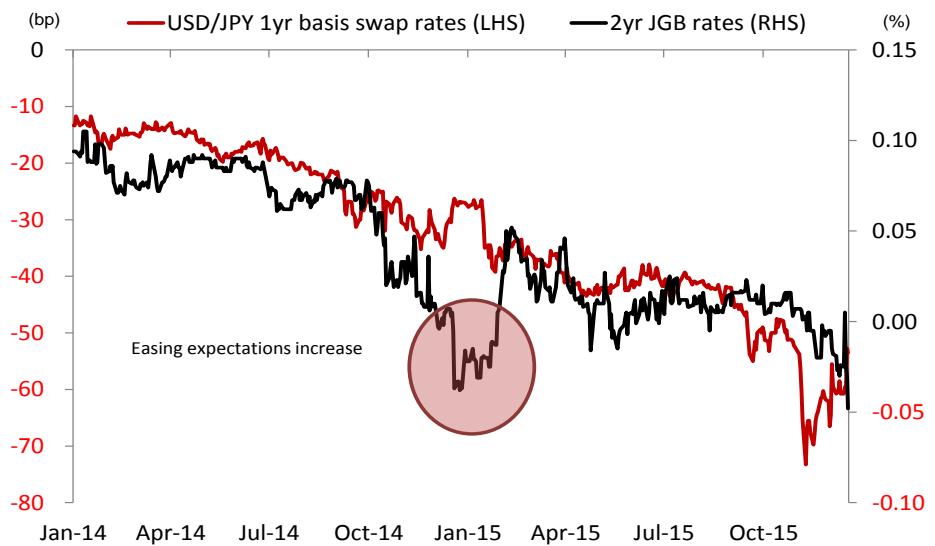
| | All tenors | 1-3yrs | 3-5yrs | 5-10yrs | 10-25yrs | 25yrs~ | (JPYtrn) |
|--|------------|------------|------------|------------|------------|------------|------------------------|
| | | | | | | | Ave. yrs of purchase s |
| FY15 market JGB issues [a] | 10.9 | 2.5 | 2.7 | 3.0 | 1.5 | 1.2 | |
| FY16 market JGB issues (forecast) [b] | 10.8 | 2.5 | 2.7 | 3.1 | 1.4 | 1.2 | |
| BOJ purchases in Sep-Nov 2015 [c] | 9.1 | 2.4 | 2.4 | 2.4 | 1.2 | 0.7 | 8.7yrs |
| BOJ purchases in Dec 2015 [d] | 8.5 | 2.1 | 2.1 | 2.4 | 1.2 | 0.7 | 9.1yrs |
| BOJ purchases in Jan 2016 [e] | 9.8 | 2.4 | 2.5 | 2.7 | 1.3 | 0.9 | 9.2Yrs |
| BOJ purchases in Jan 2016 (forecast) [e] | 9.7 | 2.4 | 2.4 | 2.7 | 1.4 | 0.9 | 9.2yrs |
| BOJ purchases in Sep-Nov 2015 / FY15 supply [c] / [a] | 83% | 95% | 90% | 81% | 78% | 57% | |
| BOJ purchases in Dec / FY15 supply [d] / [a] | 78% | 83% | 79% | 81% | 78% | 57% | |
| BOJ purchases in Jan 2016 / FY16 supply [e] / [b] | 91% | 97% | 94% | 88% | 94% | 74% | |
| BOJ purchases in Jan 2016 / FY16 supply (forecast) [e] / [b] | 90% | 97% | 90% | 88% | 98% | 70% | |

Note: Figures are indicated on a gross monthly basis.

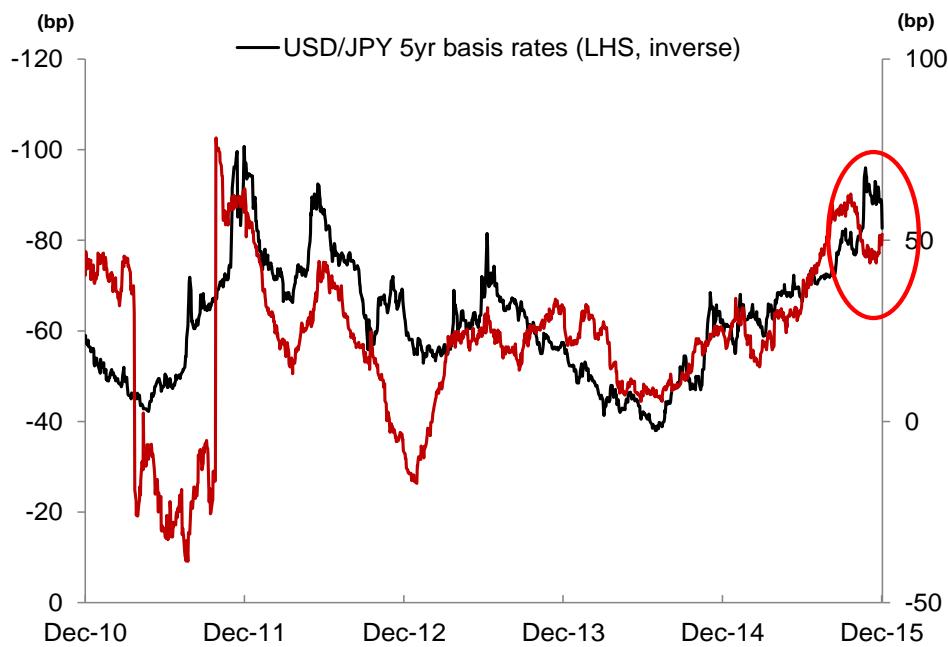
Source: BOJ, MOF, Nomura

Widening USD basis would sway BOJ policy

Widening of USD/JPY basis would be a key factor for BOJ policy. As a result of BOJ easing policy, the sum of money shifted from Japan overseas for lending and investments has increased significantly, and the premium paid when hedging currency (basis cost) increases. Foreign investors seeking this premium convert USD to JPY and park their money in Japan's short and intermediate bonds, content with even slightly negative yields as the cost of this safekeeping. Unlike the general view, we believe that the widening basis is primarily attributable to structural factors. It is fuelled by the gap between business returns (this refers not only to government bond and corporate bond investments, but also Japanese and US financial institutions' investments and lending overall) in Japan and the US (Fig. 116). One reason for this is that the BOJ's QQE has squeezed banks and insurers out of the JGB market, but Japan's credit spread has been consistently low for a long time. A more immediate factor has been the recent widening of credit spreads in the US, itself due to the halt of QE3 and anxiety over a Fed rate hike (rush to issue corporate bonds). Moreover, recently basis has widened for other currencies as well, indicating that cyclical factors (rush to secure USD financing before the Fed rate hike, impending end of fiscal period) are also at work, and for this reason regulations have had a more visible impact. Now that the Fed has raised rates for the first time and the surge of corporate bond issuance is over, the US's credit spreads have also begun to stabilize. From a historical perspective, corporate bond yields rise when the Fed is raising rates, but spreads are stable. Nevertheless, when Japan ended QE (March 2006), the market became quite (excessively) worried about a credit squeeze, which led to wider spreads. In Japan, this anxiety subsided when rate hikes subsequently began, bringing spreads back to their original levels. Spreads widened substantially in the US as well when its unprecedented easing measures ended with a QE3 exit, but we expect spreads to be stable and even narrow for some time after the start of rate hikes.

Fig. 116: USD/JPY 1yr basis swap spreads and 2yr JGB and OIS rates

Source: Bloomberg, Nomura

Fig. 117: US and Japanese companies' relative credit spreads and USD/JPY basis

Note: The relative spread is calculated as US credit spreads less Japan's credit spreads.

Source: Bloomberg, Nomura

Side-effects of BOJ easing become political problem

The BOJ does not see widening USD/JPY basis and negative short-term rates as a financial crisis or damaging to the economy, and even welcomes it to some extent. However, the BOJ is worried about the secondary effects of wider basis, i.e., the growing preference for currency and credit risks among banks, insurers and even retail investors. Meanwhile, the government is increasingly worried about weak JPY since excessive weakness not only reduces Japanese companies' buying power, but also facilitates the sale of Japan's prime companies and technology overseas. The political risks of weak JPY are escalating, particularly as China has presented its plan to invest USD1trn overseas over five years. We expect the BOJ and the government's interests to align so that talk of a QQE exit takes more concrete shape after the Upper House election.

AeJ Rates

AeJ

Note: This is an updated excerpt from Asia 2016 Outlook (see [link](#))

Summary of trade recommendations

We recommend the following trades into 2016 (see country pages for more detail):

- **China:** Long 5yr CNH CGBs; look for opportunities to receive front-end of swap curve.
- **India:** 1s5s, 2s5s NDOIS flatteners and long 9yr IGBs into Q1 2016; look to enter long 5yr IGBs and long 5yr bond vs. 5yr swap spread.
- **Korea:** 3s10s and 2s5s IRS steepeners; look to enter 1yr outright receive.
- **Thailand:** 3yr NDIRS receivers and 2s5s steepeners.
- **Malaysia:** Receive 1s3s10s and 1s2s5s as proxy steepeners; look to initiate outright receivers in 2yr and 3yr part of the curve.
- **Singapore:** 2s5s flatteners and receiving the belly of the SGD swap curve through 2s5s10s/3s5s10s flies.
- **Hong Kong:** Pay 10y IRS and 2s5s IRS steepeners.
- **Australia:** 3m fwd1s3s swap flatteners.

Key factors that affect our Asian rates outlook for 2016

For 2016, we suggest investors focus on local dynamics and take a selective and differentiating approach to Asia rates markets. 2016 will be a year where the Fed is expected to hike rates; however, despite the expected Fed tightening, we believe local factors will end up being a prominent driver of rates markets. From a top-down perspective, we believe the following key factors are most important in shaping our Asia rates market outlook for 2016:

Monetary policy divergence from the US

We are constructive on the front-end rates of various countries despite the Fed tightening. A key focus of our 2016 rates outlook is monetary policy divergence from the US. This theme is also evident in the developed world, where we expect the Fed to hike rates three times by end-2016, while we expect Europe and Japan to continue QE. For Asia rates, we also expect Asia central banks to decouple from the US, either by staying on hold or cutting further in 2016 (Fig. 118). This should provide opportunities in the front-end rates of many Asia markets, such as Thailand, Korea and Malaysia. In Thailand and Korea, our economics team expects central banks to ease further. Similarly, we also look to receive in countries where we believe the monetary tightening premium currently priced into the curve will not be realised, such as Malaysia. On Indonesia bonds, we have turned more neutral after being underweight, given attractive real yields and expected monetary easing.

Higher term premium for select countries during Fed hiking cycle

While we expect most front-end Asia rates to be capped, we do see term premiums rising in some countries as the Fed enters a rate hike cycle. The catalysts for higher back-end rates could be the fiscal situation (bond-supply driven), capital flows or simply valuations. Higher bond supply is expected in 2016 in countries like Thailand and Malaysia. The other potential driver for a steeper curve is higher back-end US rates. While our US rates strategists only expect a modest increase in 10y UST yield to 2.5% in H2 2016, this could still exert some steepening pressure on low yielding countries like Korea, Thailand and Malaysia. The yield curve could also steepen to reflect risk premiums related to capital outflow concerns in countries such as Malaysia and Thailand.

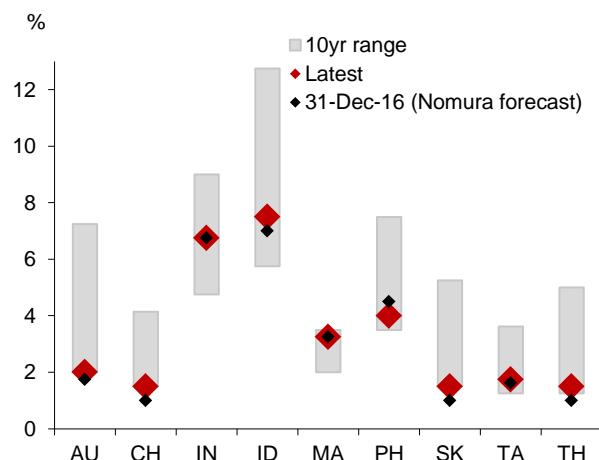
Research analysts

Asia Rates Strategy

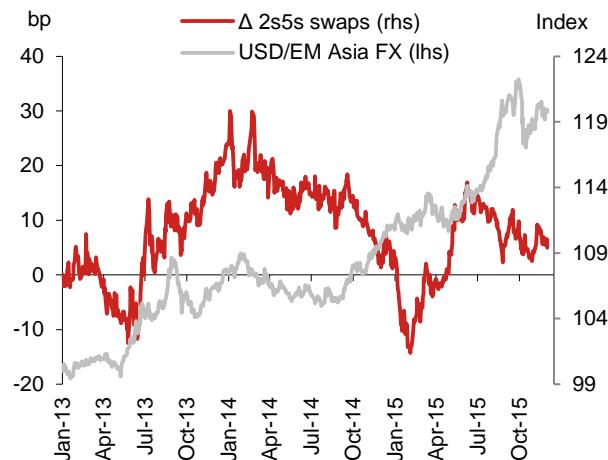
Albert Leung - NIHK
albert.leung1@nomura.com
+852 2252 1401

Vivek Rajpal - NSL
vivek.rajpali@nomura.com
+65 6433 6555

Prashant Pande - NSL
prashant.pande@nomura.com
+65 6433 6198

Fig. 118: Monetary policy range, latest and forecast

Source: Nomura, Bloomberg

Fig. 119: Yield curve dynamics

Source: Note: USD/EM Asia FX indexed to 100 on 1-Jan-13 and average % change in Asia EM FX (includes USD/CNY, USD/INR, USD/IDR, USD/MYR, USD/KRW, USD/PHP, USD/SGD, USD/THB and USD/TWD) since then is used to generate the USD/EM Asia FX series. Similarly, 2s5s swaps are tracked as the average change in bp across the swap curves since 1-Jan-13. Source: Nomura, Bloomberg

A gradual Fed hiking cycle amid slower global growth

We note that our US economics team expects a very gradual Fed hiking cycle – our base case is that Fed liftoff will occur this month and be followed by two 25bp rate hikes in June and Q4 2016. Rates in Singapore, Hong Kong and Australia are highly correlated with US rates, and are therefore most susceptible to how the dynamics around the Fed hiking cycle evolve. A shallow US hiking cycle makes us believe that, despite the high historical correlation with US rates, rates markets in Singapore, HK and Australia will be able to respond to local factors more than in past US rates cycles. In Singapore, higher term-funding rates should keep the front end elevated, while term structure should fall, aided by the gradual Fed hiking cycle. In Australia, we like front-end flatteners, as these should capture our low-for-long theme and also offers attractive roll. In HK, we expect flush interbank liquidity to keep HIBOR fixings stable so the curve can steepen.

Local and liquidity dynamics in China and India

In the two biggest economies, China and India, we expect local and liquidity dynamics to be the primary drivers of rates markets. In China, our economists' forecast of two policy rate and four RRR cuts in 2016 (see [link](#)) bodes well for fixed income, in addition to further capital account liberalisation and opening of local bond markets. High grade bonds, like CGBs should outperform, as spreads widen on credit concerns. However, liquidity dynamics are also important, as we expect the interbank rate to decline only modestly given FX outflow risks. Thus, we expect CGBs to outperform swaps.

In India, we believe markets will move away from monetary policy as the primary driver of rates markets, which was an important feature in 2015. We believe liquidity, supply and demand of bonds, and fiscal and inflation dynamics will become important drivers in 2016. Given stable monetary policy and the RBI's focus shifting to transmission of rate cuts, we expect front-end rates and the belly to remain stable. Local bond markets should also benefit from foreign investors participation. We maintain an overweight stance on India bonds, although we expect the belly of the curve (5yr) to outperform the back end. Underperformance in the longer end may become prominent towards the second half of the fiscal year, when we expect the market to gradually build in inflation risk premiums.

China: Trading macro versus micro (long 5yr CNH CGB)

Throughout 2015, the market viewed a China growth slowdown as one of the biggest global risks. Indeed, the PBOC cut the RRR (and or) policy rate seven times so far in 2015. Our China economic growth outlook is clear, with our economist, Yang Zhao, forecasting well-below-consensus GDP growth of 5.8% in 2016.

However, from a rates strategy perspective receiving China rates has been less straightforward than the macro trend. While China IRS declined substantially in H1 2015, they largely traded in a 30-40bp range in 2H15, even though substantial monetary easing continued. This is primarily because the more recent policy rate/RRR cuts have

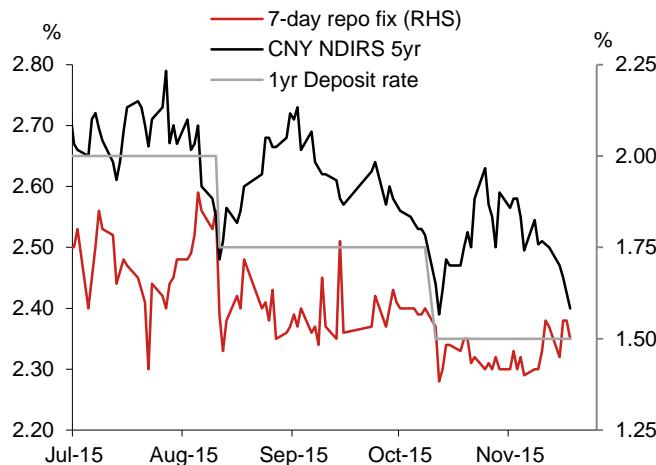
not translated into a much lower 7d repo fixing (Fig. 120), as excess interbank liquidity has decreased – from 2.5% of deposits in Q2 to 1.9% in Q3 before likely stabilising in Q4. Also, we believe the PBOC was trying to prevent interbank rates moving too low over concerns of exacerbating FX outflows after the August RMB devaluation. That said, the pattern may change in 2016. Our FX strategist Craig Chan expects FX intervention to moderate in 2016 as China moves towards a more market-driven exchange rate regime. This should allow better transmission of policy rate cuts to the interbank rate.

Meanwhile, CGBs outperformed IRS in H2 2015, and we believe this trend will continue in 2016. CGBs have much better valuations than IRS, with 5yr CGBs at more than 100bp above overnight funding cost. In contrast, 5yr NDIRS are only 10-15bp above the 7d repo fixing. In addition, CGBs can benefit from safe-haven flows if corporate default rates increase or bank loan growth slows as the economy moderates. We forecast 10yr CGB yields reaching 2.60% by end-2016 with risk of a larger decline. However, since most investors cannot access onshore bonds, the second best option would be to buy CNH CGBs. These currently trade 30-50bp above onshore CGBs. However, as offshore funding costs are much higher than onshore with 1y CCS currently above 3.5%, this would mainly be a long duration trade rather than a carry trade. We believe the new 5yr CNH CGB benchmark, currently trading at 3.41%, has the best risk/reward along the curve (Fig. 121). We suggest positioning long this bond (CGB 3.4% 11/30/20) with a target of 3.00% and reassess at 3.60% for 3K DV01. We hedge 80% of the FX exposure via a 1y CNH CCS, currently at 3.65% with USDCNH reference at 6.446.

Turning back to IRS, we believe both the 7d repo fixing and IRS have limited downside until Chinese New Year (early February) as liquidity tends to tighten seasonally.

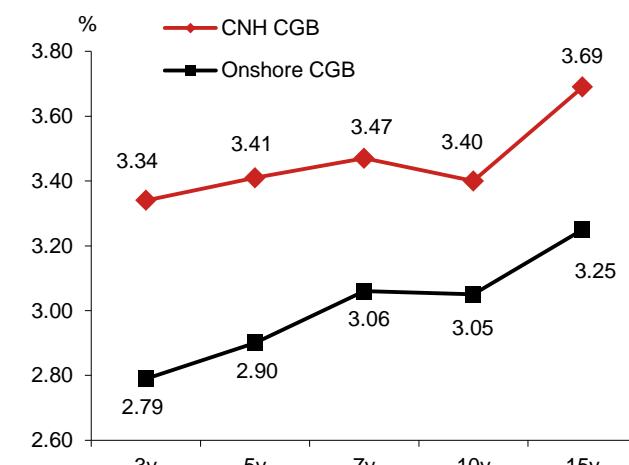
However, with our house view of two policy rate cuts starting in Q2 2016, we think the 7d repo could eventually fall to 2.0%, or even lower, in H2 2016. An opportunity to receive front-end NDIRS could present itself sometime in late Q1 2016, but timing is critical. We remain open to receiving front-end IRS as and when the opportunity arises. Finally, on CNH CCS, we expect CCS to continue to trade above IRS due to expectations of RMB depreciation. However, the current spread of over 150bp (for 1y) is too high, in our view. It should gradually narrow in 2016 as China further liberalises its capital account and promotes closer integration between the onshore and offshore markets after IMF SDR basket inclusion.

Fig. 120: 1yr target deposit rate, 7d repo and 5yr NDIRS (%)



Source: Nomura, Bloomberg

Fig. 121: Onshore and CNH CGB yield curve (%)



Source: Nomura, Bloomberg

India: Long 5yr bond; 5yr bond swap spread

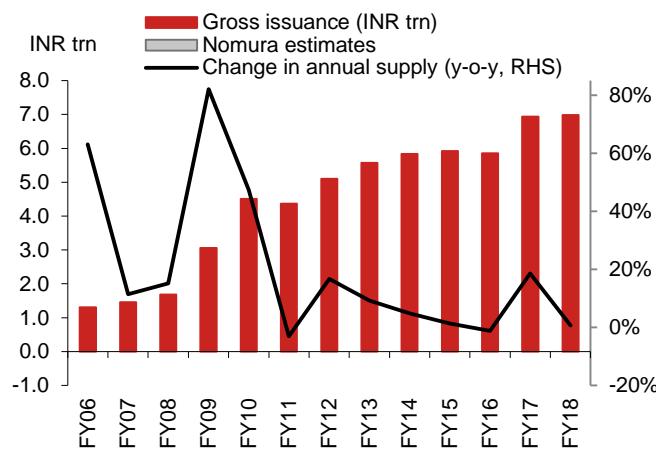
In India, we expect monetary policy to become less of a driver of rates markets. Our economics team, Sonal Varma and Neha Saraf, sees the RBI staying on hold for all of 2016 (see [link](#)). We remain constructive on bond markets, and expect 10yr bond yields to trade 40bp over the 1yr T-Bill rate, on an average. While we forecast no changes in the policy rate, we expect the RBI to increase its focus on rate cut transmission. In this process, we expect the RBI to keep ample liquidity in the banking system. This should put downward pressure on 1yr T-Bill rates which we expect to move towards 7% over the course of year. Assuming 1yr T-Bill rates reach 7% by mid-year, we would expect 10yr bond yields to reach 7.40% (current: 7.70%) by the same time. However, in the second

half of the year we expect markets to develop some risk premia as the inflation trajectory is expected to rise.

In bonds, the market would still need to navigate supply pressures which will likely weigh on markets intermittently and keep the spread versus 1yr T-Bill rate above 40bp during periods of heavy supply, while it compresses to below 40bp in periods of lower net supply. Our economics team expects the government to choose a slower pace of fiscal consolidation for FY17, which would have the obvious implications of increased bond supply. For a 3.6% fiscal deficit, net supply would be INR4.7trn,¹ higher than the INR4.5trn for FY16. However, with redemptions of about INR2.23trn, gross supply should be INR6.9trn (FY16: INR5.9trn, Fig. 122). This approximately 17% increase in gross supply should weigh on the market intermittently. We recommend entering 5yr bond which is less affected by supply pressure.

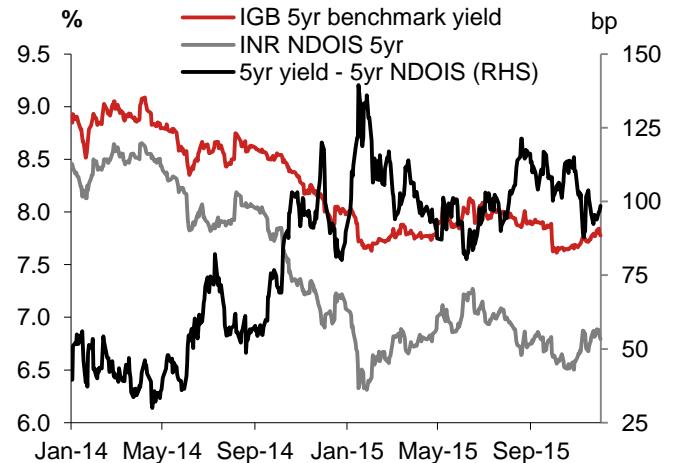
As far as the swap curve is concerned, we expect a range-bound market in Q1 2016 with 5yr NDOIS in the 6.50-7.00% range (Fig. 123). Given stable monetary policy, we expect the swap curve to stay in bull flattening/bear steepening mode (see [Asia Insights - India: RBI in wait-and-watch mode](#), 01 December 2015). With the front end of the swap curve pricing in approximately 20bp of cuts in one year's time, we see value in staying with INR 2s5s NDOIS and INR 1s5s flatteners, which is a positive carry way of expressing our receive view. We also note that current liquidity deficit conditions in the banking system, combined with OMO purchases, which are likely until March, are expected to put flattening pressure on the yield curve into Q1 2016 (see [Asia Insights - India rates: RBI infuses liquidity via OMO purchases and variable rate repo auctions](#), December 03 2016). However, we note that towards the second half of the year the belly of the curve (5yr NDOIS) should start commanding risk premia. We note that the 5yr NDOIS touched 6.30% in January 2015 and 6.50% in October 2015. On both these occasions, the market's reaction was a result of the RBI surprising on the dovish side. In January, the RBI unexpectedly delivered an inter-meeting cut, and in October it delivered a bigger-than-expected cut. However, with 125bp of cuts already delivered and the risk of further dovish surprises low, in our view, we doubt that 5yr NDOIS will fall below the 6.50% level. Therefore, we look to exit our receive bias when 5yr NDOIS approaches the 6.50-6.60% zone. We expect 5yr NDOIS to outperform bonds as it moves towards 6.50-6.60% levels. However, when the NDOIS is lower, which should coincide with a wider 5yr bond vs. NDOIS spread, we suggest investors initiate long 5yr bond vs. 5yr NDOIS positions. We look to enter a long 5yr bond vs. NDOIS position when the spread is closer to 110bp (currently 100bp) looking for a move to 60-70bp.

Fig. 122: Annual gross supply



Note: FY17 and FY18 numbers are Nomura estimates
Source: Nomura, RBI

Fig. 123: INR NDOIS 5yr and 5yr generic bond yield



Source: Nomura, Bloomberg

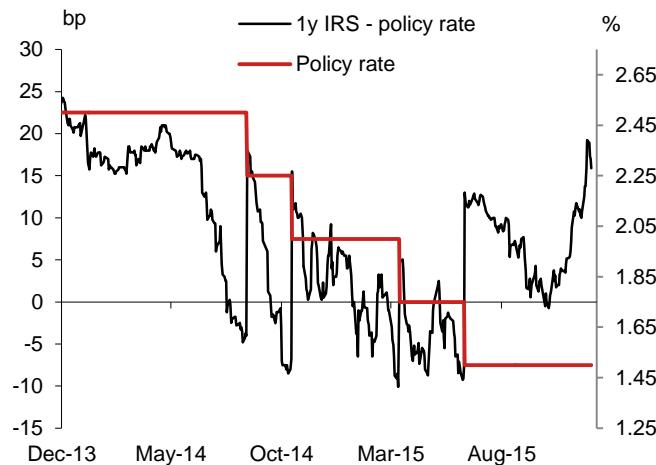
Korea: Steeper and receive front-end bias

We recommend IRS steepeners (2s5s and 3s10s, see [Korea rates: Add 3s10s IRS steepener](#), 27 November 2015) and look to receive 1y IRS into 2016. The market is effectively pricing the BOK to stay on hold in 2016 (see [link](#)) and the spread between the

¹ We assume nominal GDP growth of 11.5% and 85% of the fiscal deficit to be financed by bond issuance.

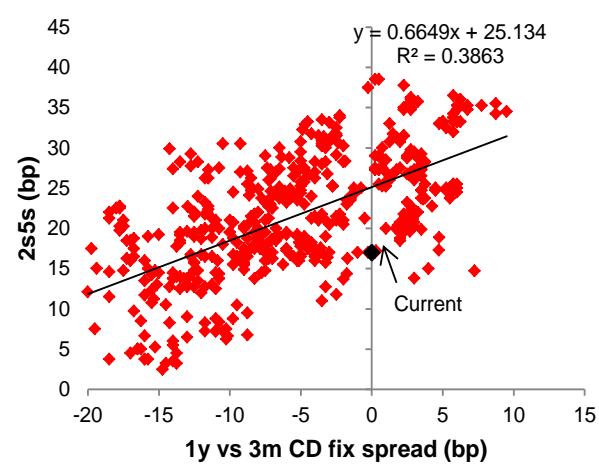
CD fix and policy rate to stay higher than in 2015 (Fig. 124). This contrasts sharply with our house view of two 25bp rate cuts by June 2016. However, there is a risk that CD fixing may only fall back in January. On the rationale for steepeners, apart from expectation of CD rate to move back down, a regression of 2s5s versus the 1y – 3m CD fixing spread shows that both 2s5s and 3s10s are about 10bp too flat (Fig. 125). If the market pricing turns out to be correct on the front-end and the BOK leaves the policy rate unchanged, a higher term premium would need to be built into the Korea curve as the Fed hikes.

Fig. 124: 1yr IRS vs. policy rate spread (bp)



Source: Nomura, Bloomberg

Fig. 125: Korea 2s5s IRS (bp) vs. 1y - 3m CD fix spread (bp)



Source: Nomura, Bloomberg

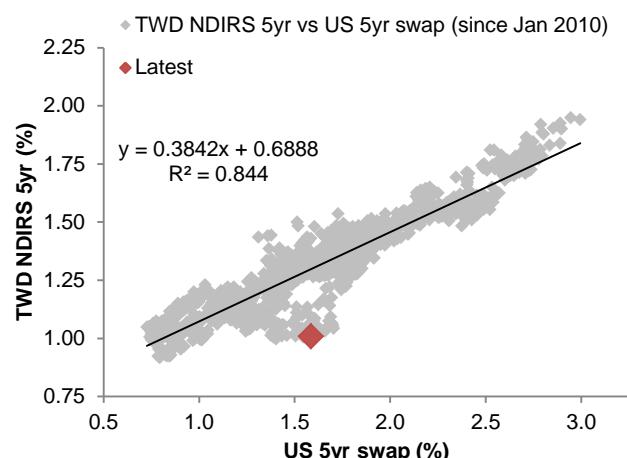
On bonds, supply and demand dynamics are favourable. Against this backdrop of stable bond supply in 2016 (compared with 2015), we expect lifer and pension fund demand to continue to support long-end KTBs. Specifically, lifers need to gradually increase duration to comply with changes in the International Financial Reporting Standard (IFRS4) to be effective early 2020. We believe the supply of high-quality long-tenor bonds will remain limited. However, there is some chance of risk premium increasing in December. Hence we wait for a level of 2.35-2.40% to go long 10yr KTBs (current 2.25%), as we believe these can ultimately test 2.00% as the BOK cuts.

Taiwan: Long duration bias but wait for better valuations

While we continue to hold a receive 2yr IRS trade into the December MPC, where we expect a 12.5bp cut, room for further cuts in rates in Q1 2016 looks limited, in our view. Market focus is likely to be on the presidential election in January (see [link](#)). From a macro perspective, similar to China and Korea, we expect 2016 to be another year of below-potential growth in Taiwan. The combination of flush banking system liquidity (as loan growth slows) and strong demand by lifers should also support TGBs and, indirectly, IRS. The issue is stretched valuations. On a beta-adjusted basis, Taiwan 5yr IRS is about 20-25bp rich relative to US 5yr IRS (Fig. 126). With monetary policies diverging in the US and Taiwan, it is reasonable for Taiwan rates to trade rich, but 20-25bp looks excessive. We wait for better levels and the conclusion of the presidential election before considering a more medium-term strategy trade for 2016.

HK: Pay 10y IRS and 2s5s steepener

With a Fed hiking cycle expected, 2016 should offer several HK versus US relative value trade opportunities. We recommend pay 10y HK IRS (see [First Insights - Hong Kong rates: Scale in pay 10y IRS](#), 2 December, 2015) as the market is already discounting a gradual Fed hike cycle with the terminal fed funds rate not too far from our US economics team's forecast of around 2%. Paying HK rates is a cheap hedge against potential liquidity tightening as the Fed hikes. It also offers an opportunity to position for a convergence with CNH or CNY rates from time to time. The HKD peg could face its most trying time since being put in place in 1983. The key reason being that Hong Kong's economy is increasingly tied to China, which we believe will continue to make progress to internationalise the RMB and further liberalise its capital account

Fig. 126: TWD NDIRS 5yr vs. US 5yr swap

Source: Nomura, Bloomberg

Separately, we hold a 2s5s HK IRS steepener (see [HK rates: Adding to our 2s5s IRS steepener](#), 23 November 2015), targeting a move to 75bp including carry and roll, which is currently worth 7bp over three months (Fig. 127). We expect front-end HK rates to outperform the US. Flush HKD liquidity – aggregate interbank balance of HKD400bn – should cause HK HIBOR to rise by less than US LIBOR in the initial stage of Fed hike.

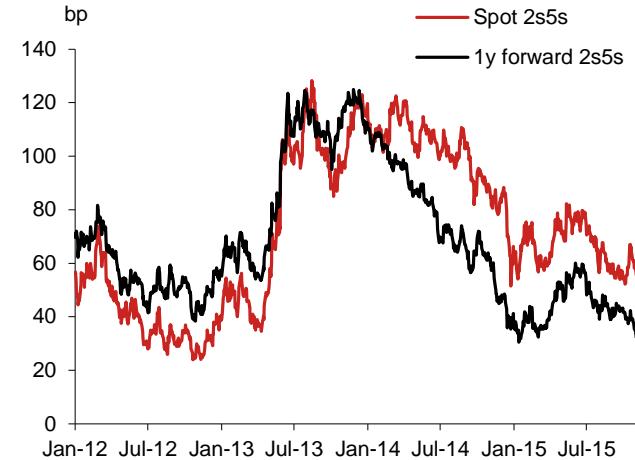
Singapore: Higher term-funding rate but fall in term structure

We continue to like flatteners in Singapore (Fig. 128). Our flattening view is primarily derived from our belief that higher term funding rates are the new norm in Singapore (see [Asia Special Report - Singapore's productivity conundrum](#), 23 October 2015). Also, with the MAS expected to remain on hold (see [link](#)), we expect flatteners to be supported by a fall in the term structure of interest rates (Fig. 129).

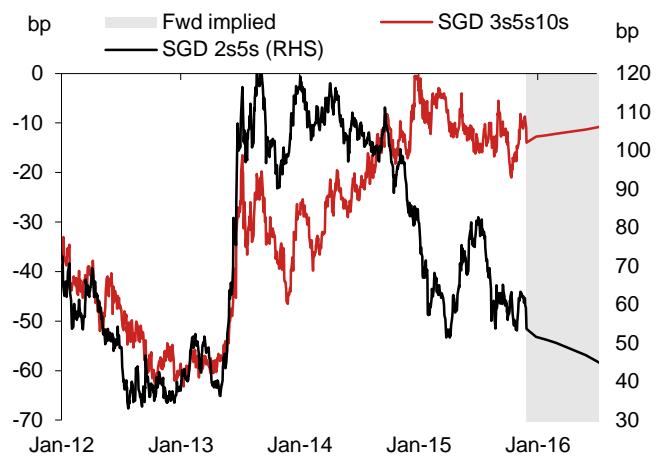
As far as front-end rates are concerned, they have risen along with six-month implied fixings since mid-October. We believe this was initially in response to the MAS policy in which the rate of S\$NEER policy band appreciation was “reduced slightly”. We think the shallower slope should keep term funding rates elevated (see [Singapore: MAS eases FX policy slightly](#), 14 October 2015). Indeed, reduced FX carry (in the form of a shallower slope) calls for a higher equilibrium value of term funding rates and one closer to the interest rates of Singapore’s major trading partners. We expect SOR fixings to stabilise closer to current levels. However, as fixings stabilise, we should see compression of spreads between the belly (which should reflect the expectations on the future path of fixings) and fixings itself. This should support a further flattening of the curve.

As far as specific trade recommendations are concerned, we remain comfortable receiving 2s5s flatteners and receiving 3s5s10s. We look to increase our receive SGD 3s5s10s position should the fly cheapen. Our choice of receiving in the 5yr part of the curve, or belly outperformance, is primarily because we expect (1) term-funding rates to remain elevated, which will limit the 2s5s/3s5s bull-steepening potential, (2) Fed hikes to be gradual, limiting the scope of 2s5s/3s5s bear steepening, and (3) the 5s10s flattening pace to slow, as term premiums are already compressed after the major flattening observed in 2014 which, in our view, was a result of ECB and BOJ QE operations.

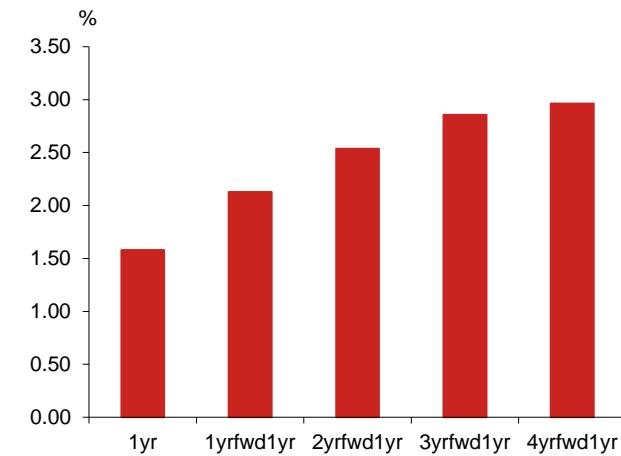
Although we do not expect term premiums to rise, we believe it will become incrementally less likely to see a 2014-style flattening led by 5s10s.

Fig. 127: Spot and 1y forward 2s5s HK IRS spread (bp)

Source: Nomura, Bloomberg

Fig. 128: SGD IRS 2s5s and 3s5s10s

Source: Nomura, Bloomberg

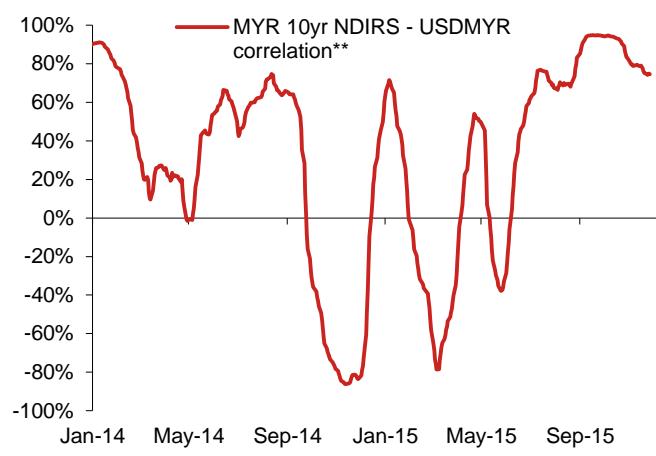
Fig. 129: Term structure of SGD IRS curve

Source: Nomura, Bloomberg

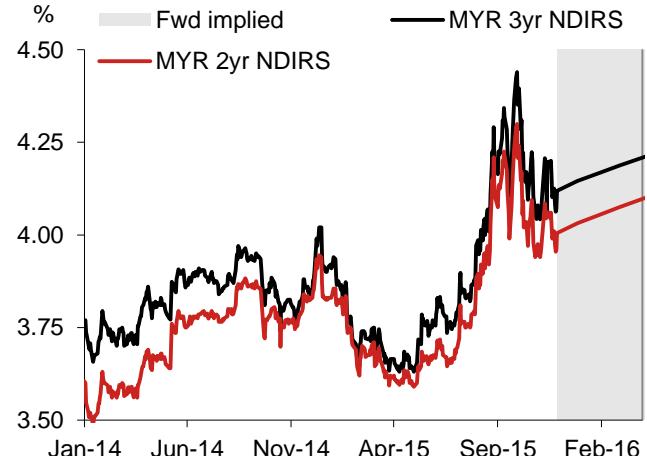
Malaysia – Carry in front end, curve to steepen

We recommend accumulating receivers in the front end of the Malaysia swap curve, along with steepeners (see [Malaysia rates: Increase steepening exposure in MYR NDIRS](#), 5 November 2015). Malaysia swap rates have faced upward pressure since August, consistent with their increased correlation with FX markets. We believe this was primarily due to the market's perception that BNM may hike rates in order to defend MYR, but these expectations were never realised. Instead, we expect monetary policy to remain stable into 2016. Our economics team, Euben Paracuelles and Brian Tan, expects headline inflation to rise in Q1 2016 to 5.1% and average 4% in 2016. However, they expect BNM to look through this higher inflation – which is a result of base effects and subsidy cuts, and expect core inflation to remain broadly stable, which would support this view (see [link](#)). Another important consideration for policymakers is a further deceleration in growth. Our economics team forecasts a moderation of GDP growth to 4% in 2016 from 5% in 2015.

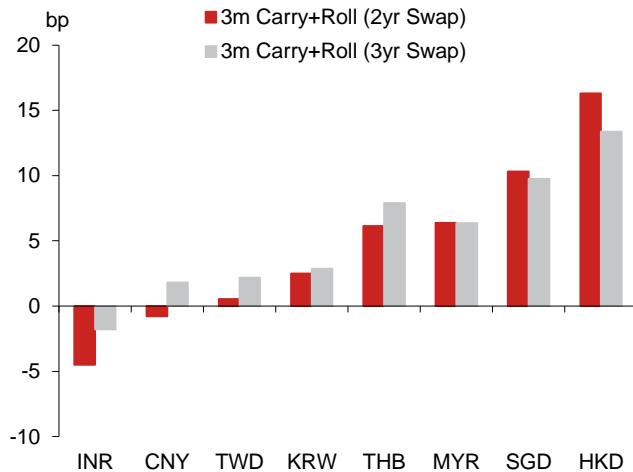
On valuations, we believe Malaysia rates offer decent carry at current levels. For example, we note that, even after the fall in front-end rates since mid-October, the market is pricing in one hike and two hikes in one and two years, respectively. As such, we think investors should look to accumulate receivers in the 2yr and 3yr part of the curve (Fig. 131) as and when the opportunity arises. We look to accumulate receivers closer to 4.10% in 2yr and 4.20% in 3yr. In terms of carry, after Singapore and Hong Kong, Malaysia front-end rates offer the most carry in Asia ex-Japan (Fig. 132).

Fig. 130: Correlation between FX and rates

Source: Nomura, Bloomberg

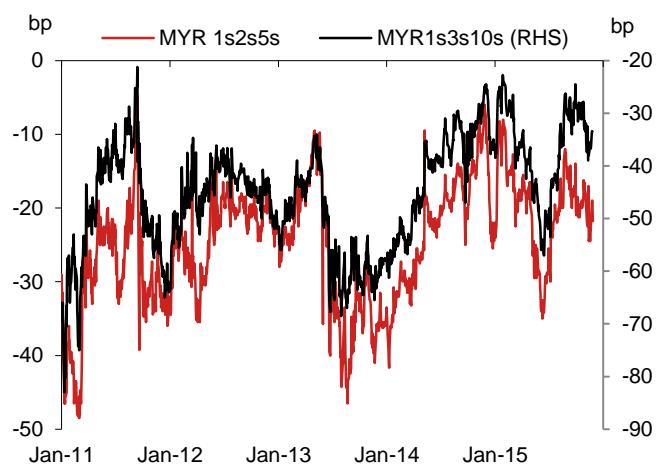
Fig. 131: MYR NDIRS 2yr and 3yr

Source: Nomura, Bloomberg

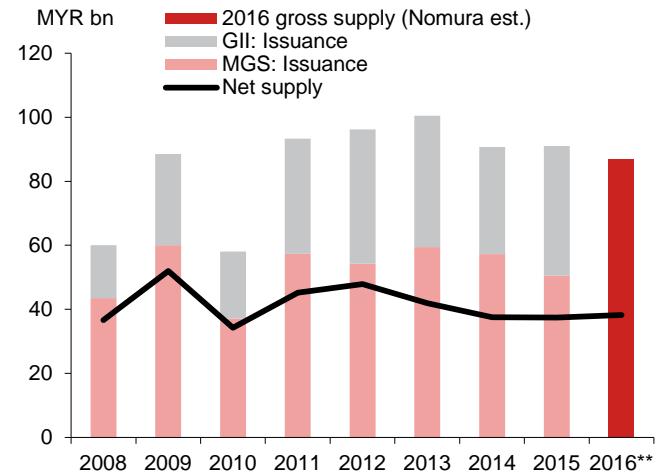
Fig. 132: Carry and roll in front end of Asia swaps

Source: Nomura, Bloomberg

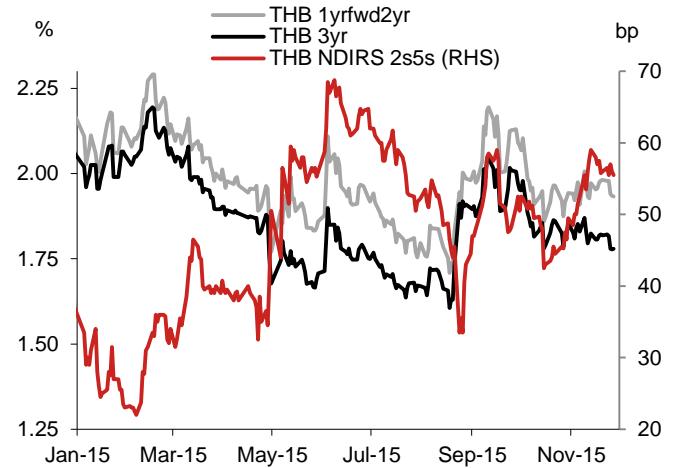
That said, we still like steepeners in the Malaysia curve. Along with stable and lower front-end rates, our steepening view also stems from our belief that the small reduction in gross bond supply (MYR86bn in 2016 vs. MYR91bn in 2015, on our estimates; Fig. 133) will weigh on bond markets. Importantly, net bond supply is rising due to lower redemptions. We like expressing this view through 1s3s10s and 1s2s5s, which are proxy 3s10s and 2s5s steepeners (Fig. 134) and offer a relative value advantage (see [Asia Insights - Malaysia rates: Steepening pressure likely to emerge](#), 29 October 2015).

Fig. 134: MYR NDIRS 1s2s5s and 1s3s5s

Source: Nomura, Bloomberg

Fig. 133: Malaysia: gross and net supply

Source: Nomura, Bondinfo

Fig. 135: THB NDIRS 1yrfwd2yr, 3yr and 2s5s

Source: Nomura, Bloomberg

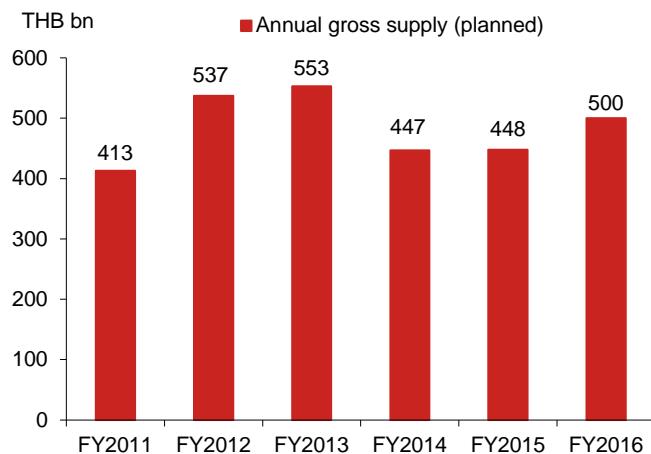
Thailand – Front-end receivers and steepeners

We recommend a combination of front-end receivers and steepeners. Our economists forecast a cumulative 50bp of easing from the BOT in H1 2016 (see [link](#)). We believe lower and stable fixings, along with monetary easing expectation, will keep front-end rates under receiving pressure (see [Thailand: BOT still on hold but case for easing intact](#), 4 November 2015). Indeed, growth is likely to remain subdued, with our economists forecasting 2016 GDP growth of 2.5% versus 2.7% in 2015 and well below official projections. We expect inflation to pick up, but it should remain at the lower end of the 1-4% target band. We also continue to like curve steepeners in Thailand, as we believe bond supply will weigh on the longer end of the curve. There is THB500bn of ThaiGB supply (LB + ILB + Amortized bonds) scheduled for this fiscal year (FY16: October 2015 to September 2016) versus THB448bn last fiscal year (i.e., an increase of 12% y-o-y; Fig. 136). This will likely weigh on markets. The quarterly profile of supply suggests that supply pressure is likely to increase from 2016, as there are limited redemptions over the rest of the financial year.² We also like steepeners because we expect foreign investor interest to remain subdued. Year to date, there have been net outflows of THB69bn, which constitutes one of the worst years for flows in recent times.

² There are only two redemptions in the rest of FY16 (ends Sep): THB29bn in May and THB52bn in July.

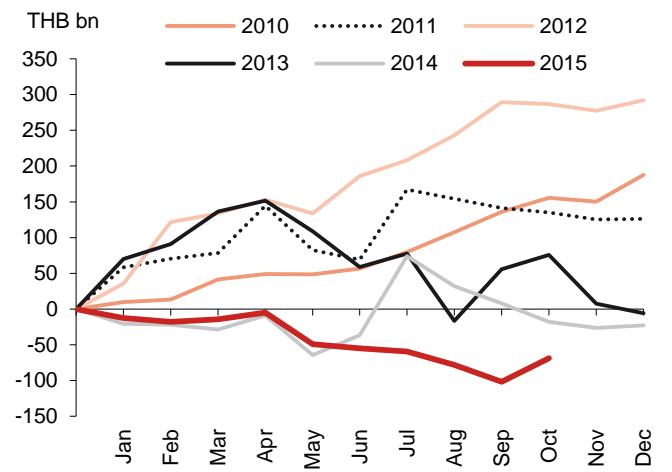
We do not expect a significant turn-around of foreign investor interest in the Thai debt market (Fig. 137).

Fig. 136: Annual gross supply



Source: Nomura, Bloomberg

Fig. 137: Yearly flows in Thailand debt



Source: Nomura, CEIC, Bank of Thailand

Indonesia – Underweight to neutral

In Indonesia, we recommend turning neutral from an underweight stance, as we expect a significant fall in inflation to lead to a rise in real yields. The prospect of inflation falling to within Bank Indonesia's policy target range of 3-5% also provides scope for policy easing.

Our economics team has recently become more constructive on Indonesia on the prospects of more stimulatory fiscal and monetary policies, as well as reform measures (see [Asia Special Report - Indonesia: Silver linings](#), 25 November 2015). On monetary policy, our economists expect BI to cut its policy rate by 25bp in January and look for a further 25bp cut in Q1 2016. This should be supported by a significant fall in inflation from an average of 6.4% in 2015 to 4.7% in 2016 (see [link](#)). Assuming this sharp fall in inflation, Indonesia bond yields would offer the highest real yield in Asia.

We forecast a fiscal deficit of 2.6% of GDP in 2016 versus 2.5% of GDP in 2015. However, net government bond supply is expected to rise by 3.6% from IDR353.3trn to IDR366.2trn in 2016. Gross issuance is expected to be IDR530trn in 2016, up 15% from 2015. We view this as a moderate increase that can be easily absorbed by the market.

Overall, the attractive real yields, monetary easing expectations and manageable bond supply have led us to change our stance from underweight to neutral on Indonesia government bonds.

LatAm Rates

Mexico

Following a structural and cyclical strategy

Mexico continues to adjust its domestic policy mix to cope with tighter global monetary conditions and minimize the risk of running macro imbalances. This last item is particularly important in understanding Mexico's 2016 interest rate path at the domestic level and at the same time fend off residual EM volatility beyond that caused by Fed liftoff.

On the domestic policy mix, Mexico has taken the necessary steps to address deteriorating fiscal metrics. This is particularly important as oil still plays a significant role in the government's revenues and implicitly paves the road to a successful transition to a higher rates environment following the US Fed. On this front, while Mexico has been caught in the global crossfire of rates sell-off, the ongoing government and central bank (Banxico) efforts should ultimately prove to be the right steps in the quarters to come, in our view.

Local yields . . . Higher but flatter . . .

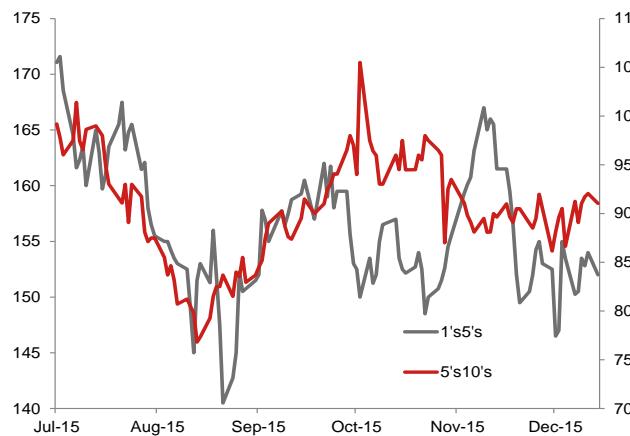
The front end of the curve in TIIE has reacted accordingly to expectations for higher US rates. The curve currently fully prices in around 70 bps of hikes over the next 12 months (discounting for the December 18 hike), a rate path more hawkish than Nomura's expectation for 50 bps of interest rate hikes in the US. Having said that, we believe that the possibility of Banxico moving at its own monetary pace could emerge in 2016 if certain circumstances materialize, but more likely to happen in 2016 H2. This is particularly true if financial variables (MXN mostly) and growth seem to cope well with liftoff in the coming months. That said, while we expect Banxico to shadow the US Fed to a large degree throughout the year, at some point, there could be signs of decoupling. This is possible especially if Mexico's inflation performance continues to deliver good results and the output gap takes longer to close.

Banxico has a comfortable starting point to its hiking path in the medium term (6 months and beyond), as inflation is structurally low and a sound macro policy mix could limit the damage from the initial liftoff, particularly in FX terms, and thus limit the risk of pass-through from this variable to prices. In addition, macroeconomic reforms should still provide room for lower prices in the telecom sector, and potentially in energy prices (gasoline and electricity) supporting a low inflation path. The only caveat to inflation prints next year is the base effect that should create the illusion of a rebound, when in fact, it is mostly a technicality rather than demand-side pressures.

That said, we continue to see value in Mexican rates (TIIE and Mbonos) in the long end of the curve in 2016. We base our analysis in the fact that the local yield curve has built an excess premium that in our view is unjustified. This is particularly true for the 5Y to 10Y sector of the curve that vis-à-vis US swaps (Fig. 139), the spread seems unjustified based on our macro assumptions for 2016 for both countries. This premium building

Fig. 138: Flatter TIIE curves . . .

slopes between 5's10's and 1's5's



Source: Nomura, Bloomberg

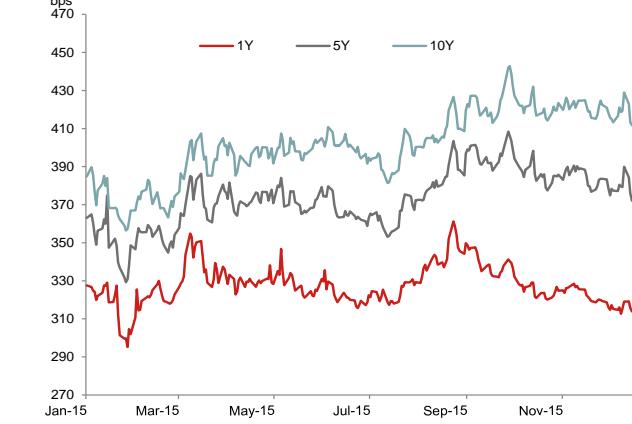
Research analysts

LatAm Research

Mario Robles - NSI
mario.robles@nomura.com
+1 212 436 8182

Fig. 139: Mexico/US spreads should tighten

Spreads between TIIE and US Swaps (1, 5, 10yr)



Source: Nomura, Bloomberg

process vs. the US in local assets also provides a good carry and roll profile of receiving local rates. This is an important feature, especially if the rally we anticipate takes longer than expected to arrive.

In addition to our base macro assumptions, Mexico continues to show a convergence process vs. the US that should ultimately be evident in lower yields across the board, but most visible beyond the 3Y sector of the curve. The energy and telecom structural reforms are slowly pushing down tariffs in these two sectors of the economy, not only at the local level but also at a cross-border level between Mexico and the US with local rates likely following this path as well.

Demand for long-dated MXN denominated assets should continue

Moreover, on the government securities supply side, our expectations of fiscal responsibility in Mexico should limit the risk to budget expenditures expansion and thus the need to expand issuance estimates. At this juncture, the Ministry of Finance has pledged to limit public spending and make up for lower oil and tax revenues via budget cuts. The strategy is credible as Mexico "limits" its oil price exposure and how it flows into the budget by using oil puts, having already secured a large portion of its oil revenues at a \$49 strike per barrel in 2016. Also, Mexico tends to shift issuance to the front end of the curve (CETES) and somehow curbs injecting duration into the Mbono program to minimize duration exposure hitting the market at once. Also, Mexico is considered a sophisticated sovereign issuer that has access to virtually any market, and thus could fund at the sovereign bond levels in markets with low interest rates with JPY, CHF and EUR in mind. These supplemental funding sources complement Mexico's funding strategy and minimize the impact of local issuance at the domestic level.

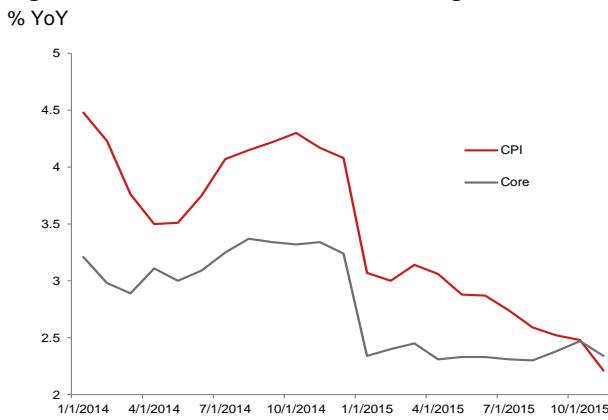
On the demand side, AFORES (local pension funds) are still growing at a fast pace and their assets now represent around 14% of GDP. These privately run funds have the inherent need to fund long-term liabilities with long-term assets in MXN-denominated terms and thus continue to bid the long end of the MXN curve. On top of this, foreign-domiciled accounts continue to flow into local fixed income market into the Mbono curve, with a special emphasis in the 2022 and 2023 sector of the curve with numbers that reach almost 72% and 78% of the total outstanding bonds in those sectors. We expect this trend to continue.

A relative US-Mexico value play

We have conviction in relative value strategies that benefit from receiving local rates TIE in the 5Y sector on a relative basis vs. US swaps but also recognize that longer tenors also have value to offer.

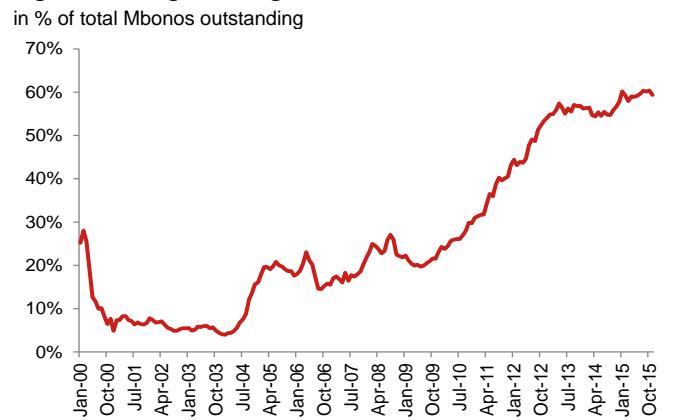
Such strategies should benefit from spread compression in coming months and could accelerate if the MXN remains well behaved and thus provide room for Banxico to decouple from the US Fed shadow and follow its own interest rate path. If this decoupling occurs, it should allow for opportunities to receive rates in a relative basis (vs. shorting US Swaps) initially, and then give way to outright receivers in local TIE IRS as Banxico's path becomes clearer.

Fig. 140: in % of total Mbonos outstanding



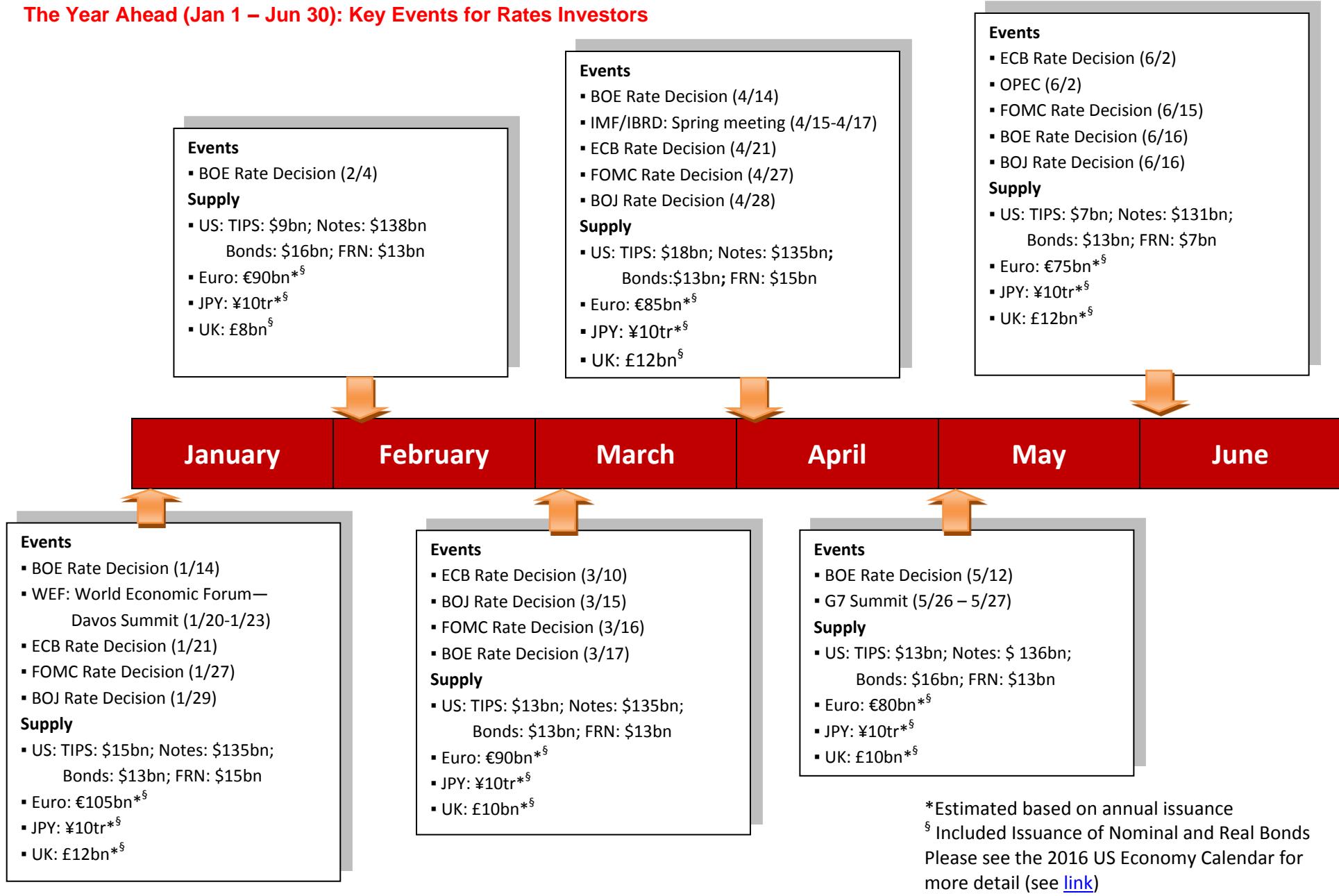
Source: Banxico, Nomura

Fig. 141: Foreign holdings of Mbonos



Source: Banxico, Nomura

The Year Ahead (Jan 1 – Jun 30): Key Events for Rates Investors



*Estimated based on annual issuance

[§] Included Issuance of Nominal and Real Bonds

Please see the 2016 US Economy Calendar for more detail (see [link](#))

Source: Nomura

Appendix

1Q16 Global Auction Calendar

Fig. 142: G4 Expected Issuance Calendar

| Auction Calendar | | | | | |
|------------------|-------------|--------------|---------------|------|---------|
| | Issuer | Ticker | Maturity | Size | New/Tap |
| Tue, 05-Jan-16 | Japan | JGB | 10yr | 2400 | TAP |
| Tue, 05-Jan-16 | UK | UKT 25s | | 3.25 | TAP |
| Wed, 06-Jan-16 | Germany | BKO/OBL/Bund | | 4/5 | |
| Thu, 07-Jan-16 | Japan | JGB | 30yr | 800 | TAP |
| Thu, 07-Jan-16 | UK | UKT 60s | | 2.25 | TAP |
| Tue, 12-Jan-16 | Austria | RAGB | | 1 | |
| Tue, 12-Jan-16 | Italy | BTP | 3y,7y,15y/30y | 7/8 | |
| Tue, 12-Jan-16 | Germany | DBRI | | 1 | |
| Tue, 12-Jan-16 | UK | Linker 46s | | 2.5 | TAP |
| Tue, 12-Jan-16 | US | UST | 3-Year NOTE | 24 | |
| Tue, 12-Jan-16 | Netherlands | DSL | | | |
| Wed, 13-Jan-16 | Japan | JGBi | 10yr linker | 500 | TAP |
| Wed, 13-Jan-16 | Germany | BKO/OBL/Bund | | 4/5 | |
| Wed, 13-Jan-16 | US | UST | 10-Year NOTE | 21 | TAP |
| Thu, 14-Jan-16 | Spain | SPGB | | 4/5 | |
| Thu, 14-Jan-16 | France | OAT | Long-Ultra | 7/8 | |
| Thu, 14-Jan-16 | US | UST | 30-Year BOND | 13 | TAP |
| Fri, 15-Jan-16 | Japan | JGB | EL >15.5 | 300 | TAP |
| Tue, 19-Jan-16 | Japan | JGB | 5yr | 2500 | TAP |
| Wed, 20-Jan-16 | Germany | BKO/OBL/Bund | | 4/5 | |
| Wed, 20-Jan-16 | UK | UKT 21s | | 3.75 | TAP |
| Thu, 21-Jan-16 | Japan | JGB | 20yr | 1200 | TAP |
| Thu, 21-Jan-16 | France | OAT | Short-Medium | 7/8 | |
| Thu, 21-Jan-16 | Spain | SPGB | | 4/5 | |
| Thu, 21-Jan-16 | US | TIPS | 10-Year TIPS | 15 | |
| Tue, 26-Jan-16 | Japan | JGB | EL <15.5 | 500 | TAP |
| Tue, 26-Jan-16 | Italy | CTZ & Linker | | 3-4 | |
| Tue, 26-Jan-16 | Netherlands | DSL | | 2/3 | |
| Tue, 26-Jan-16 | US | UST | 2-Year NOTE | 26 | |
| Tue, 26-Jan-16 | Belgium | BGB | | 3 | |
| Wed, 27-Jan-16 | Germany | BKO/OBL/Bund | | 4/5 | |
| Wed, 27-Jan-16 | US | FRN | 2-Year FRN | 15 | |
| Wed, 27-Jan-16 | US | UST | 5-Year NOTE | 35 | |
| Thu, 28-Jan-16 | Japan | JGB | 2yr | 2500 | NEW |
| Thu, 28-Jan-16 | Italy | BTP | 5y,10y,CCT | 7/8 | |
| Thu, 28-Jan-16 | US | UST | 7-Year NOTE | 29 | |
| Tue, 02-Feb-16 | Japan | JGB | 10yr | 2400 | TAP |
| Thu, 04-Feb-16 | Japan | JGB | EL >15.5 | 300 | TAP |
| Thu, 04-Feb-16 | France | OAT | Long-Ultra | 7/8 | |
| Thu, 04-Feb-16 | Spain | SPGB | | 4/5 | |
| Tue, 09-Feb-16 | Japan | JGB | 30yr | 800 | TAP |
| Tue, 09-Feb-16 | Austria | RAGB | | 1 | |
| Tue, 09-Feb-16 | Netherlands | DSL | | 1/2 | |
| Tue, 09-Feb-16 | Germany | DBRI | | 1 | |
| Tue, 09-Feb-16 | UK | Linkers 26s | | 1.5 | TAP |
| Tue, 09-Feb-16 | US | UST | 3-Year NOTE | 24 | |
| Wed, 10-Feb-16 | Germany | BKO/OBL/Bund | | 4/5 | |
| Wed, 10-Feb-16 | US | UST | 10-Year NOTE | 24 | |
| Thu, 11-Feb-16 | Italy | BTP | 3y,7y,15y/30y | 7/8 | |
| Thu, 11-Feb-16 | UK | UKT 45s | | 2 | TAP |
| Thu, 11-Feb-16 | US | UST | 30-Year BOND | 16 | |
| Fri, 12-Feb-16 | Japan | JGB | EL <15.5 | 500 | TAP |

Source: National Treasuries, Nomura

Fig. 143: G4 Expected Issuance Calendar

| | | | | | |
|----------------|-------------|----------------|--------------|------|-----|
| Tue, 16-Feb-16 | Japan | JGB | 20yr | 1200 | TAP |
| Wed, 17-Feb-16 | Germany | BKO/OBL/Bund | | 4/5 | |
| Wed, 17-Feb-16 | UK | New UKT 26s | | 3.75 | NEW |
| Thu, 18-Feb-16 | Japan | JGB | 5yr | 2500 | TAP |
| Thu, 18-Feb-16 | France | OAT | Short-Medium | 7/8 | |
| Thu, 18-Feb-16 | Spain | SPGB | | 4/5 | |
| Thu, 18-Feb-16 | US | TIPS | 30-Year TIPS | 9 | |
| Tue, 23-Feb-16 | Japan | JGB | 40yr | 400 | TAP |
| Tue, 23-Feb-16 | Italy | CTZ & Linker | | 4/5 | |
| Tue, 23-Feb-16 | US | UST | 2-Year NOTE | 26 | |
| Tue, 23-Feb-16 | Belgium | BGB | | 3 | |
| Tue, 23-Feb-16 | Netherlands | DSL | | 1/2 | |
| Wed, 24-Feb-16 | Germany | BKO/OBL/Bund | | 4/5 | |
| Wed, 24-Feb-16 | US | FRN | 2-Year FRN | 13 | TAP |
| Wed, 24-Feb-16 | US | UST | 5-Year NOTE | 35 | |
| Thu, 25-Feb-16 | Japan | JGB | 2yr | 2500 | NEW |
| Thu, 25-Feb-16 | Italy | BTP | 5y,10y,CCT | 7/8 | |
| Thu, 25-Feb-16 | US | UST | 7-Year NOTE | 29 | |
| Tue, 01-Mar-16 | Austria | RAGB | | 1 | |
| Tue, 01-Mar-16 | Japan | JGB | 10-year | 2400 | NEW |
| Wed, 02-Mar-16 | UK | UKT 21s | | 3.5 | TAP |
| Thu, 03-Mar-16 | France | OAT | Long-Ultra | 7/8 | |
| Thu, 03-Mar-16 | Spain | SPGB | | 4/5 | |
| Thu, 03-Mar-16 | Japan | JGB | EL >15.5 | 300 | TAP |
| Tue, 08-Mar-16 | Netherlands | DSL | | 2/3 | |
| Tue, 08-Mar-16 | Germany | DBRI | | 1 | |
| Tue, 08-Mar-16 | UK | UKT 52s | | 1.75 | TAP |
| Tue, 08-Mar-16 | US | UST | 3-Year NOTE | 24 | |
| Tue, 08-Mar-16 | Japan | JGB | 30-year | 800 | NEW |
| Wed, 09-Mar-16 | Germany | BKO/OBL/Bund | | 4/5 | |
| Wed, 09-Mar-16 | US | UST | 10-Year NOTE | 21 | TAP |
| Thu, 10-Mar-16 | Italy | BTP | 3y,7y,15/30y | 7 | |
| Thu, 10-Mar-16 | UK | New Linker 36s | | 3.25 | NEW |
| Thu, 10-Mar-16 | US | UST | 30-Year BOND | 13 | TAP |
| Thu, 10-Mar-16 | Japan | JGB | 5-year | 2500 | NEW |
| Wed, 16-Mar-16 | Germany | BKO/OBL/Bund | | 4/5 | |
| Wed, 16-Mar-16 | Japan | JGB | 20-year | 1200 | NEW |
| Thu, 17-Mar-16 | France | OAT | Short-Medium | 7-8 | |
| Thu, 17-Mar-16 | Spain | SPGB | | 4/5 | |
| Thu, 17-Mar-16 | US | TIPS | 10-Year TIPS | 13 | TAP |
| Mon, 21-Mar-16 | Belgium | BGB | | 3 | |
| Tue, 22-Mar-16 | Netherlands | DSL | | 2/3 | |
| Wed, 23-Mar-16 | US | FRN | 2-Year FRN | 13 | TAP |
| Thu, 24-Mar-16 | Italy | CTZ & Linker | | 4/5 | |
| Fri, 25-Mar-16 | Japan | JGB | EL <15.5 | 500 | TAP |
| Mon, 28-Mar-16 | Italy | BTP | 5y,10y,CCT | 7-8 | |
| Tue, 29-Mar-16 | US | UST | 2-Year NOTE | 26 | |
| Tue, 29-Mar-16 | Japan | JGB | 2-year | 2500 | NEW |
| Wed, 30-Mar-16 | US | UST | 5-Year NOTE | 35 | |
| Wed, 30-Mar-16 | US | UST | 7-Year NOTE | 29 | |

Source: National Treasuries, Nomura

Syndications: UK to sell new linkers +40yr maturity in second half of February Calendar does not include expected syndicate deals in euro area

UK, US, Japan as per auction calendar

Euro area as per expectations

Portugal –can tap the market 2nd/4th Wednesday of a month, Ireland and Finland issuance is as per quarterly calendars

Central Bank Expectations Dashboard – As of 12/17/2015

Fig. 144: Summary of Global Central Bank Rate Expectations and Weekly Changes vs. Nomura Economists and Market Implied Policy Change Dates

| Date | US | | JP | | EU | | UK | | CA | | AU | | NZ | | SE | | CH | |
|--------------|-------|------------|---------|------------|---------|------------|-------|------------|-------|------------|-------|------------|-------|------------|---------|------------|---------|------------|
| | Rate | w/w Δ (bp) | Rate | w/w Δ (bp) | Rate | w/w Δ (bp) | Rate | w/w Δ (bp) | Rate | w/w Δ (bp) | Rate | w/w Δ (bp) | Rate | w/w Δ (bp) | Rate | w/w Δ (bp) | Rate | w/w Δ (bp) |
| Dec 17, 2015 | 0.346 | 2.8 | 0.074 | 0.0 | (0.232) | 0.3 | 0.466 | (0.1) | 0.479 | 0.7 | 2.002 | 0.0 | 2.640 | (0.4) | (0.384) | 1.8 | (0.769) | (0.3) |
| Jan 1, 2016 | 0.354 | 2.3 | 0.072 | 0.0 | (0.240) | 0.4 | 0.475 | (0.2) | 0.476 | 1.7 | 2.001 | 0.0 | 2.639 | (4.3) | (0.381) | 1.8 | (0.811) | 2.4 |
| Feb 1, 2016 | 0.386 | 2.0 | 0.069 | 0.1 | (0.252) | 0.3 | 0.482 | (0.3) | 0.464 | 3.4 | 1.976 | (0.1) | 2.637 | (10.1) | (0.378) | 2.5 | (0.832) | 4.0 |
| Mar 1, 2016 | 0.445 | 3.0 | 0.067 | 0.2 | (0.262) | 0.3 | 0.497 | (0.3) | 0.454 | 3.4 | 1.941 | (0.9) | 2.636 | (13.6) | (0.375) | 2.4 | (0.853) | 5.0 |
| Apr 1, 2016 | 0.484 | 3.3 | 0.064 | 0.2 | (0.272) | 0.2 | 0.517 | (0.3) | 0.441 | 2.5 | 1.910 | (1.5) | 2.638 | (5.7) | (0.377) | (0.6) | (0.834) | 7.0 |
| May 1, 2016 | 0.513 | 3.4 | 0.060 | 0.2 | (0.279) | 0.1 | 0.538 | (0.2) | 0.418 | 1.3 | 1.861 | (2.2) | 2.623 | (3.2) | (0.384) | 0.5 | (0.825) | 6.2 |
| Jun 1, 2016 | 0.554 | 4.0 | 0.056 | 0.2 | (0.287) | (0.4) | 0.567 | 0.2 | 0.393 | 1.8 | 1.840 | (2.9) | 2.593 | (6.6) | (0.391) | 3.6 | (0.839) | 4.8 |
| Jul 1, 2016 | 0.594 | 4.8 | 0.042 | 0.5 | (0.293) | (0.6) | 0.591 | 0.8 | 0.375 | 2.6 | 1.820 | (3.6) | 2.564 | (8.3) | (0.393) | 5.3 | (0.820) | 4.7 |
| Aug 1, 2016 | 0.627 | 5.4 | 0.032 | 0.7 | (0.297) | (0.5) | 0.613 | 1.4 | 0.369 | 2.3 | 1.803 | (3.9) | 2.552 | (8.4) | (0.393) | 6.3 | (0.810) | 5.0 |
| Sep 1, 2016 | 0.659 | 5.7 | 0.041 | 0.5 | (0.301) | 0.0 | 0.639 | 2.0 | 0.371 | 1.5 | 1.792 | (3.9) | 2.554 | (7.7) | (0.390) | 7.0 | (0.806) | 4.8 |
| Oct 1, 2016 | 0.713 | 6.2 | 0.049 | 0.5 | (0.303) | 0.6 | 0.668 | 2.7 | 0.377 | 0.7 | 1.777 | (4.2) | 2.551 | (7.0) | (0.381) | 7.2 | (0.766) | 5.5 |
| Nov 1, 2016 | 0.759 | 6.8 | 0.049 | 0.5 | (0.308) | 0.9 | 0.698 | 2.4 | 0.384 | (0.0) | 1.771 | (4.2) | 2.555 | (6.5) | (0.370) | 7.0 | (0.692) | 7.0 |
| Dec 1, 2016 | 0.791 | 7.3 | 0.043 | 0.4 | (0.314) | 1.1 | 0.721 | 3.0 | 0.391 | (0.6) | 1.767 | (4.4) | 2.570 | (6.2) | (0.355) | 6.7 | (0.610) | 9.8 |
| Jan 1, 2017 | 0.843 | 7.9 | 0.036 | 0.2 | (0.320) | 1.2 | 0.760 | 3.8 | 0.399 | (1.0) | 1.760 | (4.5) | 2.579 | (6.2) | (0.335) | 6.7 | (0.548) | 11.8 |
| Feb 1, 2017 | 0.891 | 8.3 | 0.032 | 0.2 | (0.322) | 1.3 | 0.795 | 5.0 | 0.408 | (1.2) | 1.761 | (4.3) | 2.585 | (6.0) | (0.315) | 6.9 | (0.484) | 12.0 |
| Mar 1, 2017 | 0.917 | 8.5 | 0.029 | 0.2 | (0.321) | 1.5 | 0.818 | 4.9 | 0.418 | (1.1) | 1.759 | (3.9) | 2.596 | (5.5) | (0.290) | 7.3 | (0.418) | 10.6 |
| Apr 1, 2017 | 0.959 | 8.9 | 0.026 | 0.4 | (0.320) | 1.8 | 0.843 | 4.7 | 0.431 | (0.8) | 1.751 | (3.3) | 2.603 | (5.1) | (0.262) | 7.7 | (0.356) | 8.7 |
| May 1, 2017 | 0.999 | 9.5 | 0.024 | 0.7 | (0.318) | 2.2 | 0.870 | 5.0 | 0.443 | (0.4) | 1.747 | (2.8) | 2.618 | (4.8) | (0.234) | 8.2 | (0.292) | 7.7 |
| Jun 1, 2017 | 1.033 | 10.1 | 0.021 | 1.0 | (0.314) | 2.7 | 0.898 | 5.6 | 0.459 | 0.4 | 1.747 | (2.6) | 2.645 | (4.4) | (0.204) | 8.7 | (0.224) | 7.0 |
| Jul 1, 2017 | 1.075 | 10.7 | 0.016 | 1.3 | (0.309) | 3.1 | 0.927 | 6.2 | 0.475 | 1.4 | 1.752 | (2.6) | 2.670 | (4.1) | (0.170) | 9.3 | (0.151) | 6.5 |
| Aug 1, 2017 | 1.113 | 11.1 | 0.010 | 1.5 | (0.303) | 3.6 | 0.952 | 6.8 | 0.492 | 2.5 | 1.764 | (2.8) | 2.690 | (3.8) | (0.136) | 10.0 | (0.069) | 5.9 |
| Sep 1, 2017 | 1.144 | 11.4 | 0.004 | 1.5 | (0.296) | 4.0 | 0.976 | 7.5 | 0.511 | 4.0 | 1.777 | (3.2) | 2.711 | (3.4) | (0.101) | 10.6 | 0.010 | 5.4 |
| Oct 1, 2017 | 1.179 | 11.6 | (0.001) | 1.4 | (0.286) | 4.4 | 0.996 | 7.8 | 0.531 | 5.6 | 1.801 | (3.9) | 2.730 | (3.0) | (0.064) | 11.2 | 0.072 | 5.1 |
| Nov 1, 2017 | 1.208 | 11.4 | (0.007) | 1.3 | (0.281) | 4.6 | 1.014 | 7.8 | 0.554 | 7.5 | 1.821 | (4.6) | 2.746 | (2.5) | (0.033) | 11.5 | 0.112 | 5.0 |
| Dec 1, 2017 | 1.230 | 10.9 | (0.015) | 1.1 | (0.275) | 4.8 | 1.030 | 7.7 | 0.575 | 9.2 | 1.863 | (6.0) | 2.762 | (2.1) | (0.003) | 11.6 | 0.154 | 4.6 |
| Jan 1, 2018 | 1.267 | 10.7 | (0.025) | 1.0 | (0.267) | 5.0 | 1.048 | 7.7 | 0.596 | 10.6 | 1.863 | (6.2) | 2.776 | (1.9) | 0.026 | 11.6 | 0.207 | 4.4 |
| Feb 1, 2018 | 1.297 | 10.9 | (0.034) | 0.9 | (0.257) | 5.1 | 1.059 | 7.9 | 0.617 | 11.8 | 1.886 | (7.2) | 2.787 | (1.7) | 0.052 | 11.3 | 0.243 | 4.4 |
| Mar 1, 2018 | 1.311 | 11.5 | (0.041) | 0.8 | (0.243) | 5.3 | 1.070 | 8.0 | 0.636 | 12.6 | 1.907 | (8.0) | 2.803 | (1.4) | 0.080 | 11.0 | 0.265 | 4.6 |
| Apr 1, 2018 | 1.340 | 12.1 | (0.048) | 0.7 | (0.226) | 5.5 | 1.082 | 8.0 | 0.656 | 13.2 | 1.926 | (8.5) | 2.820 | (1.1) | 0.109 | 10.8 | 0.281 | 4.7 |
| May 1, 2018 | 1.363 | 12.4 | (0.054) | 0.6 | (0.208) | 5.6 | 1.092 | 7.9 | 0.675 | 13.4 | 1.943 | (8.8) | 2.837 | (0.7) | 0.140 | 10.9 | 0.306 | 4.8 |
| Jun 1, 2018 | 1.378 | 12.6 | (0.059) | 0.5 | (0.189) | 5.7 | 1.103 | 7.7 | 0.694 | 13.4 | 1.959 | (9.0) | 2.857 | (0.1) | 0.177 | 11.3 | 0.335 | 4.8 |
| Jul 1, 2018 | 1.404 | 12.8 | (0.062) | 0.5 | (0.170) | 5.9 | 1.114 | 7.5 | 0.712 | 13.1 | 1.975 | (9.0) | 2.879 | 0.4 | 0.216 | 12.0 | 0.363 | 4.7 |
| Aug 1, 2018 | 1.421 | 12.8 | (0.064) | 0.4 | (0.148) | 6.3 | 1.126 | 7.3 | 0.730 | 12.4 | 1.991 | (8.8) | 2.903 | 1.1 | 0.256 | 13.0 | 0.399 | 4.5 |
| Sep 1, 2018 | 1.432 | 12.6 | (0.065) | 0.3 | (0.123) | 6.7 | 1.139 | 7.1 | 0.746 | 11.5 | 2.005 | (8.5) | 2.928 | 1.9 | 0.297 | 14.1 | 0.433 | 4.6 |
| Oct 1, 2018 | 1.450 | 13.0 | (0.065) | 0.3 | (0.099) | 7.1 | 1.150 | 7.2 | 0.762 | 10.2 | 2.018 | (8.0) | 2.952 | 2.6 | 0.337 | 15.3 | 0.456 | 4.6 |
| Nov 1, 2018 | 1.464 | 14.4 | (0.064) | 0.3 | (0.074) | 7.4 | 1.164 | 7.6 | 0.778 | 8.7 | 2.031 | (7.3) | 2.981 | 3.5 | 0.379 | 16.6 | 0.466 | 4.7 |

*Note: Solid borders represent a full pricing-in of central bank action (green = rate cut, red = rate hike). Dashed borders denote the prior week's pricing. Dark shaded cells represent Nomura economists' central bank rate forecasts. There are no forecasts for Sweden/Switzerland.

Source: Nomura, Bloomberg

2016 Global Rates Forecast versus Forward Yields

Fig. 145: Rates Forecast

| | | 1Q2016 | | | 2Q2016 | | | 3Q2016 | | | 4Q2016 | | | |
|-----------|------------|---------|-----------------|-------------------|--------------|-----------------|-------------------|--------------|-----------------|-------------------|--------------|-----------------|-------------------|--------------|
| | Security | Current | NMR Forecast | Forward Yield* | Diff (bp) |
| US | 2yr UST | 0.95 | 1.20 | 1.26 | -6 | 1.50 | 1.33 | 17 | 1.35 | 1.45 | -10 | 1.50 | 1.57 | -7 |
| | 3yr UST | 1.28 | 1.40 | 1.51 | -11 | 1.65 | 1.63 | 2 | 1.55 | 1.75 | -20 | 1.75 | 1.87 | -12 |
| | 5yr UST | 1.68 | 1.80 | 1.92 | -12 | 2.00 | 2.02 | -2 | 1.90 | 2.11 | -21 | 2.00 | 2.20 | -20 |
| | 7yr UST | 2.01 | 2.00 | 2.15 | -15 | 2.20 | 2.23 | -3 | 2.10 | 2.30 | -20 | 2.25 | 2.36 | -11 |
| | 10yr UST** | 2.20 | 2.30 | 2.35 | -5 | 2.50 | 2.41 | 9 | 2.25 | 2.46 | -21 | 2.50 | 2.51 | -1 |
| | 30yr UST | 2.92 | 3.00 | 3.02 | -2 | 3.10 | 3.05 | 5 | 2.85 | 3.09 | -24 | 3.00 | 3.12 | -12 |
| CA | 2yr CAN | 0.50 | 0.70 | 0.53 | 17 | 0.80 | 0.55 | 25 | 0.90 | 0.58 | 32 | 1.00 | 0.62 | 38 |
| | 5yr CAN | 0.75 | 1.00 | 0.93 | 7 | 1.15 | 1.00 | 15 | 1.30 | 1.07 | 23 | 1.45 | 1.14 | 31 |
| | 10yr CAN | 1.40 | 1.65 | 1.64 | 1 | 1.75 | 1.70 | 5 | 1.85 | 1.75 | 10 | 1.95 | 1.81 | 14 |
| AU | 2yr ACGB | 2.00 | 2.00 | 2.08 | -8 | 2.05 | 2.09 | -4 | 2.10 | 2.10 | 0 | 2.15 | 2.13 | 2 |
| | 5yr ACGB | 2.25 | 2.30 | 2.40 | -10 | 2.45 | 2.45 | 0 | 2.60 | 2.51 | 9 | 2.70 | 2.58 | 12 |
| | 10yr ACGB | 2.76 | 2.90 | 2.96 | -6 | 3.00 | 3.01 | -1 | 3.10 | 3.05 | 5 | 3.20 | 3.10 | 10 |
| DE | 2yr Bund | -0.35 | -0.40 | -0.31 | -9 | -0.40 | -0.32 | -8 | -0.40 | -0.33 | -7 | -0.35 | -0.33 | -2 |
| | 5yr Bund | -0.10 | -0.15 | -0.02 | -13 | -0.10 | 0.03 | -13 | -0.10 | 0.09 | -19 | -0.05 | 0.15 | -20 |
| | 10yr Bund | 0.55 | 0.50 | 0.70 | -20 | 0.60 | 0.76 | -16 | 0.65 | 0.81 | -16 | 0.75 | 0.86 | -11 |
| UK | 2yr Gilt | 0.59 | 1.30 | 0.74 | 56 | 1.50 | 0.85 | 65 | 1.75 | 0.97 | 78 | 1.85 | 1.08 | 77 |
| | 5yr Gilt | 1.22 | 1.85 | 1.36 | 49 | 1.95 | 1.45 | 50 | 2.05 | 1.55 | 50 | 2.10 | 1.63 | 47 |
| | 10yr Gilt | 1.83 | 2.30 | 1.93 | 37 | 2.40 | 1.99 | 41 | 2.45 | 2.06 | 39 | 2.50 | 2.12 | 38 |
| JP | 2yr JGB | -0.05 | -0.01 | -0.05 | 4 | 0.04 | -0.04 | 8 | 0.12 | -0.02 | 14 | 0.17 | 0.00 | 17 |
| | 5yr JGB | 0.04 | 0.06 | 0.04 | 2 | 0.13 | 0.04 | 9 | 0.30 | 0.05 | 25 | 0.45 | 0.06 | 39 |
| | 10yr JGB | 0.27 | 0.40 | 0.30 | 10 | 0.55 | 0.33 | 22 | 0.80 | 0.36 | 44 | 1.00 | 0.39 | 61 |

* The forward yields are calculated using fixed maturity par bonds based on a spline.

As of 12/17/2015

** The forecast range for 10yr UST is

near-term (up to 1m ahead) =2.00-2.30%, medium-term (post 1 month to 3 month range) = 2.00% - 2.60%

Source: Nomura

2015 Rates Strategy Publications

Global

US Rates Weekly

| Date | Title | Link |
|-----------|--|----------------------|
| 1/9/2015 | Rates Weekly - Rates Rally, Same as It Ever Was . . . | Link |
| 1/17/2015 | Rates Weekly - Bond Investors Taken to the CB Church | Link |
| 1/24/2015 | Rates Weekly - CBs, You've Sunk My Bond Markets! | Link |
| 1/30/2015 | Rates Weekly - Deflategate: Shrink Your Way to the Top? | Link |
| 2/6/2015 | Rates Weekly - Strong NFP Trumps Eurozone Negativity | Link |
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| 3/6/2015 | Rates Weekly - Curve Whiplash, More to Come? | Link |
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| 10/30/2015 | Rates Weekly - Fed Obsession: 2015 Hikes or Bust? | Link |
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| 11/20/2015 | Rates Weekly - Will key events in December finally usher in the dawn of central bank divergence? | Link |
| 12/4/2015 | Rates Weekly - Ushering In a Dovish Hike & Gradual Path | Link |

Global Rates Insights

| Date | Title | Link |
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| 8/5/2015 | Global Rates Insights - The income-lite US recovery | Link |
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| 8/21/2015 | Supply in Focus - Will EM Weakness Support Demand? | Link |
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US**US Rates Insights**

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| 5/21/2015 | First Insights - Auction Review: \$13bn 10yr TIPS | Link |
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| 6/9/2015 | First Insights - Auction Review: \$24bn 3yr UST | Link |
| 6/10/2015 | First Insights - Auction Preview: \$13bn 30yr UST | Link |
| 6/10/2015 | First Insights - Auction Review: \$21bn 10yr UST | Link |
| 6/10/2015 | First Insights - Auction Preview: \$21bn 10yr UST | Link |
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Appendix A-1

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- Quantitative analysis of price variations.
- Technical factors such as regulatory changes, changes to risk appetite in the market, unexpected rating actions, primary market activity and supply/ demand considerations.

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Global Rates Research

Rates Strategists

North America

| | | | |
|------------------|-----------------------------------|--|-----------------|
| George Goncalves | Head of Rates Strategy – Americas | george.goncalves@nomura.com | +1 212 667 2254 |
| Stanley Sun | Senior US Rates Strategist | stan.sun@nomura.com | +1 212 667 1236 |
| Andrew Ticehurst | Senior Dollar-Bloc Strategist | andrew.ticehurst@nomura.com | +61 2 8062 8611 |
| Michael Chang | Senior Cross-Vol Strategist | michael.chang2@nomura.com | +1 212 667 1690 |
| Penglu Zhao | US Rates Strategist | penglu.zhao@nomura.com | +1 212 667 9516 |
| Tracy Jin | US Rates Strategist | tracy.jin@nomura.com | +1 212 667 1642 |

Europe

| | | | |
|--------------------------|----------------------------------|--|------------------|
| Andy Chaytor | Head of Rates Strategy – Europe | andy.chaytor@nomura.com | +44 20 7103 1202 |
| Norbert Aul | Senior Euro Rates Strategist | norbert.aul@nomura.com | +44 20 7103 0063 |
| Christophe Duval-Kieffer | Senior Euro Inflation Strategist | christophe.duvakieffer@nomura.com | +44 20 7103 1202 |
| Pooja Kumra | Euro Rates Strategist | pooja.kumra@nomura.com | +44 20 7103 7236 |
| Anne Karina Asbjorn | Euro Rates Strategist | annekarina.asbjorn@nomura.com | +44 20 7103 6064 |

Asia Ex-Japan

| | | | |
|----------------|------------------------------|--|----------------|
| Albert Leung | Senior Asia Rates Strategist | Albert.leung1@nomura.com | +852 2252 1401 |
| Vivek Rajpal | Senior Asia Rates Strategist | vivek.rajpal@nomura.com | +65 6433 6555 |
| Prashant Pande | Asia Rates Strategist | pande.prashant@nomura.com | +65 6433 6198 |

Japan

| | | | |
|--------------------|-------------------------------|--|-----------------|
| Naka Matsuzawa | Chief Japan Rates Strategist | naka.matsuzawa@nomura.com | +81 3 6703 3864 |
| Neale Vincent | Chief Quantitative Strategist | neale.vincent@nomura.com | +81 3 6703 3842 |
| Masahiro Nishikawa | Senior Fiscal Policy Analyst | masahiro.nishikawa@nomura.com | +81 3 6703 1409 |
| Koji Masaoka | Japan Rates Strategist | koji.masaoka@nomura.com | +81 3 6703 3936 |
| Takenobu Nakashima | Japan Rates Strategist | takenobu.nakashima@nomura.com | +81 3 6703 3873 |
| Ryoko Tada | Japan Rates Strategist | ryoko.tada@nomura.com | +81 3 6703 3863 |
| Naokazu Koshimizu | Japan Rates Strategist | naokazu.koshimizu@nomura.com | +81 3 6703 3887 |
| Yasuhiro Kaneko | Japan Rates Strategist | yasuhiro.kaneko@nomura.com | +81 3 6703 3839 |