March 13, 2016

Global Interest Rate Strategist

Lowering Our Yield Forecasts

We updated our global rates outlook and sovereign yield forecasts. We forecast 10-year Treasuries at 1.75%, Bunds at 0.55%, Gilts at 1.50%, and JGBs at -0.18%, all at year-end. The global backdrop for rates markets looks so supportive that 2016 may become known as the 'Year of the Bull'.

Duration and Curves

We suggest investors go long duration across G4 bond markets over the next six months – a period over which we expect yield curves to bull-flatten by more than forwards in the US and UK. We suggest US and UK 2s10s curve flatteners vs. steepeners in Germany and Japan. For the next 12 months, we prefer 5s30s flatteners in the UK vs. 5s30s steepeners in Germany.

Sovereigns and Supply

In the US, we present our outlook for coupon issuance in 2016. We expect further coupon cuts to be announced by the Treasury at the May refunding announcement. We forecast euro sovereign spreads to remain well supported in the near term, and a modest widening in 2H16. In the UK, we look at the issuance outlook, and we expect a significant increase in the gilt Remit because of higher redemptions.

Inflation

We update our quarterly breakeven forecasts for the US, UK, euro area and Japan. Relative to current market pricings and the recent uptick in oil futures, we think TIPS and JGBi BEIs offer the most value. We also update the US CPI forecast and review the outlook for 10y TIPS supply. In the euro area, we think the short-end issues with index ratios close to 1 offer a lot of value. We forecast modest upside for UK BEIs.

Money Markets

We look at recent repo fails in the US Treasury market and the trend of higher fails since the 2008 financial crisis. In the Euro zone, the ECB has clearly communicated that the threshold for further near-term cuts is quite high, and we like to tactically pay Dec'16 ECB EONIA, which still prices around 6bp in cuts.

Derivatives

We discuss our longstanding call to be long 2-year spreads in the US as well as introduce our suggestion to buy 2y JGB ASWs. We like staying long gamma in the top right given the persistence of choppy markets and an uncertain macro backdrop. But we think upper left terminal volatility will be limited, and thus still like 6m1y1y struck forward vol.

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Duration and Curves

Global summary

All of our global **Bond Market Indicators** (BMIs) are now neutral on duration after the DBR and UKT BMIs gave up their mildly bullish signals from last week. We also suggest investors remain neutral into the BoJ, Fed, and MPC meetings. Our cross market sanity check is preventing the JGB combined signal (-1.5) from flowing through to the overall signal (0.0). So, instead of the JGB BMI suggesting investors sell 10-year JGBs, it is suggesting a neutral stance, **Exhibit 1** shows the BMI readings as of Thursday, March 10. **Exhibit 2** summarizes the performance of the BMIs.

Our UST BMI signal (-0.7) turned negative over the week as momentum became more bearish, equity markets performed better, and business cycle data surprised more to the upside. Nevertheless, the combined UST BMI signal is not negative enough to flow through to the overall signal. With the Fed meeting on Wednesday, **we agree with our UST BMI that taking duration risk is ill-advised**. While **data could continue outperforming**, our US economists expect that **retail sales did not improve in February**.

In the Euro area, we think **the outcome of the ECB meeting was ambiguous for duration**, but supportive for credit. We think the market will struggle to price in further rate cuts given President Draghi's comments at the press conference which emphasised the shift to more unconventional tools in the policy mix. However, this was partially offset by the commitment to not raise rates until well after the purchase programme came to an end.

In Japan, the BoJ meeting on March 14-15 presents its own set of risks with which to contend. Our Japan economists think **the BoJ now looks less likely than before to ease in March**. They expect additional easing during the Apr–Jun quarter, with easing most likely at the April meeting, when the BoJ Outlook Report is to be published. They are calling for an increase in ETF purchases and a 20bp policy rate cut. If additional easing comes on Tuesday, they think it will be limited to an increase in ETF purchases only,

Exhibit 1: Morgan Stanley Bond Market Indicators (BMI)

	Vol Adj. Carry	Momentum	Equity Markets	Business Cycle	Combined	Overall
UST	2.4 (2.5)	-2.0 (1.6)	-5.7 (-3.8)	2.6 (3.5)	-0.7 (0.9)	0.0 (0.0)
DBR	-4.4 (-4.4)	0.5 (6.0)	-2.6 (-1.4)	6.7 (6.7)	0.0 (1.8)	0.0 (1.8)
UKT	3.8 (3.7)	-0.8 (4.0)	-5.1 (-5.0)	4.9 (4.9)	0.7 (1.9)	0.0 (1.9)
JGB	-10.0 (-10.0)	9.5 (5.7)	-1.9 (0.8)	-3.6 (-4.2)	-1.5 (-1.9)	0.0 (0.0)
ACGB	-0.5 (-0.5)	-1.6 (0.3)	-7.0 (-3.5)	8.1 (7.9)	-0.2 (1.1)	0.0 (0.0)
NZGB	3.8 (3.7)	5.1 (4.1)	-8.0 (-5.3)	5.4 (0.3)	1.6 (0.7)	0.0 (0.0)
CAN	-1.9 (-2.3)	-3.8 (0.0)	-8.1 (-5.9)	7.1 (-1.9)	-1.7 (-2.5)	0.0 (0.0)

Source: Morgan Stanley Research
Note: Positive # = long duration; Negative # = short duration, (#) = previous week, Indicators bounded between -10 and +10, Overall signal set to zero if abs(Signal)<=1.5, See BMI primer on UST, DBR, UKT, and JGB and our BMI primer on ACGB, NZGB, and CAN.

Exhibit 2: Morgan Stanley Bond Market Indicators (BMI) - Performance summary

	UST	DBR	UKT	JGB	ACGB	NZGB	CAN
1-Week Return	0.0%	-0.6%	-0.4%	0.0%	0.0%	0.0%	0.0%
1-Year Return	5.7%	3.1%	2.9%	0.6%	0.5%	3.1%	3.8%
1-Year Return Vol	4.2%	2.6%	3.4%	1.8%	3.9%	3.4%	3.4%
1-Year Sharpe Ratio	1.35	1.19	0.84	0.34	0.12	0.91	1.10
1-Year Hit Ratio	59.5%	57.6%	55.3%	41.2%	54.5%	51.6%	63.3%

Source: Morgan Stanley Research

Year of the bull

We updated our global rates outlook and sovereign yield forecasts for the coming 12 months.

- We suggest investors go long duration across G4 bond markets over the next six months – a period over which we expect yield curves to bull-flatten by more than forwards in the US and UK. We suggest US and UK 2s10s curve flatteners vs. steepeners in Germany and Japan. For the next 12 months, we prefer 5s30s flatteners in the UK vs. 5s30s steepeners in Germany.

- We think pricing of global breakeven inflation offers investors a compelling opportunity to purchase protection against higher-than-expected inflation outcomes over the coming year. Given downside risks evident in energy markets, we suggest investors purchase linkers with at-the-money deflation floors.

The global backdrop for rates markets looks so supportive that 2016 may become known as the 'Year of the Bull'. Indeed, the year got off to a very bullish start. Our economists forecast below-consensus growth and inflation across most of the developed and emerging world. They are telling us that the global economy will no longer accelerate in 2016, and most major economies will perform worse in 2016 than in 2015. And, as a result, the ECB and BoJ will keep easing policy and the BoE and Fed will push rate hikes further out. At this point, our economists expect the ECB and BoJ to continue with their negative interest rate policies (NIRP) – an ominous sign for risk sentiment.

To make the outlook for rates markets more bullish, our China experts suggest that the PBoC will eventually guide the trade-weighted renminbi weaker such that USD/CNY will end 2016 at 6.93 (+6% from spot) and end 2017 at 7.30 (+12% from spot). That compares with the 5% appreciation in USD/CNY since August 10, 2015 – the day before the PBoC altered its currency regime. The combination of a continued slowdown in China and NIRP in the developed world makes it easier to see developed sovereign bond yields remaining low – and at some point going lower. In this context, we lowered our forecasts for yields in the US and the UK, in the euro area and Japan. Over the next 12 months, we have sovereign yields falling to local lows in 3Q16 before rebounding higher.

By the end of 1Q17, we have 10-year UST yields roughly unchanged versus spot, 10-year DBR and UKT yields slightly higher than spot, and 10-year JGB yields slightly lower than spot.

- **In the US**, our economists look for the Fed to delay its next rate hike until the December 2016 FOMC meeting – a big change from their previous expectation of three hikes this year. Our economists expect quarterly real GDP growth to stay below 2.0% through 2017. Annual growth in 2016 and 2017, 1.7% and 1.6% on their forecasts respectively, represents a notable downshift from 2.4% Y/Y growth in 2015. Our economists also expect core PCE inflation to miss the Fed's median projection at 1.6% Q4/Q4 as the Y/Y rate inflects downward in 2Q16.

  With the Fed hiking again, but only in December, policy plays out in 2016 much like in 2015. We expect a mid-year rally to take 10y Treasury yields down to 1.45% − a new cycle low – by the end of 3Q16. 2-year yields re-test the 0.60% level at the same time, but rebound more strongly as the next rate hike approaches in December. By year-end, the 2s10s curve flattens to 0.80% from 1.00% spot and versus the forward at 0.84%. The marginal pickup vs. forwards means playing the yield curve continues to offer little reward for the risk, so we continue to focus on duration over curve.

- **In Euro**, further ECB easing is well anticipated by the market but the weak inflation and faltering growth outlook means we expect 2y rates to remain well anchored around current levels (-50 to -60bp). We expect longer maturities to trade directionally with global rates, but with a lower beta because investor demand is likely to be impaired if yields fall further while the expansion of the ECB purchase program is likely to moderate any sell-off. Short-dated inflation breakevens remain very cheap, but the risk is that they remain cheap as long as the realized inflation outlook is weak. We expect a modest tightening of sovereign spreads in the short term, due to the ramping up of QE purchases, but are concerned about political risks and slightly weaker growth over the next 12 months, so that we forecast generally flat spreads.

- **In the UK**, the binary risk around the EU referendum will keep the rates outlook uncertain until the end of June. Assuming our base case of the UK staying in the EU is realized, we expect gilts to largely trade in line with USTs, reflecting similar global growth concerns as well as a similar domestic economic outlook. However, as we approach year-end, and the Fed moves to raise rates again, we expect gilts to underperform cross market, as the market starts to price in the first rate hike our economists forecast in February 2017. The combination of rate hikes being priced in, but still strong demand for duration globally, causes the 2s10s curve to flatten. We expect UK breakevens to remain well supported and trade at a premium to other inflation markets.

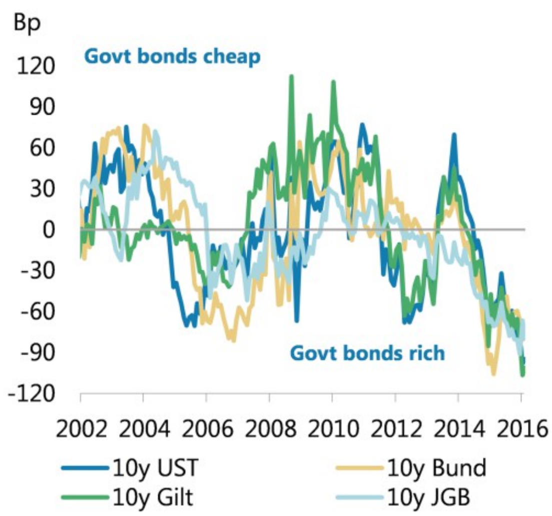
- **In Japan**, our economists expect further rate cuts totaling at least 20bp ahead of the July Upper House election, and have few (if any) concerns about the prospect of BoJ tapering, given that the core CPI inflation rate (excluding fresh foods) looks highly unlikely to climb near 2.0% by 2017. Thus, we expect that the JGB market will continue to be driven mostly by supply/demand and BoJ rate cut speculation. NIRP has effectively eliminated the 'floor' for short- to medium-term yields, for which reason the balance of risks to JGB rates is probably weighted to the downside. Thus, we lowered our yield forecast significantly with the 10y yield falling to around -0.2% by 1Q17. We expect the JGB curve to bull-steepen through the 10y sector and bull-flatten through the super-long end. The super-long sector is likely to outperform on the curve, as domestic investors looking to avoid negative yields take on greater duration risk. We expect the 30y yield to fall to 0.4% in 1Q17.

Valuations stretched by QE and NIRP policy

One of the themes unifying developed market sovereign debt is the demanding valuations at which yields are trading. **Exhibit 3** shows how the push to lower yields in early 2016 took 10-year US and UK yields into uncharted levels of richness, and kept 10-year yields in Germany and Japan near their richest levels, against the following four factors: (1) level of 3-month yields, (2) shape of the curve between 3-months and 2-years, (3) changes in PMI surveys, and (4) changes in realized inflation. As the history from this simple valuation framework shows, 10-year sovereign debt can remain rich, or cheap, for quite a number of years. And even then, it may be the case that estimates of fair value move to the market as opposed to the market moving toward fair value.

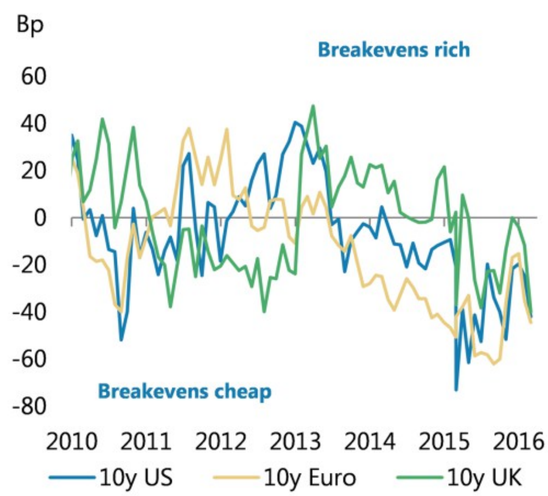
In the current environment, we know the proximate causes for the sustained richness in sovereign bond valuations. Central bank QE, negative interest rate policies, and the decline in energy prices, all since mid-2014, have suppressed both real term premiums and inflation risk premiums. These factors – not captured in our simple regression model – took Treasuries, Bunds, and gilts from cheap valuations in early 2014 to the richest valuations we have seen in over a decade. In our view, these X-factors are likely to keep weighing on yields throughout our forecast horizon, or at least will not reverse and place upward pressure on yields.

Exhibit 3: 4-factor regression valuations for 10-year yields



Source: Morgan Stanley Research, Bloomberg

Exhibit 4: Regression valuations for 10-year breakevens



Source: Morgan Stanley Research, Bloomberg

As we proceed through the year, we will continue to monitor our tactical Bond Market Indicators (BMIs) for guidance on whether investors should continue to position in the way our forecasts suggest. The yield forecasts we published in our 2016 year-ahead outlook had yields moving slightly higher into the end of 2015 and then mostly sideways in 1H16. Shortly thereafter, our tactical BMIs turned bullish on bonds and here we are revising lower our forecasts in what has become an all-too-familiar pattern. If our forecasts for lower yields into 3Q16 prove prescient, our BMIs would have a role to play once again.

Breakeven inflation protection is cheap

For inflation markets, valuations in most markets remain unusually cheap relative to history (see **Exhibit 4**). We think the safest way to take advantage of this, given it is unclear if realized inflation will pick up enough to propel inflation protection higher, is where there are bonds with tight breakevens and at-the-money deflation floors. We see several examples of this in euro, and also in the JGBi market. In general, in spite of the global growth and inflation concerns, we see the market assigning very little value to breakeven floors. Owning these bonds gives one an attractively asymmetric potential return distribution.

United States

Our economists look for the Fed to delay its next rate hike until the December 2016 FOMC meeting – a big change from their previous expectation of three hikes this year. Our economists expect quarterly real GDP growth to stay below 2.0% through 2017. Annual growth in 2016 and 2017, 1.7% and 1.6% on their forecasts respectively, represents a notable downshift from 2.4% Y/Y growth in 2015. Our economists also expect core PCE inflation to miss the Fed's median projection at 1.6% Q4/Q4 as the Y/Y rate inflects downward in 2Q16.

With the Fed hiking again, but only in December, policy plays out in 2016 much like in 2015. We expect a mid-year rally to take 10y Treasury yields down to 1.45% – a new cycle low – by the end of 3Q16. 2-year yields re-test the 0.60% level at the same time, but rebound more strongly as the next rate hike approaches in December. By year-end, the 2s10s curve flattens to 0.80% from 1.00% spot and versus the forward at 0.84%. The marginal pickup vs. forwards means playing the yield curve continues to offer little reward for the risk, so we continue to focus on duration over curve.

Exhibit 5: US Treasuries base case forecasts

Quarter	2y	5y	10y	30y
MAR 10	**0.93**	**1.45**	**1.93**	**2.69**
2Q16	0.65	1.10	1.55	2.35
3Q16	0.60	1.05	1.45	2.20
4Q16	0.95	1.35	1.75	2.40
1Q17	1.10	1.50	1.85	2.55

Source: Morgan Stanley Research

US treasuries bear case forecasts

In the bull case for the US economy, our economists expect easing of financial conditions, along with stabilization in EM economies and central bank easing to bear fruit in developed economies. While core PCE is slightly higher than the base case, robust GDP growth fuels expectations for the fed to act stronger in 2017. The Fed embarks on an optimal control type policy where a gradual tightening path with only two hikes in 2016, makes way for a fast pace of tightening in 2017 with six hikes in the year.

US Treasury yields take their cue from that backdrop, with yields rising in 2Q16 and 4Q16 consistent with the Fed raising rates at the June and December 2016 FOMC meetings. The 2-year note rises to the highest level in the cycle, reaching 1.55% by the end of 2016, with the 10-year note touching 2.50%. While yields generally beat their forwards, the 30-year point beats the forwards most handily, offering the highest gains from shorting the long end of the Treasury curve.

Exhibit 6: US Treasuries bear case forecasts

Quarter	2y	5y	10y	30y
MAR 10	**0.93**	**1.45**	**1.93**	**2.69**
2Q16	1.15	1.65	2.10	2.90
3Q16	1.20	1.70	2.15	2.95
4Q16	1.55	2.05	2.50	3.20
1Q17	1.85	2.35	2.75	3.45

Source: Morgan Stanley Research

US Treasuries bull case forecasts

In the bear case for the US economy, our economists expect tighter financial conditions to persist, along with resilience of the domestic economy, wherein the Fed does not budge from its tightening stance. Ultimately, tighter financial conditions force their way into the economy, leading to job losses, a credit crunch and a deep recession. The Fed eventually caves, and is forced to revert to forward guidance, eventually driving interest rates into negative territory. Core PCE remains lackluster, as growth numbers diminish to ultimately a shrinking US economy.

US Treasury yields flirt with all time lows with 2-year note ending the year at 0.30% while the 10-year yield moves into never before seen territory at 1.25% at the end of 2016. All Treasury tenors end much lower than their currently implied forwards, with the 2- to 10-year sector almost 100bp lower than forwards at the end of 2016. While the reluctance of the Fed to budge initially bull flattens the curve versus the forwards, ultimately, easing Fed policy through the zero lower bound causes the curve to eventually bull steepen versus the forwards.

Exhibit 7: US Treasuries bull case forecasts

Quarter	2y	5y	10y	30y
MAR 10	**0.93**	**1.45**	**1.93**	**2.69**
2Q16	0.60	1.05	1.45	2.20
3Q16	0.55	0.95	1.35	2.10
4Q16	0.30	0.80	1.25	2.05
1Q17	0.05	0.55	1.10	2.00

Source: Morgan Stanley Research

Euro area

At the March ECB meeting, President Draghi commented that the Governing Council thought further rate cuts were not needed and that the emphasis will shift to more unconventional tools. He did not close the door completely on further cuts, though, and our economists forecast a further 10bp cut in September. This is slightly more than current market pricing, but not enough, in our opinion, to significantly alter the overall duration outlook.

More important are the weak inflation and faltering growth outlooks, which mean we expect 2y Schatz to remain well anchored around current levels (-40 to -60bp). We expect longer maturities to trade directionally with global rates, but with a lower beta because investor demand is likely to be impaired if yields fall further while the expansion of the ECB purchase program is likely to moderate any sell-off.

Exhibit 8: German Bund base case forecasts

Quarter	2y	5y	10y	30y
SPOT	**-0.45**	**-0.24**	**0.31**	**1.07**
2Q16	-0.50	-0.35	0.15	0.80
3Q16	-0.55	-0.35	0.10	0.70
4Q16	-0.55	-0.25	0.55	1.25
1Q17	-0.50	-0.20	0.60	1.35

Source: Morgan Stanley Research

With the front end anchored, the correlation between changes in the level of rates (e.g., 10y) and curve remains high. Previously, this was primarily a phenomenon for 2s10s, with the curve bull flattening and bear steepening. It has now extended to 10s30s as well, so that the entire curve moves together. We expect this dynamic to remain in place through our forecast horizon.

Bund bear case forecasts

Better-than-expected growth and inflation data may push the market to moderate its expectations of ECB accommodation. The market prices inflation staying below 1% Y/Y for the next 5 years, and for the first ECB rate hike to be in May-19, well beyond the recent guidance from the ECB, so even a modest improvement in the inflation data is likely to come as an upside surprise to the market. Beyond pricing rate hikes starting sooner, Bunds would be vulnerable to a backup in US Treasury yields, if the Fed were to tighten more aggressively than currently priced.

Even if the sell-off comes from a revision to ECB expectations, we expect the long end to lead in the sell-off. Valuations are more extreme in longer maturities, and even if growth and inflation surprise significantly to the upside, the ECB is likely to proceed cautiously. Hence we see the sell-off as being most pronounced in 10y and 30y, with the curve bear steepening.

Exhibit 9: German Bund bear case forecasts

Quarter	2y	5y	10y	30y
SPOT	**-0.45**	**-0.24**	**0.31**	**1.07**
2Q16	-0.40	-0.05	0.50	1.35
3Q16	-0.30	0.20	0.90	1.65
4Q16	-0.30	0.35	1.10	1.85
1Q17	-0.30	0.55	1.40	2.10

Source: Morgan Stanley Research

Bund bull case forecasts

Further weakness in inflation – in particular in core inflation measures which suggest "second round effects" from previous declines in commodity prices – are likely to encourage the ECB to ease policy even further. While President Draghi said he thought further rate cuts were unlikely, he did not rule them out as a policy option. We therefore have the Schatz rallying further in our bull case, although the decline in yields is even larger in 10y, as sustained accommodation is priced in.

Exhibit 10: German Bund bull case forecasts

Quarter	2y	5y	10y	30y
SPOT	**-0.45**	**-0.24**	**0.31**	**1.07**
2Q16	-0.60	-0.50	0.05	0.60
3Q16	-0.75	-0.70	-0.20	0.35
4Q16	-0.75	-0.60	-0.10	0.50
1Q17	-0.65	-0.55	-0.05	0.60

Source: Morgan Stanley Research

United Kingdom

The binary risk around the EU referendum will keep the rates outlook particularly uncertain until the end of June. Assuming our base case of the UK staying in the EU is realized, we expect gilts to largely trade in line with USTs, reflecting similar global growth concerns as well as a similar domestic economic outlook. However, as we approach year-end, if the Fed moves to raise rates again, we would expect Gilts to underperform cross market, as the market starts to price in the first MPC rate hike, which our economists forecast in February 2017. The combination of rate hikes being priced in, but still strong demand for duration globally, would then cause the 2s10s curve to flatten.

Exhibit 11: UK Gilt base case forecasts

Quarter	2y	5y	10y	30y
SPOT	**0.53**	**0.96**	**1.54**	**2.35**
2Q16	0.40	0.65	1.35	2.25
3Q16	0.40	0.60	1.25	2.15
4Q16	0.80	1.10	1.50	2.30
1Q17	1.10	1.40	1.70	2.40

Source: Morgan Stanley Research

Gilt bear case forecasts

The market has pushed the timing of the first MPC rate hike into 2019, so it would only take a modest improvement in the UK growth and inflation data to force a significant revision of its expectations. Our economists continue to believe that a tightening labour market would translate into rising inflationary pressures, which would force the MPC to tighten sooner than expected.

The EU referendum is likely to prevent any significant policy moves before 3Q16, but if the vote is to Remain, and the reduction in uncertainty were to spur economic activity, our economists think the MPC could hike in November. A more hawkish Fed would also undoubtedly push 10y gilt yields higher as well. We would expect both 2s10s and 10s30s to bear flatten, and for 5y to cheapen on the curve.

Exhibit 12: UK Gilt bear case forecasts

Quarter	2y	5y	10y	30y
SPOT	**0.53**	**0.96**	**1.54**	**2.35**
2Q16	0.65	1.05	1.80	2.70
3Q16	1.05	1.50	2.10	2.90
4Q16	1.55	2.05	2.50	3.15
1Q17	1.85	2.30	2.75	3.30

Source: Morgan Stanley Research

Gilt bull case forecasts

The bull case for gilts is most likely to be realized if the UK votes to leave the EU, an event to which our economists assign a 35% probability. If this were to happen, we would expect the MPC to adopt a more accommodative stance, even though the currency is likely to depreciate and push inflation higher (as in the 2010-13 period, we expect the MPC to look through the above-target inflation if the growth picture remains uncertain).

Unlike many other DM central banks, the MPC has the potential to cut rates meaningfully before it has to consider moving to negative rates, but we still forecast 2s10s flattening. Further out the curve, we forecast 10s30s steepening, consistent with its historical directionality with 10y rates.

Exhibit 13: UK Gilt bull case forecasts

Quarter	2y	5y	10y	30y
SPOT	**0.53**	**0.96**	**1.54**	**2.35**
2Q16	0.25	0.50	1.10	2.10
3Q16	0.15	0.30	0.90	1.95
4Q16	0.20	0.40	1.00	2.05
1Q17	0.25	0.50	1.00	2.10

Source: Morgan Stanley Research

Japan

We expect that the JGB market will continue to be driven mostly by BOJ policy - or more specifically, by its impact on supply/demand - rather than fundamentals. Our economics team's base-case scenario is for headline inflation to remain well short of the BOJ's +2% "price stability goal", rising no further than +0.7% YoY before March 2017 (**see report**). As such, we see very little prospect of BOJ tapering expectations picking up through the first quarter of next year.

As discussed in **our previous report**, it appears unlikely that the BOJ's JGB-buying operations will encounter insurmountable technical obstacles during FY2016. The BOJ's negative interest rate policy (NIRP) should ensure that the short end remains firmly anchored, while supply/demand is liable to keep tightening—even without demand from real-money investors—as the net supply of JGBs runs at around - ¥50 trillion in FY2016.

Occasional surges in yields due to temporary supply/demand imbalances—such as those seen in the wake of this week's 30y auction—are of course possible, but a more sustained (structural) uptrend in interest rates looks unlikely so long as the BOJ persists with its QQE+NIRP framework. Indeed, we believe that the balance of risks to JGB yields is still weighted to the downside now that the zero "floor" for short- to medium-term rates has effectively been eliminated.

Our economists expect the BOJ to announce a 20bp rate cut and an ETF-centric increase in asset purchases ahead of this July's upper house election on their economic base case. On the back of this, our base-case scenario is for the JGB curve to bull-steepen through the 10y sector and bull-flatten through the super-long end. We expect short- to medium-term yields to trade around 10bp–20bp rich to the BOJ's Tier 3 policy rate due to a combination of (1) rate cut expectations, (2) strong demand from foreign investors, and (3) a further tightening of supply/demand as issuance at auction is reduced from April. This should be conducive to a 2y yield level of around –0.45% for 3Q 2016.

Exhibit 14: JGB base case forecasts

Quarter	2y	5y	10y	30y
SPOT	**-0.17**	**-0.16**	**-0.02**	**0.77**
2Q16	-0.40	-0.35	-0.15	0.50
3Q16	-0.45	-0.40	-0.23	0.28
4Q16	-0.43	-0.38	-0.20	0.43
1Q17	-0.40	-0.35	-0.18	0.53

Source: Morgan Stanley Research

We see ample potential for the super-long sector to outperform on the curve as domestic investors take on greater duration risk in a bid to avoid negative interest rates, and expect the 30y yield to drop to around 0.275% by 3Q 2016. The long-term sector is liable to underperform—with the 10y yield perhaps only dropping to around –0.225% by 3Q 2016—as foreign investors favor shorter maturities while domestic investors look further out the curve for positive yields. With the global rates picking up from 3Q2016, we expect the JGB curve to revert back into 1Q2017 led by the super-long sector.

We have previously suggested shorting a 5s10s30s butterfly, but now favor a 2s10s30s butterfly for this purpose. The short end of the curve should be much anchored by monetary policy, rate cut expectations, demand from overseas, and reduced issuance, while the super-long sector is likely to be bought up by domestic investors looking for positive yields. The 10y sector looks particularly likely to underperform in a bull market given that domestic investors will probably remain reluctant to buy at negative yields. The main risk to this trade —corresponding to our bear-case scenario below—would be a dialing back of expectations for further BOJ easing that causes the 10s30s spread to widen by significantly more than the 2s10s spread.

Trade idea: Sell JGB 2s10s30s 50:50 butterfly at -31bp
Target: -15bp, Stop: Level -45bp

Japan government bond bear case forecasts

Our economic bull case is for a cyclical recovery. Faster-than-expected global demand helps exports to recover. The tight labor market continues to push wages, and the income recovery helps consumption to recover at a faster-than-expected pace.

Our economists expect no further BOJ easing to be necessary under this scenario, but current measures would need to remain in place through at least 2017 in order to mitigate the negative impact of the April 2017 consumption tax hike from 8% to 10%. As such, we would not expect to see a significant (structural) shift in JGB yield levels even in our base case. The JGB curve would probably face bear-steepening pressure due to diminished hopes for further BOJ easing, with the 10y sector perhaps seeing dip-buying demand from banks at positive yield levels while the super-long sector might keep correcting until life insurers start to see sufficient value.

Exhibit 15: JGB bear case forecasts

Quarter	2y	5y	10y	30y
SPOT	**-0.17**	**-0.16**	**-0.02**	**0.77**
2Q16	-0.15	-0.13	0.08	0.93
3Q16	-0.15	-0.10	0.10	1.00
4Q16	-0.15	-0.10	0.15	1.05
1Q17	-0.15	-0.10	0.20	1.10

Source: Morgan Stanley Research

Japan government bond bull case forecasts

Our economic bear case is for the US to drag Japan into recession. The weak external demand due to slower growth in key trading partners, including a recession in the US. Although domestic consumption will likely remain resilient on the back of the structurally tight labor market, the economy would likely fall into a recession with weak exports, capex, and production.

Under this scenario, our economists would expect the BOJ to lower its Tier 3 policy rate to –0.3% and increase its ETF purchases by July 2016 and then announce another 20bp rate cut and a further expansion of ETF purchases by mid-2017. As with our base-case scenario, we would expect the medium- to long-term portion of the curve to be outperformed by the short and super-long ends due to expectations of further rate cuts and demand from domestic investors looking for positive yields. More specifically, we would expect the 2y yield to drop to around –0.6% by 1Q 2017 amid rate cut expectations and broader "risk off" pressures and the 30y yield to end up somewhere around 0.0%.

Exhibit 16: JGB bull case forecasts

Quarter	2y	5y	10y	30y
SPOT	**-0.17**	**-0.16**	**-0.02**	**0.77**
2Q16	-0.40	-0.40	-0.20	0.45
3Q16	-0.50	-0.45	-0.28	0.23
4Q16	-0.50	-0.50	-0.33	0.13
1Q17	-0.60	-0.55	-0.35	0.00

Source: Morgan Stanley Research

Sovereigns and Supply

United States
We present our outlook for coupon issuance in 2016. Given the Treasury's guidance to cut coupons to make room for bill issuance, we expect further coupon cuts in May. We expect another $1bn cut across 5-year to 30-year maturities, including TIPS. We show our estimates of the monthly coupon schedule in 2016. Overall, our estimates suggest a net coupon issuance of $357bn in calendar year 2016.

Euro area
We forecast euro sovereign spreads to remain well supported in the near term, given the relatively larger ECB purchases, large upcoming redemptions and positive second-round effects from the ECB's corporate bond buying and new LTROs. In 2H16, we expect spreads to widen out modestly, given the weakening cycle and broad political uncertainty. We see spreads widening out relatively more aggressively in our bear case than in our bull case, underscoring our view that risks are unfavourably skewed for sovereign spreads. We recommend tactical longs in 5y BTP/Bunds and 30y France on 10s30s vs. Germany. Medium term, we continue to favour Italy over Spain.

United Kingdom
We expect a significant increase in the gilt Remit because of higher redemptions: £89bn in total from the Sep-16 and Jan-17 Conventionals, and £25bn from the Jul-16 UKTi . We believe part of this £153bn funding requirement will be met through an expansion of the t-bill stock and NS&I offerings so that the gilt sales figure will come to £145bn, up from £127.4bn this year.

United States - Coupon supply in 2016

2016 outlook for coupon supply - more cuts ahead?
We published on our 2016 net issuance estimates in our year-ahead outlook for 2016. Since then , the February refunding announcement made it clear the US Treasury intends to increase bill supply, and thus it had to cut coupon supply starting from February. The Treasury explicitly stated that coupon cuts were a "pathway to increased bill issuance".

The Treasury's refunding announcement in February contained two elements to note: First, the focus on coupon cuts was on "maturities of 5 years and longer". This is a clear sign that the Treasury is willing to place lesser importance on its erstwhile strategy of increasing the weighted average maturity (WAM) of outstanding debt. Second, the Treasury guided toward the possibility of future rate cuts. "... if Treasury were to significantly increase in Treasury bill issuance, it would likely need to reduce nominal coupon and TIPS issuance over the coming quarters".

Given the guidance above, we expect further coupon cuts in May. We expect another $1bn cut across 5-year to 30-year maturities, including TIPS. In **Exhibit 17** we show our estimates of the monthly coupon schedule in 2016. Overall, our estimates suggest a net coupon issuance of $357bn in calendar year 2016.

Exhibit 17: Estimated Treasury coupon supply in 2016

Month	Redemptions	2s	3s	5s	7s	10s	30s	Total Coupon	Total TIPS	5y TII	10y TII	30y TII
Dec-16	114	26	24	33	27	19	11	140	13	13		
Nov-16	146	26	24	33	27	22	14	146	10		10	
Oct-16	121	26	24	33	27	19	11	140	4			4
Sep-16	119	26	24	33	27	19	11	140	10		10	
Aug-16	135	26	24	33	27	22	14	146	13	13		
Jul-16	139	26	24	33	27	19	11	140	12		12	
Jun-16	112	26	24	33	27	19	11	140	4			4
May-16	131	26	24	33	27	22	14	146	10		10	
Apr-16	142	26	24	34	28	20	12	144	16	16		
Mar-16	102	26	24	34	28	20	12	144	11		11	
Feb-16	115	26	24	34	28	23	15	150	7			7
Jan-16	118	26	24	35	29	21	13	148	15		15	
Total	1,492	312	288	401	329	245	149	1,724	125	42	68	15

Source: Morgan Stanley Research

Euro area - Sovereign spread outlook

The year ahead

We forecast euro sovereign spreads to remain well supported in the near term, with periphery outperforming semi-core, and in particular Italy leading the way tighter (see **Exhibit 18**). Spreads should receive near-term support from the ECB's announcement to purchase an additional €20bn worth of assets per month, most of which will be in government bonds, we think. Positive second-round effects from the corporate bond buying and new LTROs should also act in the periphery's favour

In the latter half of our forecast horizon, we forecast sovereign spreads to widen broadly but modestly, reaching slightly wider levels than forwards would imply. While parts of the periphery are likely to continue their economic outperformance (e.g., Spain, Ireland), our economists forecast the cycle to weaken from here, while reform momentum could also slow.

Exhibit 18: Euro sovereign spread base case forecasts

	Spot	1Q16	2Q16	3Q16	4Q16	1Q17
Austria	24	24	25	28	28	30
Netherlands	11	11	10	12	12	15
France	38	38	35	37	40	42
Belgium	41	41	38	45	50	52
Ireland	64	64	65	70	75	80
Spain	128	128	120	135	140	150
Italy	116	116	100	115	120	125
Portugal	283	283	260	280	300	315

Source: Morgan Stanley Research, Bloomberg

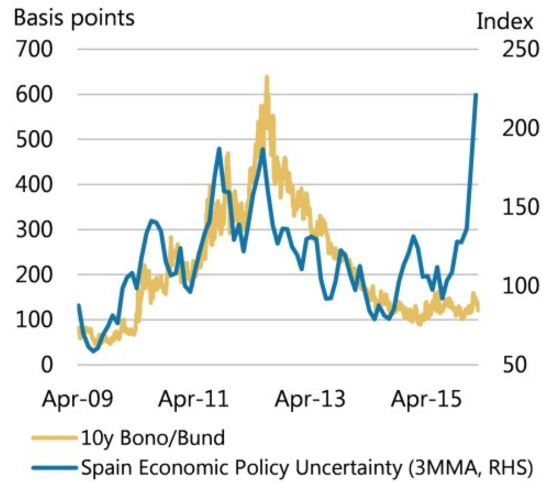
Among the sovereigns, our economists remain more positive than the consensus on Italy and expect growth to catch up with France and Spain over the next two years. This view is reflected in our forecasts, which also reflect the relative stability of Italian politics relative to history.

Politics, more broadly, is one of our main concerns for euro sovereign spreads in the medium term. In a recent report (see **European Economics & Strategy: What Brexit Would Mean for Europe**, March 7, 2016), our economists' outlined the economic implications of Brexit on the eurozone.

This dynamic could be compounded if euro government bond investors perceive Brexit as having a significant read-across to the political situations in the region, especially given the backdrop of already sub-optimal cooperation within the bloc. Such a market reaction would be likely to precede any real economic or consumer/business sentiment impact, intensifying both. In the sovereign bond space, we believe that any such reaction would hit the periphery the hardest.

Further, we highlight the more idiosyncratically uncertain outlooks in Spain and Portugal. In Spain, economic uncertainty has shot up (see **Exhibit 19**) as a result of the inability to form a new government. Looking beyond near-term negotiations and a possible second round of elections, we highlight the 2017 budget process as a key obstacle to overcome.

Exhibit 19: 10y Bono/Bund spreads and economic policy uncertainty in Spain

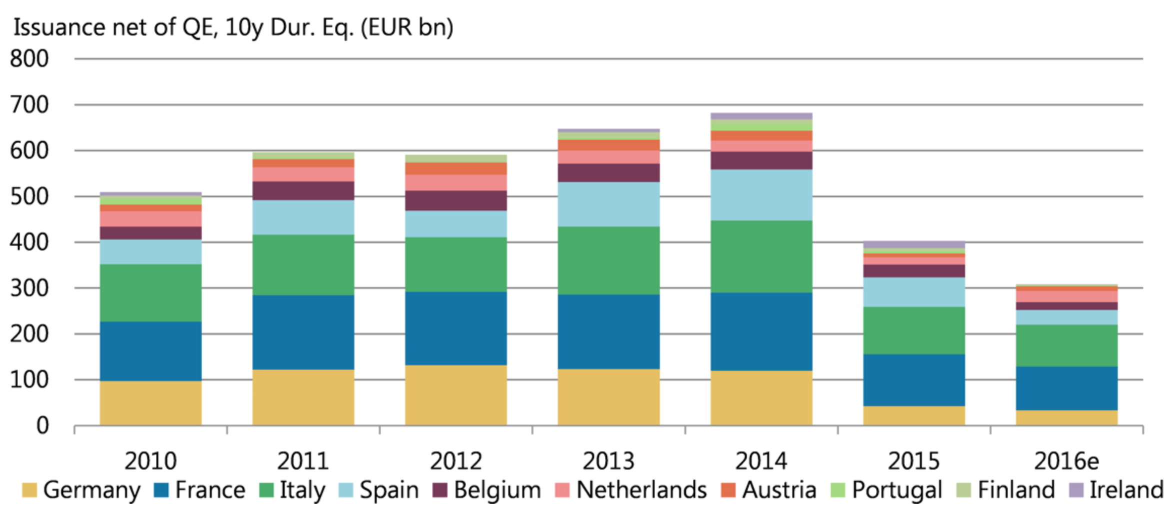


Source: Morgan Stanley Research, Bloomberg

In Portugal, the policy path will be key following the autumn's elections, from a cycle perspective as well as for its implications on relations with the EU. Further, the policy path could impact Portugal's credit rating, which could in turn have implications on its eligibility for ECB purchases. From a funding perspective, we remain of the view that the funding requirements for 2016 and 2017 appear relatively undemanding (see **Economics & Strategy Brief Portugal: Just How Tough Is It?**, February 15, 2016).

The key factor preventing spreads from widening out more aggressively year-to-date, despite political uncertainty and the weak macro backdrop, is QE, in our view. As seen in **Exhibit 20**, supply net of ECB purchases in 2016 will be less than half of the average of 2010-2014. Aside from taking a large amount of systemic risk off the table over time, the purchases also act as a marginal source of demand on a daily basis.

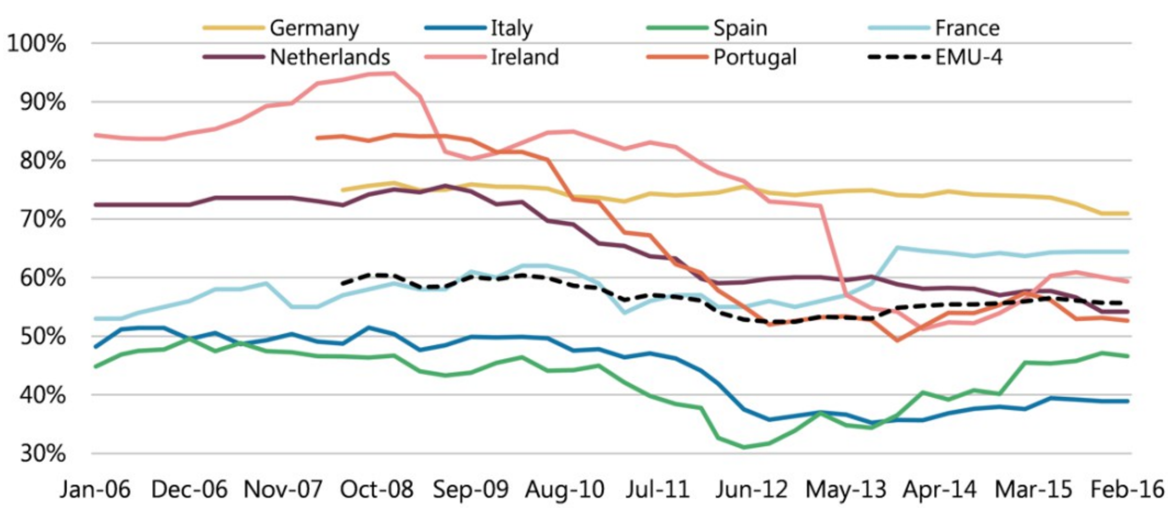
Exhibit 20: EGB gross supply, adjusted for QE, in 10y duration equivalent terms



Source: Morgan Stanley Research, Bloomberg

The declining share of foreign ownership in the periphery is another factor that likely limits the extent to which spreads can widen (all else equal) in the current environment. Foreign ownership has fallen markedly in the smaller peripherals, like Ireland and Portugal (see **Exhibit 21**). Meanwhile, the share of foreign BTP owners has declined some 10 percentage points, while Spain's share is more or less flat vs. pre-crisis levels.

Exhibit 21: Share of foreign ownership across major EGB markets



Source: Morgan Stanley Research, Bloomberg

Bull and bear cases

In our bull case, spreads tighten back toward the levels seen around the start of PSPP in March 2015 (see **Exhibit 22**). In such a scenario, the ECB newly undertaken easing measures would significantly boost lending and broader economic activity, as well as inflation. At the same time, political uncertainty abates, owing to a strengthening of the Schengen area, continued convergence to the Maastricht rules as well as the UK opting to remain within the EU. In our bear case, we see spreads widening out relatively more aggressively than in the bull case, underscoring our view that risks are negatively skewed for sovereign spreads (see **Exhibit 23**).

In the bear case, the market starts looking beyond the ECB's QE-horizon as the political situation deteriorates, while the cycle weakens in a more pronounced way as a result of a weaker macro environment and negative impact from Brexit. Here, peripheral credit curves bear steepen as 10y BTP/Bunds reach 210bp in 1Q17, with the exception of Portugal, which sees a more pronounced widening led by the front end.

Exhibit 22: Euro sovereign spread bull case

	Spot	1Q16	2Q16	3Q16	4Q16	1Q17
Austria	24	24	20	15	10	8
Netherlands	11	11	8	6	5	5
France	38	38	32	27	20	17
Belgium	41	41	35	30	25	25
Ireland	64	64	60	55	50	50
Spain	128	128	100	95	80	75
Italy	116	116	90	85	75	70
Portugal	283	283	250	220	200	180

Source: Morgan Stanley Research, Bloomberg

Exhibit 23: Euro sovereign spread bear case

	Spot	1Q16	2Q16	3Q16	4Q16	1Q17
Austria	24	24	30	35	40	45
Netherlands	11	11	15	20	30	35
France	38	38	45	50	55	60
Belgium	41	41	50	60	65	70
Ireland	64	64	80	95	120	140
Spain	128	128	170	190	210	240
Italy	116	116	155	170	190	210
Portugal	283	283	300	350	400	470

Source: Morgan Stanley Research, Bloomberg

We favor tactical spread tighteners in the periphery via long 5y BTP/Bunds
We reiterate our tactical long 30y France on 10s30s vs. Germany
Medium-term, we suggest investors continue to be overweight 10y Italy vs. Spain

2016 outlook for supply and demand

Our gross and net issuance estimate for 2016 is €854bn and €216bn, respectively. Considering the impact of government bond PSPP purchases (€40bn in Jan, Feb and an estimated €50bn per month thereafter), about €350bn of paper will be withdrawn from the market in 2016 - **Exhibit 24 Exhibit 24**. Issuance has picked up as sovereigns have front-loaded supply in the beginning of the year; a total of €206bn has been issued, i.e., 24% of the funding target. However, the pace of issuance has been marginally slower than the past two years. Nevertheless, peripheral countries including Portugal, Ireland and Spain successfully issued new benchmarks via syndications, despite the risk-off sentiment, while Italy released a significant amount of duration into the market via its €9bn syndication of the 30y BTP.

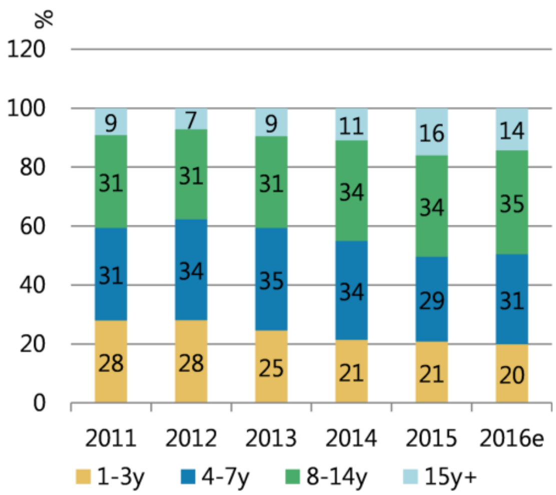
Exhibit 24: 2016 funding target and year-to-date funding progress

	2016 Gross Bond Issuance *	Redemption	2016 Net Bond Issuance	QE Purchases for 2016	Net Supply Less QE	YTD Issuance
Germany	165	169	-4	129	-132	37
France	220	127	93	122	-29	51
Italy *	220	179	42	119	-78	52
Spain *	127	80	47	83	-36	31
Netherlands	28	28	-1	34	-34	1
Belgium	34	23	10	24	-14	11
Austria	21	12	9	17	-7	8
Finland	13	7	7	12	-5	6
Ireland	8	8	0	11	-11	4
Portugal	19	6	13	17	-4	5
Total	854	638	216	567	-352	206

Source: Morgan Stanley Research, Treasuries.* Morgan Stanley Estimate. For France, 2016 issuance as announced by the treasury is €187bn, net of buybacks; €220bn is estimated as gross of buybacks. Austria 2016: €20-22bn, Netherlands 2016: €25-30bn, Germany: €154bn Nominal + €10-12bn Linkers, Ireland 2016: €6-10bn, Portugal: €18-20bn of OTs

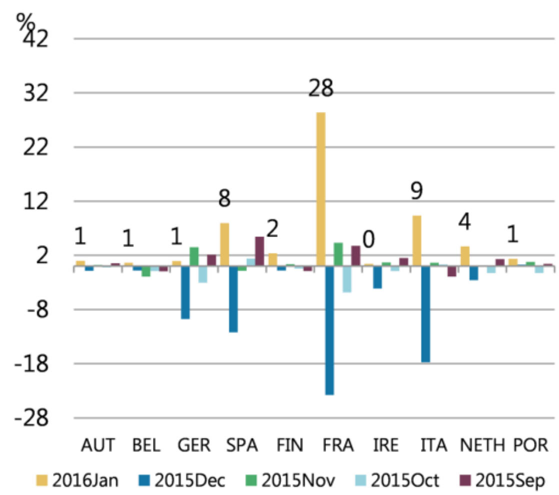
On the whole, the year-to-date syndication statistics are not as aggressive as last year. Only 18% of issuance so far has been in the 15y+ sector, of which ~40% is from peripheral countries; compared to 21% and 61% respectively last year. While this can be partly explained by lower estimated funding needs this year, we think sovereigns will continue to tap the long end of curves, especially given recent successful long-end syndications. We expect long-end issuance to be about 14% of the total, slightly lower than 16% last year, which was highest in the past five years (see **Exhibit 25**).

Exhibit 25: Bucket-wise issuance estimates



Source: Morgan Stanley Research, Treasuries

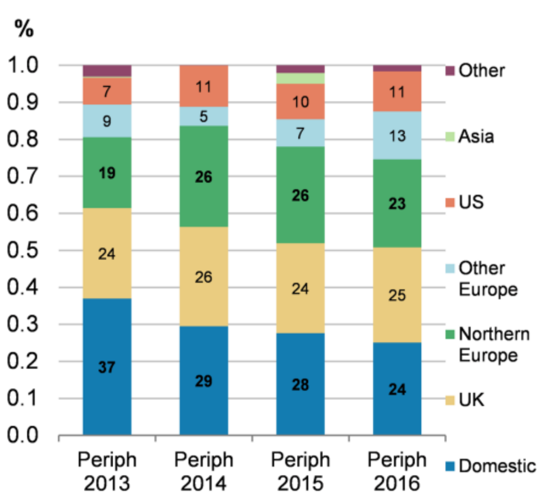
Exhibit 26: Bank buying of government bonds



Source: Morgan Stanley Research, ECB

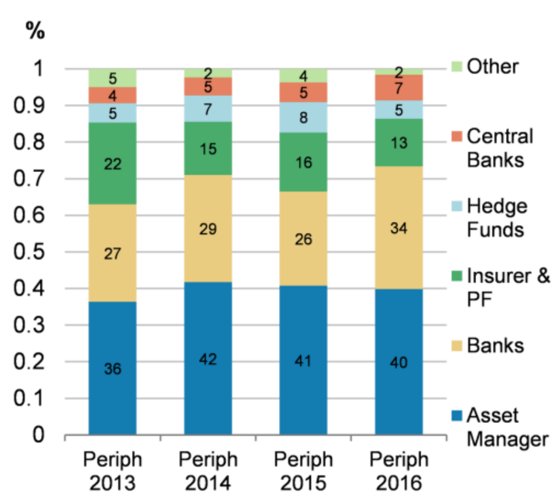
Interestingly, the distribution statistics of peripheral syndications have shown a shift in both the investor base and geography of participants. This year, we have seen a significant increase in allocation to UK participants at the cost of domestic and Northern European investors - **Exhibit 27** . The shift was more pronounced at the 30y BTP syndication. In addition, the allocation to banks and asset managers has increased, in particular the latter, who took more than 50% of the new 30y BTP syndication versus only 6% to institutional investors (see **Exhibit 28**).

Exhibit 27: Peripheral syndication statistics: by investor type



Source: Morgan Stanley Research, Treasuries

Exhibit 28: Peripheral syndication statistics: by geography



Source: Morgan Stanley Research, Treasuries

The monthly ECB MFI holdings data suggest that in January, banks reversed 75% of the selling flows from December (a total of €56bn of buying in January), mainly from France, Italy and Spain (see **Exhibit 26**). Going forward, we think asset managers will remain an important source of demand for peripherals as they extend out the curve and the credit spectra in reach for yield.

United Kingdom - 2016/17 DMO remit: more mediums and linkers

£18bn more gilts expected in 2016/17

While our economists' estimate of the CGNCR (Central Government Net Cash Requirement), after adjusting for various one-off factors, is significantly lower for the 2016/17 fiscal year versus the current one (i.e., £64bn vs. £75bn), we still expect a significant increase in the gilt Remit because of higher redemptions: £89bn in total from the Sep-16 and Jan-17 Conventionals, and £25bn from the Jul-16 UKTi (its notional is only £8bn, but it has accrued significant inflation over its lifetime). We believe part of this £153bn funding requirement will be met through an expansion of the t-bill stock and NS&I offerings so that the gilt sales figure will come to £145bn, up from £127.4bn this year.

How might the remit change?

We expect more Mediums and Linkers, and fewer Shorts and Longs. We believe Mediums will be well supported by Asset Purchase Facility (APF) reinvestment flows as well as the increased activity in the long Gilt futures contract - liquid 10y tenor bonds are important for a smooth functioning of the contract, in addition to providing the DMO with a reliable funding point on the curve. Our argument for more UKTis is that they would help meet the resilient demand from the UK DB pension sector, which continues to absorb real yield risk as schemes de-risk. It would also be relatively easy for the DMO to scale up linker issuance at auctions given the launch of new 10y and 20y benchmarks.

Why fewer shorts and longs?

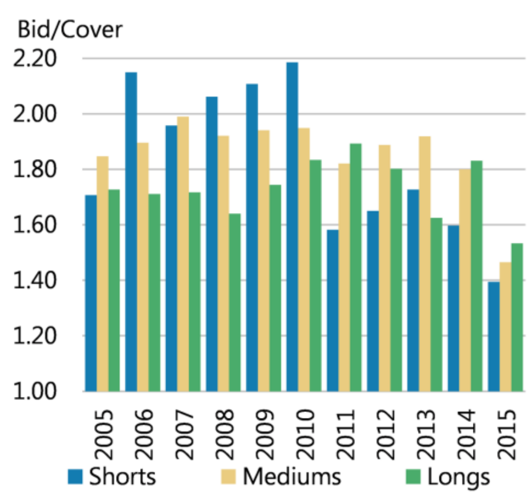
Cutting back in these parts of the curve would make sense, in our opinion, given demand has occasionally been shaky. The bid/cover on Shorts auctions has fallen more than it has for Mediums and Longs, even though all are a lot lower now (see Exhibit 7). We suspect the decline in bid-offers is driven at least in part by changes in banking regulation that make it difficult and unattractive for primary dealers to warehouse paper. Shorts are particularly unattractive for dealers to take down as they are balance sheet intensive and, given their low duration, are a lower-margin business.

Exhibit 29: Expected 2016/17 gilt issuance

	FY 2015/16		FY 2016/17	
	£bn	%	£bn	%
Shorts	32.3	25	34.0	23
Mediums	25.4	20	31.0	21
Longs	36.8	29	38.0	26
Linkers	30.2	24	38.0	26
Mini Tenders	2.7	2	4.0	3
Total	**127.4**		**145**	

Source: Morgan Stanley Research, DMO

Exhibit 30: Gilt auction bid/cover ratios



Source: Morgan Stanley Research, DMO

Our reason for expecting a reduction in Longs is a bit more complicated. While they have performed very poorly on an asset swap basis, this is not immediately relevant to the DMO given they are not a Libor-based issuer. Our simple regression models of 10s30s suggest 30y gilts are currently fairly priced relative to 10s given the level of rates and 2s10s, while 30y swaps are trading very rich to 10y swaps. So the dislocation in swap spreads appears to be more about long-end swaps trading rich than gilt Longs being cheap. However, the DMO must be concerned about the relative lack of support for cash at the long end of the curve, and it may be prudent not to test the market more than needed, even if 30y gilt yields are close to all-time lows.

What about syndications?

We have pencilled in £27bn, similar to the current fiscal year, assuming 6 syndications, 4 linkers and 2 Conventionals. This is consistent with the DMO's current practice of limiting the size of transactions to around £4.5bn (in cash terms), but if it is desirable to scale the programme up, this could be done by taking from the mini tender allocation, which we have also scaled up on the assumption that the DMO would prefer to have more flexibility with its issuance programme to respond to changes in market conditions. A larger expansion of the programme may require doing more syndications.

What about "Brexit Risk"?

We think it will primarily affect the timing of syndications. In particular, we do not expect the DMO to schedule one in June due to the referendum, but in the event of a vote to leave the EU, it could be more challenging to do syndications for several months following the referendum due to the increases in political and economic uncertainty. The logical option, therefore, would be to front-load syndications to the first two months of the fiscal year, possibly doing one in late April and a second in early/mid May. We would otherwise expect one linker syndication per quarter and the Conventional supply in fiscal Q1 and Q2.

Inflation

United States
We update our quarterly breakeven forecasts across regions. We also update the US CPI forecast and expect February CPI NSA to come in at 236.92 with a m/m core CPI print of 0.15%. For the upcoming $11bn 10-year TIPS reopening, we think further relative concession in 10s will be needed for the auction to go well. We see good long-term value in 10-year TIPS on a breakevens basis. Given the oil rally, we recommend re-initiating a 30-year breakeven long post supply.

Euro area
We forecast a recovery in euro breakevens, consistent with our economists' forecast of a recovery in inflation toward the end of this year. We think the rebound will likely come in 4Q16, once the recovery in inflation has been confirmed. We do see quire a bit of value in short-dated BEIs, though, and we recommend taking advantage of this through recent issues with low index ratios.

United Kingdom
We forecast modest upside to UK breakevens, based on our economists' forecast of a gradual recovery in RPI, in part driven by currency weakness. Given the starting point for UK breakeven valuations is a lot more demanding than in other markets, we do not see the same type of upside if our economists' estimates are realised.

Japan
The breakeven inflation rate (BEI) priced into JGB linkers looks anomalously low given the value of the embedded floor option (principal guarantee at maturity) and the possibility of an April 2017 consumption tax hike. We thus see ample justification for buying the real yield/BEI from a risk/reward perspective.

Global summary

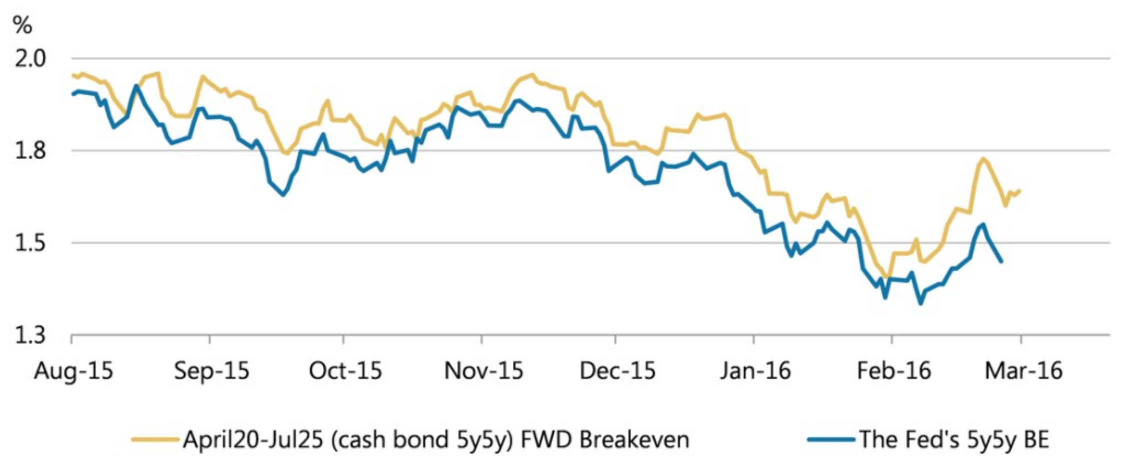
As our economics team updates their quarterly growth and inflation forecast, we take the opportunity to provide a breakeven forecast consistent with their outlook. Given that oil has already declined significantly, it can serve as a tailwind to headline inflation globally. This should be a boon for the underpriced inflation markets (i.e. US TIPS and JGBi). Below, we discuss the opportunity set in the US, euro area, the UK and Japanese linkers market.

United States - Waiting for 2%

Low breakevens: more than an inflation risk premium story
We review the outlook for TIPS breakevens for the coming year. Over the past two months, breakevens suffered from a "risk-off" shock, but they have recovered from historical lows since mid-February (see **Exhibit 31**). We think the inflation risk premium remains quite negative in the TIPS market.

As we have **argued in the past**, a key component of the negative inflation risk premium is a decline in oil prices and the rise in oil volatility. Albeit, we believe the recent decline in breakevens suggests a shift lower in core goods and core service inflation expectations. This is reflected in our new CPI forecasts.

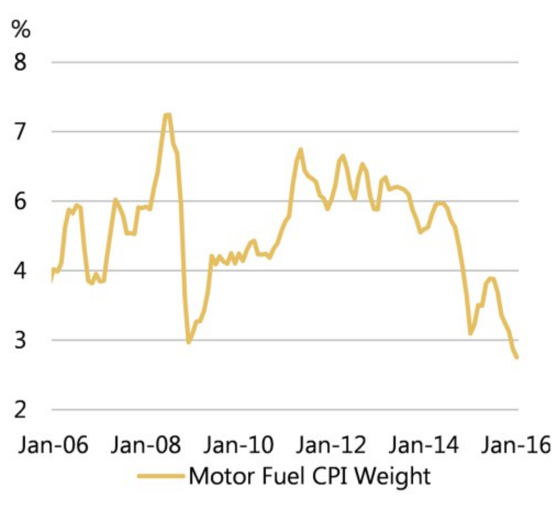
Exhibit 31: Cash instrument based and the Fed's 5y5y breakevens



Source: Morgan Stanley Research, Bloomberg

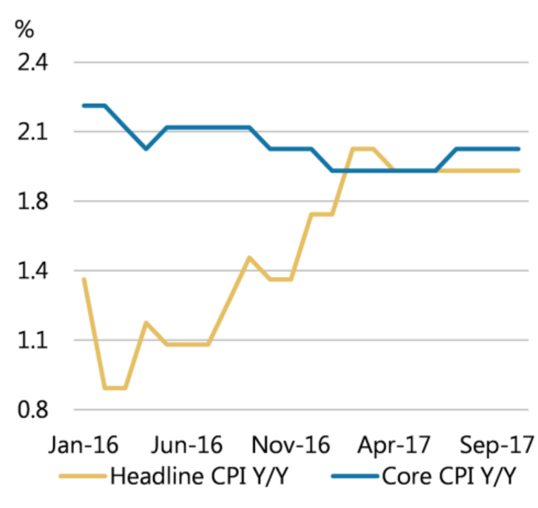
Going forward, we think the impact of downside oil volatility on CPI should not be as onerous because motor-fuel CPI weight has declined significantly over the past few years. In **Exhibit 32**, we see that the motor-fuel CPI weight has declined from almost 7% to 2.9% now. Thus, a 50% decline in oil futures from current levels should have half the impact on CPI NSA as it did in early 2014. This should serve as a tailwind for the US inflation-linked market.

Exhibit 32: Motor-fuel CPI weight



Source: Morgan Stanley Research, Bloomberg

Exhibit 33: Headline and core CPI Y/Y projection



Source: Morgan Stanley Research, Bloomberg

If the US labor market remains firm and oil remains stable, we expect headline CPI to trend towards core CPI. Already, headline CPI in the US is at 1.4%, whereas the Y/Y core CPI trend is at 2.2%. **Exhibit 33**shows that in our CPI forecast, we expect the spread between the headline and core CPI to narrow.

Fair value of US breakevens

Breakevens across the curve remain well below the core CPI levels of 2.2%. As noted, we think much of this has to do with oil futures volatility. Downside oil volatility affects equity market performance as well, which could feed into future service inflation via the wealth effect channel. We think TIPS investors will be able to earn this negative inflation risk premium over a one- to two-year holding period, assuming the US labor market remains firm.

In the long run, we have defined the fair value of breakevens as 220bp, with 300bp coming from service inflation and 0bp for goods inflation. However, in the near term, due to the US monetary policy divergence relative to global developed and EM counterparts, we think upward pressure on the dollar could continue and this will weigh on goods inflation. **Therefore, we see the fair value of 10-year breakevens closer to 200bp for the next few years.**

Below (see **Exhibit 34**) are our breakevens forecast for the remainder of the year. They show a gradual upward-moving trend. In Q2 2016, we expect a move higher in breakevens as oil prices typically rebound in the second quarter due to the US summer driving season demand. Oil futures are generally lower in the second half and we expect that to lower inflation risk premium in the second half.

For those who cannot hedge oil volatility by buying oil puts, we recommend buying 30-year TIPS outright or on breakevens. Already 30-year real rates at 108bp are above our view of the Fed's long-term terminal real rate expectation (in CPI terms). Thus, we think for those investors that can't hedge oil volatility, buying 30-year breakevens remains a better risk-adjusted trade. The risk to the trade is a decline in risk assets. If one is able to oil hedge, we recommend buying 1-year BEIs hedged with oil puts.

Exhibit 34: US breakeven forecast

	5y	10y	30y	5y5y
MAR 10	**1.40%**	**1.53%**	**1.67%**	**1.66%**
2Q16	1.60%	1.70%	1.85%	1.80%
3Q16	1.60%	1.65%	1.80%	1.70%
4Q16	1.50%	1.75%	1.90%	2.00%
1Q17	1.60%	1.80%	2.00%	2.00%

Source: Morgan Stanley Research

CPI forecast update

In terms of February CPI forecast, we expect some payback on the core CPI front after a significant upside surprise in January. Specifically, we expect February CPI NSA print of 236.92 (see **Exhibit 35**) with a core CPI print of 0.15% m/m. February US import prices from China were lower than in January, which suggests downside risks relative to consensus core CPI expectation of 0.2%. Overall, looking a year ahead our economics team has revised lower their inflation forecast on the back of their expectation of higher trade weighted dollar, lower US import prices from China and deceleration in Shelter inflation.

Given the upcoming apartment supply, we think rental vacancies are likely to rise from all-time lows and Shelter inflation will likely be about 3% in 2016. Already, we have seen some deceleration in Shelter inflation over the past six months. The six-month annualized trend in OER has been about 3%. Owners' equivalent rent tends to be a sticky category, which supports this deceleration view. Our previous estimate for Shelter inflation was about 3.5%. The key impetus for the revision lower is that wage inflation has not ticked up enough for high rental inflation to be sustainable.

Exhibit 35: CPI forecast

Date	CPI NSA	CPI NSA m/m (%)	Core CPI SA m/m (%)	Date	CPI NSA	CPI NSA m/m (%)	Core CPI SA m/m (%)
16-Jan	**236.92**	**0.17**	**0.29**	**17-Jan**	241.49	0.13	0.16
16-Feb	236.92	0.00	0.15	**17-Feb**	242.06	0.24	0.16
16-Mar	238.12	0.51	0.15	**17-Mar**	242.49	0.18	0.16
16-Apr	239.69	0.66	0.15	**17-Apr**	244.00	0.62	0.16
16-May	239.79	0.04	0.15	**17-May**	244.54	0.22	0.16
16-Jun	240.73	0.39	0.15	**17-Jun**	245.53	0.41	0.17
16-Jul	240.82	0.04	0.16	**17-Jul**	245.62	0.04	0.17
16-Aug	241.48	0.28	0.16	**17-Aug**	246.31	0.28	0.17
16-Sep	242.28	0.33	0.16	**17-Sep**	247.16	0.34	0.17
16-Oct	242.04	-0.10	0.16	**17-Oct**	246.93	-0.09	0.17
16-Nov	241.81	-0.10	0.16	**17-Nov**	246.70	-0.09	0.17
16-Dec	241.18	-0.26	0.16	**17-Dec**	246.08	-0.25	0.17

Source: Morgan Stanley Research

10-year TIPS reopening preview

The Treasury announced $11bn in size for the upcoming 10-year TIPS reopening, which is scheduled for Thursday, March 17. Based on this $11bn size for this reopening, we estimate that the month-end TIPS index extension would be about 0.012 years. We think cheap breakeven valuations, the rally in risk assets (particularly in oil) and the upcoming turn to positive breakeven carry are all favorable factors for the auction.

The fundamental factor that is negative for the auction is that 10-year real rates are below what we consider to be the terminal real rate expectation. As of now, the Fed has defined terminal nominal rate at 3.50, with a 2% PCE inflation objective. This translates to 1.50% real rate expectation in PCE terms. Based on our view of a CPI-PCE wedge of 50bp, we think the terminal real rate expectation in CPI terms is close to 100bp. 10-year real rates are at 43bp, offering a negative real term premium of 55bp. 5y5y real rates are trading at 85bp, which suggests that the term premium is less negative further out (see **Exhibit 36**).

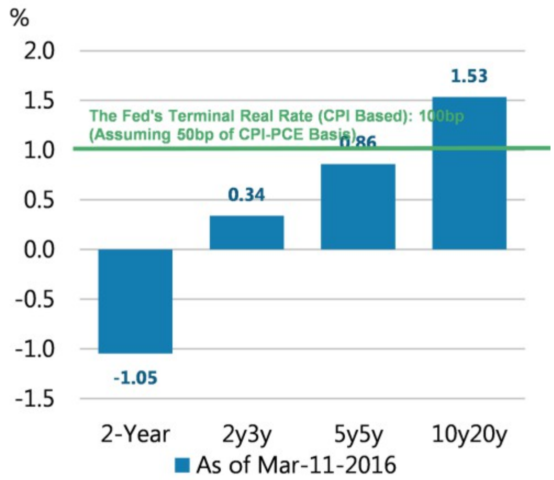
We think real money investors with positive growth expectations are unlikely to find 10-year real rates attractive at these levels. 30-year real rates at 108bp look much more favorable from a real term premium perspective. It is important to note that the last two TIPS auctions have tailed by more than five basis points and there has not been a relative concession ahead of this supply.

Previously, we highlighted that the **10s30s breakeven curve (Jan26s-Feb42s BE) was inverted** and it has remained that way (see **Exhibit 37**). We think further relative concession in 10s will be needed for the auction to go well, particularly because the 10-year TIPS reopening auction is scheduled the day after the February CPI release and the March FOMC meeting.

We recommend reinstating 30-year breakeven longs post 10-year TIPS supply. The key risk to the trade is significant dollar strength as US monetary policy diverges from global counterparts.

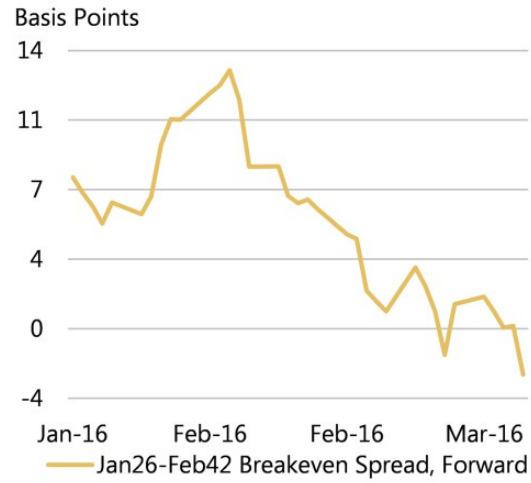
Trade idea: Buy 30-year TIPS breakevens at 1.65%
Target: 1.90%, Stop: 1.55%

Exhibit 36: Real yield term structure



Source: Morgan Stanley Research

Exhibit 37: 10s30s breakeven curve



Source: Morgan Stanley Research

Euro area - We'll believe the recovery when we see it

Breakeven forecasts

We forecast a recovery in euro breakevens, consistent with our economists' forecast of a recovery in inflation towards the end of this year. However, while valuations remain close to all-time lows, for all tenors across the curve, we think the rebound will only really come in 4Q16, once the recovery in inflation has been confirmed. Having been repeatedly disappointed by stories of an inflation rebound in the past, we think investors will need to see higher inflation prints before they believe in them.

Exhibit 38: Euro (HICPxT Swap) breakeven forecasts

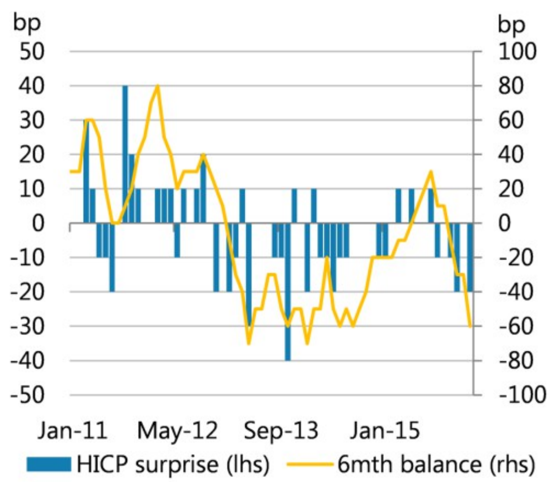
	5y	10y	30y	5y5y
MAR 10	**0.76%**	**1.14%**	**1.60%**	**1.52%**
2Q16	0.90%	1.20%	1.65%	1.50%
3Q16	0.90%	1.20%	1.70%	1.50%
4Q16	1.40%	1.60%	2.00%	1.80%
1Q17	1.40%	1.60%	2.00%	1.80%

Source: Morgan Stanley Research estimates

The realised inflation prints have not been helping the market, and this may remain the case for some time to come. The February flash HICP estimate surprised 0.2 percentage points to the downside, with the core component in particular weaker than expected as both services and non-energy manufactured goods inflation slowed in Y/Y terms. It was the fourth downside surprise in the last six months, so that the trend in inflation surprises is clearly to the downside (see **Exhibit 28**). Breakeven carry & roll is also generally not supportive, making it more difficult to hold long breakeven positions in anticipation of reflation.

We do see lots of value in short-dated breakevens, though, and we recommend taking advantage of this through recently issued linkers which have Index Ratios close to 1 and hence limited downside in the event of deflation or renewed breakeven compression (our assumption is that inflation bonds with at-the-money deflation floors are unlikely to trade at a negative breakeven - see **Exhibit 40**). In particular, **we recommend owning SPGBei-19s, BTPei-18s and BTP Italia breakevens.**

Exhibit 39: HICP flash release surprises



Source: Morgan Stanley Research, Bloomberg.

Exhibit 40: Nov-19 SPGBei breakeven

Source: Morgan Stanley Research, Bloomberg.

United Kingdom - Some Upside

Breakeven forecasts

We forecast modest upside to UK breakevens, based on our economists' forecast of a gradual recovery in RPI, in part driven by currency weakness. Given the starting point for UK breakeven valuations is a lot more demanding than in other markets, we do not see the same type of upside if our economists' estimates are realised. On the other hand, if inflation were once again to surprise significantly to the downside, we would not expect to see UK breakevens fall significantly given the support from the domestic pension fund sector, which also offers some support tenors as short as 10-year.

The EU referendum is seen as a supportive factor for UK breakevens, given the potential for currency depreciation. We otherwise expect the main structural driver of the market to remain the domestic LDI bid, and breakevens to fluctuate in line global growth and inflation concerns, which we find are reflected by the changes in energy and equity prices. We otherwise eagerly await the DMO Remit for details of linker supply, in particular syndications. These have historically provided attractive tactical trading opportunities.

Exhibit 41: UK (RPI Swap) breakeven forecasts

Quarter	5y	10y	30y	5y5y
MAR 10	**2.78%**	**3.04%**	**3.37%**	**3.29%**
2Q16	2.70%	2.96%	3.35%	3.23%
3Q16	2.70%	3.01%	3.40%	3.32%
4Q16	2.85%	3.10%	3.45%	3.35%
1Q17	3.00%	3.20%	3.50%	3.40%

Source: Morgan Stanley Research, Bloomberg.

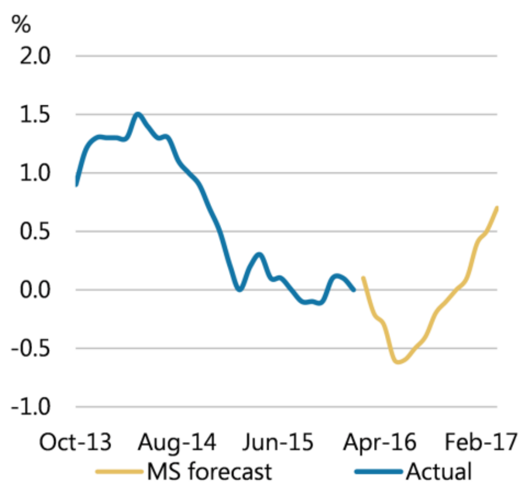
Japan - JGBi Outlook

JGBi breakevens

As discussed in our previous report (**Too Negative Isn't Positive**), the breakeven inflation rate (BEI) priced into JGB linkers looks anomalously low given the value of the embedded floor option (principal guarantee at maturity) and the possibility of an April 2017 consumption tax hike. Thus, we see ample justification for buying the real yield/BEI from a risk/reward perspective.

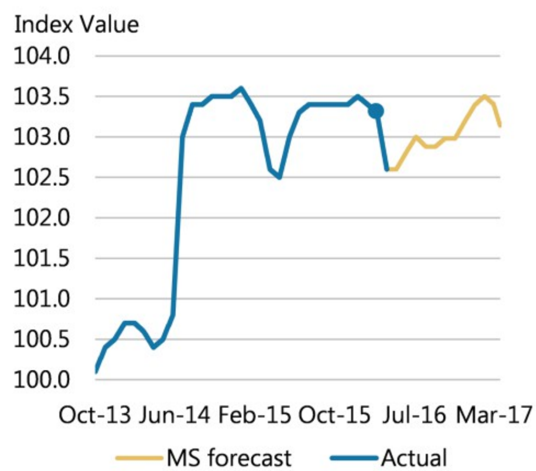
Our economists expect the core CPI inflation rate (which excludes fresh food prices) to drop to around –0.5% YoY in May–June of this year as liberalization of the retail electricity market from April results in greater price competition (see **Exhibit 42**). However, the actual level of the index should fall only modestly over the coming months, after which we forecast inflation carry to be virtually flat through 1H 2017 (see **Exhibit 43**). It is also quite possible that inflation will end up meeting our current forecasts given that oil price have risen so sharply of late.

Exhibit 42: Y/Y core CPI



Source: Morgan Stanley Research, Bloomberg

Exhibit 43: Japan CPI index

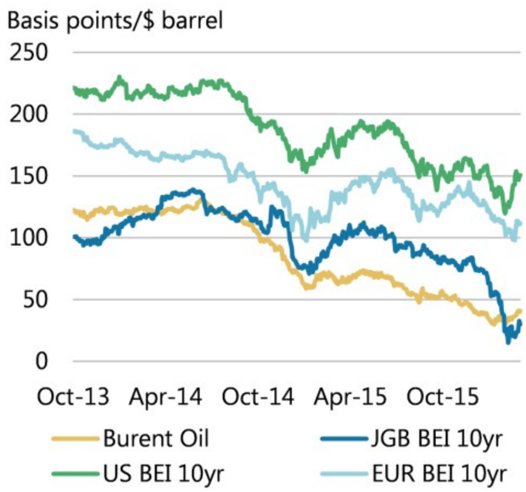


Source: Morgan Stanley Research, Bloomberg

There has also been market discussion that the MoF might reduce issuance of JGB linkers from 500 billion to 400 billion per quarter from April or/and launch buybacks of the principal-guaranteed issues (JBI17 onwards). Underperformance of JGB linkers to this point has reflected continued growth of the market at a time when the inflation outlook is deteriorating, but supply/demand might improve to some extent once FY2016 gets under way, thereby causing valuations to be rethought.

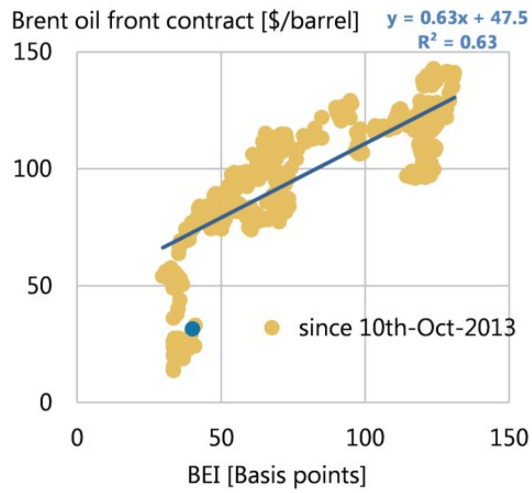
We see little prospect of JGB linkers climbing well beyond fair value given that our economists are essentially ruling out the BOJ's scenario of +2% inflation by 1Q 2017, but there does appear to be considerable upside from current (depressed) levels relative to the other BEIs (see **Exhibit 44**). JGB BEI had been reasonably correlated with the oil price. However, the correlation collapsed after oil traded below $40/barrel (see **Exhibit 45**), with significant loss-cut selling on the back of lower inflation outlook.

Exhibit 44: TIPS, JGBi, euro BEIs vs oil



Source: Morgan Stanley Research, Bloomberg

Exhibit 45: Brent oil versus 10-year JGBi BEIs



Source: Morgan Stanley Research, Bloomberg

That's said, we expect the previous correlation with oil price to return once the supply/demand environment starts to recover. Given our oil price outlook, we expect a JGB BEI resurgence to around 70bp in 1Q2017. Please see the table below (see **Exhibit 46**) for our quarterly forecasts.

Exhibit 46: JGBi breakeven forecast

	10y Base	10y Bull	10y Bear
MAR 10	**0.31%**	**0.31%**	**0.31%**
2Q16	0.40%	0.60%	0.20%
3Q16	0.45%	0.75%	0.15%
4Q16	0.55%	0.80%	0.15%
1Q17	0.70%	0.90%	0.15%

Source: Morgan Stanley Research

Money Markets

United States
We look at recent repo fails in the US Treasury market and the trend of higher fails since the 2008 financial crisis.

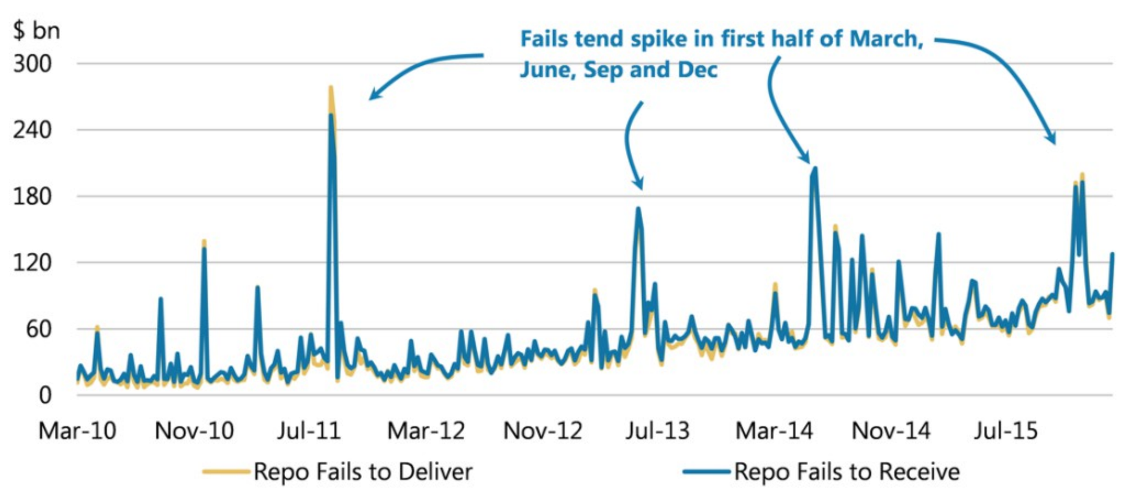
Euro area
The ECB has clearly communicated that the threshold for further near-term cuts is quite high, and we like to tactically pay Dec'16 ECB EONIA, which still prices around 6bp in cuts. We also like to receive 5y5y EURUSD XCCY basis, as Draghi yesterday strengthened the case for EUR as a funding currency.

United States - Any reason to be worried about repo fails?

Repo fails and their pattern
Repo fails in the US Treasury market have been rising recently (see **Exhibit 47**), with fails to deliver and receive rising again for the week ending March 2. This has been coincident with the current on-the-run 10-year note trading very 'special' in the repo market. Securities trading very special in repo markets indicate scarcity of that security to borrow, which usually leads to fails in delivering that security.

Note that it is not uncommon for fails to be higher during the first month of re-opened securities, especially just ahead of the auctions. As **Exhibit 47** shows, there have been various episodes of spikes in fails ahead of 10-year auctions after the initial issue opened. Recall that 10-year notes have a new issue every February, May, August and November, with two re-openings in the two months following the new issues (see **Exhibit 48**). Thus, there is scarcity of the on-the-run 10-year security in the first month.

Exhibit 47: Repo fails since the 2008 crisis



Source: Morgan Stanley Research, Bloomberg

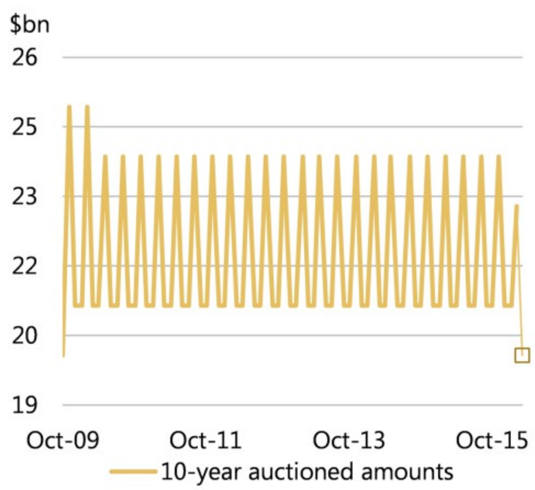
Given the auction dynamics mentioned above, investors looking to set shorts are typically emboldened just ahead of the auctions in the anticipation of covering their shorts at the auctions. Thus it is not surprising that we see more fails around mid March, June, September and December ahead of the 10-year auction settle. Even the last spike in December was ahead of the 10-year re-opening, as has been the case in March so far. We expect some this specialness to mitigate after the first re-opening of the 10-year note settles on March 15.

It is also notable that the current 10-year note was auctioned in a smaller amount (by $1bn) than has been the case in the last seven years since the crisis. This is because the Treasury guided towards cutting down coupon sizes in longer-maturity Treasuries to manage its issuance in the near term (for details on Treasury issuance in 2016, please refer to **Sovereigns and Supply**).

Additionally, while there is certainly a trend towards higher repo fails in the last few years since the 2008 financial crisis, that trend is very benign compared to the levels of fails we saw at the peak of the crisis in 2008. **Exhibit 26** shows that the current level of fails is a minor blip on the radar compared to the number of fails in 2008. Therefore, the current level of fails is not worrying in itself when compared to history.

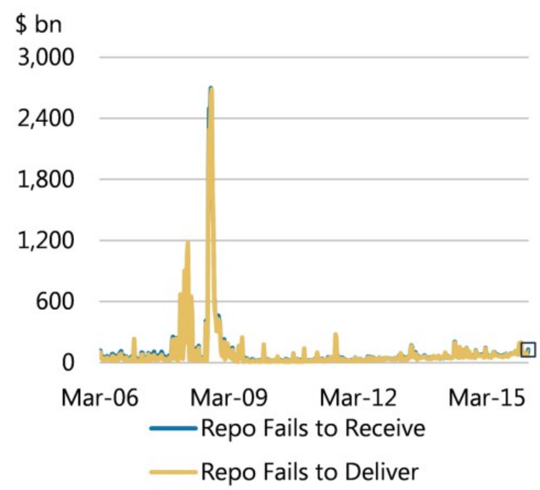
During the 2008 financial crisis, after fails rose significantly, the Treasury Market practices group (TMPG) applied a **penalty on fails in May 2009**, where the counterparty failing to deliver has to pay a fails charge of 3% - fed funds rate, which set a floor on the economical cost of failing . In other words, given the high cost of failing (nearly 3%, given that fed funds was ~0), the 'incentive to fail' only arose if the specialness repo rates went below ~ -3%.

Exhibit 48: 10-year note auction amounts history



Source: Morgan Stanley Research, Bloomberg

Exhibit 49: Repo fails - long-term history



Source: Morgan Stanley Research, Bloomberg

Why has there been a trend towards higher fails in the last few years? We believe that given the structural bull market in US Treasuries, specialness of on-the-run issues has increased as more shorts have been entrenched in the market. Given the high levels of shorts, there has been higher specialness and therefore more difficulty in sourcing the specific Treasuries to deliver. This may have contributed to a higher levels of fails in recent years.

Euro zone - Tranquility to replace volatility

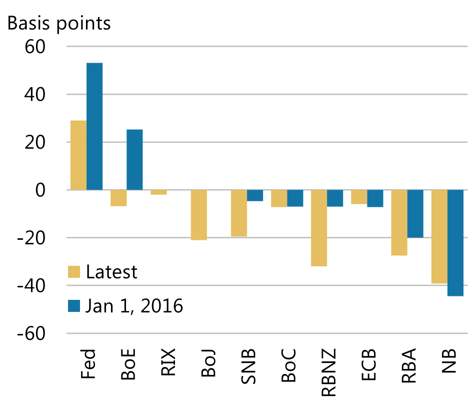
Lessons from the past six months

The past half year has been surprisingly volatile for Euro zone money markets. Front-end rates hovered safely above the deposit rate from summer 2014 (when the depo rate was cut to -20bp) until autumn last year, when the ECB decided to remove the lower bound and opened up for further cuts ahead. That brought life to speculation about aggressive ECB easing as the rate measure was reintroduced as a viable policy option.

Markets may however have been "over-enthusiastic" about this option, as rate-cut pricing turned increasingly aggressive, in particular when a tiered rate system was mentioned in a Reuters article towards the end of 2015 and after Bank of Japan dipped a toe into negative territory earlier this year. Ahead of the important December 2015 and March 2016 meetings (where macroeconomic projections were released), front-end pricing was quickly corrected.

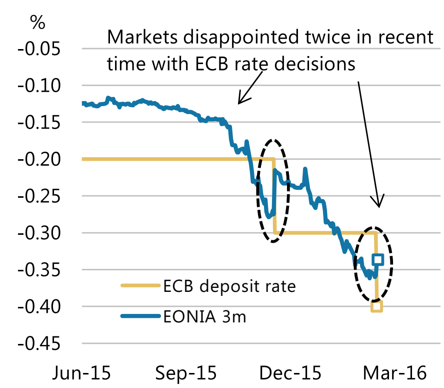
After having priced the depo rate down to -60bp at one point, money market participants will likely be more cautious. Our economists are still calling for another deposit rate cut later this year and the ECB didn't take that option off the table. However, in the near term, we think that market focus will shift to the unconventional side of the toolbox, and we suggested investors tactically pay Dec'16 ECB EONIA (which still prices around 6bp in depo cuts this year) in **European Economics & Strategy: ECB Watch – Whatever it Takes – Take II**.

Exhibit 50: Pricing of rate hikes/cuts for G10 central banks during 2016



Source: Morgan Stanley Research, Bloomberg

Exhibit 51: Markets "overpriced" the probability for aggressive depo cuts twice



Source: Morgan Stanley Research, Bloomberg

Negative rates and bank profitability

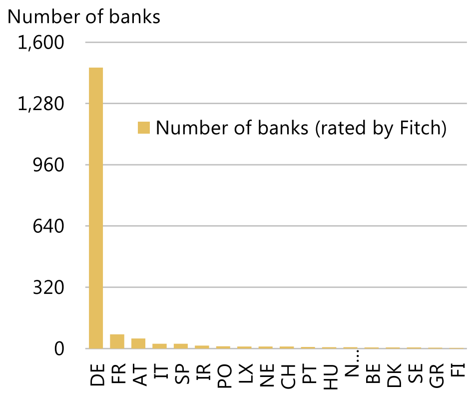
The negative rate debate has been increasingly about the impact on the banking sector. In **Banks/Economics/FX/Rates Strategy - Negative rates a "dangerous experiment" with diminishing positive impact?**, our colleagues in the Equity banks team argue that they i) erode bank profits; ii) incent banks to shrink, not grow; iii) disincentivise cross-border Euro zone lending; and iv) risk non-linear effects on bank funding. These are all implications that the ECB would rather avoid. In essence, negative rates could in the worst case lead to a weakening transmission mechanism.

The most notable example of this is probably the hiked mortgage rates in Switzerland after rates were cut to -75bp, which we highlighted in **Global Interest Rate Strategy Brief: Negative Rates – Trading the New Regime**. Even if the experience in Sweden has not been as dramatic, spreads between mortgage rates and market rates have hit all-time wides.

The ECB has clearly paid attention to this and argued that a tiering system had not been introduced partly because it might send the wrong signals and cause concern about bank profitability. Even if bank debt will not be bought as part of the corporate credit purchase program, Euro zone banks did get a sweetener in terms of the second TLTRO program, TLTRO II.

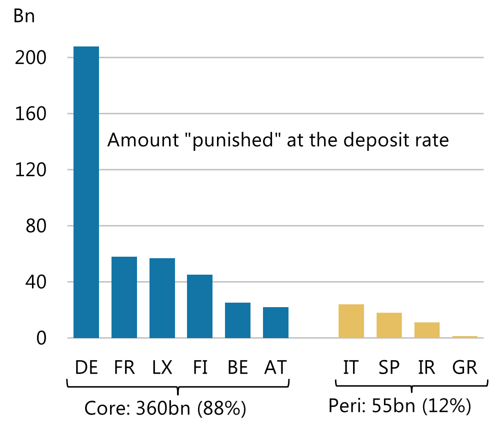
Negative rates have not caused a significant change in bank profitability in the smaller jurisdictions in Europe with negative rates, Switzerland, Sweden and Denmark. However, these markets have more of an oligopolistic character than what is, for example, the case in Germany. Fitch is rating about 1500 banks in Germany while the same number for Switzerland, Sweden and Denmark is ten or below. Thus, negative rates may have a more significant impact in the Euro zone than among the other "early adopters".

Exhibit 52: Negative rates in the Euro zone not comparable with smaller jurisdictions



Source: Morgan Stanley Research, Bloomberg

Exhibit 53: Core banks are the ones mainly "punished" with the negative deposit rate



Source: Morgan Stanley Research, Bloomberg

While we don't think markets will focus much on possible rate cuts in the near term, they are not completely off the table, as Draghi clearly highlighted in his introductory statement. Things could of course change, and the decisions from other central banks will likely be key here to realize if for example the Bank of Japan will draw similar conclusions or if they continue to go down the route of rate cuts.

Draghi put it quite clearly himself: "So the bottom line of this is that basically more and more the emphasis will shift from rates instruments to other, non-conventional instruments". Thus, the probability of tail events of cuts down towards -75/-100bp has significantly been reduced.

What about liquidity?

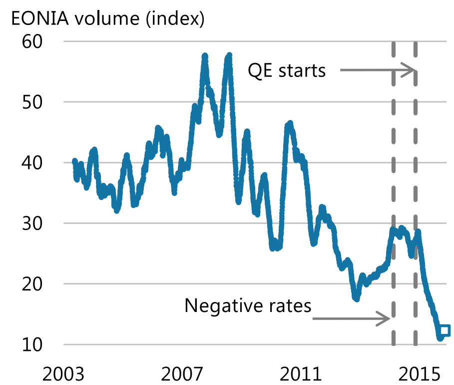
The question about negative rates and reduced front-end liquidity has come up on several occasions during the past year. The ECB highlighted it in the latest Money Market Survey that the "Perceived market liquidity generally worsened compared with last year". That also seems to be the case looking at EONIA volumes, which have dropped close to record low levels since QE and negative rates were introduced.

However, this is not merely a result of negative rates but also low volatility (caused by high excess liquidity) and regulatory changes. This will likely continue in the year to come. However, it's not certain markets will interpret this as a direct problem for the ECB.

Instead, this will likely catch the attention of the providers of the benchmarks (EONIA and Euribor provided by the European Money Market Institute, EMMI). As we discussed in **Global Interest Rate Strategist – The Bull Market is Here**, a reform of Euribor is already underway, where Euribor+, a more transaction-based fixing, is scheduled to be introduced this summer. A similar initiative is taking shape for EONIA.

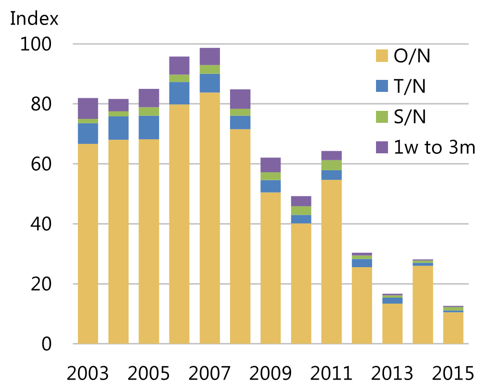
Thus, money market liquidity is not necessarily an immediate problem for the ECB. Instead, it will impact markets through new fixing methodologies to avoid low Euribor/EONIA volumes causing volatile and choppy readings.

Exhibit 54: EONIA volumes dropping to new record lows



Source: Morgan Stanley Research, Bloomberg

Exhibit 55: Unsecured borrowing volumes beyond O/N maturity significantly reduced



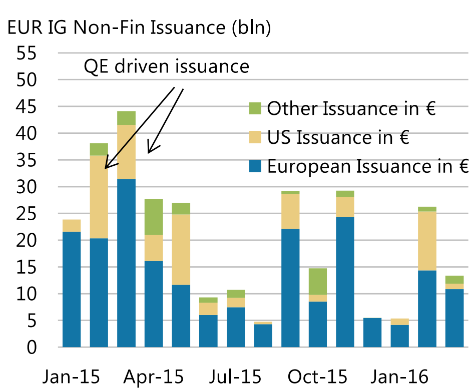
Source: Morgan Stanley Research, Bloomberg

XCCY basis – another way to play the post-ECB environment

One of the indirect measures of the latest ECB decision is the strengthening of the EUR as a funding currency. The forward guidance provided through the TLTROs and primarily the corporate credit purchase program should increase the attractiveness for issuers to tap the EUR market. While US corporates issuing overseas may not directly be benefiting, indirectly they might, and liquidity could even be seen as somewhat better since the ECB would not be a major holder of these bonds.

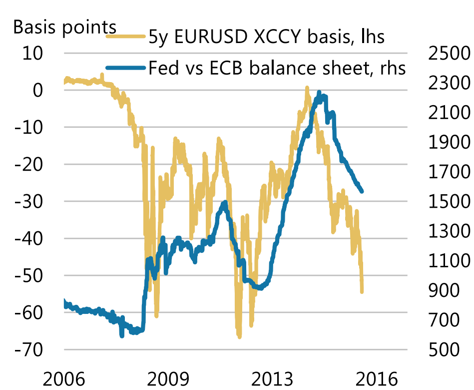
Thus, we do see continued widening pressure on EURUSD XCCY. The front end however will likely remain sticky, and thus we expect the curve to continue to trade increasingly inverted. Last year, we saw large volumes of reverse Yankee issuance after the QE program was announced. We could see a similar pattern over the coming months, and we suggest investors position accordingly by receiving 5y5y EURUSD XCCY basis.

Exhibit 56: Reverse Yankee issuance to pick-up going into the credit program



Source: Morgan Stanley Research, Bloomberg

Exhibit 57: Diverging central bank policy should keep favoring wider XCCY basis



Source: Morgan Stanley Research, Bloomberg

Derivatives

United States
We reiterate our core views. Namely, we like being long 2-year swap spreads given an improved carry profile and a slowly improving supply/demand backdrop. We continue to like staying long gamma in the top right but short gamma in the upper left, with our preferred expression of that view a 6m1y1y midcurve/vanilla straddle switch.

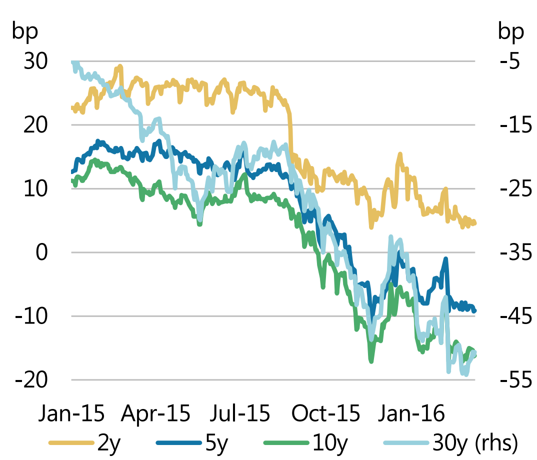
Japan
We recommend 2-year ASW longs in Japan as well, given attractive valuations and a significant improvement in carry profile.

United States - Views on spreads and volatility

We continue to like front-end spreads; longer-dated spreads remain volatile globally
In our January 17 weekly (available **here**), we laid out detailed views on the front end of the spread curve, and recommended entering long spread positions at the 2-year point. While headline spreads (and matched-maturity spreads on the then 2y note) have tightened slightly from those levels, the attractive carry profile more than made up for the nominal tightening. We continue to believe that 2-year spread wideners give investors attractive asymmetric risk exposure while also being profitable in an unchanged front-end environment.

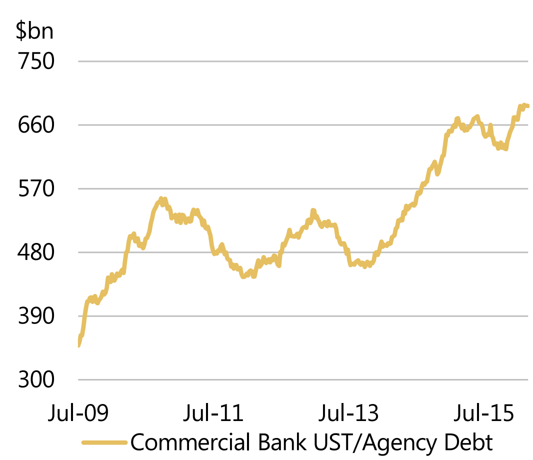
Exhibit 58 shows the trend in swap spreads across the curve. While spreads have continued to drift tighter across the curve, the volatility of 2y and 5y spreads has been much lower than that of longer tenor spreads, and 2y spreads in particular have remained supported above zero. Part of this is likely the result of commercial bank buying of Treasuries. **Exhibit 59** shows UST and agency debt holdings of US commercial banks, which remain at record highs, likely pressuring spreads wider.

Exhibit 58: History of swap spreads



Source: Morgan Stanley Research

Exhibit 59: Commercial bank treasury holdings

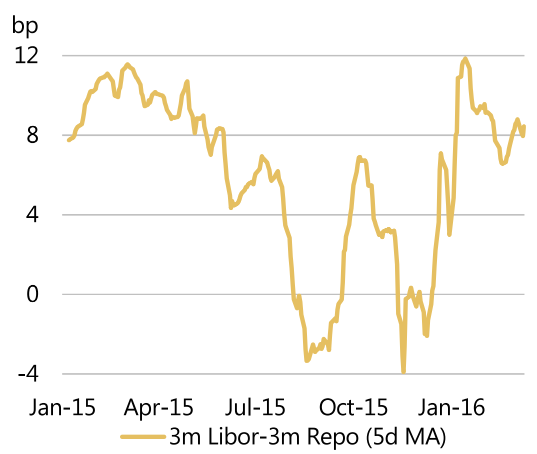


Source: Morgan Stanley Research, Bloomberg

From a fundamental perspective, the spread between Libor and repo has normalized in a way that makes 2-year spread positions carry quite well. In **Exhibit 60**, we show the spread between 3m Libor and 3m GCF term repo. The spot spread now trades much closer to the historical range, and far from the inversion that was associated with the lowest levels and sharpest tightening in spreads. In **Exhibit 61** we show the forward expectations of the Libor-repo spread, based on Eurodollar and GCF futures. Expectations of the spread were quite tight at the end of the summer and in early December, but now have widened materially.

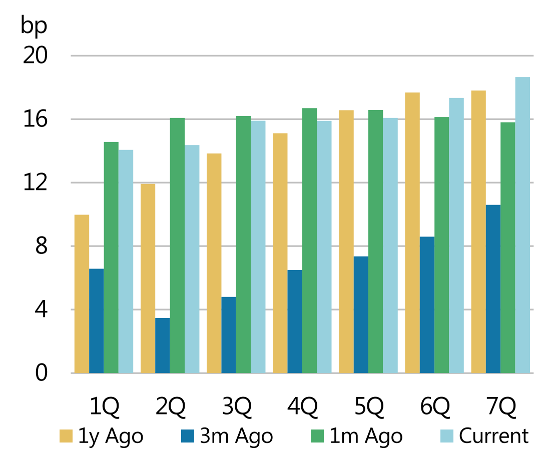
With expectations of the Libor-repo spread so wide over the next two years, we do not believe 2y spreads should be trading at the lows. While spreads may not move immediately to wider levels, the carry investors earn (assuming they can fund at levels near the quoted repo rate) and the roll to wider spreads in shorter tenors make 2y spreads an attractive medium-term trade.

Exhibit 60: 3m Libor - 3m Repo spread



Source: Morgan Stanley Research, Bloomberg

Exhibit 61: Libor-Repo expectations



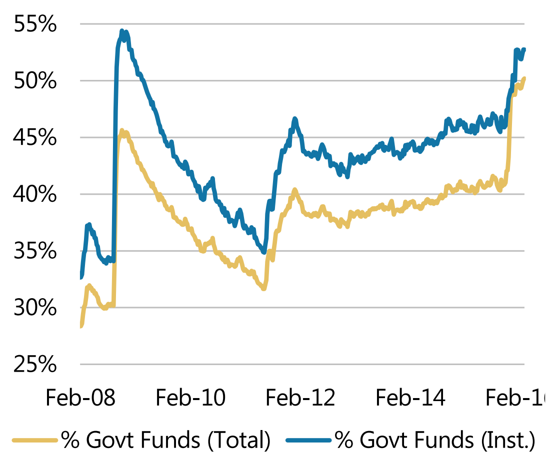
Source: Morgan Stanley Research

Moreover, the spread widener is exposed to two other dynamics that could push spreads wider. The first is money market reform pushing assets out of prime funds and into government funds (see **Exhibit 62**) which should cheapen Libor and richen front-end Treasuries and repo. Some funds have already transitioned (which we believe led to the widening we saw in Libor-repo in December), yet we believe more AUM will transition before new SEC regulations move into place in October.

A second factor potentially leading to wider spreads is a move to cleared dealer-to-client repo, pushing repo rates lower and limiting the potential of further spikes. While there is no set timeline for this, the widener is well positioned for it if some buyside counterparties begin clearing.

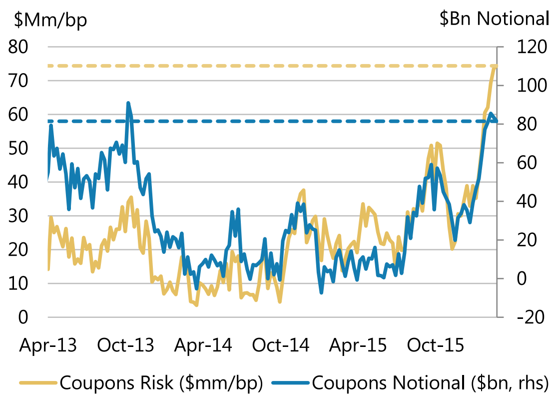
The trade is attractive from a fundamental and carry perspective, and should benefit from money market or repo reform. However, primary dealer Treasury holdings are at a high (see **Exhibit 63**) and further selling of Treasuries may be more difficult for the market to take down (given dealer and commercial bank holdings). Thus we could envision flows causing some tightening in spreads, but overall believe that the further tightening potential in spreads is limited.

Exhibit 62: MMF AUM in gov't vs. prime funds



Source: Morgan Stanley Research, ICI

Exhibit 63: Primary dealer Treasury holdings



Source: Morgan Stanley Research, Bloomberg

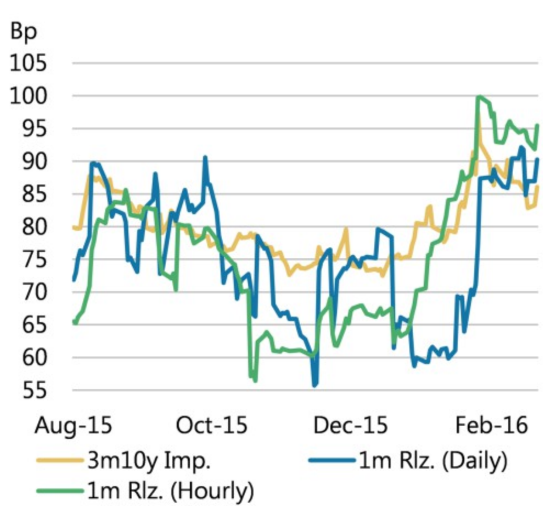
Rehashing our views for volatility

Our views on volatility remain largely the same as laid out in our 2016 Outlook (see **2016 Global Rates Outlook**). We maintain a preference for long gamma in the top right of the grid, particularly in 6-month to 1-year expiries on 10-year (and 30-year) tails. **Exhibit 64** and **Exhibit 65** illustrate a development we have highlighted repeatedly in recent months, namely the divergence between hourly and daily realized vol.

While implieds look fair to recent delivered volatility on longer tails, they actually look somewhat cheap relative to delivered vol computed at higher frequencies. As long as risk, FX and commodity markets remain volatile and global central bank policies remain in flux, we expect US rates markets to remain volatile, particularly with a backdrop of conflicting US data prints creating a hazier picture of underlying economic fundamentals.

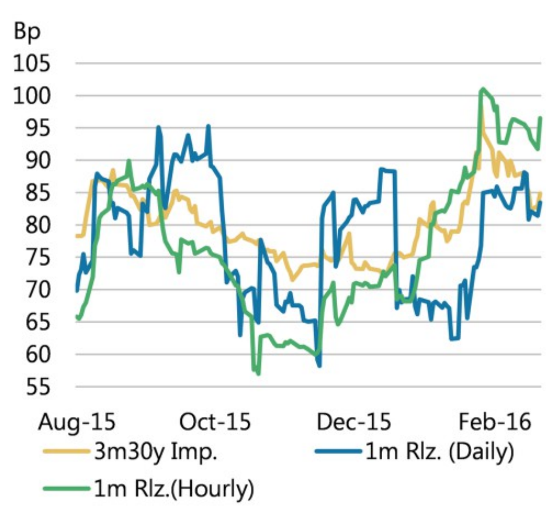
While long delta-hedged swaption straddles in the aforementioned section are the cleanest implementation of this view, we like receiving some long-dated forward swap curves as a proxy long gamma structure. Location on many of these curves – 10y5y/15y5y and 10y10y/20y10y are our preferred flatteners – is extremely favorable, and in our view offers cheap convexity to a big repricing of longer-term rates. While these have flattened off the extreme steeps of two weeks ago (please see **Global Interest Rate Strategist, February 26, 2016**), we still think current entry levels are attractive from a very long-term perspective.

Exhibit 64: 3m10y Vol vs 1m Rlzd. (hourly and daily)



Source:Morgan Stanley Research

Exhibit 65: 3m30y Vol vs 1m Rlzd. (hourly and daily)



Source:Morgan Stanley Research

For similar reasons to those just discussed, and perhaps paradoxically, we continue to expect terminal volatility in the front end to remain constrained for the time being. The Fed has been forced to continue grappling with a quandary: expectations and communication of further rate policy normalization have and continue to tighten financial conditions significantly without any actual policy tightening.

Said another way, there is a greater beta between the lever (changes in the federal funds rate) and the desired effects (financial conditions). This is not inherently problematic, but suggests the Fed must go extremely slowly with policy actions if they want to avoid an excessively strong dollar or an undesirable amount of risk and commodity market volatility.

For this reason, we continue to recommend upper left forward vol structures in struck form, such as the 6m1y1y midcurve/vanilla straddle switch first recommended in mid-January (please see **Global Interest Rate Strategist, January 17, 2016** for details). These structures trade short gamma at inception, an exposure we like, but long vega and take advantage of the steeply inverted term structure of volatility in this sector. We estimate the current 6m1y1y forward vol trades at a nearly 20% discount to the 6m1y1y midcrurve implied vol. If desired, the same notional-neutral switch could be struck above ATMF to a) reduce the gamma short, and b) overlay some short delta exposure.

Japan - Asset swap spreads

Short-end asset swap spreads look too cheap

Since BoJ's negative rates introduction, the front-end ASW have cheapened dramatically. The cheapness of the short-end ASW has been mainly driven by the swaps, with 1) further rate-cut speculation from overseas investors and 2) massive delta covering demand related to the valuation model changes in swaption.

On the other hand, the GC-Libor spread has fallen sharply after the negative rates introduction. As we discussed on our previous report (**Global Interest Rate Strategist, February 26, 2016**), GC repo tend to trade below the IOER level, with foreign banks having strong incentive to offer their surplus money. Moreover, given that the bidding target of the domestic banks to arbitrage with the policy rates appears to be below -0.1 % , the GC repo rate should remain below -0.1%. But 6m Libor has struggled to break 0% clearly as well as the overnight uncollateralized call rate. This distortion provides the attractive rolldown to the short-end ASW (see **Exhibit 66**).

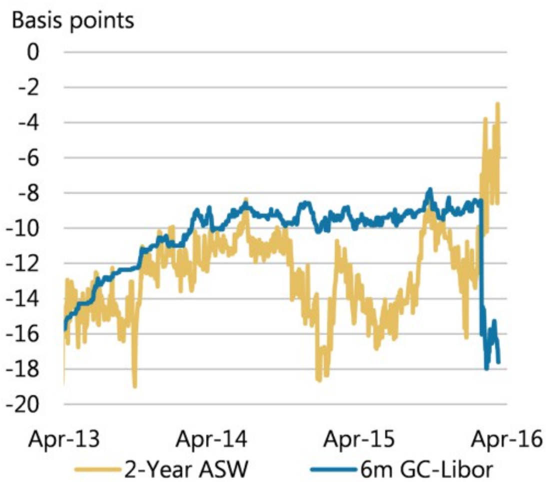
We believe that the short-dated swap is essentially regarded as the non-risk asset as well as short-term JGBs. Swap rates can effectively be considered risk-free rates given that swap agreements with a Credit Support Annex eliminate counterparty risk almost entirely (with trades cleared through central counterparty clearing houses and collateral needing to be pledged).

For a holder of cash, the effective carry income generated by receiving in a swap will be equal to the difference between the swap rate and the LIBOR fixing, plus the interest on excess reserves (IOER) rate. Investing the same amount of cash in a short-term JGB would effectively generate carry income equal to the yield on that bond. If credit risk is the same, then these two returns should be roughly equal.

Short-dated swap rates and short-term JGB yields have basically been trading on a rough par with one another since the launch of QQE back in April 2013 (see **Exhibit 67**). JGBs did richen for a period from 2014 onwards as widening of cross-currency basis swap spreads caused foreign real money investors to buy up JGBs. However, now the 2yr JGB provides relatively attractive carry vs swaps.

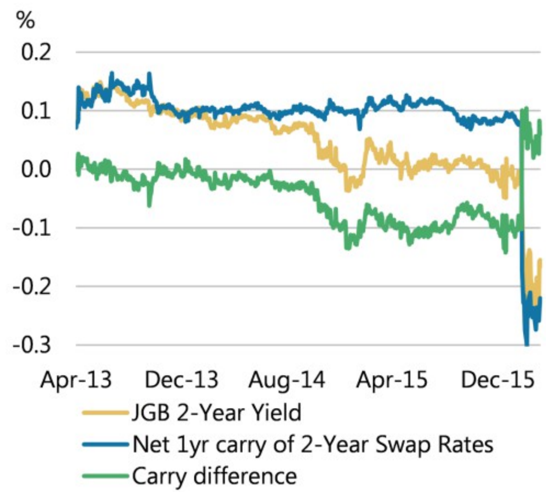
Trade Idea: Buy 2y ASW at -6bp
Target: -15bp, Stop: 0bp.

Exhibit 66: 2y ASW vs. 6m GC-Libor spread



Source: Morgan Stanley Research

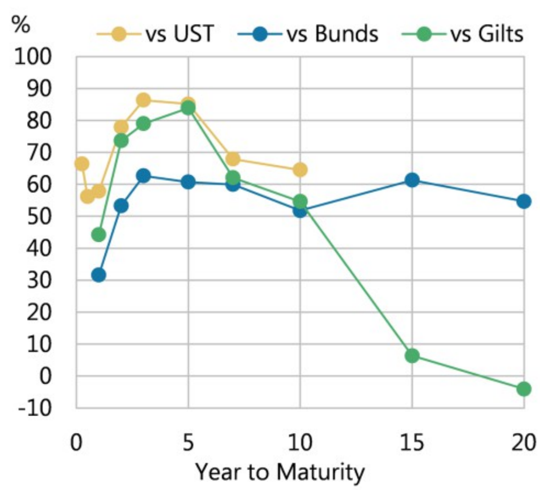
Exhibit 67: Effective carry comparison



Source: Morgan Stanley Research

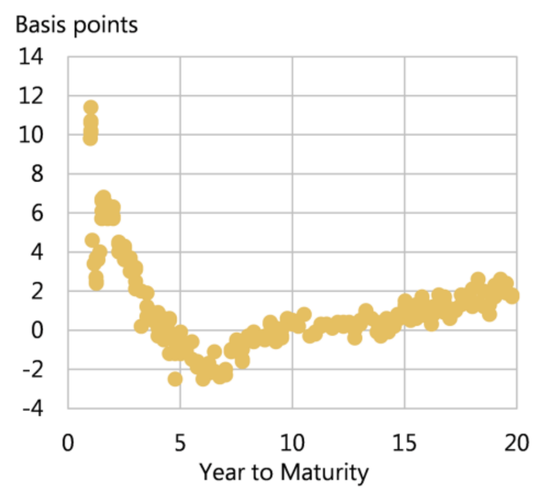
The MoF will reduce the issuance amount of 2yrJGBs from this April and short-end JGBs still seem to be attractive for the non-JPY investors (see **Exhibit 68**). The supply/demand on short-end JGBs will likely remain tight, in our view. Given the attractive carry/rolldown (see **Exhibit 69**) and the tight supply demand in short-end JGBs, we suggest buying 2yr ASW from here. The risk to this trade is that front end asset swaps continue to cheapen, with the most likely catalyst being that foreign market participants position for further rate cuts, and do so via the swaps market as they have been.

Exhibit 68: JGB yield pick-up vs. local sovereign bonds



Source: Morgan Stanley Research

Exhibit 69: ASW 6m carry and rolldown



Source:Morgan Stanley Research

Sovereign Supply

The week ahead

In the US, a new 3-year was issued and , 10- and 30-year were re-opened, all for a total of $56bn. These will settle in the next week when $0.7bn coupon and $32bn redemptions will be paid**. In the euro area,** we expect about €15.5bn of nominal supply coming into the market from Germany, France and Spain. This is against €2.8bn coupons and no redemptions. Average gross nominal supply for the same week of the past three years is €20bn. **In the UK,** there will be no supply or cash coming into the market. **In Japan,** a 20y JGB will be issued for ¥1200bn against ¥5.5bn coupons and ¥3000bn redemptions.

Exhibit 70: Sovereign supply calendar

Monday	Tuesday	Wednesday	Thursday	Friday
14-MAR	**15-MAR**	**16-MAR**	**17-MAR**	**18-MAR**
		GER: DBR 0.5% February 2026 Tap, €4bn JPN: Rinban purchases of 800bn yen of 1-5y and 400bn yen of 5-10y	FRA: Medium Term Auction, €6-7bn OAT 3.5% April 2020, €2.5bn*, OAT 0.25% November 2020, €3bn*, OAT 2.25% October 2022, €1.5bn* FRA: Linker Auction, €1.5-2bn New OATi 0.1% September 2021 SPA: SPGB Auction Tap, €4-5bn* SPGB 0.25% January 2019, €1.5bn*; SPGB 1.95% 2026, €2bn* and SPGB 5.75% 2032, €1bn* US: 10-Year TIPS Reopening, $12bn JPN: 20y JGB Auction, ¥1200bn	NETH: Announcement of coupon of the new 10y DSL July 2026 JPN: Rinban purchases of 800bn yen of 1-5y and 380bn yen of 10y+
21-MAR	**22-MAR**	**23-MAR**	**24-MAR**	**25-MAR**
BEL: OLO Auction, €2.5bn* ITA: CTZ and BTPei Announcement	NETH: New 10y DSL July 2026 via DDA, €4-6bn JPN: Rinban purchases of 800bn yen of 1-5y and 400bn yen of 5-10y	GER: DBR 2.5% August 2046 Tap, €1bn ITA: BTP Auction Announcement US: 2-Year FRN Re-opening, $13bn* JPN: Auction for Enhanced Liquidity, ¥300bn*	ITA: CTZ Auction, €2bn* ITA: BTPei Auction, €1bn*	JPN: 2-Year JGB, ¥2500bn*
28-MAR	**29-MAR**	**30-MAR**	**31-MAR**	**1-APR**
US: New 2-year UST, $26bn* JPN: Rinban purchases of 800bn yen of 1-5y and 380bn yen of 10y+	US: New 5-year UST, $34bn*	GER: OBL April 2021 Tap, €4bn US: New 7-year UST, $28bn* JPN: Rinban purchases of 400bn yen of 5-10y and 380bn yen of 10y+		
4-APR	**5-APR**	**6-APR**	**7-APR**	**8-APR**
	AUT: RAGB Auction, €1.21bn* JPN: 10-Year JGB Auction, ¥2400bn*	GER: BKO March 2018 Tap, €4bn	FRA: Long Term OAT Auction, €8bn* SPA: SPGB Auction, €4-4.5bn* JPN: Auction for Enhanced Liquidity, ¥300bn*	ITA: BTP Announcement

Source: Morgan Stanley Research, Treasuries

* Morgan Stanley estimate

Event Calendar

Exhibit 71: Risk event calendar

Date (GMT)	Time (GMT)	Date (ET)	Time (ET)	Ccy	Event	Ref. Period
12-Mar	5:30	12-Mar	0:30	CNY	Fixed Assets Ex Rural YTD (YoY)	Feb
13-Mar	1:00		21:00	CNY	PBOC Governor Xiaochuan spks (Beijing)	
	21:30	13-Mar	17:30	NZD	Performance Services Index	Feb
	23:50		19:50	JPY	Machine Orders (MoM)	Jan
14-Mar	10:00	14-Mar	6:00	EUR	Industrial Production (MoM)	Jan
	22:30		18:30	AUD	Consumer Confidence	
15-Mar	0:30		20:30	AUD	RBA Minutes	
	4:30		0:30	JPY	Industrial Production (MoM)	Jan F
	4:30		0:30	JPY	Tertiary Industry Index (MoM)	Jan
	7:45	15-Mar	3:45	EUR	French CPI (YoY)	Feb F
	9:00		5:00	EUR	Italian CPI (YoY)	Feb F
	12:30		8:30	USD	Retail Sales Advance (MoM)	Feb
	12:30		8:30	USD	Retail Sales Ex Auto (MoM)	Feb
	12:30		8:30	USD	PPI (YoY)	Feb
	12:30		8:30	USD	Empire Manufacturing	Mar
	13:00		9:00	CAD	Existing Home Sales (MoM)	Feb
	14:00		10:00	USD	NAHB Housing Market Index	Mar
	14:00		10:00	USD	Business Inventories	Jan
	20:00		16:00	USD	Total Net TIC Flows	Jan
	21:45		17:45	NZD	Current Account Balance	4Q
	23:30		19:30	AUD	Westpac Leading Index (MoM)	Feb
	N/A		N/A	JPY	BoJ Policy Rate	
	N/A		N/A	NZD	Global Dairy Trade Announces Milk Auction Results	
16-Mar	6:00	16-Mar	2:00	JPY	Machine Tool Orders (YoY)	Feb F
	9:30		5:30	GBP	Jobless Claims Change	Feb
	9:30		5:30	GBP	Average Weekly Earnings (3M/Y) (incl. bonuses)	Jan
	9:30		5:30	GBP	Average weekly wages (ex bonuses) (3m Av, YoY)	Jan
	9:30		5:30	GBP	ILO Unemployment Rate 3Mths	Jan
	9:30		5:30	GBP	Employment Change 3M/3M	Jan
	11:00		7:00	USD	MBA Mortgage Applications	
	12:30		8:30	CAD	Manufacturing Sales (MoM)	Jan
	12:30		8:30	CAD	Int'l Securities Transactions	Jan
	12:30		8:30	GBP	Osborne Speech on Budget	
	12:30		8:30	USD	Housing Starts	Feb
	12:30		8:30	USD	Housing Starts (MoM)	Feb
	12:30		8:30	USD	CPI (YoY)	Feb
	12:30		8:30	USD	CPI Ex Food and Energy (YoY)	Feb
	13:15		9:15	USD	Industrial Production (MoM)	Feb
	13:15		9:15	USD	Capacity Utilization	Feb
	13:15		9:15	USD	Manufacturing Production (MoM)	Feb
	18:00		14:00	USD	FOMC Rate Decision (Lower Bound)	
	18:00		14:00	USD	FOMC Rate Decision (Upper Bound)	
	21:45		17:45	NZD	GDP (QoQ)	4Q
	22:05		18:05	AUD	RBA's Debelle spks (Sydney)	
	23:50		19:50	JPY	Trade Balance	Feb
	23:50		19:50	JPY	Exports (YoY)	Feb
17-Mar	0:30		20:30	AUD	Employment Change	Feb
	0:30		20:30	AUD	Unemployment Rate	Feb
	6:30	17-Mar	2:30	JPY	BoJ's Kuroda spks	
	9:00		5:00	EUR	Italian Trade Balance	Jan
	10:00		6:00	EUR	Trade Balance	Jan
	10:00		6:00	EUR	Construction Output (MoM)	Jan
	10:00		6:00	EUR	CPI (YoY)	Feb F
	10:00		6:00	EUR	CPI Core (YoY)	Feb F
	12:00		8:00	GBP	BoE Rates Decision	
	12:30		8:30	CAD	Wholesale Trade Sales (MoM)	Jan
	12:30		8:30	USD	Current Account Balance	4Q
	12:30		8:30	USD	Philadelphia Fed Business Outlook	Mar
	12:30		8:30	USD	Initial Jobless Claims	
	14:00		10:00	USD	JOLTs Job Openings	Jan
	14:00		10:00	USD	Leading Index	Feb
	22:30		18:30	AUD	RBA's Ellis spks (Sydney)	
18-Mar	0:00		20:00	NZD	ANZ Consumer Confidence Index	Mar

	1:30		21:30	CNY	China February Property Prices	
	7:45	18-Mar	3:45	EUR	French Wages (QoQ)	4Q F
	12:30		8:30	CAD	Retail Sales (MoM)	Jan
	12:30		8:30	CAD	CPI (YoY)	Feb
	12:30		8:30	CAD	Core CPI (YoY)	Feb
	13:00		9:00	USD	Fed's Dudley (voter) spks (New York, NY)	
	14:00		10:00	USD	Univ. of Michigan Confidence	Mar P
	15:00		11:00	USD	Fed's Rosengren (voter) spks (New York, NY)	
	N/A		N/A	JPY	Nationwide Dept Sales YoY	Feb
20-Mar	21:00	20-Mar	17:00	NZD	Westpac Consumer Confidence Index	1Q
21-Mar	0:01		20:01	GBP	Rightmove House Prices (MoM)	Mar
	1:45		21:45	CNY	MNI March Business Indicator	
	2:00		22:00	NZD	Credit Card Spending (MoM)	Feb
	9:00	21-Mar	5:00	EUR	Euro-area Current Account	Jan
	9:00		5:00	EUR	ECB's Liikanen spks (Helsinki)	
	9:30		5:30	EUR	Italian Current Account Balance	Jan
	14:00		10:00	USD	Existing Home Sales	Feb
	16:30		12:30	USD	Fed's Lockhart (non-voter) spks (Savannah, GA)	
	22:30		18:30	AUD	Consumer Confidence	
	N/A		N/A	EUR	Spanish Trade Balance	Jan
22-Mar	0:30		20:30	AUD	House Price Index QoQ	4Q
	0:30		20:30	USD	Fed's Bullard (voter) spks (St. Louis, MO)	
	0:45		20:45	AUD	RBA's Edey spks (Sydney)	
	4:30		0:30	JPY	All Industry Activity Index (MoM)	Jan
	5:30	22-Mar	1:30	AUD	RBA's Stevens spks (Sydney)	
	9:00		5:00	EUR	IFO Business Climate	Mar
	9:00		5:00	EUR	IFO Current Assessment	Mar
	9:00		5:00	EUR	IFO Expectations	Mar
	9:30		5:30	GBP	CPI (YoY)	Feb
	9:30		5:30	GBP	RPI (YoY)	Feb
	9:30		5:30	GBP	PPI Output NSA (YoY)	Feb
	9:30		5:30	GBP	ONS House Price (YoY)	Jan
	9:30		5:30	GBP	PSNB ex Interventions	Feb
	10:00		6:00	EUR	German ZEW Survey Current Situation	Mar
	10:00		6:00	EUR	German ZEW Survey Expectations	Mar
	10:00		6:00	EUR	Eurozone ZEW Survey Expectations	Mar
	13:00		9:00	USD	House Price Index (MoM)	Jan
	14:00		10:00	USD	Richmond Fed Manufacturing Index	Mar
	17:30		13:30	USD	Fed's Evans (non-voter) (Chicago, IL)	
	20:00		16:00	CAD	Canada Federal Budget	
	23:00		19:00	USD	Fed's Harker (non-voter) spks (New York, NY)	
23-Mar	1:30		21:30	JPY	BoJ's Funo spks (Kobe)	
	14:00	23-Mar	10:00	USD	New Home Sales	Feb
	15:00		11:00	EUR	Consumer Confidence	Mar A
	21:45		17:45	NZD	Trade Balance	Feb
24-Mar	7:00	24-Mar	3:00	EUR	German GfK Consumer Confidence	Apr
	7:45		3:45	EUR	French Business Confidence	Mar
	7:45		3:45	EUR	French Manufacturing Confidence	Mar
	8:00		4:00	EUR	French PMI Manufacturing	Mar P
	8:00		4:00	EUR	French PMI Services	Mar P
	8:30		4:30	EUR	German PMI Manufacturing	Mar P
	8:30		4:30	EUR	German PMI Services	Mar P
	9:00		5:00	EUR	PMI Manufacturing	Mar P
	9:00		5:00	EUR	PMI Services	Mar P
	9:00		5:00	EUR	Italian Industrial Orders (MoM)	Jan
	9:30		5:30	GBP	Retail Sales (MoM)	Feb
	10:00		6:00	EUR	Italian Retail Sales (MoM)	Jan
	12:15		8:15	USD	Fed's Bullard (voter) spks (New York, NY)	
	12:30		8:30	USD	Initial Jobless Claims	
	12:30		8:30	USD	Durable Goods Orders	Feb P
	15:00		11:00	USD	Kansas City Fed Manufacturing Activity	Mar
	17:00		13:00	EUR	French Jobseekers Net Change	Feb
	23:30		19:30	JPY	CPI (YoY)	Feb
25-Mar	5:00	25-Mar	1:00	JPY	Natl CPI Ex Fresh Food, Energy YoY	Feb
	5:00		1:00	JPY	Leading Index CI	Jan F
	5:00		1:00	JPY	Coincident Index	Jan F
	7:45		3:45	EUR	French Consumer Confidence	Mar
	7:45		3:45	EUR	French GDP (QoQ)	4Q F
	12:30		8:30	USD	GDP (QoQ)	4Q T

Source: Morgan Stanley Research, Bloomberg

In Case You Missed It

Below you will find a list of our recent publications:

European Economics & Strategy: ECB Watch: Whatever It Takes - Take II

10 Mar 2016

Going well beyond market expectations, the ECB announced a comprehensive easing package today. In addition, it is still ready to do more if needed and still sees downside risks to the outlook.

US Econmics & Rates Strategy: FOMC Preview: A Downward Tilt

9 Mar 2016

At the conclusion of the March meeting, we think policymakers will lower expectations for growth and inflation, as well as lower the policy path, all the while maintaining a tightening bias. Market probabilities for a June hike are likely to remain in a tight band around 50%.

European Economics & Strategy: What Brexit Would Mean for Europe

7 Mar 2016

The concessions that the UK has negotiated with the EU could complicate extra EU integration even if the UK votes to stay in. Brexit would likely not just hit the UK, but also Europe. We explore effects for different break-up scenarios.

Global Interest Rate Strategist: Too Negative Isn't Positive

4 Mar 2016

We remain neutral duration across sovereign bond markets, and most BMIs now agree. The global growth scare may have passed, but upcoming central bank meetings present risks to this uncertain and unstable equilibrium. We wait to see whether central banks get too negative or go too negative.

European Economics & Strategy: ECB Preview: More Measures in March

4 Mar 2016

At the March meeting, we expect a further cut in the depo rate by 10 bp and additional asset purchases of €20 bn p.m. We would not rule out a tiered depo system, amended TLTROs or talk about buying credit.

Global Interest Rate Strategist: Risky Business

29 Feb 2016

We suggest investors remain neutral duration across sovereign bond markets, though our BMIs remain long. Upcoming central bank meetings present risks that, given low to negative term premiums across most yield curves, are difficult to protect against in the event of surprises.

European Interest Rate Strategy Brief: Short the EUR Vol Wedge via Receivers

24 Feb 2016

Euro cap/floor vol relative to swaptions (the 'vol wedge') has richened to multi-year highs in the top left. We believe this reflects the general move higher in implieds, and strong demand for low strikes - in particular for floors.

US Interest Rate Strategy Brief: Thoughts on Macro, Vol, and Spreads

19 Feb 2016

Recent Fedspeak suggests further declines in inflation expectations will lead to a more dovish stance at the March FOMC meeting. We discuss the divergence between daily and intraday realized vol, and recommend fading the richness of USM6 futures with conditional bear invoice spread tighteners.

Forecasts

Exhibit 72: Morgan Stanley sovereign 10-year yield bull, base, and bear case forecasts

	Bull					Base					Bear				
	MAR 10	**2Q16**	**3Q16**	**4Q16**	**1Q17**	**MAR 10**	**2Q16**	**3Q16**	**4Q16**	**1Q17**	**MAR 10**	**2Q16**	**3Q16**	**4Q16**	**1Q17**
US	1.93	1.45	1.35	1.25	1.10	1.93	1.55	1.45	1.75	1.85	1.93	2.10	2.15	2.50	2.75
Germany	0.31	0.05	-0.20	-0.10	-0.05	0.31	0.15	0.10	0.55	0.60	0.30	0.50	0.90	1.10	1.40
Japan	-0.02	-0.20	-0.28	-0.33	-0.35	-0.02	-0.15	-0.23	-0.20	-0.18	-0.02	0.08	0.10	0.15	0.20
UK	1.54	1.10	0.90	1.00	1.00	1.54	1.35	1.25	1.50	1.70	1.54	1.80	2.10	2.50	2.75
Austria*	24	20	15	10	8	24	25	28	28	30	24	30	35	40	45
Netherlands*	11	8	6	5	5	11	10	12	12	15	11	15	20	30	35
France*	38	32	27	20	17	38	35	37	40	42	38	45	50	55	60
Belgium*	41	35	30	25	25	41	38	45	50	52	41	50	60	65	70
Ireland*	64	60	55	50	50	64	65	70	75	80	64	80	95	120	140
Spain*	128	100	95	80	75	128	120	135	140	150	128	170	190	210	240
Italy*	116	90	85	75	70	116	100	115	120	125	116	155	170	190	210
Portugal*	283	250	220	200	180	283	260	280	300	315	283	300	350	400	470

Source: Morgan Stanley Research, Last updated November 30, 2015

* Yield spread to German Bunds

Exhibit 73: Morgan Stanley sovereign 2-year, 5-year, 10-year yield base case forecasts

	2Y					5Y					10Y				
	MAR 10	**2Q16**	**3Q16**	**4Q16**	**1Q17**	**MAR 10**	**2Q16**	**3Q16**	**4Q16**	**1Q17**	**MAR 10**	**2Q16**	**3Q16**	**4Q16**	**1Q17**
US	0.93	0.65	0.60	0.95	1.10	1.45	1.10	1.05	1.35	1.50	1.93	1.55	1.45	1.75	1.85
Germany	-0.45	-0.50	-0.55	-0.55	-0.50	-0.24	-0.35	-0.35	-0.25	-0.20	0.31	0.15	0.10	0.55	0.60
Japan	-0.17	-0.40	-0.45	-0.43	-0.40	-0.16	-0.35	-0.40	-0.38	-0.35	-0.02	-0.15	-0.23	-0.20	-0.18
UK	0.53	0.40	0.40	0.80	1.10	0.96	0.65	0.60	1.10	1.40	1.54	1.35	1.25	1.50	1.70
Austria*	7	6	8	8	8	4	6	6	6	8	24	25	28	28	30
Netherlands*	2	3	3	3	3	8	8	9	10	11	11	10	12	12	15
France*	7	7	9	10	10	13	12	15	15	18	38	35	37	40	42
Belgium*	6	6	7	9	9	5	7	7	8	9	41	38	45	50	52
Ireland*	18	18	20	25	25	33	30	35	40	45	64	65	70	75	80
Spain*	47	40	45	60	70	71	68	80	90	95	128	120	135	140	150
Italy*	41	35	38	40	50	62	55	65	70	75	116	100	115	120	125
Portugal*	113	100	120	140	155	227	210	230	235	260	283	260	280	300	315

Source: Morgan Stanley Research, Last updated November 30, 2015

* Yield spread to German Bunds

Sovereign Ratings

Exhibit 74: Agency sovereign bond ratings as of March 11, 2016

		Aaa/ AAA	Aa1/ AA+	Aa2/ AA	Aa3/ AA-	A1/ A+	A2/ A	A3/ A-	Baa1/ BBB+	Baa2/ BBB	Baa3/ BBB-	Ba1/ BB+	Ba2/ BB	Ba3/ BB-	B1/ B+	B2/ B	B3/ B-	Below B3/ B-
US	Moody	STA																
	S&P		STA															
	Fitch	STA																
Japan	Moody					STA												
	S&P					STA												
	Fitch						STA											
UK	Moody		STA															
	S&P	NEG																
	Fitch		STA															
Germany	Moody	STA																
	S&P	STA																
	Fitch	STA																
France	Moody			STA														
	S&P			NEG														
	Fitch			STA														
Austria	Moody	NEG																
	S&P		STA															
	Fitch		STA															
Netherlands	Moody	STA																
	S&P		POS															
	Fitch	STA																
Finland	Moody	NEG																
	S&P		STA															
	Fitch	NEG																
Belgium	Moody				STA													
	S&P			STA														
	Fitch			NEG														
Spain	Moody									POS								
	S&P								STA									
	Fitch								STA									
Italy	Moody									STA								
	S&P									STA								
	Fitch								STA									
Ireland	Moody								POS									
	S&P					STA												
	Fitch							POS										
Portugal	Moody											STA						
	S&P											STA						
	Fitch											STA						
Greece	Moody																	STA
	S&P																	STA
	Fitch																	

Source: Morgan Stanley Research, Moody's, Standard and Poor, Fitch
STA: Outlook Stable
NEG: Outlook Negative
DEV: Outlook Developing
OW-: On Watch Negative
POS: Outlook Positive
SD: Selective Default

For a 12-month history of the performance of our trade ideas, see our **Historical Trade Table**.

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Overweight/Buy	**1216**	**36%**	**320**	**44%**	**26%**
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Not-Rated/Hold	**69**	**2%**	**3**	**0%**	**4%**
Underweight/Sell	**671**	**20%**	**89**	**12%**	**13%**
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