EVERCORE ISI

Global Policy & Central Banking Strategy

January 26, 2018

Krishna Guha
202-872-5260
Krishna.Guha@evercoreisi.com

Ernie Tedeschi
202-872-5262
Ernie.Tedeschi@evercoreisi.com

GLOBAL POLICY, RATES AND THE DOLLAR

Carry will help dollar when momentum abates; medium term weakness driven by macro-policy themes including "Global Goldilocks"

Summary: Extreme dollar weakness year to date is on the face of it puzzling given strong US growth, tax cuts, better news on inflation, a repricing of Fed expectations from two to three hikes this year and a widening of yield differentials in favor of the currency. And yet not even President Trump's surprise change of tone on the dollar Thursday could deliver a durable rebound. Part of this is momentum, and when the trade finally pauses for breath the dollar may claw back some ground, as dollar longs have been driven out and the carry costs of holding short positions are high. Market expectations of early policy transitions at the ECB and BoJ have outrun internal debates that are wary of too much FX strength too fast, while the Fed will gradually shift more hawkish on easy financial conditions and better data, and we think will end up delivering four hikes in 2018. But we do not think this is all momentum trading or gaming of near-term central bank plans: as the dismissive response to Draghi and Kuroda in FX markets this week indicates, there are deeper factors at work. Our note identifies five macro-policy themes linked to dollar weakness: a Trump FX policy / political economy risk premium; the perception that US tax cuts will widen the trade deficit but not boost potential growth; an extreme Global Goldilocks view that the business cycle will be vigorous enough and last long enough for the ECB and BoJ to normalize without generating too much inflation even in the US; skepticism that the neutral interest rate will rise much more in the US than elsewhere; and a sense that central bank reaction functions are diverging again as the Fed toys with dovish inflation overshooting. A sustained recovery in the dollar will likely require one or more of these views to be refuted and we analyze each of them in turn. We note in passing that the Global Goldilocks theme is in our view why extreme dollar weakness is consistent with extreme strength in risk assets driven by similar beliefs in robust non-inflationary growth. In brief:

- Since the start of the year the dollar has fallen 1.9 per cent on a trade-weighted basis, 3.7 per cent against the euro and 3.8 per cent against the yen even as US growth momentum has accelerated
- It is not surprising that the dollar is weak against EM currencies in a strong global growth / risk-on environment – the puzzle is on the DM crosses (euro, yen, also sterling though there are unique Brexit factors at work there)
- This has happened at a time when both shorter term and longer term rate differentials have widened in favor of the dollar
- Part of the story is likely that non rate-sensitive capital flows (listed and unlisted equity, real estate, intra-company flows) to the eurozone and perhaps Japan are picking up on strong growth after years of cumulative under allocation
- The market is appears highly sensitive to Trump administration signals on the dollar, while there is some evidence of a larger Trump risk premium or at a minimum a relative improvement in eurozone and Japan political risk v the US

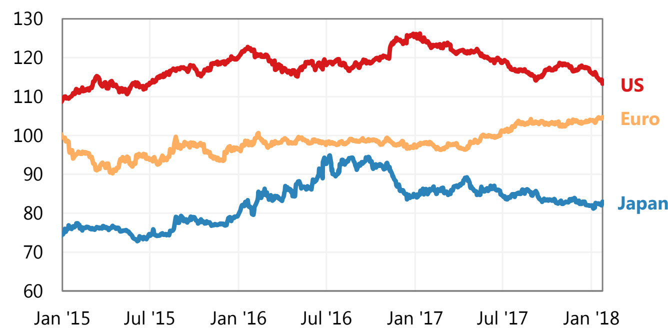
- The Mnuchin / Trump reversal suggests US administration policy is not settled, with unresolved tension between an inclination to favor short term dollar depreciation for trade purposes – which market participants fear may de facto include putting pressure on central banks – and a desire not to project US weakness on the global stage
- US tax cuts have not had the textbook effect of pushing up the currency, in part because the effects were discounted in advance and in part because the market does not see a very large impact on inflation and rates – consistent with the Fed's own projections in December
- Moreover tax cuts are not widely seen as leading to an investment boom that will catalyze a step-up in productivity – such that FX markets are tracking 2005-late 2007 dynamics (decrease in net national savings, wider current account deficit) not 1998-2000 dynamics (increase in US potential output and desire to invest in the US); this assessment could yet prove wrong
- As confidence grows in a long and vigorous global expansion that may in time allow all central banks to normalize at least to new normal levels of rates, the gravitational pull of purchasing power parity increases, with the dollar being pulled down towards its longer-run fundamental equilibrium value
- The distance to travel on rates back to a neutral rate-setting is plausibly much greater in the case of the ECB and BoJ, with much less discounted by markets already than in the case of the Fed
- Indeed if the Fed only has to return to a longer-run neutral rate between +50bp and +100bp real, then by the end of 2018 (assuming only the three hikes this year discounted in markets), it might only have 25bp to 100bp of hiking left, a material part of which is already discounted
- By contrast, if the ECB has to return to a longer-run neutral rate between zero real and +50bp real, then by the end of 2018 (assuming no hike this year) it could in theory have as much as 230bp to 280bp of hiking ahead to return to neutral, albeit over many years, of which only around 100bp is discounted
- In practice this would depend on the recovery in inflation and reinvestment strategy, such that with inflation moving slowly back towards target and QE roll-off kicking in a few years from now, the ECB might have more like 160bp of distance to travel by end 2021
- It is very hard to estimate the distance to longer-run neutral for the BoJ but at the higher end of the range it could also have a very long way to go, with virtually nothing discounted
- Estimates of the neutral rate in the US could rise such that the Fed could end up with further to go to neutral, but there seems to be a strong global common component in the neutral rate, such that if neutral rises in the US it may well rise elsewhere too
- The neutral rate in the US could rise relative to the neutral rate in other economies if tax cuts did generate a rise in US-specific rise in productivity or if every extended dollar weakness means financial conditions continue to ease in the US but not elsewhere; in that sense there is ultimately a feedback loop that operates as a partial brake on the dollar
- Further, while the Fed may have much less distance to travel to neutral, there is no reason why the rate cycle has to stop at neutral, and if too much inflationary pressure emerges in the more cyclically advanced US, the Fed could end up hiking more than the others because it has to go past neutral and they do not
- This is why the sense that a gap is opening up again in central bank reaction functions is so important

- Market participants see the Fed as edging towards a more symmetric approach to its inflation target with tolerance of mild inflation overshooting – a perception fueled by a crude but not wholly unreasonable read of the debate about a possible shift to a price level target framework
- Meanwhile the ECB and BoJ are both toying with policy normalization before they can even confidently predict that inflation will return to target in a timely manner, fueling the belief that they do not in truth have symmetric targets and/or are being driven to normalize by concern for the costs of their tools (QE, yield curve control, negative rates)
- We think this is part of the reason why, while inflation breakevens have risen everywhere, they have risen more in the US than in the eurozone and Japan, favoring a softer dollar; the ECB and BoJ may need to walk the talk on a more symmetric approach themselves if they wish to mitigate this source of euro / yen strength

EXTREME DOLLAR WEAKNESS AT A TIME OF STRONG US DATA AND RISING US RATES

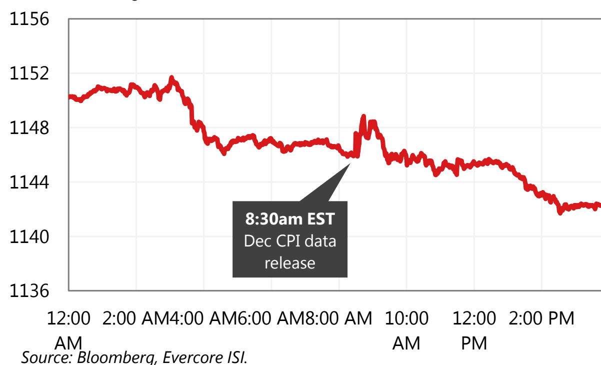
The across-the-board weakness in the dollar since the start of the year is striking by any standard. The US currency has fallen 3.7 per cent against the euro, 3.8 per cent against the yen and 1.9 per cent on a trade-weighted basis since December 31 in spite of ongoing better than expected economic data, reflected in strong surprise indices and some better inflation news. Narrow event windows indicate that the dollar is unable to find durable support even when the data runs hot – for instance, the December CPI release on January 12. This phase of extreme weakness accelerates the declines that resumed from mid-October after the dollar stabilized in the Fall. It came even as the market has repriced US rates higher, repricing from around two to roughly three Fed hikes this year, and from 241bp to 265bp on the ten year yield.

Trade-weighted major currencies
Index, 2010 = 100



Source: JP Morgan, Evercore ISI.

Trade-weighted dollar (BBDXY) on January 12 intraday

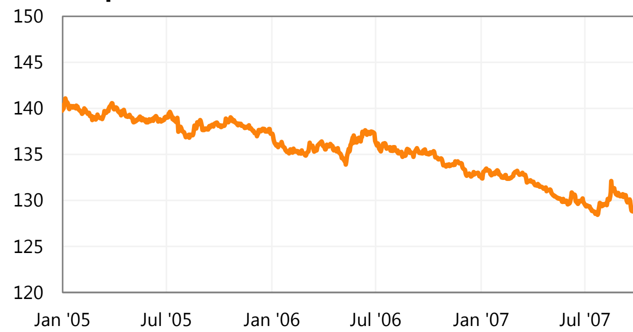


Source: Bloomberg, Evercore ISI.

NATURAL FOR THE DOLLAR TO TRADE WEAK V EM AT A TIME OF STRONG GLOBAL GROWTH AND STRONG RISK-ON SENTIMENT

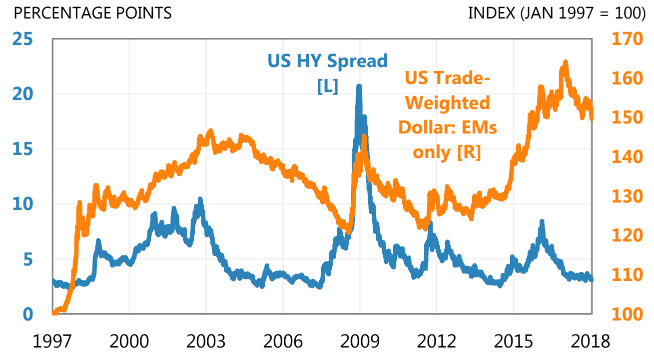
We distinguish between dollar weakness against EM currencies, and dollar weakness against DM currencies – principally the euro and the yen, but also sterling, which has recovered smartly from its post-Brexit lows against the dollar in recent weeks. That the dollar is weak against EM currencies at a time of strong global growth and ultra-bullish risk on sentiment is hardly surprising – this is consistent with a broader risk-on / beta trade across assets such as high yield and equities. The period 2005 to the start of the first phase of the financial crisis in September 2007 demonstrated that in such a context the dollar can be weak on the EM crosses even if the Fed is hiking and expectations as to the extent of those hikes are revised higher over time, as was the case in the mid-2000s and may be the case today.

EM Portion of US Trade-Weighted Dollar, 2005-Sept 2007



Source: FRB, Evercore ISI.

EM Dollar versus US High-Yield Spread



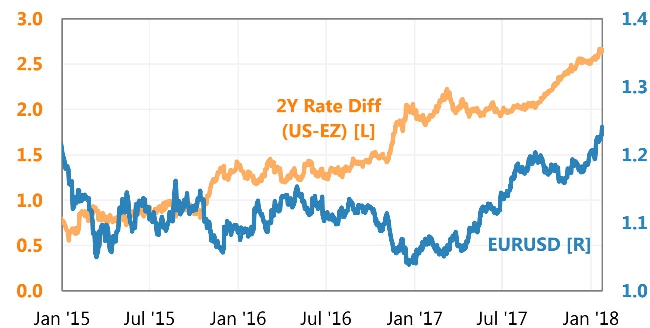
Source: FRB, BoA, Evercore ISI.

PUZZLE IS WHY DOLLAR IS SO WEAK V EURO AND YEN WHEN RATE DIFFERENTIALS HAVE WIDENED IN ITS FAVOR

The puzzle is on the DM crosses – why the dollar should also be so weak against safe haven currencies such as the euro and the yen, at a time when nominal rate differentials have widened in its favor, both at the two year and the ten year horizons, from levels that in many models already favored the dollar by end 2017. This does not appear to be driven by other shifts in expectations around policy captured in the evolution of yield curves, based on shadow rate measures such as Wu Xia and Krippner. We note that from 2005 – September 2007 the dollar first strengthened against the euro before weakening again, while strengthening consistently against the yen.

EURUSD versus 2Y rate differential

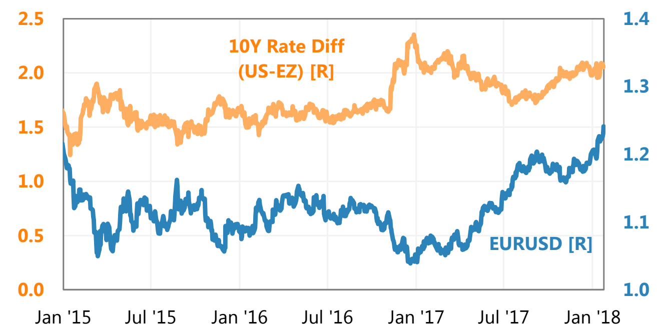
USD per EUR versus US-Germany 2Y spread



Source: WSJ, FRB, Evercore ISI.

EURUSD versus 10Y rate differential

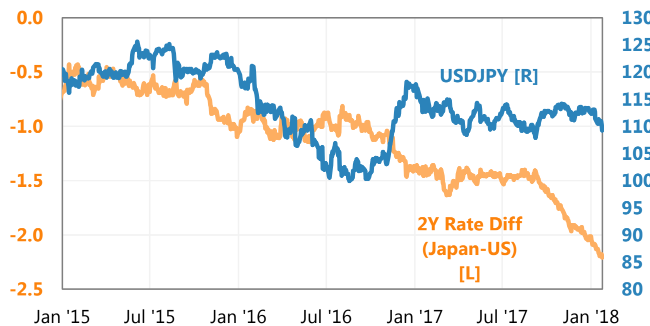
USD per EUR versus US-Germany 10Y spread



Source: WSJ, FRB, Evercore ISI.

USDJPY versus 2Y rate differential

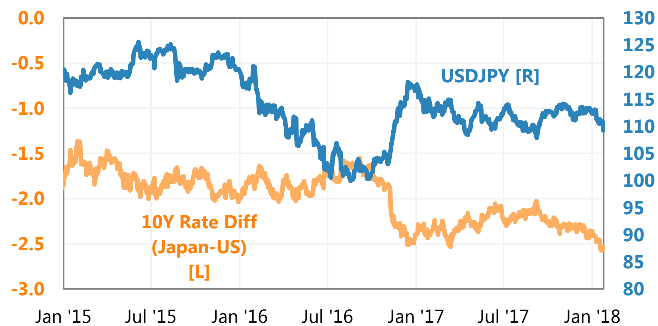
JPY per USD versus Japan-US 2Y spread



Source: WSJ, FRB, Evercore ISI.

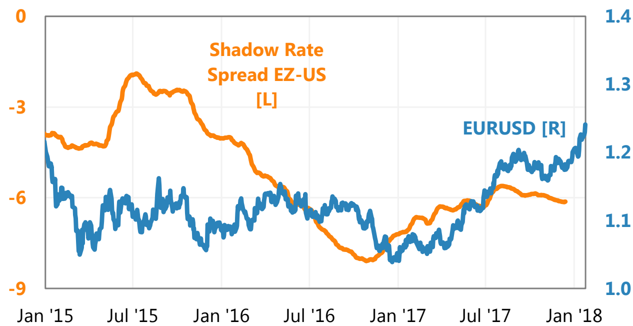
USDJPY versus 10Y rate differential

JPY per USD versus Japan-US 10Y spread



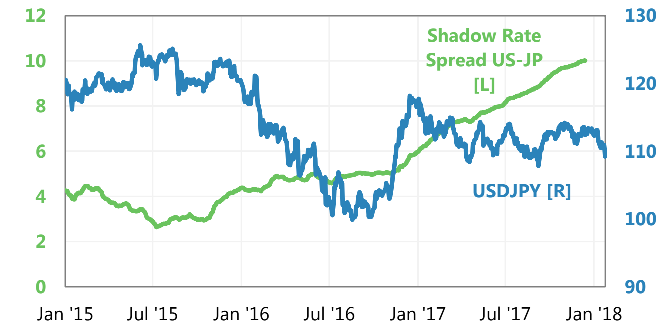
Source: WSJ, FRB, Evercore ISI.

EURUSD versus shadow rate differences
USD per EUR versus EZ-US shadow rate spread (pp)



Source: WSJ, RBNZ, Evercore ISI.

USDJPY versus shadow rate differences
JPY per USD versus US-JP shadow rate spread (pp)



Source: WSJ, RBNZ, Evercore ISI.

PHASE OF EXTREME WEAKNESS COULD END QUICKLY IF MOMENTUM STALLS BECAUSE OF THE COST OF CARRY, EVEN IF MEDIUM TERM TREND IS LOWER

The fact that rate differentials are so wide means that the phase of extreme dollar weakness could end abruptly if downward momentum stalls, possibly with some partial recovery. This is because the most dollar longs have likely been driven out by now, and the cost of carry for traders holding short dollar positions for any extended period of time is substantial (short the higher yielding currency, long the negative yielding currency) – though more than made up for if the momentum remains intact, and capable of being offset by a bet on yield differentials narrowing that has positive carry[1] (short the low yield German or Japanese bond, long the higher yield US bond).

NON-RATE SENSITIVE CAPITAL FLOWS TO EZ, JP MAY BE PICKING UP ON STRONG GROWTH AFTER YEARS OF UNDERALLOCATION

Part of the answer to why the dollar is so weak relative to rate differentials may lie in the hypothesis that investors around the world are underinvested in equity, real estate and perhaps corporate debt in the eurozone and Japan after years of cumulative under allocation relative to their weight in the global economy – and are now seeking to play catch-up as solid growth becomes firmly entrenched in those economies. Apart from risk-free German bunds, the eurozone was for many classes of investors borderline uninvestable from the onset of the double-dip recession and euro crisis in 2009-12 to the Le Pen election defeat in May 2017. Foreign investors did buy into Japan around the launch of Abenomics and QQE, but gave up not long after. We will test this hypothesis against incoming capital flow data, recognizing the limitations of this data.

CLEAR SENSITIVITY TO ADMINISTRATION SIGNALS ON THE DOLLAR – WITH REVERSAL SHOWING UNDERLYING POLICY NOT RESOLVED

The past week has offered a stark reminder that central bankers are not the only sheriffs in town, with a roller-coaster ride in FX after Treasury Secretary Mnuchin appeared to embrace dollar weakness Wednesday, breaking with a quarter century of US official support for a strong dollar, only for President Trump to tell CNBC a day later that Mnuchin had been misunderstood and the administration favors a strong dollar. The reversal reflects unresolved tension in Trump

[1] A point highlighted by our friend Grace Gu, founder / CIO of Dracaena

administration policy on the dollar, which is torn between an inclination to favor short term dollar weakness for trade purposes and a desire for a strong dollar over the longer term as part of a projection of US strength on the global stage.

The channel through which the signals work is not clear. The administration lacks instruments to directly influence the exchange rate[2]. While there is global suspicion that it could at some point seek to put pressure on the Fed, the White House has to date shown firm discipline in not using the nuclear option of weakening the dollar by exploiting Fed vacancies to stuff the central bank with reflationists[3]. Pressure might in principle influence non-US central bank actions as well: Trump administration bold comments evidently swamped the influence of ECB and BoJ signals focused on their inflation objectives, to Draghi's evident frustration Thursday. But we do not see the ECB in particular succumbing to pressure to be less dovish than might be warranted based on its inflation outlook. Some Trump policies, such as trade actions against cheap imports in certain sectors, would tend to favor dollar higher against the largely EM countries targeted, though possibly weaker against safe haven euro and yen, as long as Europe and Japan were not the main focus of the administration's ire.

SOME EVIDENCE OF A BROADER TRUMP RISK PREMIUM / RELATIVE GAIN IN POLITICAL ECONOMY STABILITY FOR EUROZONE, JAPAN

Conceptually distinct from (though of course not unrelated to) the administration's on-off preference for a weak dollar, we see good anecdotal evidence of a Trump political risk premium on dollar assets, relating to the reduced predictability of US institutional decision-making under the current administration, at a time when political stability in the eurozone and Japan have strengthened on net and relative to the US. This is supported by event windows around controversial Trump actions and reports regarding the Muller investigation. These risks may have gone up as the administration's focus has moved past market-friendly tax reform, and the Muller investigation has continued to zero in on the president's inner circle.

TRUMP TAX CUTS SEEN WIDENING THE DEFICIT BUT NOT DRIVING INFLATION AND INTEREST RATES MUCH HIGHER

We meanwhile observe the FX market responding to the Trump tax cuts in a non-textbook manner. Part of this is probably buy the rumor sell the news, for instance in terms of repatriation flows or the relative attractiveness of the US as a place to invest. More fundamentally however, the market does not seem to have revised dramatically higher its expectation of the number of Fed hikes that will be required in light of the stimulus from tax cuts. This is at odds with the textbook treatment when a fiscal stimulus at full employment leads to higher rates and exchange rate appreciation[4].

But it is consistent with the Fed's own assessment: the December SEP[5] showed no front-loaded rate response to the tax cuts and only a very mild response further out, reflecting the view that the tax cuts would provide a moderate 30-40bp stimulus to growth this year and less next, enough to give a little more confidence that inflation would return to target, but not much else, given the

[2] Short of FX intervention, which is ineffective in deep and integrated global capital markets unless backed up by consistent monetary policy
[3] For all the general characterization of the Trump administration as populist, its Fed nominations so far have been very mainstream
[4] As for instance in a simple ISLM framework
[5] https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20171213.pdf

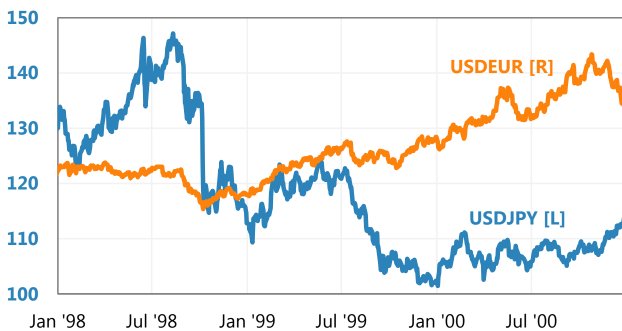
assumption of a very flat Phillips Curve. Indeed instead of interpreting the tax cuts as driving real rates and the dollar higher, the market appears to have interpreted them as widening the difference between US savings and investment, and so increasing the path of the current account deficit, requiring exchange rate depreciation to attract global capital. We note in this context that flow of funds data that shows rapid foreign accumulation of US risk assets need not be read as dollar positive.

AND NOT SEEN RAISING PRODUCTIVITY / TREND GROWTH EITHER – THOUGH THIS COULD BE PROVEN WRONG (98 V 2005)

This pessimistic take also seems to extend to skepticism that the tax cuts will really transform the attractiveness of the US as an investment destination or lead to an investment boom that will catalyze a step higher in productivity. We can see this in the difference between 2005-2007 type FX dynamics and 1998-2000 type FX dynamics. In 1998-2000 acceleration in productivity and potential output growth drew foreign capital into the US pushing the dollar higher even as it widened the current account deficit. In 2005-2007 an increase in residential investment and decline in national savings with no corresponding increase in productivity and potential output growth widened the current account deficit and caused the dollar to decline on net. The current phase appears to be tracking the 2005-2007 type dynamic. But we note that the assessment that the tax cuts are not likely to catalyze a material step up in productivity and potential output growth could prove premature; if so we could yet pivot to 1998-2000 type dynamics.

USDEUR and USDJPY, 1998-2000

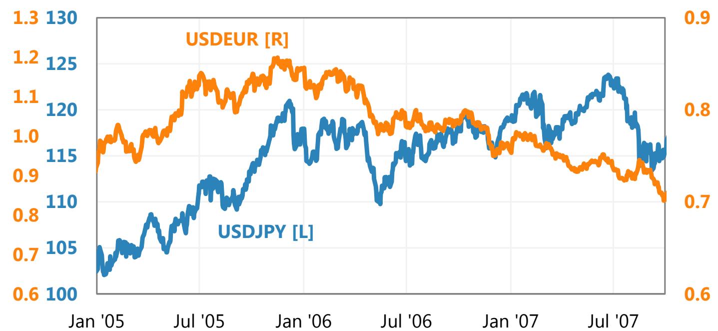
Higher values = stronger dollar



Source: FRB, Evercore ISI.

USDEUR and USDJPY, 2005-Sept 2007

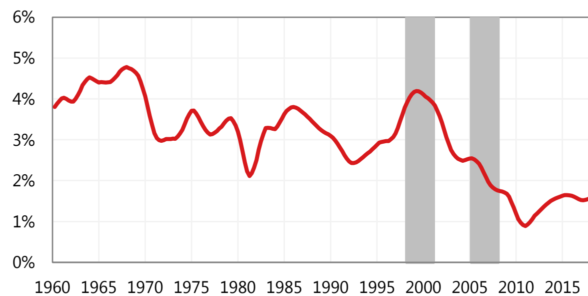
Higher values = stronger dollar



Source: FRB, Evercore ISI.

US real potential output growth, year-on-year

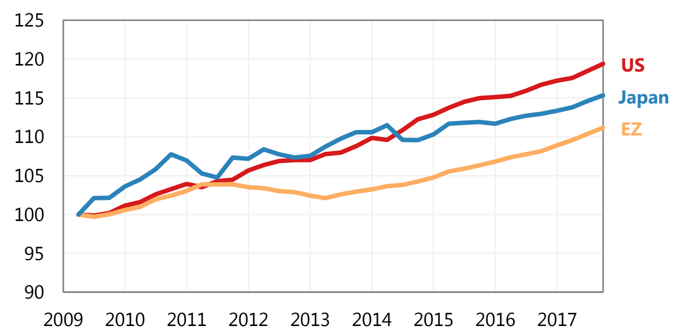
1998-2000 and 2005-07 periods highlighted



Source: CBO, Evercore ISI.

Cumulative real GDP growth since 2009

2009 Q1 = 100



Source: BEA, CAO, Eurostat, Evercore ISI.

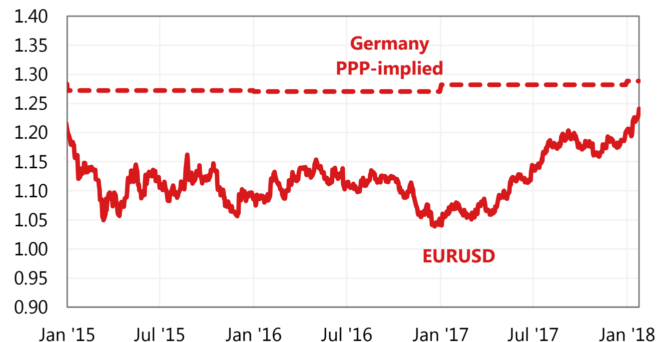
GRAVITATIONAL PULL OF PURCHASING POWER PARITY AS CONFIDENCE GROWS IN A LONG CYCLE THAT WILL EVENTUALLY ALLOW ALL CENTRAL BANKS TO NORMALIZE

The largest part of the story however in our view likely lies in growing confidence that the global business cycle will be vigorous enough and last long enough for all central banks – not only the US Fed – to normalize policy at least to new normal levels. In this context the gravitational pull of purchasing power parity may become stronger even if the rates piece takes a while to materialize. Even after the extreme recent weakness, the dollar remains above / euro and yen below their PPP equilibria. One possibility is that an intermediate floor may be provided by levels of the dollar that prevailed in mid-2014 prior to the global growth scare.

USDJPY versus PPP-implied

Source: WSJ, IMF, Evercore ISI.

USDEUR versus German PPP-implied



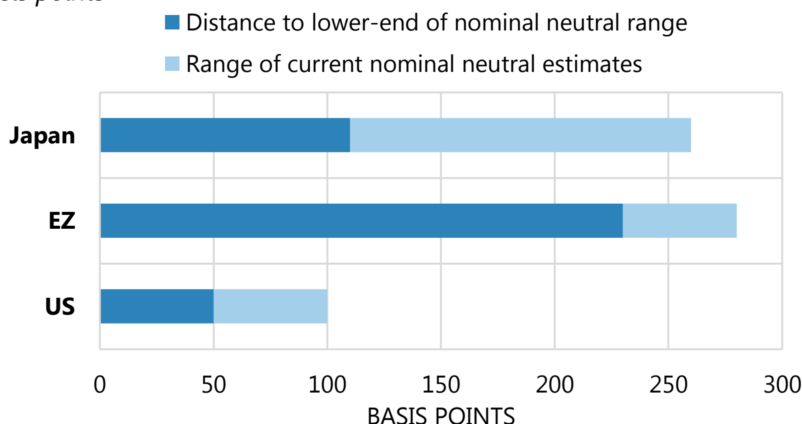
Source: WSJ, IMF, Evercore ISI.

THE DISTANCE TO TRAVEL BACK TO A NEUTRAL STANCE ON RATES (AND BALANCE SHEET) IS PLAUSIBLY MUCH GREATER FOR THE ECB AND BOJ

We believe the market is looking ahead and assessing that by the end of this year the Fed will be within sight of neutral and potentially the end of the tightening cycle[6], while the ECB and BoJ will only be preparing for the start of this process, with far more distance to travel on both rates and balance sheet before they are back at something approximating a neutral stance. Further, with three Fed rate hikes this year now more or less priced in[7], but still very little priced in on the part of the ECB and BoJ even looking out several years, the scope for repricing market rate expectations higher may be greater in the case of the ECB (particularly) and BoJ than the Fed.

[6] All this assumes the Fed does not have to go beyond neutral, and assumption we think is not safe; more on this below.

[7] In particular, if we assume a small negative term premium at the front end.



Assumes market-discounted rate path through end-2018, assumes inflation at target in the medium term, and is conditional on balance sheet strategy.
Source: Evercore ISI.

FED SEEN NEARLY THERE BY END 2018 – BASED ON THE ASSUMPTION THAT IT WILL ONLY HAVE TO GO BACK TO A NEUTRAL RATE SOMEWHERE BETWEEN THE MID-2S AND 3

The target for the federal funds rate now stands at 1.25-1.50 per cent, and the market is discounting nearly three more hikes this year, which would put the funds rate at the end of the year at 2-2.25 per cent. From there (and assuming inflation roughly on target by 2019) it would be only a hike or two to the low end of the range for estimates of the longer-run neutral rate at +50bp real / 250bp nominal – roughly the level implied by the Laubach-Williams model, close to the market's estimate of the longer-run average interest rates according to the ACM model, and in line with the estimate provided by San Francisco Fed president Williams, the leading internal candidate for the Fed vice-chair position. And the market has already discounted at least one[8] of the remaining one or two hikes needed to get back to that neutral rate.

If the longer run neutral rate is a bit higher than +50bp real – say 75bp real / 275bp nominal (the SEP median) or 100bp real / 300bp nominal (also favored by a significant number of FOMC participants – then the Fed would have a bit more distance to travel and the market would have a bit more by way of additional hikes to price, but only one or two additional hikes. Again, provided that all the Fed has to do is to return rates to neutral.

ECB HAS MUCH MORE DISTANCE TO TRAVEL TO NEUTRAL WITH LESS DISCOUNTED IN MARKETS, AND ALL THE HIKING AHEAD BEYOND END 2018

Compare this to the ECB. The deposit rate starts from a current level of -40bp and Draghi confirmed this week that a rate hike this year is very unlikely, such that it will also end the year at -40bp. As we wrote in our last deep dive on the ECB, a conservative estimate might put the longer-run neutral rate in the eurozone around zero real – the level the FOMC believes prevailed in the US in recent years – and spot neutral might be there a few years from now, subject to balance sheet assumptions we will explore below. If inflation is at target by end 2021, and we

[8] Arguably closer to two, allowing for negative term premia

assume that target is 1.9 per cent[9] then to achieve a neutral zero real interest rate the ECB would need to raise rates a total of 230bp[10] from end 2018 to end 2021, of which only about 100bp is currently discounted in markets.

Inflation may not be at target in the eurozone even by end 2021. But if inflation was 1.7 per cent, and the ECB therefore kept rates slightly below neutral, the deposit rate might still have to rise to around -50bp real, which would mean 120bp nominal at that point. In this scenario the ECB would still have to raise rates 160bp from end 2018 to end 2021, of which only about 100bp is currently discounted. This is roughly speaking our base case.

DISTANCE TO RUN FOR THE ECB COULD BE MATERIALLY HIGHER THAN OUR BASE CASE, BUT IS COMPLICATED BY THE LIKELY INITIATION OF BALANCE SHEET ROLL-OFF AT SOME POINT IN THE NEXT FEW YEARS

The neutral rate in the eurozone a few years from now might easily be higher than zero real – the latest Holsten Laubach Williams estimates suggest that it has already recovered above zero. A simple mapping to rates would imply that if neutral was +50bp real by end 2021 the ECB might have to raise rates a total of 280bp from 2019 to 2021 if inflation is on target or 210bp if it recovers but only to 1.7 per cent by then. The complication is that if inflation is on a sustained recovery path and the Governing Council assesses that the spot neutral rate is moving up towards a longer-run estimate of neutral that is itself materially above zero real, then rather than take full advantage of this to raise rates faster and further than in the base case, it may well decide to initiate balance sheet roll-off within the four year time-frame.

We think a reasonable guesstimate is that the ECB will begin roll-off when the deposit rate is in the region of 1 to 1.5 per cent – a similar threshold to the one used by the Fed – and can provide some buffer against shocks. Starting balance sheet roll-off would tend to put downward pressure on the spot neutral rate, or at least prevent it from moving higher[11], making it less likely that the ECB would be able to raise rates cumulatively by very much more than required by a zero real neutral rate above.

NEUTRAL RATE IN JAPAN VERY HARD TO ESTIMATE GIVEN POSSIBLE INFLATION REGIME SHIFT, AND IS ALSO COMPLICATED BY BALANCE SHEET POLICY, BUT BOJ COULD PLAUSIBLY HAVE MUCH MORE DISTANCE TO RUN THAN THE FED AS WELL

The overnight rate on marginal excess reserves in Japan is currently -10bp, and while the market is discounting some material probability of a 10bp hike to zero by end 2018 the base case remains no hike this year. Estimating how far the BoJ might have to travel to achieve a neutral rate some years from now in the event that it is finally successful in engineering a regime shift in inflation expectations to 2 per cent is extremely difficult. The forward path of rates in the bond market suggests that average future interest rates might be very low, not far above zero in nominal terms for many years to come and throughout this cycle. But this is hard to interpret because long dated inflation break-evens suggest that the market also assumes only a modest recovery of inflation over the next decade.

[9] We think most ECB officials interpret the target as 1.99999 per cent so functionally 2 per cent, but as this is not universally agreed and some others see an asymmetric comfort zone below 2 we will use 1.9 for this analysis
[10] Assuming surplus liquidity throughout, in which case we think the deposit rate will continue to be the main attractor of EONIA
[11] We interpret HLW as de facto assuming an unchanged balance sheet

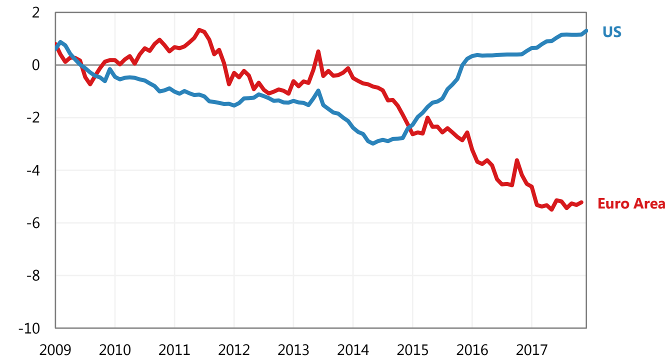
In principle the neutral rate (as we use the term[12]) is not the interest rate that delivers the central bank's inflation target, but the interest rate at which the economy, at potential and growing at potential, imparts no upward or downward pressure on inflation, such that the inflation trend remains broadly unchanged. On this basis it is not unreasonable to estimate that the longer-run neutral rate in Japan might be around zero real, as suggested by BoJ analysis[13]. If that were the case, then in a scenario in which the BoJ finally breaks through and engineers a regime shift to 2 per cent inflation by say 2021, the central bank might have to raise interest rates by around 210bp, of which next to nothing is discounted. Of course the likelihood of such a regime shift is much less than probability 1, the BoJ (unlike the ECB) at least in principle has committed to an inflation overshoot, and as with the ECB case above, estimates of the neutral rate may be flattered by balance sheet policy, and might need to be revised down in the event that the BoJ decided to normalize its balance sheet as well, slowing the pace of rate hikes. So the probability-weighted distance to travel on rates on a four of five year view is likely materially lower in the BoJ case than the ECB case.

IF ECB AND BOJ DECIDE TO ALLOCATE PART OF THE NORMALIZATION TO BALANCE SHEET RATHER THAN RATES THIS WOULD STILL TEND TO FAVOR EURO, YEN BUT BY LESS THAN IF THE NORMALIZATION IS ALL IN RATES SPACE

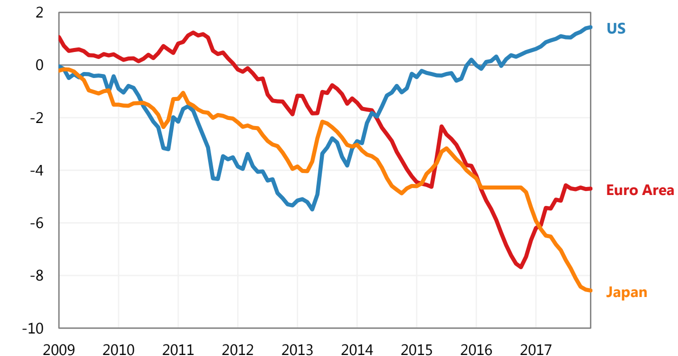
The difference in terms of distance to travel to neutral in absolute terms and relative to what is discounted in financial markets looks even greater when viewed through the prism of shadow rates, which take into account the stimulus from QE / central bank balance sheets, the moderation of which may also contribute to currency strength. As mentioned above, we have to be careful about double-counting – our guesstimates of the neutral rate in the eurozone / Japan several years out assume that the central banks do little more than cease net asset purchases over this time horizon. More aggressive normalization on the balance sheet front would likely put downward pressure on the path of the neutral rate, resulting in less distance to travel on rates to meet neutral on a given timeframe.

The euro / yen would still be subject to upward pressure from the longer end of the yield curve with a rise in the term premium. But as Brainard has suggested in a different context, the impact on exchange rates of tightening at the long end via balance sheet may be less than the impact of tightening at the short end on rates[14]. We would go a step further: to the extent that there is a strong global common component in the term premium, the initiation of balance sheet roll-off in the eurozone and Japan some years from now might put upward pressure on both US and foreign yields rather than widen the differential very much.

[12] There are multiple definitions, we follow Yellen: neutral is the rate of interest at which the economy at potential grows at potential
[13] https://www.boj.or.jp/en/research/wps_rev/rev_2016/data/rev16e12.pdf
[14] https://www.federalreserve.gov/newsevents/speech/files/brainard20170711a.pdf



Source: FRB, Wu-Xia, Evercore ISI.



Source: RBNZ, Evercore ISI.

LONGER-RUN NEUTRAL RATE IN THE US MAY BE REVISED UP OVER TIME – BUT THE SAME COULD BE TRUE OF THE EUROZONE AND POSSIBLY JAPAN TOO

An obvious objection to the argument that the Fed will be nearly done by the time it has hiked rates another three or four times is that by the time the Fed approaches the current band of estimates of the longer-run neutral rate in the US (+50bp to +100bp real), these estimates may start to move higher[15]. This would be the case if in effect the spot neutral rate converges on the longer-run neutral rate, but the economy continues to grow above potential with tightening resource utilization. This is perfectly plausible, for instance if productivity was to pick up or financial conditions were continue to ease on a sustained / low frequency basis. In this type of scenario the market could come to assess that the longer-run neutral rate is in fact around +150bp real or even higher, in which case the Fed would still have material ground to cover after the end of 2018 to return policy to a neutral setting.

But in FX terms what matters is the relative path of interest rates. And we think that – given the fact that there appears to be a material global common component in the neutral rate in part due to the globalization of technology and existence of globally integrated capital markets with high correlation of market-based financial conditions – most developments that would favor revising materially higher estimates of the longer-run neutral rate in the US would also tend to favor revising higher estimates of the longer-run neutral rate in Europe and Japan as well. And there are developments ex-US that might favor a higher neutral rate in other jurisdictions, such as progress in making the eurozone more resilient through the cycle by deepening EMU.

PROSPECTS FOR US-SPECIFIC RISE IN NEUTRAL RATE COME BACK TO TAX POLICY AND THE DOLLAR ITSELF (STRUCTUALLY WEAK DOLLAR COULD MEAN US-SPECIFIC EASING OF FINANCIAL CONDITIONS)

Prospects for a rise in estimates of the longer-run neutral rate in the US but not to the same degree elsewhere seem to us to revolve around tax policy and the dollar itself. If markets were to form the view that in fact the initial skeptical assessment of tax cuts is incorrect and changes in tax policy are catalyzing a US-specific acceleration in productivity and potential output growth then estimates of the longer-run neutral rate in the US might rise relative to other economies,

[15] We abstract here from the subtle debate as to whether the longer-run neutral rate would really be moving up or whether in fact spot neutral would be moving above longer-run neutral, for instance supported by an asset market bubble

favoring the dollar. That could in time force copycat tax policy actions[16] that would share the benefit more widely.

More simply, if the dollar were to be in a persistent phase of structural weakness from here onwards relative to the euro and the yen for reasons that are not related to weak US growth, then it is possible that financial conditions could continue to ease in the US to a much greater extent than elsewhere. This could push estimates of the neutral rate in the US up relative to estimates of the neutral rate elsewhere – at least on a spot basis, and possibly in the longer-run[17] - causing the Fed in time to raise more than currently seems plausible. The qualifier of course is that in this scenario the underlying reason for the dollar weakness would be upward revisions to prospects in the eurozone and Japan, which would likely also involve some reassessment higher of the path of the neutral rate in those jurisdictions. Still, it is not inconceivable that the move in the dollar could outrun those developments.

BIG CAVEAT ON DISTANCE TO RUN IS THAT US RATES DO NOT HAVE TO STOP AT NEUTRAL – BUT THIS IS A CALL ON INFLATION, WHICH STILL SEEMS SUBDUED

The main caveat to the argument that the ECB and BoJ have further to go in hiking rates and more still to be priced into markets relative to the Fed is that this assumes that none of these central banks need to do more than return to neutral. It is in this sense that we view the dollar weakness as consistent with the extreme version of the Goldilocks hypothesis on a global scale. There is no a priori reason why the rate cycle should stop when rates reach neutral and the terminal rate could easily be above the neutral rate as the central bank seeks to cool the economy and moderate overheating. Indeed more often than not rate cycles do ex post extend beyond neutral, though this is rarely projected ex ante[18] (there is even a small hint of this in the December Fed SEP, with the median fed funds projection fractionally above the longer run neutral estimate at end 2020.)

Given the fact that the US is more cyclically advanced than the eurozone, and does not have to overcome the legacy of deflation expectations as in Japan, it is far more plausible that the Fed may need to go beyond neutral in the coming years than it is that the ECB or BoJ have to do so. In that case the Fed might yet have more distance to run to the terminal rate than its counterparts, even if it has less distance to travel to neutral. This, however, is a call on US inflation and the Fed reaction function relative to it. As long as the market perceives that – based on inertia in the inflation process, structural disinflationary forces, subdued inflation expectations and a very flat Phillips Curve – the risk of more than a mild pick-up in inflation over the next couple of years is low, there is no obvious need to price rates going much beyond neutral even in the US. This is because the Fed wants a mild pick-up, which would take inflation towards, not away from its target. Moreover, it may be very tolerant even towards a moderate inflation overshoot above 2 per cent.

[16] At least on expensing, which is the most promising catalyst for investment and productivity

[17] As above, we simplify here by abstracting from whether spot neutral would be moving above longer-run neutral, or longer-run neutral would be moving up. More on that topic to come in later notes.

[18] In practice central banks often discover where neutral is only by going past it and causing the next downturn

EMERGING GAP BETWEEN CENTRAL BANK REACTION FUNCTIONS, WITH FED TOYING WITH A MORE SYMMETRIC APPROACH TO ITS INFLATION TARGET, MORE RELAXED RESPONSE TO ACH TO INFLATION OVERSHOOTS

Indeed we see evidence that a gap is emerging again between the reaction functions of the Fed and the ECB / BoJ with the Fed toying with a more symmetric approach to its inflation target that is relaxed about or actively seeks inflation overshooting at this stage in the cycle, at a time when the ECB / BoJ are not acting in ways consistent with a symmetric approach. In this sense the Fed may be becoming fundamentally more dovish than its counterparts for any given inflation outlook, promising a higher (average) path of inflation ahead and therefore lower real rates relative to any path for nominal rates, which might be traded as dollar negative[19]. There is some suggestion of this in the relative evolution of inflation break-evens, which have moved up much more in the US than in the eurozone and Japan over the past three months.

We see a growing number of FOMC participants – including recently Dudley – make the point that the Fed should be relaxed about a moderate inflation overshoot after a long period of inflation below target, even if it is not targeting such an overshoot ex ante as real doves such as Evans propose. This communication is partly a response to the opportunity of such a moderate overshoot – three or four months ago, at the nadir of despair about puzzlingly weak inflation, talking about a willingness to overshoot while raising rates would have appeared incoherent.

But it has been catalyzed in our view by the emerging debate about the possibility of reviewing the Fed framework and considering the adoption of a price level target with a commitment to make up for inflation shortfalls. Strictly, it does not follow that a central banker keen to consider a new framework that envisages a make-up principle should be prepared to target an overshoot under the current framework and both Williams and Rosengren draw a sharp distinction between the two. But the distinction is largely lost on the market, and we think that the more FOMC participants ponder the merits of a PLT to re-anchor inflation expectations, the more relaxed they will become about an ex post overshoot under the current framework. We see this in the relative evolution of breakevens in the US and eurozone / Japan since the start of the year – with the spread going the opposite way than would be expected if upside surprises were releasing the ECB and BoJ from zero bound constraints.

MEANWHILE THE ECB IS RAISING CONCERNS IT MAY NOT ACT IN A WAY CONSISTENT WITH A SYMMETRIC INFLATION TARGET

The reconsideration of the Fed reaction function in favor of inflation overshooting (whether ex ante with Evans or ex post with Williams) comes at a time when the ECB and BoJ are both acting in ways that are not obviously consistent with a symmetric inflation target. This is partly a question of lack of opportunity – given that both central banks are further from realizing their inflation objectives it is not obviously credible for them to be signaling a relaxed attitude to even ex post inflation overshooting. But it is not only a question of lack of opportunity.

The ECB has always struggled with whether it has or does not have a symmetric inflation target even in principle: the goal of “below but close to 2 per cent” can be read as an asymmetric tolerance for inflation below rather than above 2 or (as some doves propose) a point definition of a target that could be 1.99999999 per cent, around which the ECB could be symmetric. A few years ago Liikanen appeared to make the case for some period of overshooting[20] and

[19] Although on a through the cycle basis, if a more symmetric approach delivers better economic outcomes and fewer / shorter zero bound episodes, it might actually be associated with higher real rates on average

[20] https://www.bloomberg.com/news/articles/2016-05-19/ecb-policy-maker-sees-simple-math-warranting-inflation-overshoot

approaching the inflation target from above; Draghi in recent press conferences has thrown out the idea that the ECB could allow inflation to go above target for a period if this was the path most consistent with achieving its goal on a sustainable basis over the medium term. But eurozone inflation meaningfully above 2 per cent would likely require inflation close to 3 per cent in Germany, which market participants reasonably view as risking too much political tension with Berlin.

ECB HESITATION / RELITIGATION OVER FULLY IMPLEMENTING THE OCTOBER POLICY GAMEPLAN FUELS THE PERCEPTION THAT ITS TARGET IS ASYMMETRIC

One of the merits of the ECB policy game plan set out in October was that – by locking in a dovish policy stance with extensive forward guidance across both QE and rates – the ECB indicated that it was prepared to run some (slight) risk that inflation might move up above target, even though it was projected to remain below target even in the out-year of the forecast horizon, so strictly this was still an approach likely to deliver inflation undershooting not overshooting ex ante on a three year type view[21]. Regrettably, the December minutes and relitigation of the forward guidance suggested that the Governing Council is anxious to avoid any risk of overshooting 2 per cent, and while Draghi ticked the right boxes at the January GC meeting he lacked conviction and weakened the guidance by underlining data-dependency. This at a time when underlying core inflation is less than 1 per cent and market inflation break-evens – though meaningfully higher in recent weeks – remain below mandate-consistent levels.

As we argued in our January ECB commentary, it is not appropriate to respond to the upside surprise in the eurozone economy and ease in financial conditions since October by pulling forward the start of normalization, because the surprise takes the ECB closer to not further from its inflation target, and because in any event, the Council should rationally trade a later start for a slightly steeper path of rate hikes. The implication is that the Council has an asymmetric view of its target and/or sees costs in its tools (QE and negative rates) that are large enough to outweigh the importance it puts on validating the symmetry of the target, if such symmetry exists.

BOJ SIGNALS ALSO SUGGEST NOT RELIABLY COMMITTED TO A SYMMETRIC APPROACH TO THE INFLATION TARGET, IN SPITE OF ITS FORMAL GUIDANCE

Unlike the ECB and the Fed the BoJ actually adopted an ex ante inflation overshoot as part of its forward guidance[22] in late 2016 when it moved to the new regime of QQE with Yield Curve Control. However, the overshooting commitment was never viewed as credible in the eyes of the market. This may be in the first instance because the BoJ is viewed as tightly policy constrained. But it is also because the commitment itself was weak, as it was tied to the increase in base money, not the target either for the overnight rate or the ten year yield, and under YCC rates can rise while QE is ongoing, honoring the commitment on base money growth.

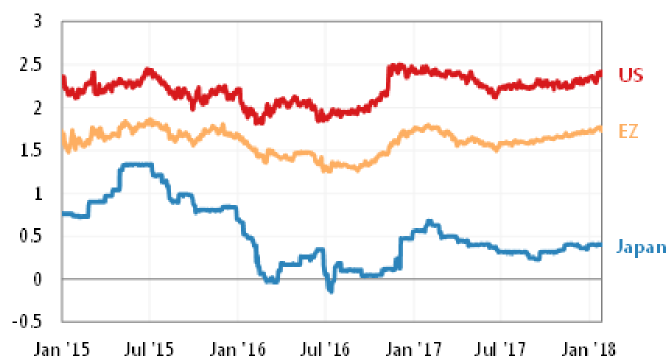
Since then the BoJ leadership's toying with the concept of a reversal rate and indications that it is putting more weight on the costs of an ultra-low and flat yield curve on the health of Japan's regional banks, along with Kuroda's inflation cheerleading in Davos, has gone in the opposite direction to the Fed's toying with a PLT – suggesting that it may raise the yield target before this

[21] The ECB does not target inflation at a two or three year horizon but over the medium term; still the path most consistent with reanchoring inflation expectations close to 2 per cent for the medium term very likely requires the ECB to get to 2 per cent within a few years after a long period below target. This would be particularly wise given the fact that there is no guarantee the cycle will last more than three more years.

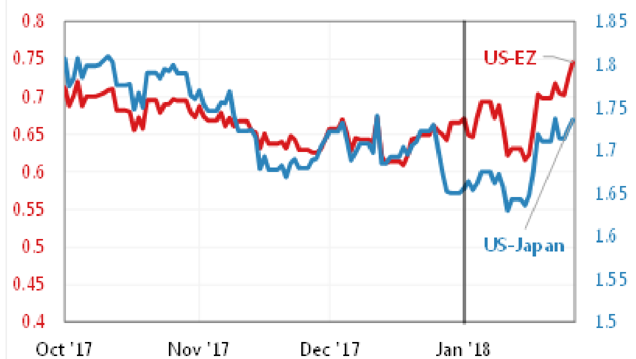
[22] https://www.boj.or.jp/en/announcements/release_2016/k160921a.pdf

is with a high degree of confidence consistent with raising inflation to 2 per cent, never mind overshooting 2 per cent for a period. As with the ECB, this reflects concerns about the costs of the instruments, but as with the ECB, it also conveys information about the relative importance the Policy Board puts on delivering an inflation overshoot.

As we have argued in recent notes, the BoJ could address recent concern about its reaction function by providing forward guidance that commits it not to raising the ten year target before the inflation is sustainably above 1 per cent and rising based on realized inflation ex food and energy and market-based indicators of inflation expectations. This in effect would formalize the assessment that a real ten year yield of around -100bp for a period would be most consistent with a timely return of inflation to target with some moderate overshooting. But the BoJ is unlikely to adopt this type of guidance, partly for institutional reasons, and partly because we think the Policy Board precisely wants to maintain the option of a Plan B type limited rate hike for financial stability purposes in the event that the timeline for a Plan A type hike when inflation meets the standard set out above is delayed for too long, perhaps because strong productivity gains dampen the price response to a tightening output gap.



Source: Bloomberg, Evercore ISI.



Source: Bloomberg, Evercore ISI.

IMPLICATATIONS FOR UPCOMING FED MEETING(S)

For the Fed the most obvious implication of ongoing severe dollar weakness, along with the melt-up in equities, is that US financial conditions have by most counts eased significantly further since December in spite of the material move higher in longer-term yields. This comes at a time when economic momentum is likely running a shade stronger than the Committee anticipated and the combination of some better high frequency inflation data, an assist from the dollar and oil, and higher (though still below historically normal) inflation breakevens are making Fed officials somewhat more confident that the baseline projection that inflation will recover close to the 2 per cent target by year end will be delivered.

In our view the balance of risks is slowly shifting to the upside based on the Fed's baseline three hike call, and the Committee will eventually come to our four hike call, though it may take until June before this is the median SEP projection. We do not expect any lurch at the January meeting, but we do anticipate that a set of tweaks that will skew a fraction hawkish on net, and possibly rejigging of the risk assessment in a way that falls short of moving to net upside risks but builds a bridge to possible further adjustment in the messaging in March; details in our Fed preview Monday. Looking further out, as discussed above, all else being equal, persistent deep weakness in the currency could in principle result in a materially higher path for the neutral rate

over the coming years than presently discounted[23] and therefore a hiking cycle that ex post extends much further than seemed plausible along the way, as was the case in the 2000s, even if the Fed does not respond to any moderate inflation overshoot by moving much past neutral. But the Fed would likely adjust to this only incrementally over time.

IMPLICATIONS FOR FUTURE ECB, BOJ MEETINGS

We think surging euro and incipient yen strength has still not taken the currencies to levels that threaten above-trend growth in both the eurozone and Japan, in particular given strong growth in export markets and the fact that exchange rates moves in trade-weighted terms have been much smaller than on the dollar crosses, given the breadth of dollar weakness. But the appreciation does present risks to underlying inflation dynamics and inflation expectations that have not yet broken decisively higher in either case (in particular in Japan). Moreover, the medium term macro-policy themes driving dollar weakness – in particular the extreme Global Goldilocks belief in very long and vigorous cycle that will allow everyone to normalize but require no-one to go beyond neutral – are powerful.

In our view this requires both the ECB and BoJ to be very careful in managing expectations about the timing and pace of policy normalization, provide credible guidance and stick to guidance already provided, keep the spotlight on inflation not growth, emphasize patience and persistence over growing confidence in the medium term inflation outlook, while welcoming upside surprises that take the inflation path closer to target in a manner that refutes beliefs that these central banks have asymmetric inflation objectives. We think the next round of meetings in March may be a bit more successful in this regard than the last. The cost of carry for short dollar positions means that in a war of attrition between the central banks and dollar shorts / euro and yen longs the central banks are not powerless even in the face of powerful medium term trends driven by tectonic shifts in perceptions of the cycle and melt-up sentiment with regard to risk.

[23] Again, we abstract here from whether this would be longer-run neutral higher or spot neutral moving above longer-run neutral on asset market excesses

DISCLOSURES

General Disclosures

This report is approved and/or distributed by International Strategy & Investment Group LLC ("ISI Group LLC"), a U.S. licensed broker-dealer regulated by the Financial Industry Regulatory Authority ("FINRA") and by International Strategy & Investment Group (UK) Limited ("ISI UK"), which is authorised and regulated in the United Kingdom by the Financial Conduct Authority. The institutional sales, trading and research businesses of Evercore Group and IDI UK collectively operate under the global marketing brand name Evercore ISI ("Evercore ISI"). Both Evercore Group and ISI UK are subsidiaries of Evercore Partners Inc. ("Evercore Partners"). The trademarks, logos and service marks shown on this report are registered trademarks of Evercore Partners Inc.

This report is provided for informational purposes only. It is not to be construed as an offer to buy or sell or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy in any jurisdiction. The information and opinions in this report were prepared by registered employees of Evercore ISI. The information herein is believed by Evercore ISI to be reliable and has been obtained from public sources believed to be reliable, but Evercore ISI makes no representation as to the accuracy or completeness of such information. Opinions, estimates and projections in this report constitute the current judgment of the author as of the date of this report. They do not necessarily reflect the opinions of Evercore and are subject to change without notice. In addition, opinions, estimates and projections in this report may differ from or be contrary to those expressed by other business areas or groups of Evercore and its affiliates. Evercore ISI has no obligation to update, modify or amend this report or to otherwise notify a reader thereof in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate. Facts and views in Evercore ISI research reports and notes have not been reviewed by, and may not reflect information known to, professionals in other Evercore affiliates or business areas, including investment banking personnel.

Evercore ISI does not provide individually tailored investment advice in research reports. This report has been prepared without regard to the particular investments and circumstances of the recipient. The financial instruments discussed in this report may not suitable for all investors and investors must make their own investment decisions using their own independent advisors as they believe necessary and based upon their specific financial situations and investment objectives. Securities and other financial instruments discussed in this report, or recommended or offered by Evercore ISI, are not insured by the Federal Deposit Insurance Corporation and are not deposits of or other obligations of any insured depository institution. If a financial instrument is denominated in a currency other than an investor's currency, a change in exchange rates may adversely affect the price or value of, or the income derived from the financial instrument, and such investor effectively assumes such currency risk. In addition, income from an investment may fluctuate and the price or value of financial instruments described in this report, either directly or indirectly, may rise or fall. Estimates of future performance are based on assumptions that may not be realized. Furthermore, past performance is not necessarily indicative of future performance.

Evercore ISI salespeople, traders and other professionals may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed in this research. Our asset management affiliates and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

Electronic research is simultaneously available to all clients. This report is provided to Evercore ISI clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of Evercore ISI. Receipt and review of this research report constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion or information contained in this report (including any investment recommendations, estimates or target prices) without first obtaining express permission from Evercore ISI.

This report is not intended for distribution to, or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation.

For investors in the UK: In making this report available, Evercore makes no recommendation to buy, sell or otherwise deal in any securities or investments whatsoever and you should neither rely or act upon, directly or indirectly, any of the information contained in this report in respect of any such investment activity. This report is being directed at or distributed to, (a) persons who fall within the definition of Investment Professionals (set out in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order")); (b) persons falling within the definition of high net worth companies, unincorporated associations, etc. (set out in Article 49(2) of the Order); (c) other persons to whom it may otherwise lawfully be communicated (all such persons together being referred to as "relevant persons"). This report must not be acted on or relied on by persons who are not relevant persons.

Applicable current disclosures regarding the subject companies covered in this report are available at the offices of Evercore ISI, and can be obtained by writing to Evercore Group LLC, Attn. Compliance, 666 Fifth Avenue, 11th Floor, New York, NY 10103.

In compliance with the European Securities and Markets Authority's Market Abuse Regulation, a list of all Evercore ISI recommendations disseminated in the preceding 12 months for the subject companies herein, may be found at the following site: https://evercore.bluematrix.com/sellside/MAR.action.

© 2018. Evercore Group L.L.C. All rights reserved.