

FX Compass: Sick and Tired

Research Analysts

Shahab Jalinoos
212 325 5412
shahab.jalinoos@credit-suisse.com

Ray Farris
65 6212 3412
ray.farris@credit-suisse.com

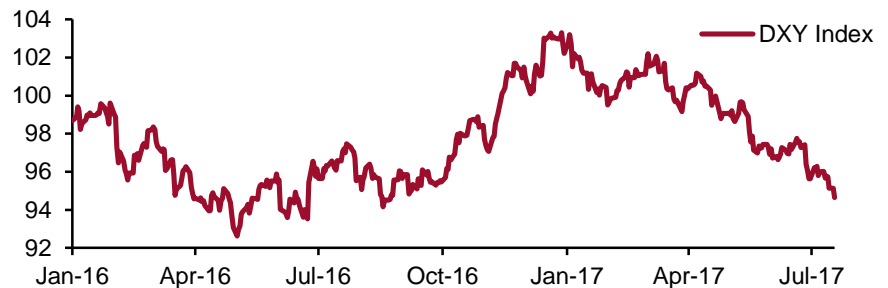
Alvise Marino
212 325 5911
alvise.marino@credit-suisse.com

Trang Thuy Le
852 2101 7426
trangthuy.le@credit-suisse.com

Honglin Jiang
44 20 7888 1501
honglin.jiang@credit-suisse.com

Bhaveer Shah
44 20 7883 1449
bhaveer.shah@credit-suisse.com

Figure 1: US dollar decline continues as policy reflation hopes wither



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service

“You do it to yourself / You do / And that’s what really hurts” - Radiohead

The failure of the US Senate to agree on a healthcare plan, despite months of discussion and preparation, has led to an across-the-board continuation of the USD weakness theme. It’s ironic for us to see this take EURUSD above our long-held 1.15 target as the original catalyst for turning bullish the pair in late March was the failure of the US House to manage a vote on the same issue ([link](#)).

In this context, and taking into consideration the wide range of technical breaks to new highs against the greenback by multiple currencies, we acknowledge that the odds are rising that we will have to revise our key forecasts once again in a USD-negative direction. Clearly soft US output and inflation data seen of late only add to reasons for USD weakness. The weak USD trend is further encouraged by the propensity of many other key central banks to either become increasingly hawkish (the Bank of Canada the best recent example), give clear signals that it is on that path (the ECB) or have sufficiently positive fundamentals to be seen as a suspiciously likely candidate for a hawkish tilt (the RBA).

As far as the ECB is concerned, a key reason why we are not immediately reviewing our EURUSD forecast now our 1.15 target has been breached is that we want to see whether the central bank makes any attempt at all to slow the currency’s progress at its meeting this week. Clearly a direct reference to FX strength as an issue and as a threat in the introductory statement would be the most powerful (and probably least likely) way to do this. But considering how long the EUR rally has been in play and the fact that the shorter-term market is likely long, it may be sufficient for ECB chief Draghi to reference currency strength as a factor for consideration to allow a correction.

In this issue of the FX Compass we revise our EURSEK forecast from 9.60 in 3m to 9.40, and leave our 12m forecast unchanged at 9.15. We raise our USDPHP forecasts to 51.0 and 52.0 from 49.5 and 50.5 previously but recommend buying USDPHP on dips rather than chasing the rally. We show that Asian FX sell-off on higher US yields is a product of the post Global Financial Crisis period. More importantly, this relationship appears to be moderating in response to better global growth conditions.

Macro Overview: Sick and Tired

Shahab Jalinoos
212 325 5412
shahab.jalinoos@credit-suisse.com

Alvise Marino
212 325 5911
alvise.marino@credit-suisse.com

Honglin Jiang
44 20 7888 1501
honglin.jiang@credit-suisse.com

Bhaveer Shah
44 20 7883 1449
bhaveer.shah@credit-suisse.com

The failure of the US Senate to agree on a healthcare plan, despite months of discussion and preparation, has led to an across-the-board continuation of the USD weakness theme. It's ironic for us to see this take EURUSD above our long-held 1.15 target as the original catalyst for turning bullish the pair in late March was the failure of the US House to manage a vote on the same issue ([link](#)).

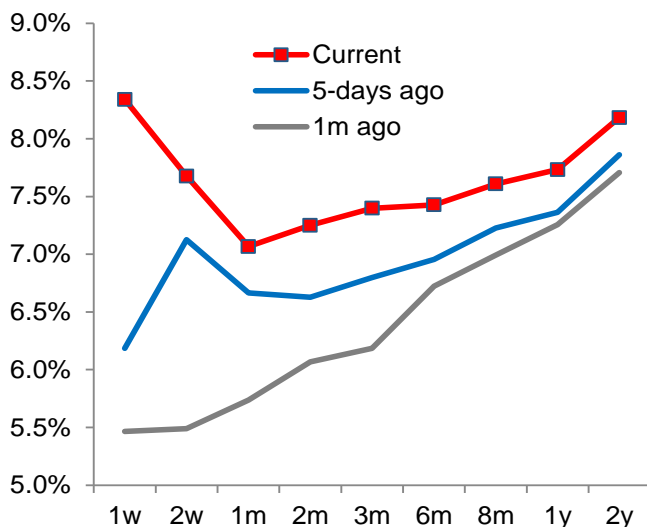
Much of the USD positivity in the aftermath of the Trump election win was a function of market participants hoping that Republican control of all three chambers of power would usher in a period of radical pro-growth tax and wider policy change. Instead the market has learned that the Republican Party is internally divided to such a degree that it cannot even agree on healthcare reform, something seen as essential to freeing up the funds needed to allow for personal and corporate tax cuts. If even healthcare can't be agreed on, the odds of even more controversial pro-USD policies passing such as border-adjusted taxation fall close to zero.

Most disappointing perhaps is that the Republicans have "done it to themselves", a reality that's hard to ignore despite the President's attempts to blame the Democrats. With Trump's popularity rating at just 36%, supposedly an all-time low six months into a presidency, and with the Russia story far from over, the odds of a dramatic shift towards effective government on a scale necessary to rapidly re-energize USD bulls look slim.

In this context, and taking into consideration the wide range of technical breaks to new highs against the greenback by multiple currencies, we acknowledge that the odds are rising that we will have to revise our key forecasts once again in a USD-negative direction. Clearly soft US output and inflation data seen of late only add to reasons for USD weakness.

The weak USD trend is further encouraged by the propensity of many other key central banks to either become increasingly hawkish (the Bank of Canada the best recent example), give clear signals that it is on that path (the ECB) or have sufficiently positive fundamentals to be seen as a suspiciously likely candidate for a hawkish tilt (the RBA).

Figure 2: EURUSD implied vols are elevated until the 1-month tenor, covering the July ECB meeting



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service

Figure 3: Focus is turning to this year's Jackson Hole summit, where the ECB's Draghi speaks

ECB 2017 Calendar	
ECB Meetings	ECB Minutes
20th July	17th Aug
7th Sep	5th Oct
26th Oct	23rd Nov
14th Dec	10th Jan

In addition, ECB Chief Mario Draghi is also scheduled to speak at this year's Jackson Hole summit. The summit dates are 24th to 26th Aug, though there are no details yet about the exact date or title of Draghi's speech.

Click [here](#) for a transcript of Draghi's speech at the 2014 Jackson Hole summit; which was the last time he spoke at the summit.

Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service

As far as the ECB is concerned, a key reason why we are not immediately reviewing our EURUSD forecast now our 1.15 target has been breached is that we want to see whether

the central bank makes any attempt at all to slow the currency's progress at its meeting this week. Indeed part of the reason we had originally targeted 1.15 instead of higher levels was a view that the ECB would not feel comfortable with a strong currency appreciation, in light of still-low inflation and question marks about the size of the output gap.

Clearly a direct reference to FX strength as an issue and as a threat in the introductory statement would be the most powerful (and probably least likely) way to do this. But considering how long the EUR rally has been in play and the fact that the shorter-term market is likely long, it may be sufficient for ECB chief Draghi to reference currency strength as a factor for consideration to allow a correction.

Of course the risks are not entirely one way – it's also possible that the ECB will be interpreted as hawkish. This in our view would be a clear opening for an even more sustained EUR rally medium term. How could this happen? Our European economists suggest the following:

1. Tweaks to the introductory statement that tone down the idea that interest rate changes will materially lag the end of net asset purchases or a suggestion that the ECB is not as committed to further increases in the size and / or duration of asset purchases if needed.
2. A more upbeat stance on the growth outlook.
3. A less downbeat view on low inflation, for example characterizing it as "temporary" as have the likes of the Fed and BoC.

Our economists expect that the ECB could well be more upbeat on growth, but as a base case also expect the central bank to not take low inflation seriously and not dismiss it as temporary. And while they see room for wording change around asset purchases to open the door for a blueprint for their wind down to be presented in September, they do not expect a shift in language around the timing of interest rate changes once this process is complete.

Hawkish surprises down under

Hawkish policy expectations shifts are hardly a EUR-specific development. In Australia, the release of the RBA's July meeting minutes spurred a blistering rally in the AUD as board members sounded optimistic tones that were absent from the original release. In particular, language around the potential for infrastructure spending and public demand and diminished downside risks to wages suggested that the RBA was more positive on these aspects of the economy than previously thought. But it was the new discussion on the neutral rate of interest (estimated at 3.5%) that drew much of the attention.

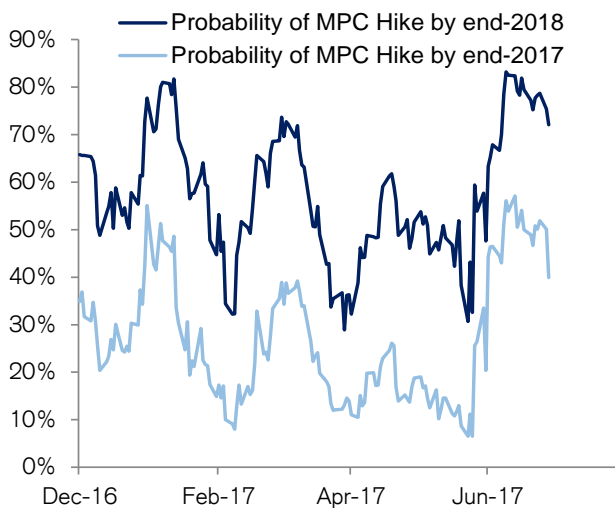
As we noted [last week](#), the rates market is essentially already pricing in around 3.5% as the medium-term neutral rate (1.3% in the 5y5y real rate, plus 2-2.5% inflation), so the magnitude of the estimate should not be very surprising. In our view, its significance appears to be that the RBA is using the discussion as a signaling tool to emphasize that the rate-cutting cycle is definitively over and that current policy is at exceptionally stimulatory levels compared to the "long run equilibrium". That said, we do not think it indicates an intention to accelerate the pace or timing of hikes, which are likely to remain dependent on the realization of continued improvements in the labor market and wages.

Politics vs. data in the UK

In the UK, some hopeful developments for the pound from the political front seem to have been quickly offset by a bearish turn in the data. On the political front, sterling appears to have benefited from the perception of a stronger footing for the "soft Brexit" political camp. Two cues have prompted such thinking: firstly, the UK Government's formal acknowledgement that it might need to eventually pay a financial Brexit liability and secondly greater signs of frictions within the Conservative Party over the matter of a hard

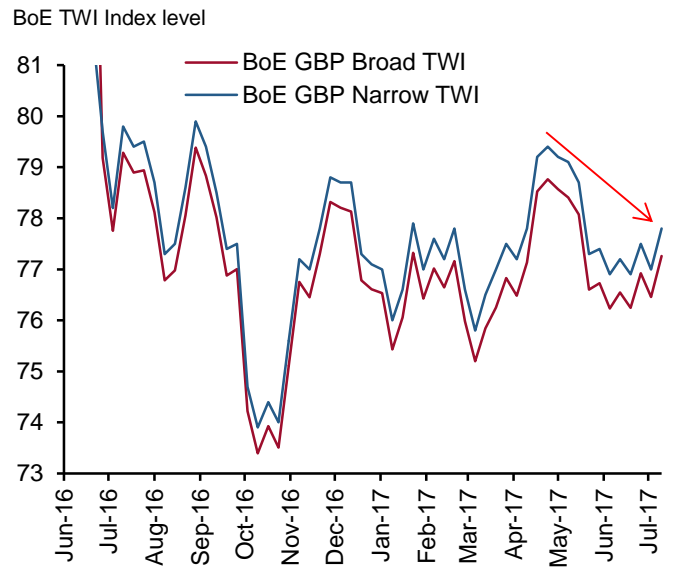
Brexit. It remains debatable whether the odds of hard/soft Brexit have really shifted in a meaningful manner recently, or whether such chatter merely characterizes a temporary oscillation in the ongoing clouded narrative. Our inclination is to side with the latter, unless UK Brexit Secretary David Davis hints otherwise after another round of Brexit negotiations this Thursday.

Figure 4: The latest inflation print has only slightly reduced the odds of an MPC hike by end-2018



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service

Figure 5: GBP TWI is still nearly 3% weaker than before the May BoE inflation report



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service

The weak CPI data earlier this week on the other hand was enough to push EURGBP above June 2017 highs (amidst broader EUR strength), while also dampening market-implied odds of an MPC hike in 2017 from 50% of 40%. Medium-term expectations remain sticky, with the market's pricing for a full BoE hike barely budging from Q3 2018. One of the key points of debate on the inflation front has been the slowdown in FX pass-through. We don't think this latest set of data will make conclusive additions to the debate: doves believe the first signs of slowing core goods inflation have emerged underneath the headline dynamic. On the other hand, sceptics will point out that this was only the first downside CPI surprise in many months, with no declines in year-on-year inflation from October until now. Thursday's UK retail sales data will once again test the notion of a consumer-led UK economic slowdown, though a quiet public events calendar suggests the MPC's reactions may not emerge until the 3rd August inflation report itself.

To be clear, neither of this week's developments have been enough for us to question our 0.90 3- and 12-month EURGBP targets. We still think there's good reason for the BoE to refrain from taking too dovish a route at its August meeting. As argued previously, we see a risk that the fading benefits of sterling depreciation may start to worry the MPC at such stages (see [FX Compass: When hawks fly](#)). And for what it's worth, GBP TWI is still 3% lower than it was at the time of the BoE's last inflation report – certainly giving reason for the hawks to keep talking.

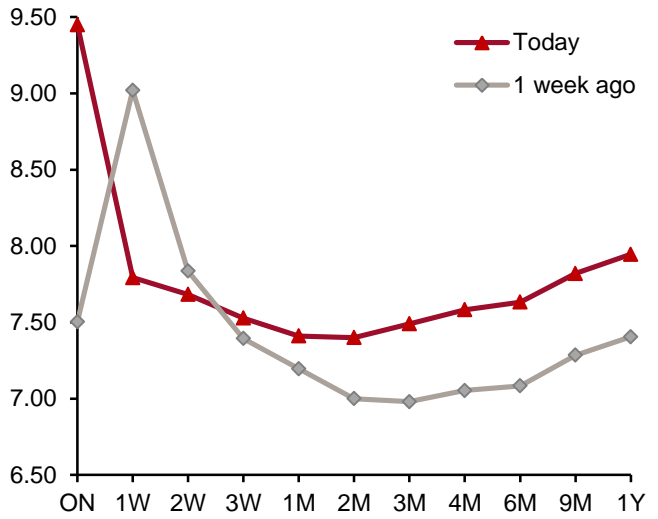
All eyes on CPI in Canada

Lastly, market focus on the Canadian dollar remains elevated following last week's hike by the Bank of Canada, as suggested by the near-parallel move higher in the implied vol curve since the rate decision (Figure 6). While the hawkish tinge of the decision has contributed to the initial bullish market reaction, and likely stoking uncertainty about the BoC's policy intentions for the rest of the year, we note however that USDCAD has not

outperformed in a significant way since the hike, but rather appears to have weakened in line with broad USD weakness (Figure 7).

Figure 6: CAD volatility has surged beyond the front end following the BoC hike

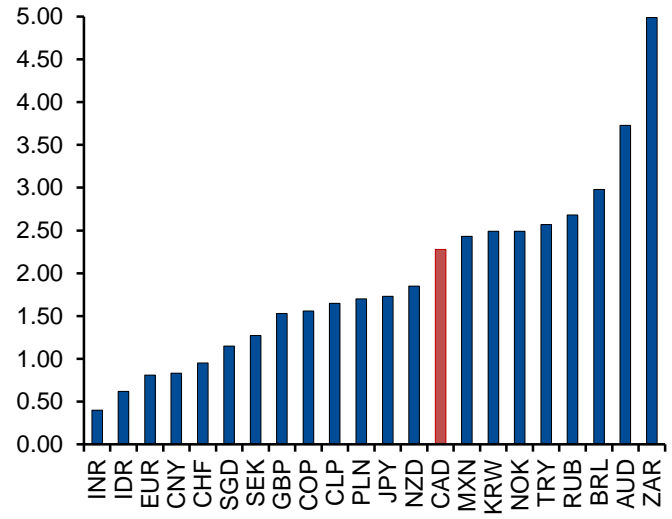
USDCAD implied volatility curve (%)



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service

Figure 7: Since the BoC decision, CAD performance does not stand out in context of broadly weak USD

1-week spot FX % performance vs. USD



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service

In our preview of the Bank of Canada decision last week ([link](#)) we stated that we would be buyers of USDCAD below 1.2750. While the outcome of the Bank of Canada decision was in line with our expectations, substantiating our stance on USDCAD, the USD-focused nature of the move since the rate decision and the arising of more substantial risks to the US dollar as noted above represent a new substantial development that potentially challenges our original view. In this sense, Thursday's ECB decision represents a key event for the outlook on USDCAD too, as a hawkish outcome would likely drive further weakness in the USD, and push USDCAD towards the key support level of 1.2461. Failure to breach below said level would bring renewed confidence to our bullish USDCAD view.

At the domestic level, with no BoC meeting until September, the focus remains on the data, and this Friday's CPI will be the first important test for the BoC's strong belief, as stated last week, that inflation is due for a surge from the current low levels. We maintain a skeptical bias on this front, as noted in our preview, but acknowledge that broader USD dynamics might prove dominant even in the event of a weak inflation print, if the USD were to attempt another broad leg lower. As such we favor waiting for clarity before pulling the trigger on long USDCAD.

SEK: Circular reference error

Honglin Jiang
44 20 7888 1501
honglin.jiang@credit-suisse.com

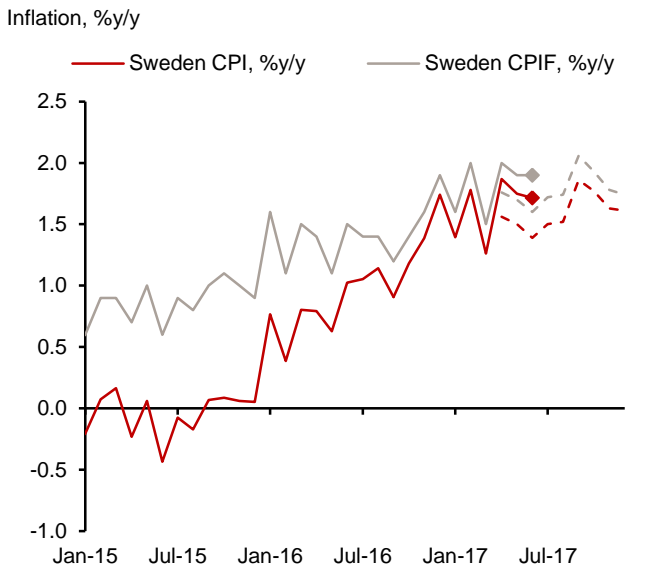
- We revise our EURSEK forecast from 9.60 in 3m to 9.40, and leave our 12m forecast unchanged at 9.15

The Riksbank will no doubt be pleased by June’s robust CPIF inflation print of 1.9% y/y putting the gauge within touching range of the target and beating expectations for the third consecutive month (Figure 8). Furthermore, the improvement in services inflation that was cited for special mention in the July meeting continued its run higher, with the HICP gauge printing at a seven-year high of 2.8%. Nonetheless, the Riksbank is likely to continue emphasizing limited market reflexivity as a precondition for tightening. Governor Floden summed it up thus:

“Market participants have now more clearly started to discuss and expect rate rises that occur earlier than in the Riksbank’s forecast. This has led to rising market rates and a strengthening in the krona compared with the Riksbank’s April forecast, something that will lead to downward pressure on inflation in the year ahead. The more the market prices in an earlier repo rate increase than in our forecast, the more likely it will become that the repo rate will instead be raised even later.”

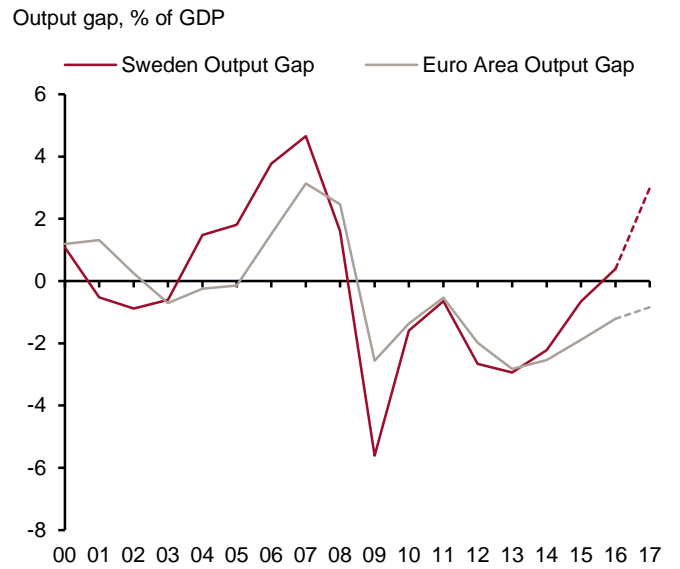
Nevertheless, our view is that fundamental economic strength and rapidly diminishing spare capacity should resolve the circularity of the argument in a way that allows SEK to appreciate gradually and the rate hike path to be gently brought forward without derailing inflation outcomes. Sweden’s relative output gap (Figure 9) and realized data continue to suggest that its economic cycle is leading Europe’s, even as the Riksbank insists on maintaining a lagged rate cycle. Meanwhile, SEK is by our measures the most undervalued currency in G10 FX (Figure 11). Thus, we revise our EURSEK 3m forecast lower to 9.40 to maintain a modestly bullish stance, while leaving our 12m forecast of 9.15 unchanged.

Figure 8: Inflation gauges maintaining trend higher and tracking well vs. expectations



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service, Riksbank

Figure 9: Sweden’s economic cycle is at odds with its monetary policy cycle



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service

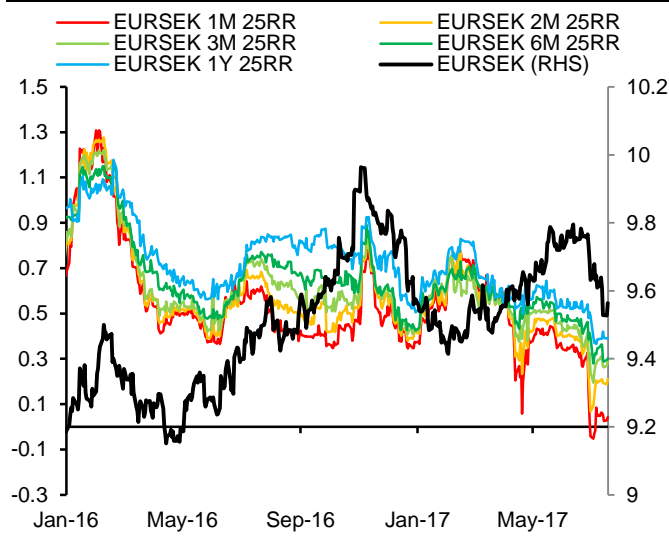
What specific conditions are necessary for the Riksbank to exit its expansionary policy? Governor Jansson usefully summed up his thinking:

- Underlying inflation at around 2% for several months. The Riksbank is forecasting this to occur in its CPIF ex-energy gauge by around September. Continued strength in services inflation is likely to help this goal be met.

- SEK appreciation should be limited and gradual. Riksbank credibility on this front should prevent disorderly appreciation.
- Other central banks, notably the ECB, need to begin unwinding their own stimulus. Our economists expect the ECB to announce a decision to taper asset purchases in September, with implementation in January 2018.

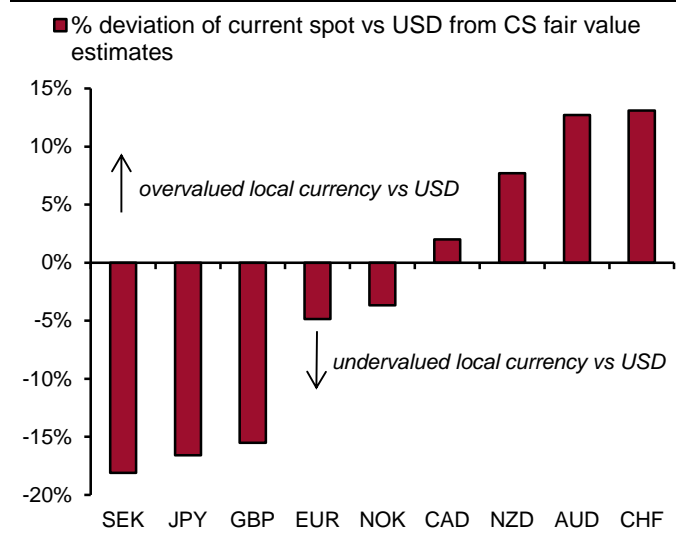
Given that Governor Jansson is relatively dovish compared to his peers (having voted for April’s extension of QE), this should be interpreted as a relatively high bar for tightening policy. Indeed, he noted that even if the ECB should taper, it would still be accumulating assets, which might necessitate continued extensions of the Riksbank’s own asset purchases. However, given the dissension around the last two votes, the possibility of a more hawkish replacement for Governor Ingves at the turn of the year, elevated house price inflation and increasing technical difficulties with implementation, we doubt whether such a threat would be credible given the current information set. If anything, the risk scenario may skew to the reflationary side in Sweden even more than Europe, leaving Riksbank policy looking well behind the curve. For now, behind the curve is where they wish to be, but it is a position that comes with attendant risks.

Figure 10: Risk reversals pricing in market bias for SEK appreciation already



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service

Figure 11: SEK is the most undervalued currency in G10 by CS fair value metrics



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service, Riksbank

To some extent, the FX options market already reflects increased appetite for EURSEK downside, as risk reversals have fallen toward multi-year lows across a range of tenors (Figure 10). This stands out especially as EUR risk reversals are well bid for EUR calls versus other crosses such as the USD, JPY and CHF. Combined with the Riksbank’s long standing aversion to deep and rapid gains the SEK, this makes purchasing EURSEK puts a relatively unfavorable strategy for monetizing the view, and suggests that structures such as reverse knock out puts or selling EURSEK forward might be more effective strategies.

PHP: Sell on bounce, the worst of the trust funds outflows is probably over

Ray Farris
65 6212 3412
ray.farris@credit-suisse.com

Trang Thuy Le
852 2101 7426
trangthuy.le@credit-suisse.com

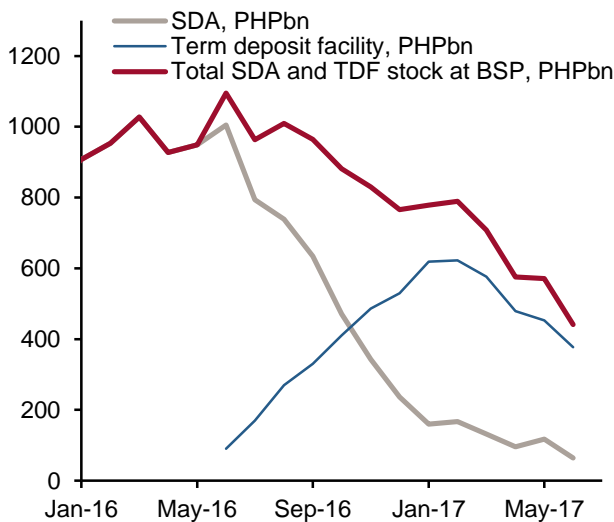
We have raised our USDPHP forecasts to 51.0 in three months and 52.0 in 12 months from 49.5 and 50.5 previously. We recommend adding to USDPHP longs on pullbacks rather than chasing the rally now. We think the worst of the trust fund outflows that accelerated from Q4 2016 through June is probably over and its impact on PHP should diminish. However, the now weaker current account balance and the dovish shift in the central bank's (BSP) tone implies persistent pressure for PHP to weaken, albeit likely at a slower pace than recently).

Trust fund outflows likely to stabilize in the coming months...

The BSP's removal of access of trust funds to its deposit facilities has released PHP520bn of liquidity from BSP's balance sheet since Q4 last year to Q2 2017 (Figure 12). We think part of these funds were rotated into foreign assets, causing the PHP to weaken. However, the June 30 deadline for withdrawal means that this process is now complete. The balance in the Special Deposit Account (SDA) has fallen to a residual PHP65bn – likely reflecting banks' operational liquidity needs. We expect the liquidity stock at the BSP to stabilize in the next several months, and as such this source of drag on the PHP should also start to diminish. Figure 13 shows that PHP has historically correlated well with measures of liquidity stock.

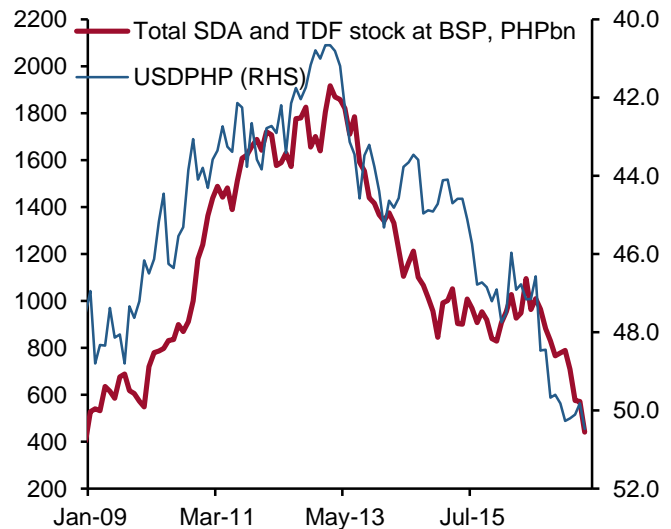
Figure 12: Sharp fall in liquidity stock at BSP due to withdrawal of trust accounts

SDA was subsequently changed to Overnight Deposit Facility (ODF) from 2016



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service, CEIC

Figure 13: USDPHP correlates well with measure of liquidity stock

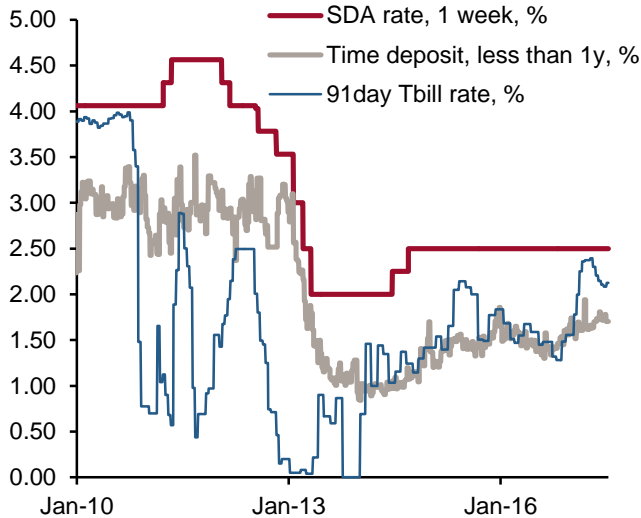


Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service, CEIC

There are only two episodes of large falls in the SDA balance in the past five years, 2013 and late 2016 to June this year. Both were results of the BSP's policy to restrict trust funds access. As background, SDA is a deposit facility at BSP which offered higher interests than commercial banks' deposits (Figure 14). The facility is accessible only by banks, and previously trust funds. SDA was a popular investment vehicle for trust funds, especially money market funds. Back in 2012, before BSP's move to restrict access and reduce SDA rates, nearly 50% of trust funds' total assets were parked in SDA, including likely foreign money after PHP carry.

Figure 14: SDA rates are higher than commercial banks' deposits and short-term government bonds

SDA was subsequently changed to Overnight Deposit Facility (ODF) from 2016



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service, CEIC

Figure 15: BSP's moves to restrict access to Special Deposit Account (SDA) in 2013 and late 2016

- Jul-12 Restrict foreign funds to SDA, required certification of domestic sources of funds
- May-13 Restrict agency (investment management) accounts and fiduciary accounts access to SDA, to be phased in by end 2013
- Nov-16 Restrict all trust accounts access to deposit facilities including ODF (previously SDA) and Term Deposit Facility (TDF), to be phased in by June 2017

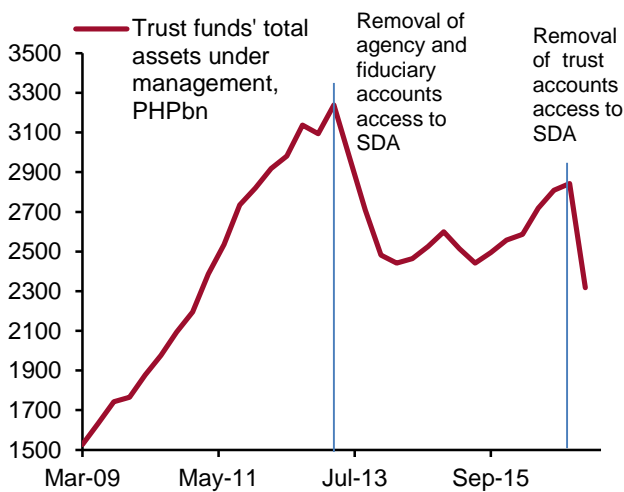
Source: Credit Suisse, BSP

Liquidity released from SDA is bearish for the PHP in two ways. First, the liquidity released is rotated into other domestic assets, particularly bank deposits and short-term government bonds, depressing yields and moving interest rate differentials against the PHP. This effect was prominent in 2013. Second, to the extent that the change in BSP's regulations prompted investors to re-evaluate investment decisions altogether, some may have decided to shift abroad, seeking better returns.

Figures 16 and 17 indeed show that trust funds faced heavy redemption pressures during both episodes of BSP reducing their access to the SDA in mid-2013 and from Q4 last year. This suggests that investors have not simply shifted to different funds – e.g. to bond or equity funds, but have re-evaluated their investments. Capital outflows from Philippines balance of payments accelerated in 2013, suggesting at least part of the funds withdrawn were shifted overseas, although the fact that this period coincided with the taper tantrum sell-off made it difficult to separate the effect.

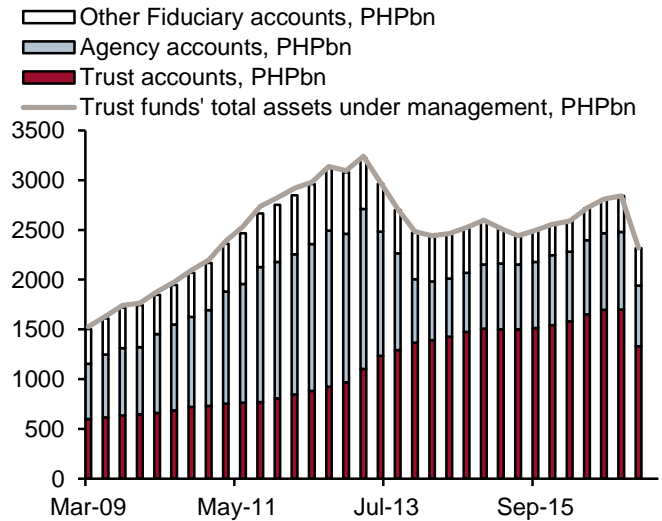
Figure 16: Trust funds faced heavy redemption pressures in 2013 and recently...

Data up to 1Q 2017



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service, CEIC

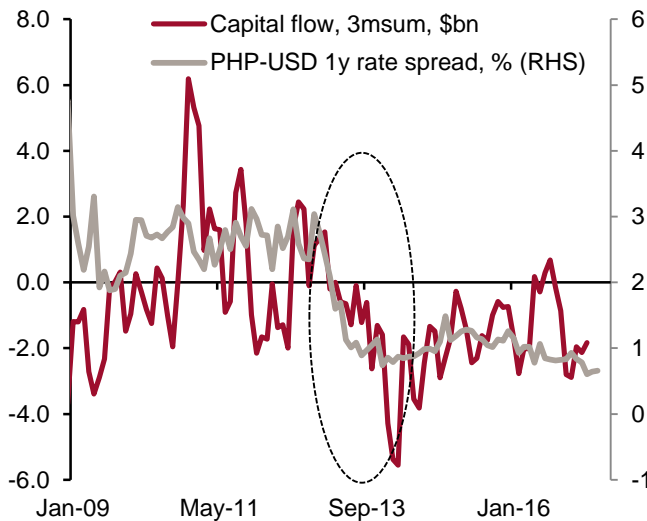
Figure 17: ...led by drop in Agency and Fiduciary accounts in 2013 and trust accounts in 2016/17



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service, CEIC

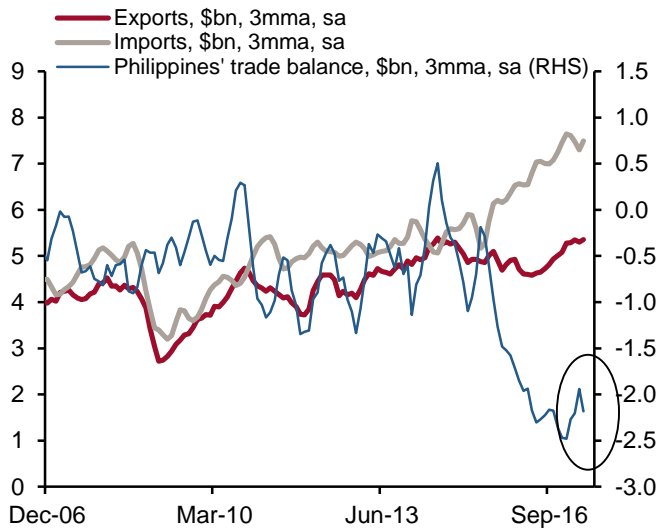
Figure 18: Capital outflows accelerated in 2013

Data up to 1Q 2017



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service, CEIC

Figure 19: Improvement in the trade balance recently could prove short-lived



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service, CEIC

But dovish BSP and weak current account position leave us bearish

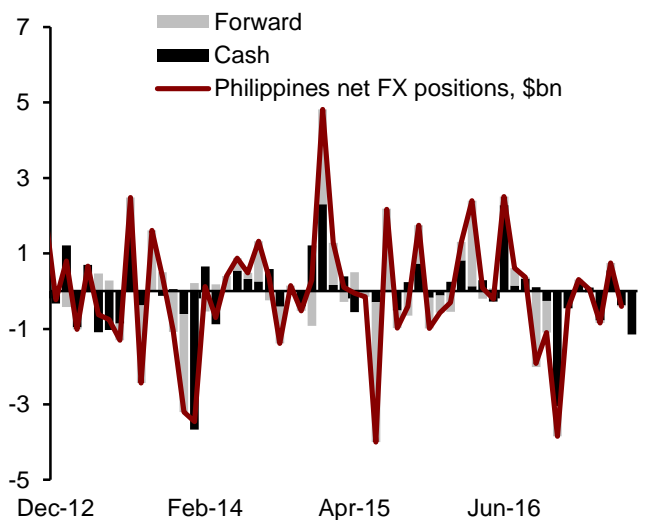
Looking into Q4 and the year ahead, we expect BSP dovishness to be bearish for the PHP. We do not expect rate cuts, but think reserve requirement cuts are a possibility. We estimate that a 50bp to 100bp RRR cut could release between PHP37bn to PHP75bn of liquidity, small in scale compared to the recent SDA shifts, but still negative for PHP in the context of rising global yields. In addition, we think the BSP could reduce the pace of liquidity withdrawal via its term deposit facility.

Falling inflation and downside growth surprise support the BSP's dovish turn. Our economist expects inflation to fall from 2.8% now to 2.4% by year end, the low end of BSP's 2% to 4% inflation target range. More importantly, we see scope for downside growth surprise, driven by weak consumption following a collapse in employment growth in early 2017 (see [Philippines: Consumer pains](#)). To be sure, BSP new Governor Nestor Espenilla said recently that falling inflation has given space for the BSP to carefully consider "policy options" to fine tune the use of monetary policy instruments and further the development of the domestic financial market.

Importantly, the BSP appears willing to allow controlled PHP weakness. Intervention rose to an estimated \$1.2bn in June, but this is small relative to past bouts of intervention that were aimed more clearly at halting depreciation. BSP has said that it is managing volatility but not influencing FX levels. An effect of this is that PHP underperformance of its regional peers has facilitated a gradual depreciation of the real effective exchange rate (Figures 20 and 21). Much of the deterioration of the Philippines current account has come from export weakness and we believe the authorities view currency depreciation as a policy adjustment given that inflation is low.

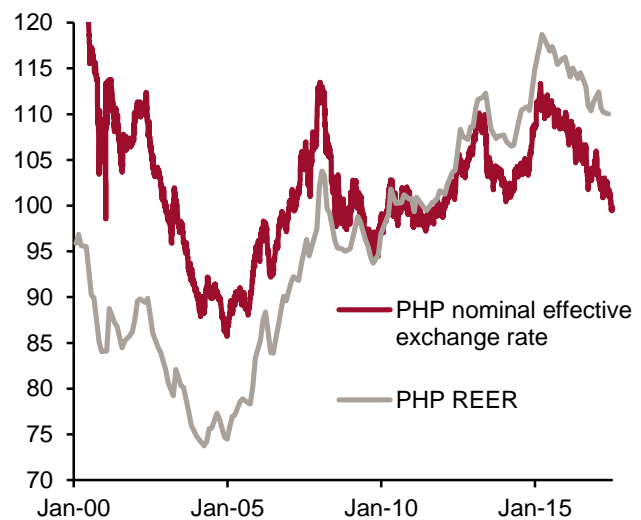
Figure 20: BSP intervention has not picked up materially...

Monthly change in FX reserves and forward positions, val adjusted



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service, CEIC

Figure 21: ...more room for PHP REER to fall



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service, CEIC

Asian FX: Mini-tantrum more history than preview

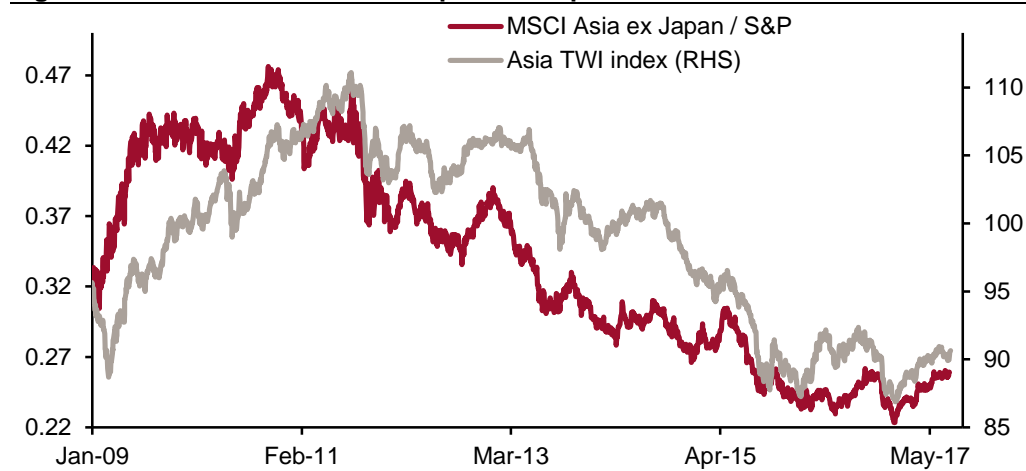
Ray Farris
65 6212 3412
ray.farris@credit-suisse.com

Trang Thuy Le
852 2101 7426
trangthuy.le@credit-suisse.com

This is an excerpt of [FX Strategist – Mini-tantrum more history than preview](#) published on July 17. Please refer to our full report for more detailed analysis.

The mini-tantrum in global bond yields from 26 June to 7 July has rolled over thanks to dovish Humphrey-Hawkins testimony from Fed Chair Yellen and Friday's weak US CPI data...at least for now. Asian currencies have recovered and have recoupled with Asian equity market outperformance of US equities.

Figure 22: Asian currencies recouple with equities



Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service

Nonetheless, this recent experience of higher US yields and weaker Asian currencies begs the question of whether this was a preview to the show to come later this year when G2 central banks are expected to deliver hawkish innovations. ECB President Draghi's speech in August at the Fed's Jackson Hole conference, a potential Fed announcement on the timing of balance sheet shrinkage in September, and our expectation for another Fed hike in December are all potential triggers.

Our analysis suggests that although Asian currencies would not be immune to shocks to US yields, they are likely to prove robust to a gradual grind higher. We think equity risk appetite will increasingly determine Asian FX directionality over the next several months.

This leads us to expect choppy ranges rather than clear directionality. We are better biased to buy the MYR, TWD, and, to a lesser extent, KRW on dips, but to be short the SGD (for SGD see [SGD NEER: Scale into short SGD positions](#)). We also see risk biased to the downside in PHP versus our forecast and would be a seller on any bounce.

The AUD has confirmed a large base

Christopher Hine
212 538 5727
christopher.hine@credit-suisse.com

AUD has recently experienced a sharp and broad based rally, which has seen the **TWI (BoE)** rally off uptrend from January 2016 at 91.70, to test the potential downtrend from May 2014 at 96.50. Extension above here can see strength extend to the February and March highs at 97.60, which we expect to cap at first. However, a break in due course is expected to reinstate the core bull trend for the 38.2% retracement of the 2013/16 fall at 98.40 initially, then the May and January 2015 highs at 99.60 and 100.20 respectively, with the latter expected to offer a stronger barrier.

Support is seen at 93.80/70 initially. Below here can see a deeper fall to 91.80/70.

AUDUSD has established an important medium-term base above .7850

AUDUSD has rallied strongly since its trough in May at .7329 to stage a clear break above key resistance at .7835/50 – the 2016 high and the 38.2% retracement of the June 2014/January 2016 bear trend. This has established an important medium-term base and signals the start of a more significant bull trend for the May 2015 high and 50% retracement at .8163/67 initially, then the measured target from the base and overlapping retracements levels at .8414/83 – including the 38.2% retracement of the entire 2011/2016 bear market.

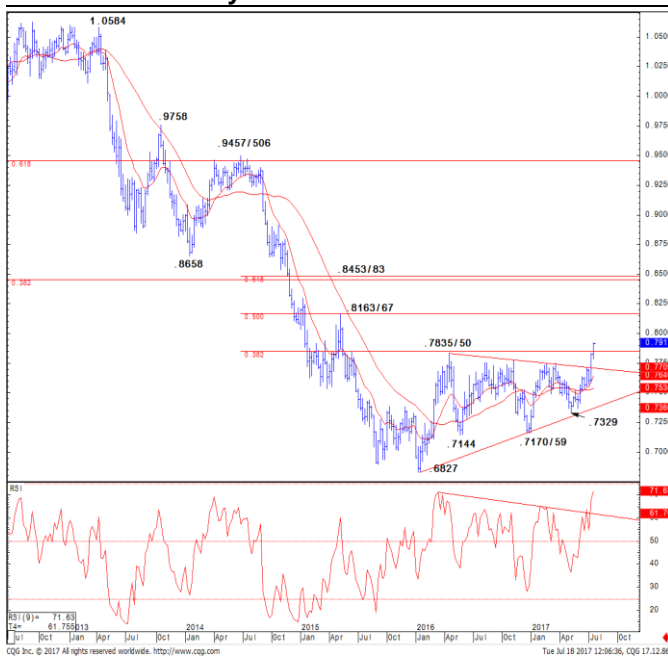
Support is seen at .7786/79 initially, then "neckline" support at 7713/08.

AUDNZD has achieved our target and the measured objective from the base at 1.0734 and stays bullish

AUDNZD has rallied strongly, post its completion of a reverse "head and shoulders" base above 1.0553, to see a clear break above the 200-day average and 38.2% retracement of the March/June fall at 1.0611/20 and the 50% retracement at 1.0697, to meet our target at the measured objective from the base at 1.0734. Resistance is seen next at 1.0821 above which can target the 78.6% retracement at 1.0883 initially, then the May high at 1.0937, ahead of more important resistance at the high of the year at 1.1023, which we would look to try and provide a ceiling.

Support is seen at 1.0632 initially. Below here would complete a small top and target basing support at 1.0554/52.

AUDUSD – Weekly



Source: CQG, Credit Suisse

AUDNZD – Daily



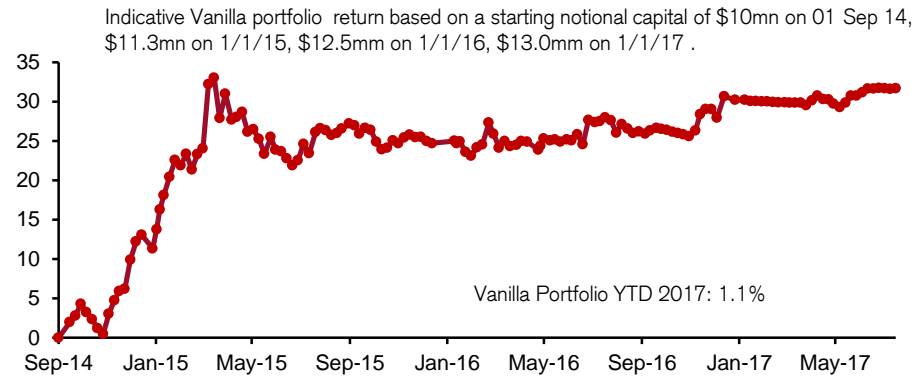
Source: CQG, Credit Suisse

Vanilla Portfolio Recap

This week's updates

- No new trades this week

Figure 23: Vanilla portfolio cumulative percent returns (Since 1 Sep 2014)



Source: Credit Suisse

Figure 24: Current vanilla recommendations

Entry Date	Expiration Trade	Details	Entry Cost/Level	Current Value	P&L (% of notional)	Notional	CCY	P&L USD
04-Apr-17	03-Oct-17 Buy 6m USDCHF put	Buy 6m 0.92 put	0.45%	0.36%	(0.09%)	10,000,000 USD		-9,000
	Buy 10m USDHKD call spread	Buy 7.75 call, sell 7.85 call	0.37%	0.41%	0.04%	15,000,000 USD		6,000
14-Feb-17	14-Dec-17 Buy 10m 7.75 USDHKD call		0.70%	0.46%	(0.24%)	15,000,000 USD		-36,000
14-Feb-17	14-Dec-17 Sell 10m 7.85 USDHKD call		0.33%	0.05%	0.28%	-15,000,000 USD		42,000

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment at the original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments may be subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. The P&L results shown do not include relevant costs, such as commissions, interest charges, or other applicable expenses.

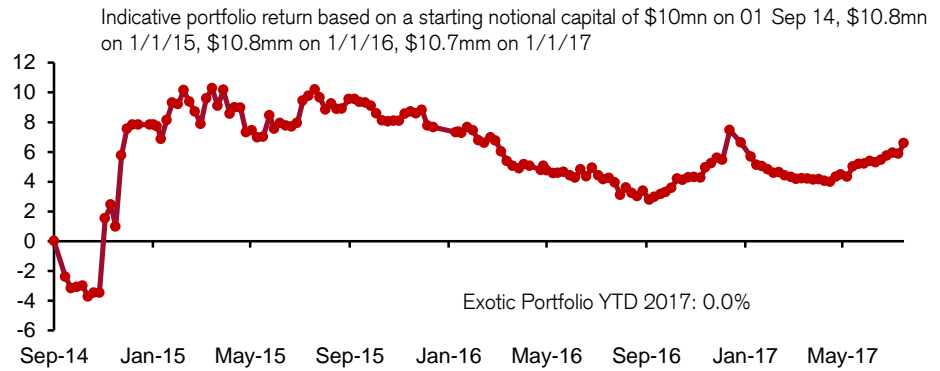
Source: Credit Suisse

Exotic Portfolio Recap

This week's updates

- No new trades this week

Figure 25: Exotic portfolio cumulative percent returns (Since 1 Sep 2014)



Source: Credit Suisse

Figure 26: Current exotic recommendations

Entry Date	Expiration Trade	Details	Entry Cost/Level	Current Value	P&L (% of notional)	Notional	CCY	P&L USD
27-Jun-17	27-Jun-18	Buy 1y EURGBP digi risk reversal	Buy 0.86 digi put, sell 0.925 digi call	0.00%	(2.00%)	(2.00%)	500,000 EUR	-11,551
06-Jun-17	08-Aug-17	Buy 2m USDMXN put DKO	18.42 put, KO barriers 17 / 20	1.24%	3.30%	2.06%	5,000,000 USD	103,000
23-May-17	22-Aug-17	Buy 3m EURUSD call RKO	EURUSD 1.1233 call, RKO 1.1750	0.53%	1.15%	0.64%	10,000,000 EUR	73,523

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment at the original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments may be subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. The P&L results shown do not include relevant costs, such as commissions, interest charges, or other applicable expenses.

Source: Credit Suisse

Recently closed trades

Figure 27: Recently closed vanilla trades

Entry Date	Date Closed	Trade	Details	Entry Cost/Level	Closed Value	P&L (% of notional)	Notional	CCY	P&L USD
11-Apr-17	11-Jul-17	Buy 3m AUDUSD 0.72 put	Buy 3m 0.72 put	0.61%	0.00%	(0.60%)	5,000,000	AUD	-22,886
09-May-17	20-Jun-17	Sell 2m USDPLN forward	Sell 2m fwd, add 2mm USD at 4.00	3.89	3.78	2.98%	-1,000,000	USD	29,774
25-Apr-17	13-Jun-17	Buy 3m EURGBP call spread	Buy 0.85 call, sell 0.88 call	1.25%	2.51%	1.29%	15,000,000	EUR	218,024
18-Apr-17	30-May-17	Buy 3m TRYZAR forward	Buy 3m fwd, target 3.90, stop 3.45 (spot)	3.5850	3.6794	2.63%	4,000,000	TRY	29,615
28-Mar-17	30-May-17	Buy 2m 1x1.5 USDJPY put spread	Buy 110 put, sell 107 put	0.53%	0.00%	(0.53%)	10,000,000	USD	-52,935
04-Apr-17	23-May-17	Buy 2m 1x1.5 EURCAD call spread	Buy 1.435 call, sell 1.47 call	0.72%	0.75%	0.07%	10,000,000	EUR	8,166
09-May-17	18-May-17	Sell 2m USDARS NDF	Sell 2m NDF target 15.60, stop 16.20	15.95	16.35	(2.51%)	-2,000,000	USD	-50,157
11-Apr-17	09-May-17	Sell 1m EURUSD iron condor	Buy 1.03, 1.09. Sell 1.05, 1.07	(0.93%)	(1.80%)	(0.89%)	5,000,000	EUR	-48,875
21-Mar-17	18-Apr-17	Buy 1m USDRUB call	Buy 1m 59.35 call	0.61%	0.00%	(0.61%)	5,000,000	USD	-30,500
10-Jan-17	11-Apr-17	Buy 3m 1x1.5 AUDUSD put spread	Buy 12mm 0.7350, Sell 18mm 0.7150	0.50%	0.00%	(0.49%)	12,000,000	AUD	-43,741
28-Mar-17	11-Apr-17	Sell 3m USDARS NDF	Sell 16.18 NDF, target 15.75, 16.40 stop	16.18	15.81	2.29%	-5,000,000	USD	114,339

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment at the original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments may be subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. The P&L results shown do not include relevant costs, such as commissions, interest charges, or other applicable expenses.

Source: Credit Suisse

Figure 28: Recently closed exotic trades

Entry Date	Date Closed	Trade	Details	Entry Cost/Level	Closed Value	P&L (% of notional)	Notional	CCY	P&L USD
12-Jul-16	12-Jul-17	Buy 1y USDJPY one touch	Long 130 strike one touch	8.43%	0.00%	(8.43%)	1,000,000	USD	-84,300
07-Mar-17	23-May-17	Buy 3m USDMXN put DKO	USDMXN 19.745 put, KO 18.00, 22.00	1.40%	4.41%	3.01%	5,000,000	USD	150,500
10-Jan-17	11-Apr-17	Buy 6m USDCAD call RKO	USDCAD 1.35 call, 1.40 ko	0.20%	0.00%	(0.20%)	10,000,000	USD	-20,000
04-Oct-16	04-Apr-17	Buy 6m EURUSD one touch	EURUSD 1.00 strike one touch	9.89%	0.00%	(9.89%)	200,000	EUR	-22,138
09-Feb-16	09-Feb-17	Buy 1y EURUSD vol swap	50k EUR per vega point	10.90%	9.01%	(1.89%)	5,000,000	EUR	-100,361

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment at the original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments may be subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. The P&L results shown do not include relevant costs, such as commissions, interest charges, or other applicable expenses.

Source: Credit Suisse

Trades of the Year 2017

As recommended in the [Top Trades for the 2017 Outlook: A New Narrative \(Not a New Normal\)](#)

Figure 29: Trades of the year

Entry Date	Expiration	Trade	Details	Entry Price	Current Price	P&L (%)	Status
05-Jan-17	05-Jul-17	Buy EURGBP 6-month double no touch	0.8120 / 0.8870 strikes, spot ref 0.8489	15.00%	0.00%	(15.00%)	Stopped out
05-Jan-17	05-Jul-17	Sell CADRUB 6m forward	Target 42.75, stop loss 47.00, spot ref 45.39	47.09	42.75	9.21%	Profit taken
05-Jan-17	05-Jul-17	Sell MXNRUB 6m forward	Target 2.60, stop loss 3.00, spot ref 2.8390	2.8590	3.0000	(4.93%)	Stopped out
05-Jan-17	05-Jul-17	Buy USDCNH 6m forward	Target 7.40, stop loss 6.80 (fwd), spot ref 6.8274	7.0440	6.8000	(3.46%)	Stopped out
05-Jan-17	05-Jul-17	Buy USDTWD 6m NDF	Target 33.50, stop loss 31.25 (fwd), spot ref 31.93	31.79	31.25	(1.70%)	Stopped out

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment at the original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments may be subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. The P&L results shown do not include relevant costs, such as commissions, interest charges, or other applicable expenses.

Source: Credit Suisse

FX Forecast Summary

Figure 30: CS FX Forecasts

Major Currencies										
	EURUSD	USDJPY	GBPUSD	USDCHF	USDCAD	AUDUSD	NZDUSD	USDSEK	USDNOK	
3m	1.150	110.00	1.278	0.952	1.300	0.740	0.695	8.174	8.348	
12m	1.150	107.00	1.278	0.943	1.360	0.720	0.692	7.957	8.478	
	EURJPY	EURGBP	EURCHF	EURCAD	EURAUD	EURNZD	EURSEK	EURNOK		
3m	126.50	0.900	1.095	1.495	1.554	1.655	9.400	9.600		
12m	123.05	0.900	1.085	1.564	1.597	1.661	9.150	9.750		
Emerging Currencies										
	USDCNY	USDHKD	USDINR	USDIDR	USDKRW	USDMYR	USDPHP	USDSGD	USDTHB	USDTWD
3m	6.750	7.750	64.80	13300	1135	4.100	51.000	1.365	33.50	30.00
12m	6.930	7.750	67.00	13600	1200	4.250	52.000	1.395	33.50	32.00
	USDBRL	USDMXN	USDCLP	USDCOP	USDRUB	USDTRY	USDZAR	EURPLN	EURHUF	EURCZK
3m	3.500	18.00	670	3,100	60.00	3.55	13.00	4.12	308	26.50
12m	3.700	20.00	680	3,150	62.00	3.95	13.90	4.12	308	26.20

Source: Credit Suisse, the BLOOMBERG PROFESSIONAL™ service

GLOBAL FIXED INCOME AND ECONOMIC RESEARCH

James Sweeney, Managing Director
 Head of Fixed Income and Economic Research
 +1 212 538 4648
 james.sweeney@credit-suisse.com

Dr. Neal Soss, Managing Director
 Vice Chairman, Fixed Income Research
 1 212 325 3335
 neal.soss@credit-suisse.com

US / GLOBAL ECONOMICS AND STRATEGY

James Sweeney Chief Economist +1 212 538 4648 james.sweeney@credit-suisse.com	Xiao Cui +1 212 538 2511 xiao.cui@credit-suisse.com	Zoltan Pozsar +1 212 538 3779 zoltan.pozsar@credit-suisse.com	Jeremy Schwartz +1 212 538 6419 jeremy.schwartz@credit-suisse.com	Wenzhe Zhao +1 212 325 1798 wenzhe.zhao@credit-suisse.com
---	--	--	--	--

Praveen Korapaty Head of Interest Rate Strategy 212 325 3427 praveen.korapaty@credit-suisse.com	Jonathan Cohn 212 325 4923 jonathan.cohn@credit-suisse.com
---	---

EUROPEAN ECONOMICS AND STRATEGY

Neville Hill Head of European Economics & Strategy +44 20 7888 1334 neville.hill@credit-suisse.com	Anais Boussie +44 20 7883 9639 anais.boussie@credit-suisse.com	Peter Foley +44 20 7883 4349 peter.foley@credit-suisse.com	Sonali Punhani +44 20 7883 4297 sonali.punhani@credit-suisse.com	Veronika Roharova +44 20 7888 2403 veronika.roharova@credit-suisse.com	Giovanni Zanni +44 20 7888 6827 giovanni.zanni@credit-suisse.com
--	---	---	---	---	---

David Sneddon Head of Technical Analysis 44 20 7888 7173 david.sneddon@credit-suisse.com	Christopher Hine 212 538 5727 christopher.hine@credit-suisse.com
--	---

GLOBAL FX / EM ECONOMICS AND STRATEGY

Shahab Jalinoos Head of Global FX Strategy 212 325 5412 shahab.jalinoos@credit-suisse.com	Honglin Jiang 44 20 7888 1501 honglin.jiang@credit-suisse.com	Trang Thuy Le +852 2101 7426 trangthuy.le@credit-suisse.com	Alvise Marino 212 325 5911 alvise.marino@credit-suisse.com	Bhaveer Shah 44 20 7883 1449 bhaveer.shah@credit-suisse.com
---	--	--	---	--

Kasper Bartholdy Head of Global EM Strategy +44 20 7883 4907 kasper.bartholdy@credit-suisse.com	Ashish Agrawal +65 6212 3405 ashish.agrawal@credit-suisse.com	Daniel Chodos +1 212 325 7708 daniel.chodos@credit-suisse.com	Nimrod Mevorach +44 20 7888 1257 nimrod.mevorach@credit-suisse.com
---	--	--	---

Berna Bayazitoglu Head of EEMEA Economics +44 20 7883 3431 berna.bayazitoglu@credit-suisse.com	Alexey Pogorelov +44 20 7883 0396 alexey.pogorelov@credit-suisse.com	Carlos Teixeira +27 11 012 8054 carlos.teixeira@credit-suisse.com
--	---	--

Alonso Cervera Head of Latin America Economics +52 55 5283 3845 alonso.cervera@credit-suisse.com	Juan Lorenzo Maldonado +1 212 325 4245 juanlorenzo.maldonado@credit-suisse.com	Casey Reckman +1 212 325 5570 casey.reckman@credit-suisse.com	Alberto Rojas +52 55 5283 8975 alberto.rojas@credit-suisse.com
--	---	--	---

Nilson Teixeira Head of Brazil Economics +55 11 3701 6288 nilson.teixeira@credit-suisse.com	Paulo Coutinho +55 11 3701-6353 paulo.coutinho@credit-suisse.com	Iana Ferrao +55 11 3701 6345 iana.ferrao@credit-suisse.com	Leonardo Fonseca +55 11 3701 6348 leonardo.fonseca@credit-suisse.com	Lucas Vilela +55 11 3701-6352 lucas.vilela @credit-suisse.com
---	---	---	---	--

ASIA PACIFIC DIVISION

Ray Farris, Managing Director
 Head of Fixed Income Research and Economics, Asia Pacific Division
 +65 6212 3412
 ray.farris@credit-suisse.com

EMERGING ASIA ECONOMICS

Dr. Santitarn Sathirathai Head of Emerging Asia Economics +65 6212 5675 santitarn.sathirathai@credit-suisse.com	Vincent Chan Head of China Macro +852 2101 6568 vincent.chan@credit-suisse.com	Deepali Bhargava +65 6212 5699 deepali.bhargava@credit-suisse.com	Weishen Deng +852 2101 7162 weishen.deng@credit-suisse.com	Michael Wan +65 6212 3418 michael.wan@credit-suisse.com
---	--	--	---	--

JAPAN ECONOMICS

Hiromichi Shirakawa Head of Japan Economics +81 3 4550 7117 hiromichi.shirakawa@credit-suisse.com	Takashi Shiono +81 3 4550 7189 takashi.shiono@credit-suisse.com
---	--

Disclosure Appendix

Analyst Certification

Shahab Jalinoos, Ray Farris, Alvise Marino, Trang Thuy Le, Honglin Jiang and Bhaveer Shah each certify, with respect to the companies or securities that the individual analyzes, that (1) the views expressed in this report accurately reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

Important Disclosures

Credit Suisse's research reports are made available to clients through our proprietary research portal on CS PLUS. Credit Suisse research products may also be made available through third-party vendors or alternate electronic means as a convenience. Certain research products are only made available through CS PLUS. The services provided by Credit Suisse's analysts to clients may depend on a specific client's preferences regarding the frequency and manner of receiving communications, the client's risk profile and investment, the size and scope of the overall client relationship with the Firm, as well as legal and regulatory constraints. To access all of Credit Suisse's research that you are entitled to receive in the most timely manner, please contact your sales representative or go to <https://plus.credit-suisse.com>.

Credit Suisse's policy is only to publish investment research that is impartial, independent, clear, fair and not misleading. For more detail, please refer to Credit Suisse's Policies for Managing Conflicts of Interest in connection with Investment Research: <https://www.credit-suisse.com/sites/disclaimers-ib/en/managing-conflicts.html>.

Credit Suisse's policy is to publish research reports as it deems appropriate, based on developments with the subject issuer, the sector or the market that may have a material impact on the research views or opinions stated herein.

The analyst(s) involved in the preparation of this research report received compensation that is based upon various factors, including Credit Suisse's total revenues, a portion of which are generated by Credit Suisse's Investment Banking and Fixed Income Divisions.

Credit Suisse may trade as principal in the securities or derivatives of the issuers that are the subject of this report.

At any point in time, Credit Suisse is likely to have significant holdings in the securities mentioned in this report.

As at the date of this report, Credit Suisse acts as a market maker or liquidity provider in the debt securities of the subject issuer(s) mentioned in this report.

Important disclosures regarding companies or other issuers that are the subject of this report are available on Credit Suisse's disclosure website at <https://rave.credit-suisse.com/disclosures/view/fixedincome> or by calling +1 (877) 291-2683.

For the history of trade ideas suggested by the Fixed Income Research department over the previous 12 months, please view the document at <https://plus.credit-suisse.com/r/aaCzff>. Credit Suisse clients with access to the Locus website may refer to <http://www.credit-suisse.com/locus>. For the history of trade ideas suggested by Emerging Markets Strategy Research, please see the latest *Emerging Markets Strategy Weekly* report on [Credit Suisse PLUS](#).

For the history of recommendations provided by Technical Analysis, please visit the website at https://plus.credit-suisse.com/ECP_S/app/container.html#loc=/MENU_FI_ECON_TECHNICAL_ANALYSIS.

Credit Suisse does not provide any tax advice. Any statement herein regarding any US federal tax is not intended or written to be used, and cannot be used, by any taxpayer for the purposes of avoiding any penalties.

For a history of recommendations for the financial instrument(s) featured in this report, disseminated within the past 12 months, please refer to <https://rave.credit-suisse.com/disclosures/view/reportfi?i=310230&v=7fzzzc2dgyodb9pgcm9zprzks>.

This research report is authored by:

Credit Suisse (Hong Kong) Limited	Trang Thuy Le
Credit Suisse Securities (USA) LLC	Shahab Jalinoos ; Alvise Marino ; Christopher Hine
Credit Suisse AG, Singapore Branch	Ray Farris
Credit Suisse International	Honglin Jiang ; Bhaveer Shah

Structured Securities, Derivatives, Options, and Futures Disclaimer

General risks: Structured securities, derivatives, options (OTC and listed), and futures (including, but not limited to, commodity, foreign exchange, and security futures) are complex instruments that are not suitable for every investor, may involve a high degree of risk, may be highly illiquid, and may be appropriate investments only for sophisticated investors who are capable of understanding and assuming the risks involved. **There is a risk of unlimited, total, or significant loss resulting from the use of these instruments for trading and investment.**

Before entering into any transaction involving these instruments, you should ensure that you fully understand their potential risks and rewards and independently determine that they are appropriate for you given your objectives, experience, financial and operational resources, and other relevant circumstances. For options, please ensure that you have read the Options Clearing Corporation's disclosure document, available at: <http://www.optionsclearing.com/publications/risks/riskchap1.jsp>.

Risk of losses on options: The maximum potential loss on buying a call or put option is the loss of total premium paid. The maximum potential loss on selling a call option is unlimited. The maximum potential loss on selling a put option is substantial and may exceed the premium received by a significant amount. There are many other options combinations that entail significant risks and transaction costs: you should ensure they are appropriate for your situation and that you understand the risks.

Risk of losses on futures: The maximum potential loss on buying a futures contract is substantial (the loss of the value of the contract) and can be amplified by leverage. The maximum potential loss on selling a futures contract is unlimited.

OTC options and other derivatives: In discussions of OTC options and other derivatives, the results and risks are based solely on the hypothetical examples cited; actual results and risks will vary depending on specific circumstances. Investors are urged to consider carefully whether these products, as well as the products or strategies discussed herein, are suitable to their needs. While some OTC markets may be liquid, transactions in OTC derivatives may involve greater risk than investments in exchange-listed derivatives because there is no exchange market on which to liquidate a position and it may be very difficult to assess the value of the position because bid and offer prices need not be quoted.

Structured products: These products often have a derivative component. As a result, they carry not only the risk of loss of principal, but also the possibility that at expiration the investor will own the reference asset at a depressed price. Even if a structured product is listed on an exchange, active and liquid trading markets may not develop and the structured product may be thinly traded.

Taxation: Because of the importance of tax considerations for many option and other derivative transactions, investors considering these products should consult with their tax advisors as to how taxes affect the outcome of contemplated options or other derivatives transactions. You should consult with such tax, accounting, legal or other advisors as you deem necessary to assist you in making these determinations.

Transaction costs: Such costs may be significant in option strategies calling for multiple purchases and sales of options and other derivatives, such as spreads and straddles. Commissions and transaction costs may be a factor in actual returns realized by the investor and should be taken into consideration.

Trading on margin: Margin requirements vary and should be determined before investing as they can impact your profit potential. If the market moves against your position, you may be called upon by your broker to deposit a substantial amount of additional margin funds, on short notice, in order to maintain your position. If you do not provide the required funds within the time required by your broker, your position may be liquidated at a loss, and you will be liable for any resulting deficit in your account.

Further information: Supporting documentation for any claims, comparisons, recommendations, statistics or other technical data in this material will be supplied upon request. Any trade information is preliminary and not intended as an official transaction confirmation. If you have any questions about whether you are eligible to enter into these transactions with Credit Suisse, please contact your sales representative.

This report is produced by subsidiaries and affiliates of Credit Suisse operating under its Global Markets Division. For more information on our structure, please use the following link: <https://www.credit-suisse.com/who-we-are>. This report may contain material that is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Credit Suisse or its affiliates ("CS") to any registration or licensing requirement within such jurisdiction. All material presented in this report, unless specifically indicated otherwise, is under copyright to CS. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of CS. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of CS or its affiliates. The information, tools and material presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. CS may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. CS will not treat recipients of this report as its customers by virtue of their receiving this report. The investments and services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. CS does not advise on the tax consequences of investments and you are advised to contact an independent tax adviser. Please note in particular that the bases and levels of taxation may change. Information and opinions presented in this report have been obtained or derived from sources believed by CS to be reliable, but CS makes no representation as to their accuracy or completeness. CS accepts no liability for loss arising from the use of the material presented in this report, except that this exclusion of liability does not apply to the extent that such liability arises under specific statutes or regulations applicable to CS. This report is not to be relied upon in substitution for the exercise of independent judgment. CS may have issued, and may in the future issue, other communications that are inconsistent with, and reach different conclusions from, the information presented in this report. Those communications reflect the different assumptions, views and analytical methods of the analysts who prepared them and CS is under no obligation to ensure that such other communications are brought to the attention of any recipient of this report. Some investments referred to in this report will be offered solely by a single entity and in the case of some investments solely by CS, or an associate of CS or CS may be the only market maker in such investments. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgment at its original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. Investors in securities such as ADR's, the values of which are influenced by currency volatility, effectively assume this risk. Structured securities are complex instruments, typically involve a high degree of risk and are intended for sale only to sophisticated investors who are capable of understanding and assuming the risks involved. The market value of any structured security may be affected by changes in economic, financial and political factors (including, but not limited to, spot and forward interest and exchange rates), time to maturity, market conditions and volatility, and the credit quality of any issuer or reference issuer. Any investor interested in purchasing a structured product should conduct their own investigation and analysis of the product and consult with their own professional advisers as to the risks involved in making such a purchase. Some investments discussed in this report may have a high level of volatility. High volatility investments may experience sudden and large falls in their value causing losses when that investment is realised. Those losses may equal your original investment. Indeed, in the case of some investments the potential losses may exceed the amount of initial investment and, in such circumstances, you may be required to pay more money to support those losses. Income yields from investments may fluctuate and, in consequence, initial capital paid to make the investment may be used as part of that income yield. Some investments may not be readily realisable and it may be difficult to sell or realise those investments, similarly it may prove difficult for you to obtain reliable information about the value, or risks, to which such an investment is exposed. This report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed any such site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to CS's own website material) is provided solely for your convenience and information and the content of any such website does not in any way form part of this document. Accessing such website or following such link through this report or CS's website shall be at your own risk.

This report is issued and distributed in **European Union (except Switzerland)**: by Credit Suisse Securities (Europe) Limited, One Cabot Square, London E14 4QJ, England, which is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. **Germany**: Credit Suisse Securities (Europe) Limited Niederlassung Frankfurt am Main regulated by the Bundesanstalt fuer Finanzdienstleistungsaufsicht ("BaFin"). **United States and Canada**: Credit Suisse Securities (USA) LLC. **Switzerland**: Credit Suisse AG. **Brazil**: Banco de Investimentos Credit Suisse (Brasil) S.A or its affiliates; **Mexico**: Banco Credit Suisse (México), S.A. (transactions related to the securities mentioned in this report will only be effected in compliance with applicable regulation); **Japan**: by Credit Suisse Securities (Japan) Limited, Financial Instruments Firm, Director-General of Kanto Local Finance Bureau (Kinsho) No. 66, a member of Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Investment Advisers Association, Type II Financial Instruments Firms Association; **Hong Kong**: Credit Suisse (Hong Kong) Limited; **Australia**: Credit Suisse Equities (Australia) Limited; **Thailand**: Credit Suisse Securities (Thailand) Limited, regulated by the Office of the Securities and Exchange Commission, Thailand, having registered address at 990 Abdulrahim Place, 27th Floor, Unit 2701, Rama IV Road, Silom, Bangkok, Bangkok10500, Thailand, Tel. +66 2614 6000; **Malaysia**: Credit Suisse Securities (Malaysia) Sdn Bhd. **Singapore**: Credit Suisse AG, Singapore Branch; **India**: Credit Suisse Securities (India) Private Limited (CIN no.U67120MH1996PTC104392) regulated by the Securities and Exchange Board of India as Research Analyst (registration no. INH 00001030) and as Stock Broker (registration no. INB230970637; INF230970637; INF010970631; INF010970631), having registered address at 9th Floor, Ceejay House, Dr.A.B. Road, Worli, Mumbai - 18, India, T- +91-22 6777 3777; **South Korea**: Credit Suisse Securities (Europe) Limited, Seoul Branch; **Taiwan**: Credit Suisse AG Taipei Securities Branch; **Indonesia**: PT Credit Suisse Sekuritas Indonesia; **Philippines**: Credit Suisse Securities (Philippines) Inc., and elsewhere in the world by the relevant authorised affiliate of the above.

Additional Regional Disclaimers

Hong Kong: Credit Suisse (Hong Kong) Limited ("CSHK") is licensed and regulated by the Securities and Futures Commission of Hong Kong under the laws of Hong Kong, which differ from Australian laws. CSHK does not hold an Australian financial services licence (AFSL) and is exempt from the requirement to hold an AFSL under the Corporations Act 2001 (the Act) under Class Order 03/1103 published by the ASIC in respect of financial services provided to Australian wholesale clients (within the meaning of section 761G of the Act). Research on Taiwanese securities produced by Credit Suisse AG, Taipei Securities Branch has been prepared by a registered Senior Business Person.

Australia (to the extent services are offered in Australia): Credit Suisse Securities (Europe) Limited ("CSSEL") and Credit Suisse International ("CSI") are authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority ("FCA") and the Prudential Regulation Authority under UK laws, which differ from Australian Laws. CSSEL and CSI do not hold an Australian Financial Services Licence ("AFSL") and are exempt from the requirement to hold an AFSL under the Corporations Act (Ch) 2001 ("Corporations Act") under Class Order 03/1099 published by the Australian Securities and Investments Commission ("ASIC"), in respect of the financial services provided to Australian wholesale clients (within the meaning of section 761G of the Corporations Act). This material is not for distribution to retail clients and is directed exclusively at Credit Suisse's professional clients and eligible counterparties as defined by the FCA, and wholesale clients as defined under section 761G of the Corporations Act. Credit Suisse (Hong Kong) Limited ("CSHK") is licensed and regulated by the Securities and Futures Commission of Hong Kong under the laws of Hong Kong, which differ from Australian laws. CSHK does not hold an AFSL and is exempt from the requirement to hold an AFSL under the Corporations Act under Class Order 03/1103 published by the ASIC in respect of financial services provided to Australian wholesale clients (within the meaning of section 761G of the Corporations Act). Credit Suisse Securities (USA) LLC (CSSU) and Credit Suisse Asset Management LLC (CSAM LLC) are licensed and regulated by the Securities Exchange Commission of the United States under the laws of the United States, which differ from Australian laws. CSSU and CSAM LLC do not hold an AFSL and is exempt from the requirement to hold an AFSL under the Corporations Act under Class Order 03/1100 published by the ASIC in respect of financial services provided to Australian wholesale clients (within the meaning of section 761G of the Corporations Act).

Malaysia: Research provided to residents of Malaysia is authorised by the Head of Research for Credit Suisse Securities (Malaysia) Sdn Bhd, to whom they should direct any queries on +603 2723 2020.

Singapore: This report has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (each as defined under the Financial Advisers Regulations) only, and is also distributed by Credit Suisse AG, Singapore Branch to overseas investors (as defined under the Financial Advisers Regulations). Credit Suisse AG, Singapore Branch may distribute reports produced by its foreign entities or affiliates pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Singapore recipients should contact Credit Suisse AG, Singapore Branch at +65-6212-2000 for matters arising from, or in connection with, this report. By virtue of your status as an institutional investor, accredited investor, expert investor or overseas investor, Credit Suisse AG, Singapore Branch is exempted from complying with certain compliance requirements under the Financial Advisers Act, Chapter 110 of Singapore (the "FAA"), the Financial Advisers Regulations and the relevant Notices and Guidelines issued thereunder, in respect of any financial advisory service which Credit Suisse AG, Singapore Branch may provide to you.

UAE: This information is being distributed by Credit Suisse AG (DIFC Branch), duly licensed and regulated by the Dubai Financial Services Authority ("DFSA"). Related financial services or products are only made available to Professional Clients or Market Counterparties, as defined by the DFSA, and are not intended for any other persons. Credit Suisse AG (DIFC Branch) is located on Level 9 East, The Gate Building, DIFC, Dubai, United Arab Emirates.

EU: This report has been produced by subsidiaries and affiliates of Credit Suisse operating under its Global Markets Division

In jurisdictions where CS is not already registered or licensed to trade in securities, transactions will only be effected in accordance with applicable securities legislation, which will vary from jurisdiction to jurisdiction and may require that the trade be made in accordance with applicable exemptions from registration or licensing requirements. Non-US customers wishing to effect a transaction should contact a CS entity in their local jurisdiction unless governing law permits otherwise. US customers wishing to effect a transaction should do so only by contacting a representative at Credit Suisse Securities (USA) LLC in the US.

Please note that this research was originally prepared and issued by CS for distribution to their market professional and institutional investor customers. Recipients who are not market professional or institutional investor customers of CS should seek the advice of their independent financial advisor prior to taking any investment decision based on this report or for any necessary explanation of its contents. This research may relate to investments or services of a person outside of the UK or to other matters which are not authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority or in respect of which the protections of the Prudential Regulation Authority and Financial Conduct Authority for private customers and/or the UK compensation scheme may not be available, and further details as to where this may be the case are available upon request in respect of this report.

CS may provide various services to US municipal entities or obligated persons ("municipalities"), including suggesting individual transactions or trades and entering into such transactions. Any services CS provides to municipalities are not viewed as "advice" within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. CS is providing any such services and related information solely on an arm's length basis and not as an advisor or fiduciary to the municipality. In connection with the provision of the any such services, there is no agreement, direct or indirect, between any municipality (including the officials, management, employees or agents thereof) and CS for CS to provide advice to the municipality. Municipalities should consult with their financial, accounting and legal advisors regarding any such services provided by CS. In addition, CS is not acting for direct or indirect compensation to solicit the municipality on behalf of an unaffiliated broker, dealer, municipal securities dealer, municipal advisor, or investment adviser for the purpose of obtaining or retaining an engagement by the municipality for or in connection with Municipal Financial Products, the issuance of municipal securities, or of an investment adviser to provide investment advisory services to or on behalf of the municipality. If this report is being distributed by a financial institution other than Credit Suisse AG, or its affiliates, that financial institution is solely responsible for distribution. Clients of that institution should contact that institution to effect a transaction in the securities mentioned in this report or require further information. This report does not constitute investment advice by Credit Suisse to the clients of the distributing financial institution, and neither Credit Suisse AG, its affiliates, and their respective officers, directors and employees accept any liability whatsoever for any direct or consequential loss arising from their use of this report or its content. Principal is not guaranteed. Commission is the commission rate or the amount agreed with a customer when setting up an account or at any time after that.

Copyright © 2017 CREDIT SUISSE AG and/or its affiliates. All rights reserved.

Investment principal on bonds can be eroded depending on sale price or market price. In addition, there are bonds on which investment principal can be eroded due to changes in redemption amounts. Care is required when investing in such instruments.

When you purchase non-listed Japanese fixed income securities (Japanese government bonds, Japanese municipal bonds, Japanese government guaranteed bonds, Japanese corporate bonds) from CS as a seller, you will be requested to pay the purchase price only.