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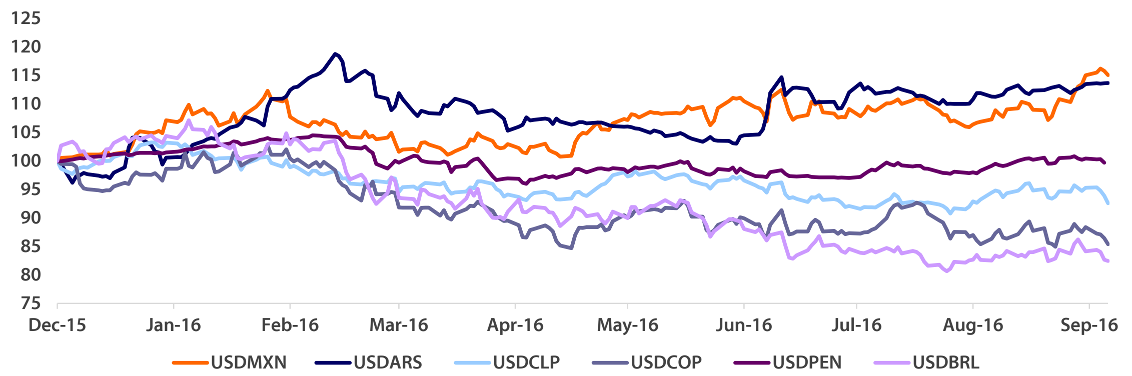
"LatAm FX, risk, carry and central banks"

- LatAm currencies remain at the mercy of global monetary policy and are likely to continue to do so going forward.
- There is greater divergence between LatAm currencies emerging on the back of domestic drivers and particular currency characteristics.
- Looking forward, rising US rates remains the key risk for LatAm currencies and significant appreciation is unlikely. Our base case is for LatAm FX depreciation against USD over the next year.

A quick recap…

LatAm currencies started the year on a weak footing as the aftermath of December's Fed rate hike lingered and a weakening Chinese currency triggered a sharp global risk-off move that saw high beta and emerging market currencies sell-off across the board. We know that EM currencies are particularly vulnerable to moves in US rates and USD as EM currencies are traded against USD and many have significant USD borrowings, a point we noted on these pages in more detail last year as part of our FX vulnerability study. This is not only important for emerging markets but also for global growth in general given that EM countries now make up a bigger slice of the global growth pie than they have since the middle 1800s, now contributing more to global growth than developed nations.

Figure 1: LatAm FX performance since 16th December 2015 Fed rate hike



Source: Bloomberg, Rabobank

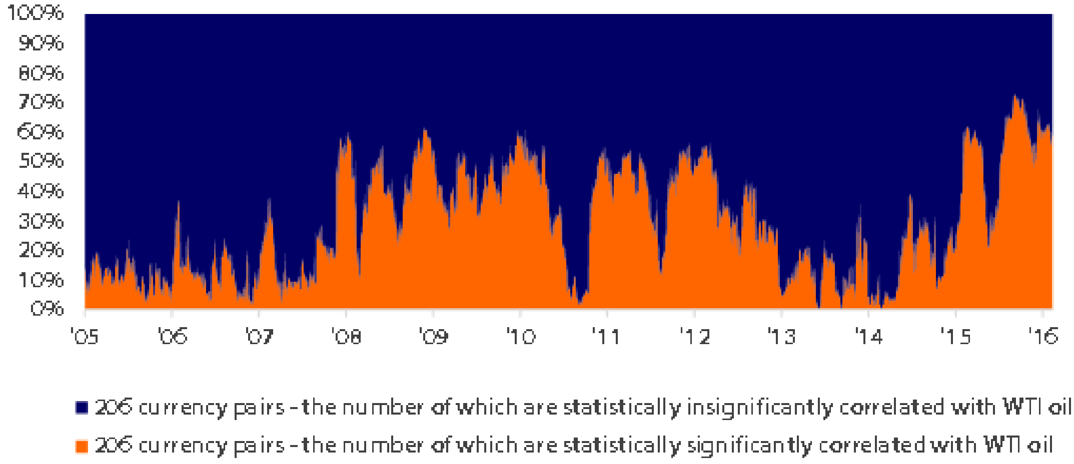
This point has not been missed by the Fed which now seems more concerned about the global impact of its actions than it has been in the past. Indeed, more FOMC members are citing the negative impact of substantial USD appreciation on the US economy which is recovering better than most developed markets but still remains fragile. Indeed, it is worth noting that the soft start to the year did not last long and in Q1 the risk tone changed. Yet again, the Fed was partly responsible with Chair Yellen striking a decidedly more dovish tone in February. More stimulus from other key central banks also played a role with the Bank of Japan cutting its policy rate into negative territory at the end of January while the ECB stepped up monetary easing in March. Easier policy and additional global liquidity dampened concerns but the medicine can only work for so long. **Markets remain at the mercy of central**

1 On a daily percentage change, 60 workday rolling basis at the 97.5% confidence interval.

bank policy which works both ways - global easing is supportive of LatAm currencies while global tightening, or indeed, US tightening will weigh.

Performance varied across LatAm currencies with MXN failing to recoup earlier losses while some fully recovered and posted gains but the general direction of currencies (excluding magnitude) was broadly in line with each other. On the surface this looked to be an oil story as correlations between oil and FX rose notably. In fact, by the end of April, out of a total of 206 currency pairs we examined, 156 were significantly correlated to oil prices (please see figure 2). That said, back then we stated our view that this relationship disguised the true underlying dynamic, namely that currency correlations to broad-based risk had risen. Of course, this is why the old adage "correlation does not imply causation" is so important. Indeed, risk appetite driving currencies is a familiar theme that has dominated FX markets intermittently over the years. In fact, for some periods, often prolonged periods, the risk-on/risk-off or 'RoRo' dynamic can be the main driver of FX with currencies of similarly characteristics, namely safe haven or high beta, effectively moving in lock step with one another.

Figure 2: Number of currency pairs out of a total of 206 that are significantly correlated to oil on a 60 day rolling, daily % change basis at the 97.5% confidence interval



Source: Bloomberg, Rabobank

Having reached a peak towards the end of April, the number of currency pairs significantly correlated to oil began to decline but, as we hypothesised, the relationship to broader based risk metrics remained strong. That is to say, the correlation between oil and risk began to decline as 'black gold' began to trade more on the back of supply and demand dynamics, or at least expectations of shifts in supply and demand. The relationship between FX and risk remained strong. That is not to say oil lost all relevancy for currencies, indeed, those currencies heavily reliant on oil, whether as a producer or net importer, were, and are, still vulnerable to sharp moves in oil. This is truer for producers than consumers.

Risky business

Let us return to the relationship with risk. LatAm currencies are generally considered 'high beta' meaning that they tend to move along with broad-based general market moves and usually exhibit higher volatility than the market. High beta currencies tend to be higher yielding and can be considered the mirror of safe haven assets. There are of course other factors that drive the beta of currencies and some are more subjective than others. If we look at perceived safe havens, JPY, CHF and USD are the traditional currencies in this camp.

So what dictates a currency's risk characteristics? In no particular order…

1. Beta (and perception of): This might seem like a 'chicken and egg' comment but it is important - if a currency has a long and stable negative beta then investors will continue to move into those currencies during times of stress in anticipation of them posting gains and the same is true for high beta names in times of rising risk appetite.

2. Liquidity: When risk aversion rises there is a strong demand for liquid currencies over and above illiquid currencies. When the market is panicking investors want to know they can exit a position easily and cheaply. This is arguably one of the most important characteristics of a safe haven. That said, there is an exception to this rule in MXN which actually suffers during times of risk aversion despite being very liquid, a point we will touch upon again in point 7.

3. Inflation and rates: Stable inflation implies less central bank policy action which can impact the currency. Notably, high beta currencies tend to have higher interest rates and this makes them a target for carry trades (borrowing in a low yielding currency to buy a high yielding currency in order to capture the interest rate differential). Furthermore, in times of stress investors are likely to be more accepting of a lower interest rate as the desire for capital preservation overrides the demand for capital appreciation.

4. Openness of economy: Generally, the currencies of more closed economies tend to behave more like safe havens in times of global stress. After all, if an economy is less open it should not be hit as hard by external events and so investors rush there if broad-based risk aversion rises.

5. Foreign ownership of domestic assets: Capital flight and in turn currency depreciation is more likely when there are large foreign claims on domestic assets as those investors tend to be quicker to exit. Countries like Japan tend to have heavy domestic ownership of assets.

6. Current account: This is arguably one of the most important economic indicators for currencies with surpluses more likely to result in currency outperformance than a deficit.

7. Political stability: A country with a more stable political environment is generally more attractive and less likely to impose controls on the economy.

8. References made later in the document Individual currency nuances: The standout example here is MXN. As MXN is the only fully deliverable, convertible LatAm currency that can be traded 24hrs a day both onshore and offshore, it is the preferred LatAm proxy hedge of choice.

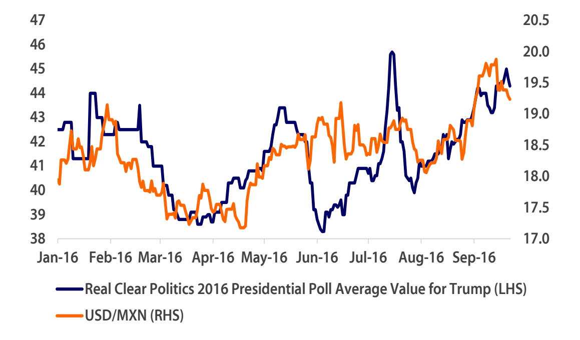
This list is far from exhaustive and of course we could highlight many other factors that drive how vulnerable currencies are but in terms of safe haven vs. risk proxy these are arguably the main factors.

In fact, if we had to highlight the most important of these it would be points 1 and 2. Perception often rules the roost in markets and if currencies have a long and consistent history of trading as a safe haven or a high beta currency then they are more likely to continue doing so. In terms of liquidity, an illiquid currency can never be a safe haven. Anecdotally, when the Swiss National Bank imposed a floor on EUR/CHF (limiting the ability to buy CHF) many market commentators began to question whether or not NOK would become a safe haven given that at the time it ticked nearly all of the above points except for 1 and 2. Now of course perception can change but the NOK market was not deeply liquid and as such it never took off as a destination for safe haven flows.
If we take the classic safe havens of USD, CHF and JPY. All are regarded as negative beta names and all are very liquid which ticks points 1-3. They also all have stable (if low) inflation rates and credible central banks (although one could argue that credibility is ebbing in the current environment as monetary policy in many developed countries reaches its limit) and all three economies are relatively closed which covers points 3-4. Points 5 and 6 are more relevant for Japan and Switzerland than the US but the US is in a unique position as the reserve currency of the world which makes demand for its assets more stable and less vulnerable to capital flight.

MXN - a unique LatAm currency about markets not economics

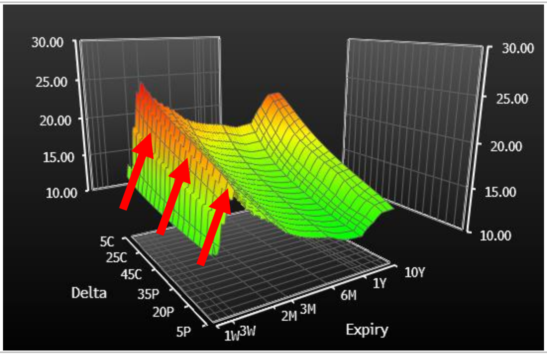
Point 8 is particularly relevant for LatAm because of MXN's unique position as the LatAm proxy hedge of choice. Analysis we ran earlier in the year showed that MXN is more sensitive to Brazilian data releases than Mexican data. This, despite no strong fundamental link between the two economies. Not only that, but we also found that the relationship between USD/BRL and USD/MXN is asymmetric with MXN suffering more as USD/BRL rallies than when USD/BRL sells off. If a negative story pertaining to a LatAm country emerges, MXN generally takes the brunt of selling in the first instance. If you are a portfolio manager or trader sitting in Asia with LatAm exposure during Asian trading hours then you have little choice, MXN is the only LatAm currency you can sell. **This makes for a rather unique situation where liquidity actually increases MXN's high beta characteristics.**

Figure 3: USD/MXN is tracking Trump in the polls



Source: Bloomberg, Rabobank

Figure 4: "Trump Hump" in volatility term structure



Source: Bloomberg

If we look at the relationship between USD/MXN and a number of risk proxies such as the VIX 'fear' index, global equities, global risk appetite monitors or aggregated FX volatility we see that **MXN is the highest beta currency globally. This also means that domestic drivers usually play 'second fiddle' to external risk sentiment in driving MXN**. This of course is an unenviable situation for the Mexican central bank which has been forced to adopt a pre-emptive reaction function in order to combat the potential price pressures emerging from rapid currency depreciation. Indeed, just this year Banxico surprised the market with a 50bp intra-meeting hike in mid-February as USD/MXN hit a high of 19.445 and they have been explicit about their discomfort with excessively rapid currency moves that diverge from underlying fundamentals. This is a point we have sympathy with, USD/MXN hasn't traded in line with domestic fundamentals for years due to the market characteristics we have outlined. This dynamic is unlikely to change in the coming years and so **MXN will continue to trade primarily as a product of global risk and interest rate differentials.** That latter point is why we expect Banxico to, at a minimum, follow the Fed in its hiking cycle.

MXN will also be firmly in focus in the coming months for another reason that is likely to intensify its high beta nature even further – the US Presidential elections. The nomination of a populist, protectionist Republican candidate in the form of Donald Trump poses a clear risk to Mexico's economy. 80% of its exports head north of the border and domestic demand has found support from rising record remittances from Mexican workers in the US. Any risk to either of those in the form of trade tariffs or immigration constraints will weigh the economy and this is a point that hasn't gone unnoticed by the market. Indeed, USD/MXN is the "Trump Trade" of choice and the perceived risk to USD/MXN can be clearly seen in the volatility term structure which spikes at the start of November – the "Trump Hump", or in other words, the market views the election as a big risk for USD/MXN price action, indeed, we expect speculators will favour USD/MXN as a way of trading the elections and this will enhance MXN's high beta nature.

LatAm Vulnerability revisited

In last year's LatAm study we looked at FX vulnerability from a macro-econonomic heatmap perspective and by creating a LatAm FX pressure gauge derived from PCA analysis. The report can be found here but table 1 shows our Heatmap findings from last September.

As we have highlighted in the previous sections, macro-economic variables are far from the only driver of FX performance and are often not the main factor to monitor. As such, it is not surprising that when looking at the performance of LatAm currencies against their vulnerability rating there are notable divergences. That said, many of these can be explained by events. If we take BRL for example, its vulnerability ranking was the worst of those we looked at but BRL has been the best performing LatAm currency since that juncture, in fact, BRL is the best performing currency globally this year. But, as Brazil watchers will know, **BRL's performance has in part been a function of the changing political landscape in Brazil** with Rousseff being impeached and replaced by Temer who brought in a more orthodox economic team dampening market concerns over debt stability. Figure 8 shows the declining credit risk as proxied by the Brazil sovergeign CDS spread which offers insurance against Brazilian government bond default. **BRL has also benefited substantially from carry.**

Table 1: LatAm Vulnerability Heatmap from September 2015

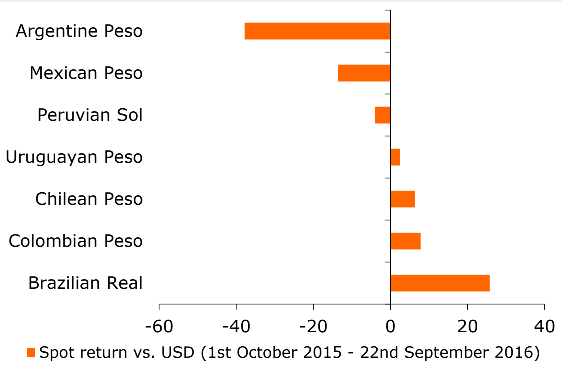
Country	Correlation	CA/GDP	BB/GDP	CPI	IR/GDP	ED/GDP	PD/GDP	Average vulnerability score 1)	Ranking
Argentina	0.19	-0.87	2.70	11.38	5.37	256	49	0.18	4
Brazil	0.47	-3.88	6.23	6.33	15.34	236	65	0.52	1
Chile	0.32	-1.16	1.42	4.40	15.68	565	14	-0.19	7
Colombia	0.46	-5.01	1.39	2.90	12.06	263	38	-0.04	5
Guatemala	-0.34	-2.31	1.86	3.42	11.69	307	24	-0.67	9
Mexico	0.47	-2.07	4.63	4.02	0.27	371	50	0.43	2
Paraguay	0.45	0.05	0.54	5.04	13.57	497	21	-0.25	8
Peru	0.41	-4.06	0.12	3.25	3.29	290	21	-0.17	6
Uruguay	0.22	-4.74	3.43	8.88	31.82	317	63	0.20	3

In applying the colour scheme, we've inverted the signals of CA/GDP, CPI and IR/GDP so that we can have the same interpretation for every variable, i.e., the redder the shading, the more highly exposed the country.

1) Computed as the unweighted average of the normalized scores of the indicators, as listed in annex table 1.

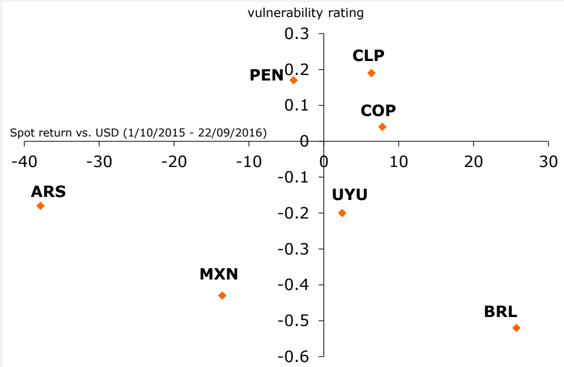
Source: Bloomberg, Rabobank

Figure 5: FX performance since the 2015 LatAm Study



Source: Bloomberg, Rabobank

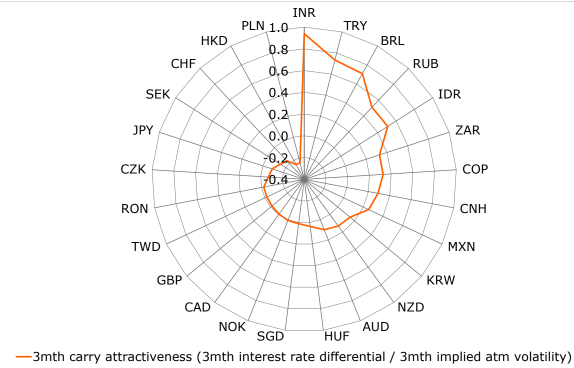
Figure 6: FX performance vs. macro vulnerability index



Source: Bloomberg, Rabobank

We noted before that **high beta currencies are often the beneficiary of carry trade demand**. This in part plays into the risk proxy/safe haven dynamic we spoke of earlier in that carry trades are more attractive during times of risk appetite as investors hope to capture some spot return on top of the carry return. Put simply, investors or traders implementing carry trades borrow in a low yielding (usually safe haven) currency and use those funds to buy a high yielding (usually risk proxy) currency thus capturing the interest rate differential assuming those currencies do not move. Of course, currency pairs do move and if the low yielder outperforms the high yielder then those interest gains can be wiped out. As such, we look at volatility adjusted carry and carry trades are favoured when high yielders are expected to outperform such as in a risk-on environment. It is easy to see how **carry trades can amplify the risk-proxy vs. safe haven dynamic.** As figure 7 shows, USD/BRL offers one of the most attractive carry trades from a volatility adjusted perspective. Figure 7 is to be read like a clock with 12 o'clock (INR) the most attractive carry trade while BRL comes in third place.

Figure 7: Carry attractiveness



Source: Bloomberg, Rabobank

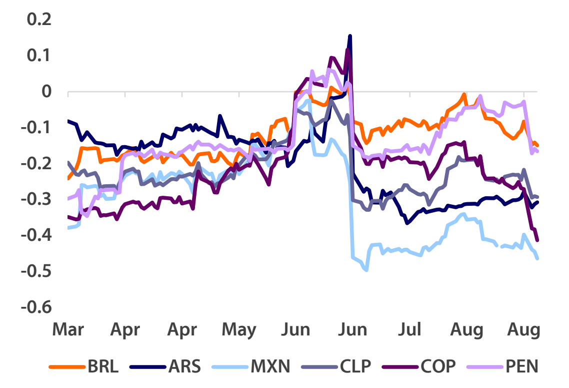
Figure 8: Credit risk has fallen in Brazil supporting BRL

Source: Bloomberg, Rabobank

The other major stand out in terms of the Vulnerability Heatmap and performance is of course ARS. Again, there is an obvious domestic development that has driven the dramatic underperformance of the Argentinean currency beyond that expected from its vulnerability ranking – namely, a new government and a new central bank which devalued the currency. After being elected in November, President Macri put a new central bank into place and in December the FX regime was changed to allow the currency to freely float more by removing many capital controls. This led to a 36% devaluation against USD from an official rate of 9.85 almost immediately but given the risk-off start to the year the ARS sell-off extended up to 15.8- a total move of over 60%.

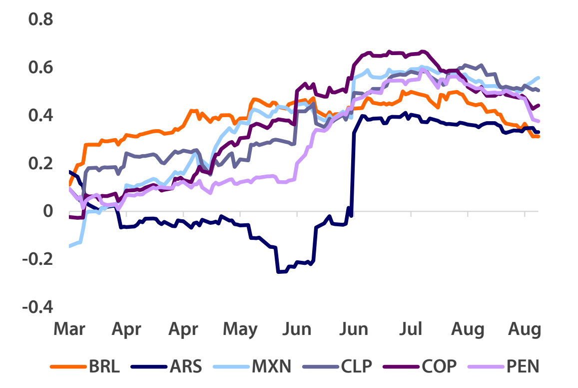
If we re-run this LatAm Vulnerability Heatmap but focus on the most liquid currencies we see that Brazil remains the most vulnerable, followed by Colombia, then Mexico, Peru and Chile as the least vulnerable. So the order remains the same with the exception of Colombia and Mexico switching places. A major factor in the deterioration of Colombia relative to last year has been rising inflation and a widening current account deficit.

Figure 9: USD cross correlation to 2yr US rates



Source: Bloomberg, Rabobank

Figure 10: USD cross correlation to the DXY Dollar index



Source: Bloomberg, Rabobank

US rates, USD and LatAm Fx

We noted earlier the importance of US monetary policy on the rest of the world and in particular emerging markets. Although the debate as to when the Fed will raise rates continues with the market currently pricing in around a 60% chance of a 25bp hike in December. Rabobank's Fed watcher, Philip Marey, is of the view that the FOMC will vote to move in December and will raise rates 25bp next December as well. A look at the Rabo forecast for 2yr US swap shows calls for further downside in yields in the first half of next year which could provide some support for EM currencies but the move expected is inside the recent range and after that juncture we see rates moving cautiously higher. Figure 9 shows the rolling correlation between USD/LatAm crosses and the 2yr US swap rate which is currently statistically significant (at the 97.5% confidence interval) for all of the currencies we have looked at except for BRL and PEN. That said, we would expect the relationship between US rates and BRL will rise once more, particularly as the spread between US and Brazilian rates widens on our expectation of rate cuts in Brazil in Q4. For PEN, this relationship may stay weak given the central bank is active in intervening in the currency market which distorts price action relative to other variables.

In contrast, MXN and COP are likely to stay the most closely related to US rates given that for Mexico, a lot of local government debt is owned by foreign investors (60% of Mbonos and around 30% of Cetes) and as the spread between US and Mexican rates narrows there is the potential for greater outflows to emerge. Indeed, Banxico Governor Carstens has been very vocal about his fear of outflows heading north of the border which is why we expect them to hike rates if the US does so in order to try and combat rate differentials widening. Figure 10 looks at the same type of correlation but against a USD index.

It is unsurprising that all show statistically significant correlations to USD given that USD is one side of the currency pair and it is also unsurprising to see MXN and COP topping the list of the most highly correlated to USD. We expect this to remain the case in light of the rates story defined above for Mexico, as well as the use of USD/MXN as a risk proxy and the close links in trade between the two countries. In terms of

COP, given the importance of oil in driving price action and the inverse relationship between USD and oil it is no surprise to see this link between COP and USD.

We have spoken much about developed world monetary policy and its global impact but of course local LatAm central banks have been active too and in contrast too the rest of the world, currency weakening has triggered inflationary pressures. Although going forward we expect more rate hikes in Mexico, the end of the cycle is near for Colombia, Chile may look to ease early next year and we see Brazil cutting rates. Of course, the other elephant in the room is China. We are still calling for a significant move higher in USD/CNY which should add to the USD bid.

Summary

Latam FX will remain at the mercy of external factors and in particular global liquidity and central bank policy. We expect to see more easing from both the ECB and BoJ over the course of the next year and this should be supportive of EM currencies. That said, the LatAm region is more vulnerable to rising US rates and USD and although we expect a cautious approach, we do see Fed embarking on a tightening cycle that is not fully priced in by the market. In addition, our resident PBOC watcher, Mike Every, is still calling for further upside in USD/CNY which we expect to rise above 7 in 2017 and this could lead to rising risk aversion weighing on EM currencies. As such, **LatAm FX downside is likely to be the path of least resistance going forward. We expect MXN to be a notable underperformer** despite the relative strength of its economy in the region as global risk factors weigh on high beta names. If we see central bank credibility continue to decline and the market becomes increasingly disillusioned with attempts at easing in the Eurozone and Japan then the potential for a sharp global risk off move remains real. Regular readers will be aware of our view that central bank policy in the Eurozone and Japan is not solving the issue of structurally lower growth and inflation. Instead, negative rates and QE are fueling asset price inflation while lowering productivity and in turn dampening wage growth. This thinking seems to be gaining some traction and a halt to easing would weigh on risky assets globally, including LatAm currencies.

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Market Commentary

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