

# Global Macro Strategy

## An EM turnaround- II? Have the Fed and China changed the game for EM FX and commodities

### Global Macro Strategy

#### Global

Read the preceding note: [An EM turnaround? I –Assessing the anatomy of the rally](#)

#### Second of three notes

We continue our research on the nature and sustainability of the EM rebound. Last week, we pointed out that the high variance in EM sector performance was reminiscent of rallies that haven't persisted and that risk appetite, having become more fickle, could reach point of maximum optimism within 3-4 weeks. This week, we address future trends in EM currencies and commodities. Has the turn in the USD and China stimulus helped these asset classes bottom-out? Does this change the entire complexion of the EM debate? Next week we will dive deep into EM valuations.

#### Yellen' and Screamin': In hurting the \$, has Fed turned things around for EM?

For nearly three years now we have witnessed trade weighted weakness in EM FX, not isolated USD strength against EM. The relationship between broad USD trends and EM returns is less powerful than generally believed. There is some evidence in that the negative beta between the USD and EM assets is more reliable in a stronger USD world than in a weaker USD world. A dovish Fed and weaker USD does postpone the pain for EM, no doubt, but with rates and risk premia already low, EM's own growth is needed to motor sustained EM currency gains. Prospects remain weak here.

#### Isn't China stimulus more relevant? Won't commodities continue to help EM?

Past episodes of strongly positive credit impulse and improving PMI data in China have been associated with robust performance in EM assets. This time, however, a majority of China stimulus is going into infrastructure, which has displayed a much weaker relationship with commodity imports than real estate investment. There is an upside risk that strong growth in home sales and prices prompts a sustained renewal in construction, but we are focussed on tier 3 cities as the key drivers of China's metals demand, and the facts here don't make us optimistic about a trend rebound.

#### EM currencies have come off hard, but are they competitive?

While EM currencies have sold off a long way, they have just not been able to evoke the kind of export response that similar FX levels have done in the past. More broadly, the current configuration of economic and financial variables in EM is very different from that seen in previous spells of EM appreciation. Weakness in growth is helping EM current accounts improve, but high leverage and worsening fiscal balances mean that overall EM balance sheet stress isn't falling.

#### Difficult to see a return of strong capital flows into EM

We find that capital account flows into EM are strongly linked to the differential between EM and DM growth. EM's growth premium over DM is at the weakest level since the 1997 crisis, and rising debt service ratios coupled with weak DM import volumes suggest limited prospects for a strong pick-up in EM growth any time soon. This suggests that a strong offset to better current accounts is likely to persist.

#### Potential volatility reduction argues for relative value trades, not chasing beta

Compared to the 17% losses against the USD in 2015, we have forecast that EM currencies will lose about 5% in 2016 see [EM Outlook 2016: Battle hardened or battle weary?](#). Despite the rally in EM currencies so far this year, we are not changing this view. Tactically speaking, we have recommended more relative value trades such as long CNY v INR and long KRW v IDR, but we aren't looking for a trend turnaround in EM FX.

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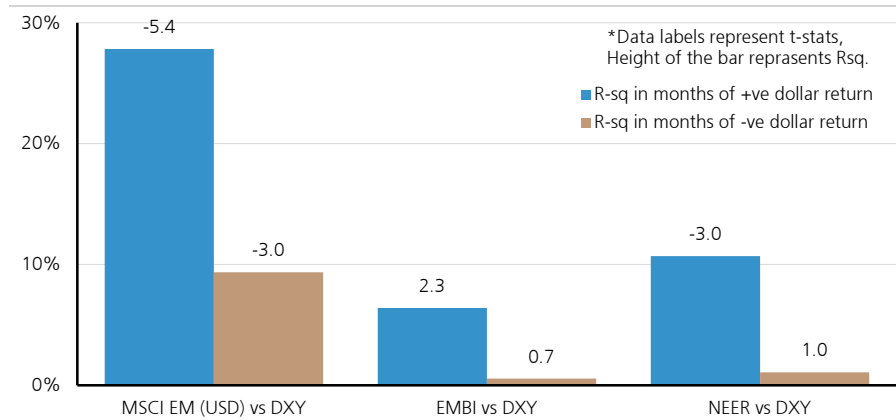
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# Key messages

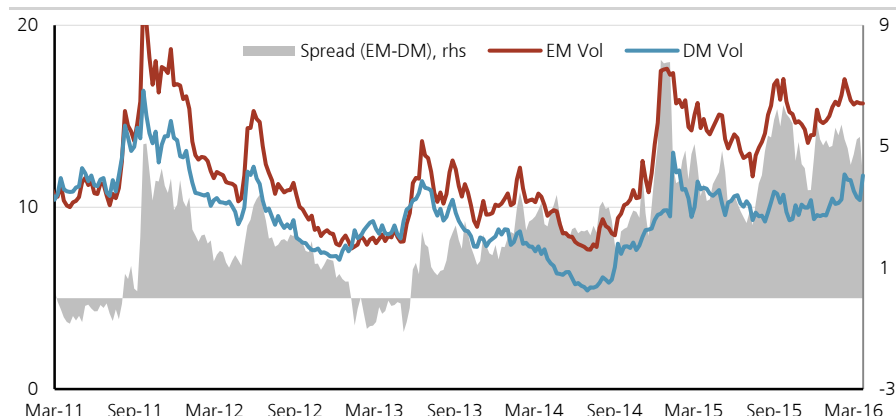
**Figure 1: Goodness of fit (R sq) between USD returns and EM asset returns, split by months of \$ appreciation and \$ depreciation.**



Source: Bloomberg, Haver, Datastream, UBS estimates. Note: analysis based on monthly data since 2002

The relationship between USD returns against developed market currencies (DXY) and returns in EM assets is a weak one, as evidenced by the low R squares. To the extent that there is a (negative) relationship, it seems to be more reliable during times of USD strength rather than times of USD weakness. We don't think recent USD weakness has turned things around for EM. We expect more trade weighted weakness in EM currencies over this year, but losses should be less than in 2015.

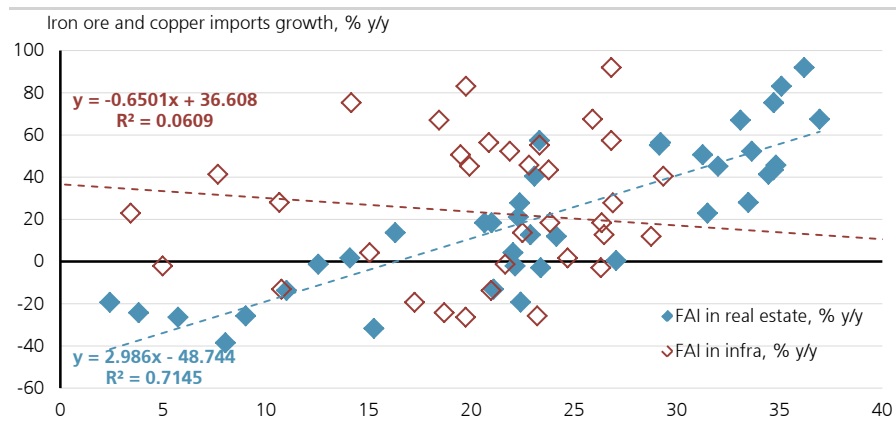
**Figure 2: 3m implied volatility in EM FX and DM FX**



Source: Bloomberg, UBS. EM represents average vol of BRL, KRW, MXN, RUB, SGD, TRY and ZAR. DM represents average vol of AUD, CHF, EUR, GBP and JPY

With the Fed showing it is sensitive to the USD, volatility in DM currencies could fall, pulling EM volatility lower with it. This usually is consistent with a strong desire for carry, but EM fundamentals are not strong enough to support a blind dash for beta. In today's benign spell we prefer to be in relative value trades, exposed to currencies (& stocks) which have operational leverage to the US (N Asia) against those that are financially levered to the US (ASEAN or EMEA).

**Figure 3: Regressions of China iron and copper ore imports on fixed asset investment in real estate and fixed asset investment in infrastructure**



Source: Haver, UBS

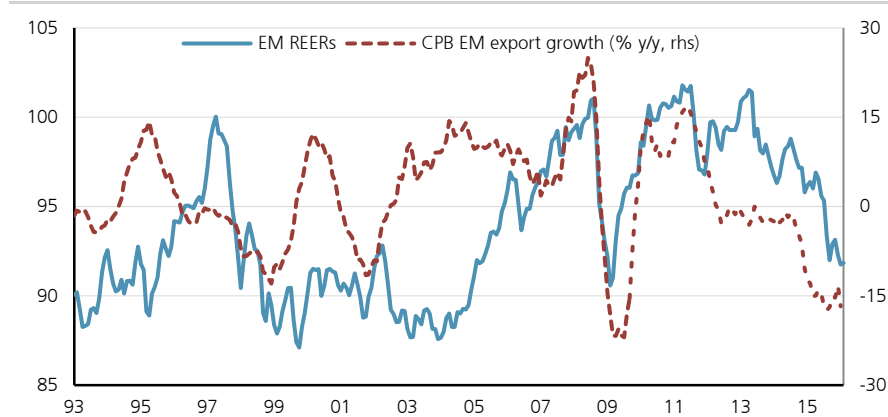
A sustained rise in commodities would strongly support EM risk assets but here China, not the Fed, is in the driver's seat. China is directing its stimulus mainly to infrastructure which typically isn't as commodity intensive as real estate. The upside risk for commodities is that the recent revival in construction was not a one off. Overall construction starts are dominated by tier 3, not tier 1 cities, and inventory levels here don't make us very optimistic.

**Figure 4: Macro and market performance during previous phases of trade weighted appreciation in EM currencies**

|                  | Performance |       |          | Macro                     |        |                                |              |              |                    |                        |             | FX    |               | Rates                |   |  |
|------------------|-------------|-------|----------|---------------------------|--------|--------------------------------|--------------|--------------|--------------------|------------------------|-------------|-------|---------------|----------------------|---|--|
|                  | S&P 500     | Oil   | Iron ore | EM Exports growth (% y/y) |        | EM current account as % of GDP | EM MBS Score | EM IP growth | EM Real GDP growth | EM- DM Real GDP growth | EM FX Carry | DXY   | US real rates | EM real policy rates | US Real Policy Rate - EM real policy Rate |  |
|                  |             |       |          | Volume                    | Value  |                                |              |              |                    |                        |             |       |               |                      |   |  |
| Nov-01 to Apr-02 | -5.5%       | 38.3% | -2.4%    | 0.8%                      | -4.6%  | 1.2%                           | 10.89        | -0.1%        | 3.6%               | 1.8%                   | 10.0        | -0.8% | -0.3%         | 2.6%                 | -3.9%                                     |  |
| Feb-04 to Feb-06 | 11.9%       | 91.6% | 163.8%   | 12.0%                     | 23.6%  | 1.9%                           | 9.50         | 8.6%         | 6.8%               | 3.7%                   | 4.4         | 3.2%  | 0.4%          | 0.8%                 | -1.8%                                     |  |
| Oct-06 to Aug-08 | -6.9%       | 93.2% | 81.8%    | 9.0%                      | 21.3%  | 2.1%                           | 8.53         | 8.3%         | 7.5%               | 4.8%                   | 1.4         | -9.3% | -0.6%         | 2.5%                 | -0.6%                                     |  |
| Mar-09 to Apr-10 | 48.7%       | 77.6% | 169.2%   | 1.1%                      | -1.4%  | 2.2%                           | 9.74         | 4.8%         | 1.6%               | 3.5%                   | 5.0         | -4.2% | -0.1%         | -0.7%                | -2.1%                                     |  |
| Jan-12 to Apr-13 | 21.7%       | -7.8% | -2.1%    | 3.9%                      | 0.2%   | 0.6%                           | 9.16         | 4.9%         | 3.5%               | 3.4%                   | 3.4         | 3.1%  | -0.4%         | 0.8%                 | -3.1%                                     |  |
| Latest           |             |       |          | -1.6%                     | -14.5% | 2.0%                           | 10.43        | 2.7%         | 2.7%               | 0.7%                   | 3.3         |       | 0.2%          | 1.1%                 | -1.6%                                     |  |

Source: Haver, Bloomberg, UBS

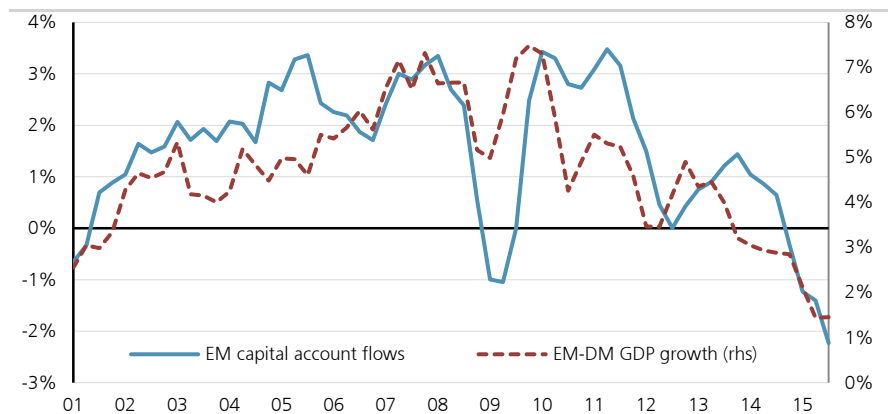
**Figure 5: EM real effective exchange rate and Export Growth (% y/y)**



Source: CPB World Trade Monitor, Haver, UBS. EM REERs shown here as simple average of 22 markets

EM real effective exchange rates (simple averages shown here) have fallen to decade-low levels. However, this doesn't say the currencies are competitive. The last time FX rates rebounded from these low levels, exports were much stronger. Weaker global income growth and slower rises in global trade have compromised the power of EM currencies to boost exports. They need to weaken further, therefore.

**Figure 6: EM capital account flows and EM-DM growth spread**



Source: Haver, UBS. EM capital flows shown here is GDP weighted average of 22 EM countries

Capital flows in EM are very closely related to the premium of EM growth over DM growth. Given high leverage and weak global trade it is unlikely we see a big revival in EM growth anytime soon, compromising EM currencies.

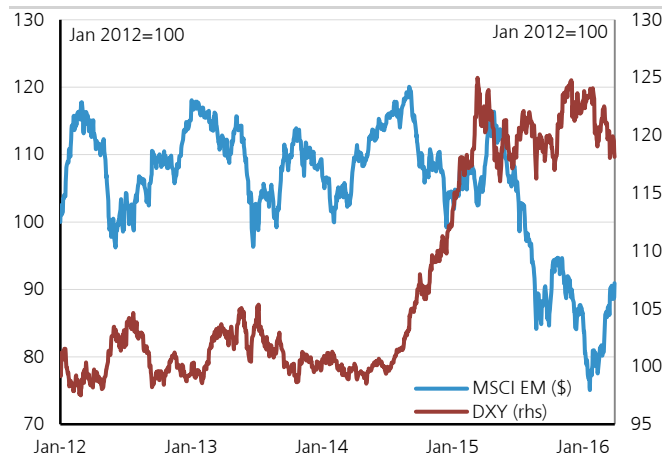
# Part I: The USD and EM assets

## Learning from recent history

The most frequently asked question we have been asked this year is whether the Fed-induced turn in the USD is likely to change the entire complexion of the EM debate. The Fed's increasing dovishness<sup>1</sup> and a clear focus on the USD have certainly contributed to stability in commodities and a hunt for yield, in the process helping EM assets. However, USD trends are neither necessary nor sufficient for defining EM trends. We need only to look at the last 12 months to understand how EM assets can move independently of the USD. Over this time the nominal value of the USD against developed market currencies (seen through the DXY index)<sup>2</sup> has been largely flat, but EM currencies, stocks (Figure 7) and credit have weakened significantly along with commodities.

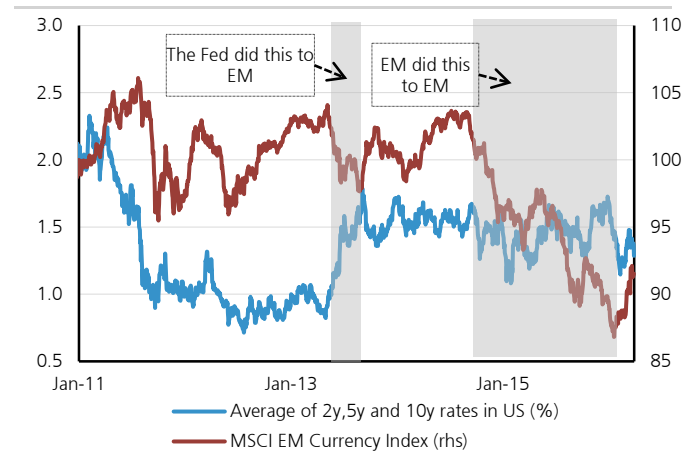
**The last 12 months have shown that the relationship between the DXY (which has been stable) and EM assets (which have weakened) is less robust than many assume**

**Figure 7: MSCI EM and the USD: MSCI EM has suffered over the past 12m despite a stable \$ vs G10 currencies**



Source: Bloomberg, Datastream, UBS

**Figure 8: EM currencies and US rates: EM currencies sold since 2014 despite stable US rates**



Source: Bloomberg, UBS

The Fed fortifying market expectations for an exceptionally slow tightening cycle is better than the counterfactual of significantly higher US rates<sup>3</sup>, but, again, higher US rates hurt EM only in 2013. Since then EM weakness has come despite US rates being stable to lower (Figure 8). The weakness in EM assets since then has been down to EM specific factors, mainly China and its impact on commodities.

**The weakness in EM assets over this period has been more about China and its impact on commodities, than a strong USD**

## How much do USD trends against DM currencies influence EM assets?

For now though we want to focus on a slightly different question – just how much does the USD trend against developed market currencies matter for EM assets? We looked at the relationship between monthly % changes in the DXY index against monthly % changes in MSCI EM, monthly absolute changes in EMBI spreads, and monthly % changes in EM nominal effective exchange rates over the

**We find a very weak statistical relationship over time between the DXY and EM equities, currencies, and credit spreads**

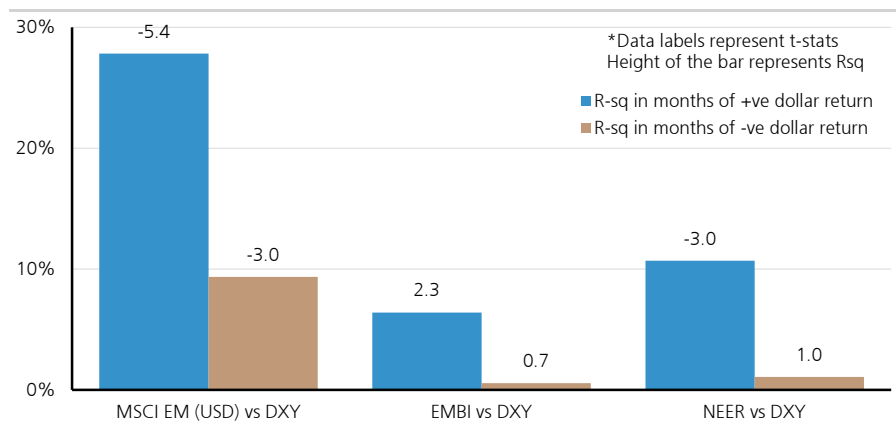
<sup>1</sup> See <http://www.federalreserve.gov/newsevents/speech/yellen20160329a.htm>

<sup>2</sup> The broad trade weighted USD has moved up aggressively, however. The difference is that this measure of the USD also includes currencies like the MXN and CNY which have sold off against the USD last year. However, as we are studying the reaction of EM to an exogenous USD move, we need to look at the value of the USD against developed market currencies, which is what DXY is.

<sup>3</sup> At the same time it is also much better than US rates collapsing under worries of a US recession.

last 20 years. In each of these cases the goodness of fit is poor, signifying a weak relationship in returns (Figure 9)<sup>4</sup>.

**Figure 9: Rsq for regressions of MSCI returns, EMBI spreads and EM nominal effective exchange rates (NEER) returns with DXY returns. Monthly, since 2002.**



Source: Haver, Bloomberg, Datastream, UBS

We worked with monthly returns data since 2002 (even weaker relationship before that) and split our sample between months of USD appreciation and months of USD depreciation. We found that the goodness of fit is slightly stronger when the USD is rising than when it is falling- a stronger USD tends to have a clearer negative impact on EM assets than the beneficial impact of a weaker USD (Figure 9). We would not exaggerate the robustness of this result, however; the overall relationship is still a weak one. We remind the reader that here we are not looking at the relationship between EM variables and USD EM- the fit there would be unquestionably stronger, but the logic would also be circular. We are looking here to isolate the influence of pure USD trends (so, USD's value against developed market currencies) on EM assets. If EM currencies move on their own steam (trade weighted moves), we want to see that as a result, not as our starting assumption.

## Getting a big piece of EM carry, or sticking with the diet?

Admittedly, USD based investors may care less about trade weighted moves in EM, and more just about moves in USD EM, whether they are driven by EM or the USD.

So we must briefly first address just how weak the USD is likely to get against developed market currencies.

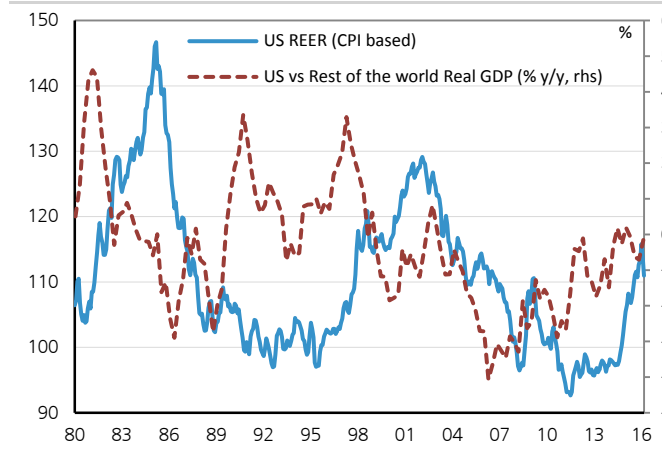
In recent days we've noted growing consensus around the idea of an implicit agreement in favour of a weaker USD within key central banks. It's difficult for us to know if that is the case, but we don't think central banks will fight the data. It is just worth reminding ourselves that the USD is not far out of line with long term growth relationships. From a near term perspective it is arguably a little weak relative to interest rate differentials already. We would not expect a significant selloff in the USD against developed market currencies from here. We believe

**To the extent there is a (negative) relationship between the USD and EM assets, it is stronger in rising USD environments.**

**Central banks won't fight the data, and the USD is not fundamentally misaligned with the data.**

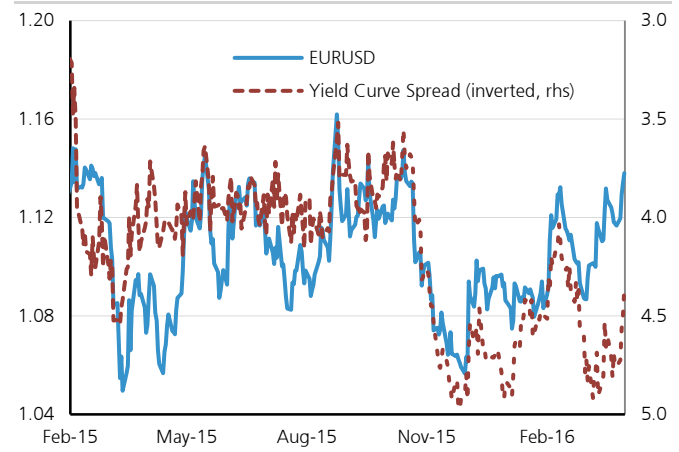
<sup>4</sup> The relationship between the USD and EM assets certainly seems to have tightened somewhat since the 2000s as commodities became financial instruments and acted as collateral in credit but, as is so often the case, EM, investors' memories of USD weakness and EM strength are so strongly coloured by that special spell between 2003 to 2007 when EM could do no wrong.

**Figure 10: US growth spread over rest of the world growth and real trade weighted USD**



Source: IMF, OEF, Haver, UBS estimates

**Figure 11: EURUSD vs US and EU interest rate\* differentials (%)**



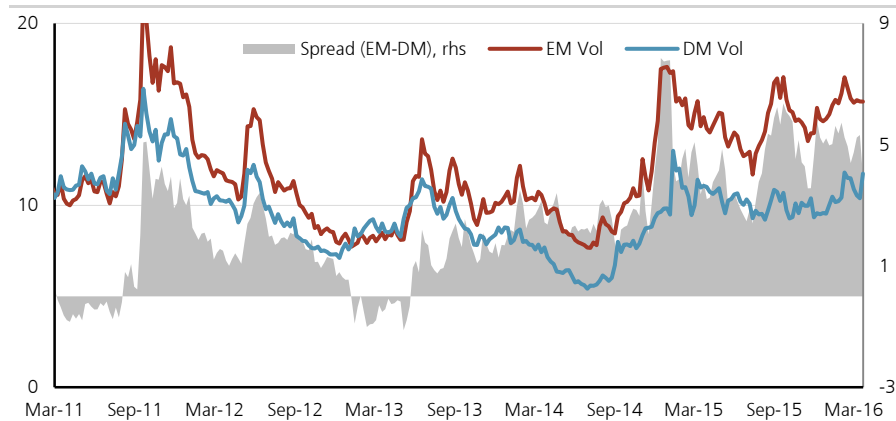
Source: Bloomberg, UBS estimates. \* Interest rate differentials calculated as average 2, 5, 10 yields in US minus Europe.

EURUSD is likely to be largely range-bound between 1.06-1.16 over the coming quarters. Today, we are not far from the top end of this range.

To us, central banks' tone suggests that they would like to see the USD as stable as possible is important, and points to a possible decline in FX volatility in developed market currency pairs. Given that EM currency volatility has in fact risen more aggressively than developed market volatility (Figure 12), the temptation to 'go big' and get a large piece of EM carry is understandably strong.

**Falling volatility = rising temptation to 'go big' on carry**

**Figure 12: EM FX volatility and DM FX volatility**



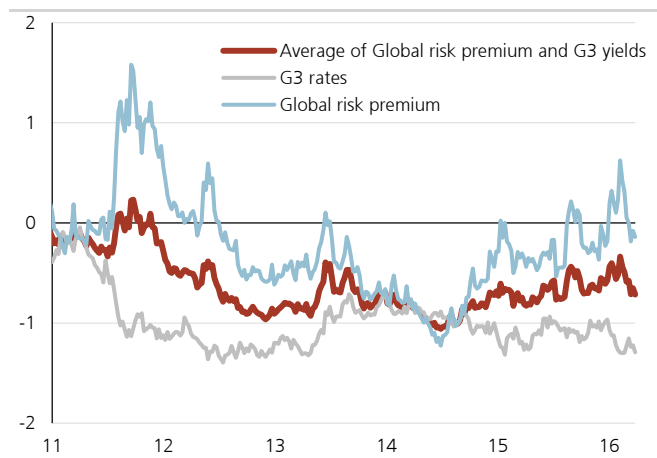
Source: Bloomberg, UBS. EM represents average vol of BRL, KRW, MXN, RUB, SGD, TRY and ZAR. DM represents average vol of AUD, CHF, EUR, GBP and JPY

However there are two reasons why, we believe, it would not make sense to chase EM carry aggressively. First, much as the Fed really underplayed both the pace and extent of tightening, this looks very largely priced into the market. Along with spot and forward interest rates, risk premia have also come lower already (Figure 13). While not at their absolute low, they certainly don't seem to have room to push lower for long enough to drive a sustained beta rally as in 2012 and 2014. Second, as mentioned in [An EM turnaround? I – Assessing the anatomy of the rally](#), risk appetite appears to be changing direction more frequently now. The 3month

**Discounted dovishness and fickle risk appetite warn us against getting too aggressively long EM carry, while fundamentals remain questionable**

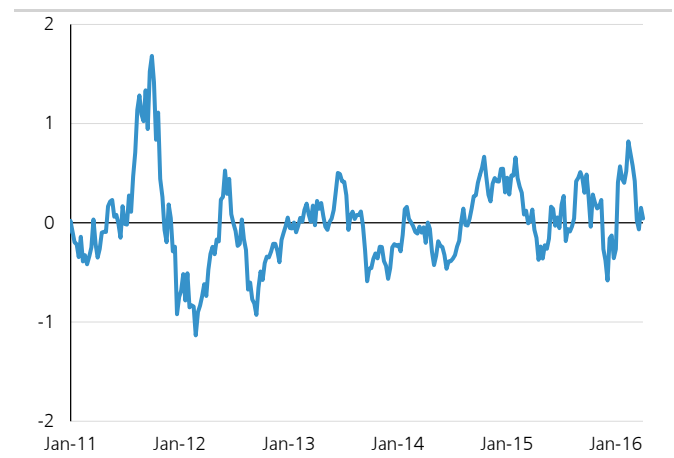
change in our preferred risk measure now goes from fear to greed and back to fear within a quarter compared to 6-12 months in 2012 and 2014 (Figure 14).

**Figure 13: G3 yields and risk premia index (z scores)**



Source: Bloomberg, UBS. Note: higher levels of global risk premia index indicate rising risk aversion. G3 rates are defined as the simple average of 2, 5 and 10y rates in US, EU and Japan. We have weighted the countries as 65%, 25% and 10% given US rates' are the dominant influence on EM

**Figure 14: 3m change in risk premium index**



Source: Bloomberg, UBS

While we believe the medium term (3-12 months) view is still for weaker EM currencies outright, we have been recommending only relative value trades tactically. There have been some improvements in cyclical momentum in China and North Asia and this has prompted us to recommend long KRW against IDR. We are sticking with long CNY v INR which we recommended in early January when market panic had driven the carry on CNY to relatively high levels.

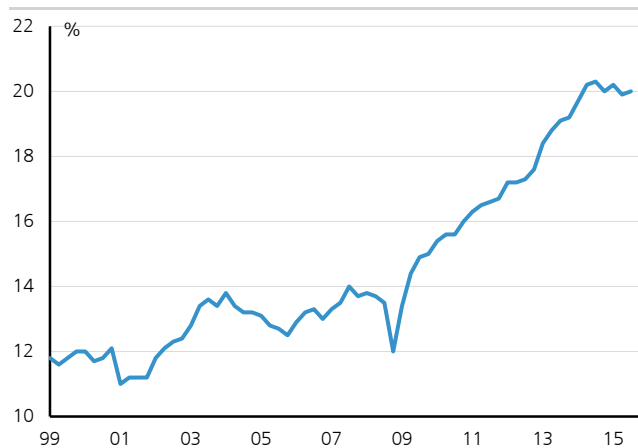
**We're negotiating a potential decline in volatility in relative value trades, not in chasing carry**



## Part II: Why can't China continue to buoy commodity prices?

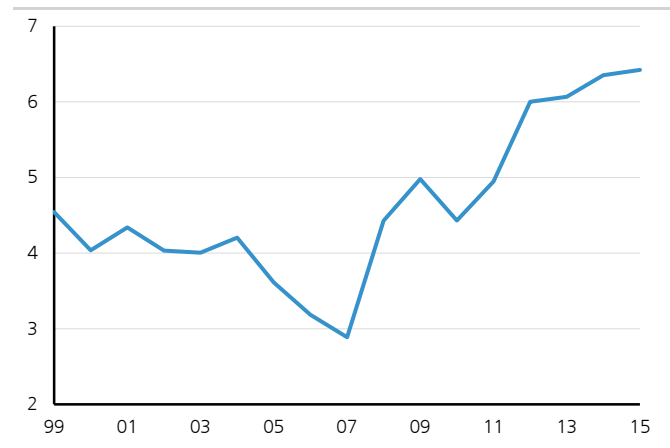
We have noted that China's credit impulse has been positive for some time now. These larger amounts of credit have evoked lesser response from growth as more funds have been needed to simply roll over existing debt (Figure 15 and Figure 16).

**Figure 15: China non-financial sector debt service ratio**



Source: BIS, Haver, UBS

**Figure 16: Proxy for China incremental capital output ratio**

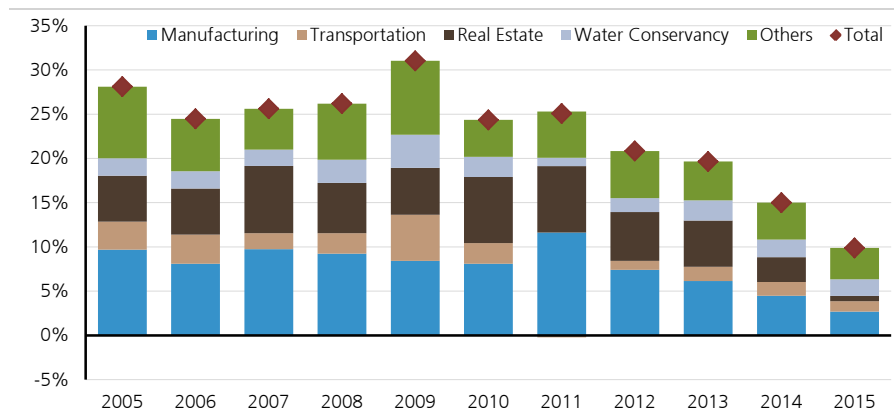


Source: Haver, UBS estimates

More importantly, we think the multiplier of this growth in total social financing for the rest of the world will also be less positive. This is because an increasing proportion of China's fixed asset investment has been directed into infrastructure spending rather than real estate. Though it may not sound it, infrastructure spending does not make very heavy demands on commodity imports in China as it has been focussed today on management of water conservation facilities, environment and other public facilities (Figure 17).

**While infrastructure investment in China is growing, it has been much stronger in less commodity-intensive sectors such as water conservancy and environmental protection**

**Figure 17: China FAI breakdown**

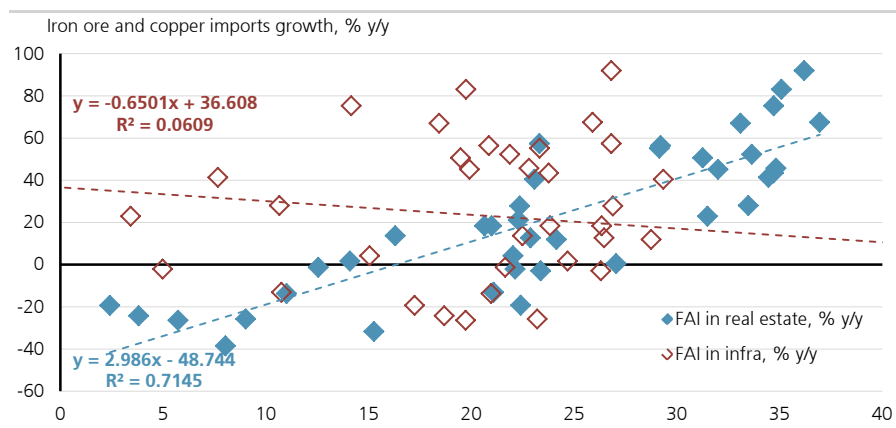


Source: Haver, UBS

As we show in Figure 18 below, infrastructure spending has almost no relationship with imports of metals. It is investment in the Chinese real estate market that is the key driver of commodity imports into China.

**It is the real estate market in China that makes the biggest demand on commodity imports**

**Figure 18: China commodity imports on infrastructure FAI**



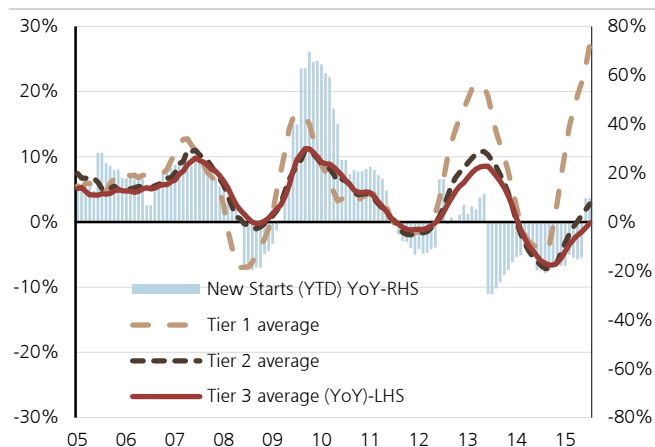
Source: Haver, UBS

This where we come to the key question – can the revival in Chinese credit growth push up construction, making greater demands on base metals? Construction has posted one surprisingly strong positive number already this year. Excess liquidity does seem to be finding its way into property prices in Tier 1 cities. Important as these cities are as leading indicators of prices in the rest of China (Figure 19), the real action, from the perspective of commodity demand is in tier 3 and 4 cities. Looking at aggregated data over the last 7 years, Tier 3 and 4 cities have accounted for about 65% of total new property starts. Unfortunately they also account for nearly 72% of all inventories in China housing (Figure 20), currently at roughly 24 months. Notwithstanding the easy liquidity then, it is difficult to see how these cities will enjoy an aggressive enough uptick in prices to drive overall construction in China strongly positive for long.

As research from Wang Tao, Donna Kwok ([Slow Start but Signs of Rebound amid Policy Support](#)), Eugene Cheung, Eva Lee and Summer Xia ([Is the strong recovery of New Starts sustainable?](#)) shows, it is far from obvious that we will see a big revival in construction in tier 3 cities this time around, implying demand for metals is likely to stay weak in EM. UBS commodity teams believe that iron ore price will slide back towards USD 45 per dry metric tonne from USD 55 dmt at the time of writing.

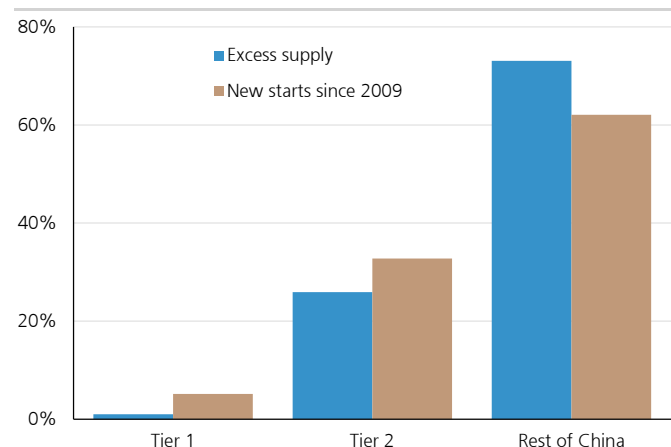
**High levels of excess inventory in Tier 3 and 4 cities in China suggest that a sustained rebound in new property starts is unlikely this year**

**Figure 19: New starts vs property prices: Tier 1 city property price trends lead prices and starts typically**



Source: National Bureau of Statistics, CEIC, UBS

**Figure 20: Distribution of new starts and inventories across type of**

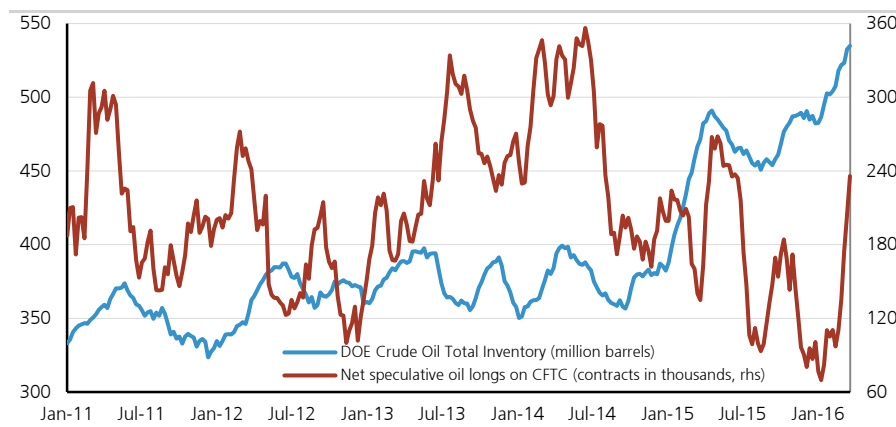


Source: National Bureau of Statistics, CEIC, UBS

The call on oil prices is a more difficult one. To give credit to our oil team, they had consistently argued ([Oil price update: Triangulating the recovery](#)) that prices at and below USD 30 per barrel were too low given the big changes in US oil production and the impending changes in OPEC oil production. They now feel that that the market is already pricing in a degree of producer freeze. They don't expect anything material from the OPEC Qatar meeting in April and don't see a further rise in oil prices beyond USD 41-42 per barrel through 2016. The rebalancing of the market will likely gain steam later this year and into next year, but there is little exciting in quarters immediately ahead.

We would add that the level of oil inventories and the big change in market positioning (Figure 21) could mean that there is downside volatility around this medium term target.

**Figure 21: US DOE Crude Oil Total Inventory and CFTC net longs on crude oil – market has taken on more net longs even as inventories continue sharp rise**



Source: Bloomberg, UBS

So, despite the strong confluence of easy policy from US, Europe and China we should expect a slide back in metals and (at best) stability on oil prices for now – that's what our commodity teams believe. There is little reason for EM to continue to rerate further. We will do a deep dive into valuations next week worth mentioning briefly that EM stocks are now 12.5 times forward earnings, visibly higher than their long term average.

Still, one may argue that we are not suffering anything like the commodity free fall we did between mid-2014 and Jan 2016. Shouldn't that mean that EM currencies, having suffered for 5 years, are now ready to rebound? We deal with the multi layered questions in this topic next.

**UBS sees the outlook for oil prices as less concerning, but upside is likely to be gradual amid high inventories and more balanced market expectations**

**This scenario of weaker metals/modest oil upside implies little room for EM assets to continue re-rating**

## Part III: Have EM currencies structurally bottomed out?

We divide this topic into five separate questions below.

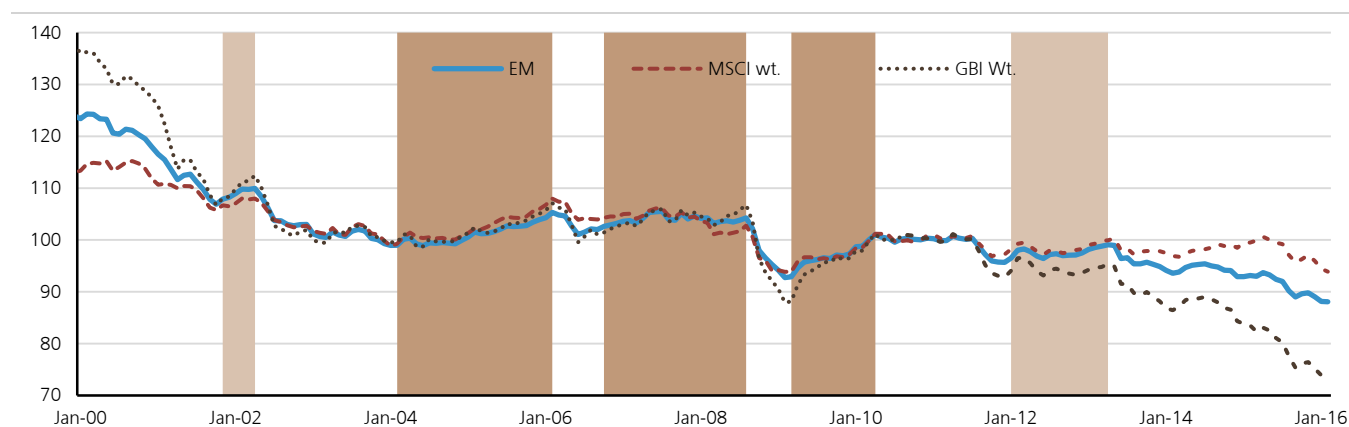
### Q: Under what conditions have EM currencies typically appreciated in the past?

In order to assess the prospects for a sustained spell of EM currency strength, we think it's instructive to look back and identify the conditions under which EM NEERs have appreciated over the past 15 years. We examined 5 periods during which EM NEERs strengthened for 6 months or longer, three of which were strong rallies, and two moderate ones. The performance of key macro and financial variables during these phases are shown in Figure 23 below. What, if anything, did these periods have in common?

**We examined five periods over the past 15 years when EM currencies appreciated in trade-weighted terms. We reached five main conclusions.**

We see five conclusions.

**Figure 22: Periods of appreciating EM nominal effective exchange rates (NEERs) since 2000**



Source: Haver, UBS. Note: darker brown bars denote stronger periods of EM appreciation; lighter bars used for moderate EM rallies.

**Figure 23: Macro and market performance during previous phases of EM NEER appreciation**

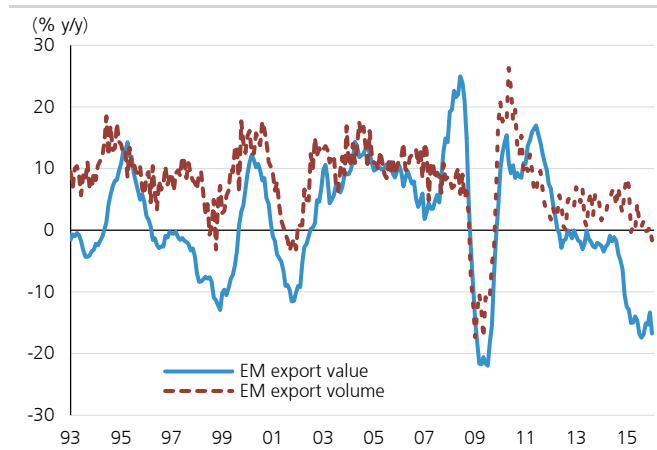
|                  | Performance |       |          | Macro                     |        |                                |              |              |                    |                        | FX          |       | Rates         |                      |   |
|------------------|-------------|-------|----------|---------------------------|--------|--------------------------------|--------------|--------------|--------------------|------------------------|-------------|-------|---------------|----------------------|---|
|                  | S&P 500     | Oil   | Iron ore | EM Exports growth (% y/y) |        | EM current account as % of GDP | EM MBS Score | EM IP growth | EM Real GDP growth | EM- DM Real GDP growth | EM FX Carry | DXY   | US real rates | EM real policy rates | US Real Policy Rate - EM real policy Rate |
|                  |             |       |          | Volume                    | Value  |                                |              |              |                    |                        |             |       |               |                      |   |
| Nov-01 to Apr-02 | -5.5%       | 38.3% | -2.4%    | 0.8%                      | -4.6%  | 1.2%                           | 10.89        | -0.1%        | 3.6%               | 1.8%                   | 10.0        | -0.8% | -0.3%         | 2.6%                 | -3.9%                                     |
| Feb-04 to Feb-06 | 11.9%       | 91.6% | 163.8%   | 12.0%                     | 23.6%  | 1.9%                           | 9.50         | 8.6%         | 6.8%               | 3.7%                   | 4.4         | 3.2%  | 0.4%          | 0.8%                 | -1.8%                                     |
| Oct-06 to Aug-08 | -6.9%       | 93.2% | 81.8%    | 9.0%                      | 21.3%  | 2.1%                           | 8.53         | 8.3%         | 7.5%               | 4.8%                   | 1.4         | -9.3% | -0.6%         | 2.5%                 | -0.6%                                     |
| Mar-09 to Apr-10 | 48.7%       | 77.6% | 169.2%   | 1.1%                      | -1.4%  | 2.2%                           | 9.74         | 4.8%         | 1.6%               | 3.5%                   | 5.0         | -4.2% | -0.1%         | -0.7%                | -2.1%                                     |
| Jan-12 to Apr-13 | 21.7%       | -7.8% | -2.1%    | 3.9%                      | 0.2%   | 0.6%                           | 9.16         | 4.9%         | 3.5%               | 3.4%                   | 3.4         | 3.1%  | -0.4%         | 0.8%                 | -3.1%                                     |
| <b>Latest</b>    |             |       |          | -1.6%                     | -14.5% | 2.0%                           | 10.43        | 2.7%         | 2.7%               | 0.7%                   | 3.3         |       | 0.2%          | 1.1%                 | -1.6%                                     |

Source: Haver, Bloomberg, UBS

1) First and foremost, the **current level of EM export growth is significantly weaker than that seen in previous episodes of sustained currency appreciation**. While we expect EM export value growth to recover moderately from here on improving EUR/USD base effects and potentially more stable oil

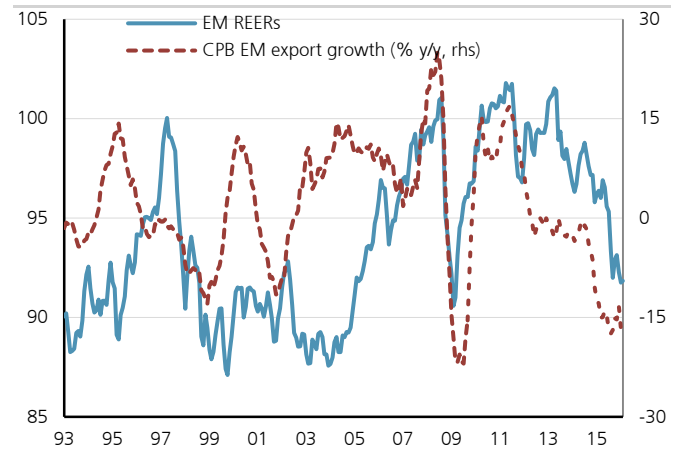
prices (EM trade with Europe is mostly invoiced in euros but reported in dollars, so the big drop in values here as EUR/USD plunged in 2014 and early 2015 should soon level off), **export volumes are also much weaker today**. We note that while several EM currencies are in real terms today trading close to decade or even two-decade lows (e.g. ZAR, COP, MYR, MXN), the same is also true for their exports – the last time these currencies sustainably rallied from similar levels, it was because they were evoking a much stronger response from exports than is the case today (Figure 25).

**Figure 24: EM export growth, values and volumes (% y/y)**



Source: CPB World trade monitor, Haver, UBS

**Figure 25: EM REER and Export Growth (% y/y)**



Source: CPB World Trade Monitor, Haver, UBS. EM REERs shown here as simple average of 22 markets

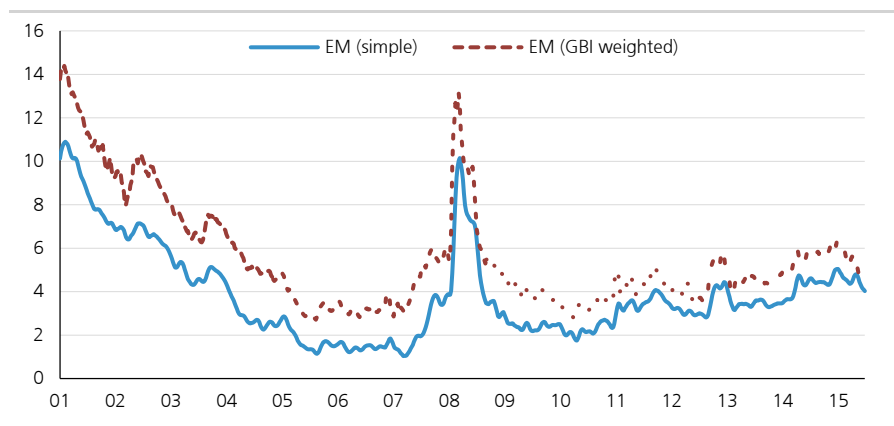
2) **The level of EM GDP growth, in absolute terms but especially relative to the developed world, is much weaker today** (Figure 31). Relatedly, our measure of EM macro balance sheet risk is today at relatively high levels.

3) While a sustained period of dollar weakness hasn't always been necessary for EM NEERs to strengthen, **broad-based commodity price appreciation (oil, copper, gold) was seen in almost all of these periods**.<sup>5</sup>

4) Interestingly, **the level of carry on offer (Figure 27) doesn't appear to have the power to predict future movements in spot** - there have been occasions in the past when EM has appreciated with lower carry (2006-8), and also those where it has not rallied despite higher carry being on offer (2003).

<sup>5</sup> The main exception to this strong trend was the moderate rally during January 2012 to April 2013, in which commodities sold off in the last 2-3 months of that period but EM NEERs held up well amid an aggressively depreciating JPY, and buoyant US stock market.

**Figure 26: 3m annualised EM FX implied yields**



Source: Bloomberg, UBS

5) EM current account/GDP ratios today look broadly similar to those seen in previous episodes of currency appreciation, but there is **significant dispersion within this aggregate finding**. Current accounts in Korea, Singapore, Thailand, Israel, and the CEE4 are today much larger than seen in the past – however those in larger EM markets such as China, India, Latin America, Russia, South Africa and Turkey are visibly worse.

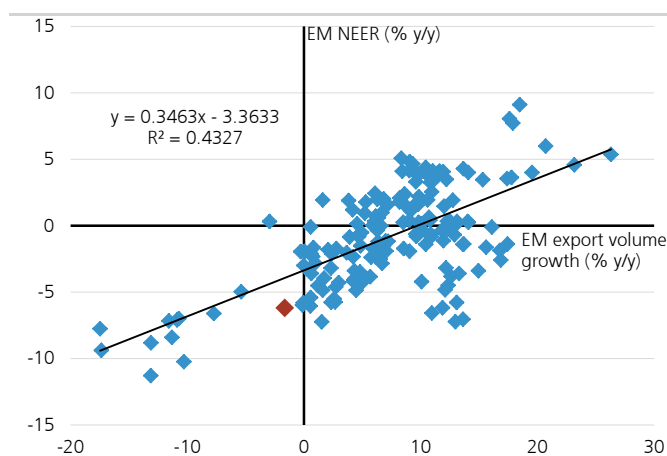
**Q: To what extent should improving trade balances support EM currencies?**

We have previously argued that improving trade/current account delta is not a sufficient condition for EM currencies to appreciate (see [Can narrowing trade imbalances boost EM FX?](#) for details). We strongly maintain that view today, and remind our readers of the following key points:

**Improving trade balances in EM are not a sufficient condition for EM currencies to appreciate**

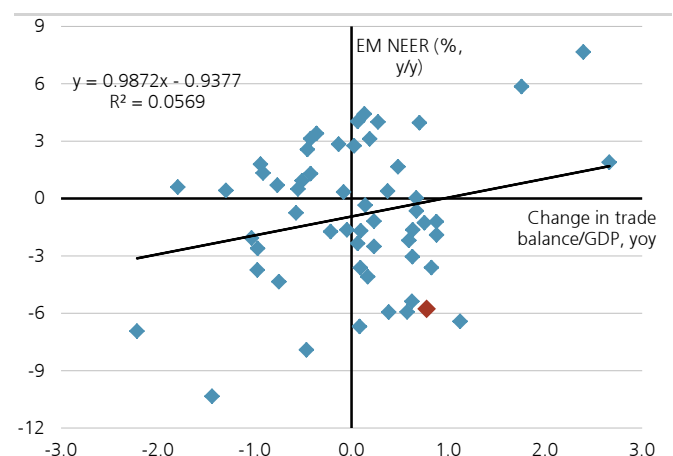
- **Export growth is statistically far more significant than changes in the trade balance in explaining EM currency movements** (Figure 27 and Figure 28). Indeed some of the best episodes of NEER appreciation in EM have taken place amid deteriorating current account positions (e.g. Korea 2005-7 and Turkey 2003-5). Exports, growth, capital flows, and credit spreads have typically mattered more.

**Figure 27: EM NEER vs EM real export growth (% y/y)**



Source: Haver, UBS. Note: regression based on monthly data since Jan 2002. Red dot denotes latest value at the time of writing i.e. Jan 2016.

**Figure 28: EM NEER vs trade balance/GDP change (% y/y)**



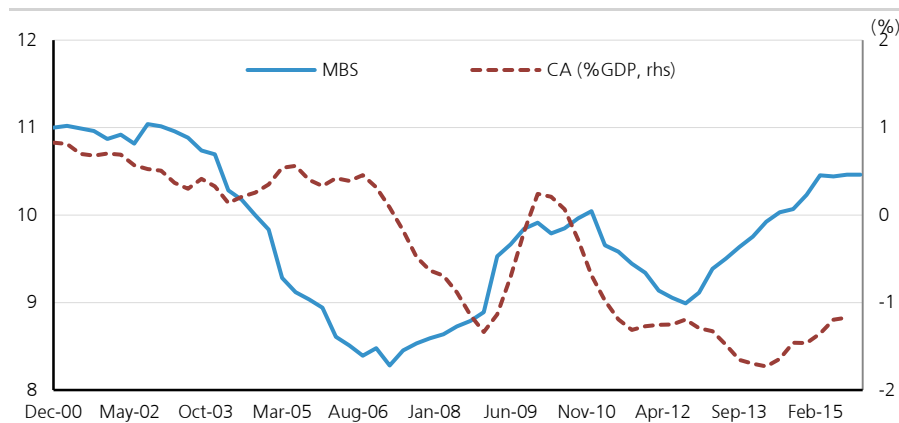
Source: Haver, UBS. Note: regression based on quarterly data since Q1 2002. Red dot denotes latest value at the time of writing i.e. Q4 2015.

- At these levels of export growth (barely positive real growth), it is entirely normal to expect trend depreciation in EM nominal effective exchange rates. Our calculations suggest at least 7-8% export volume growth is typically needed for EM NEERs to stay flat on a year-over-year basis (Figure 27).

- Weak EM growth (both in terms of domestic demand and exports) have pressured EM's fiscal and leverage metrics, mostly negating the positive impact of improving current accounts on our EM macro balance sheet risk score. This is one reason why credit spreads in EM have trended wider in recent quarters. In this respect, the recent improvement in EM current accounts is very different to periods such as 2004-2008, H2 2009 and 2012, when current account improvement took place alongside a positive re-rating of credit profiles (Figure 29).

The current level of export growth in EM looks entirely consistent with trend NEER depreciation

**Figure 29: EM Current account/GDP ratio vs. Macro Balance Sheet (MBS) risk score\***



Source: Haver, UBS \*Both the parameters are EMBI weighted

As we discuss below, it is worth noting that despite improving current account positions, FX reserves have come under significant pressure in several EM countries – both commodity importers and exporters – over the last 18 months. This underscores the degree of pressure on EM's financial account – FDI, portfolio, and 'other' investment flows, to which we now turn our attention.

#### **Q: Why have EM capital accounts been problematic, and is that likely to persist?**

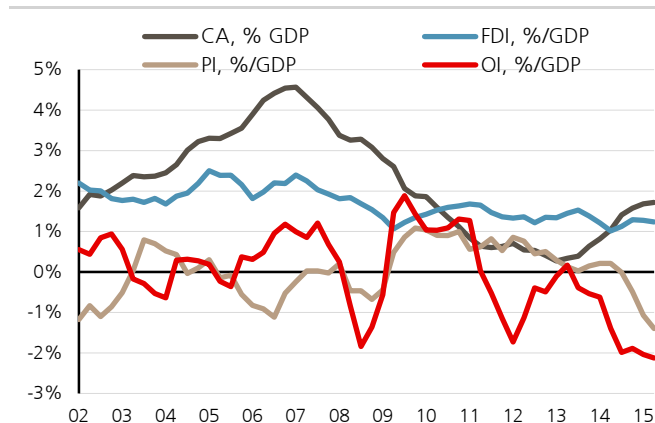
Figure 30 below shows that improvements in EM current accounts since late 2013 have been fully offset by weakening financial account flows – namely portfolio and 'other' investment flows (the latter constitutes hot money flows, foreign bank lending, and trade credits). Unfortunately, given the persistent weakness in EM-DM growth spreads, there appears to be little prospect of a big reversal in this dynamic in the foreseeable future (Figure 31).

Moderate net portfolio outflows from EM are not reflective of a major exodus of foreign positioning – rather EM itself has continued to accumulate foreign portfolio securities abroad, while inward flows decelerated to a near zero pace in 2015 (Figure 32). Nor has EM taken significant strides towards reducing its external debt that would create optimism about a strong bounce in bank/corporate external borrowing flows (Figure 33).

We find capital account flows in EM to be closely correlated with EM-DM GDP growth spreads, which are unlikely to rebound strongly

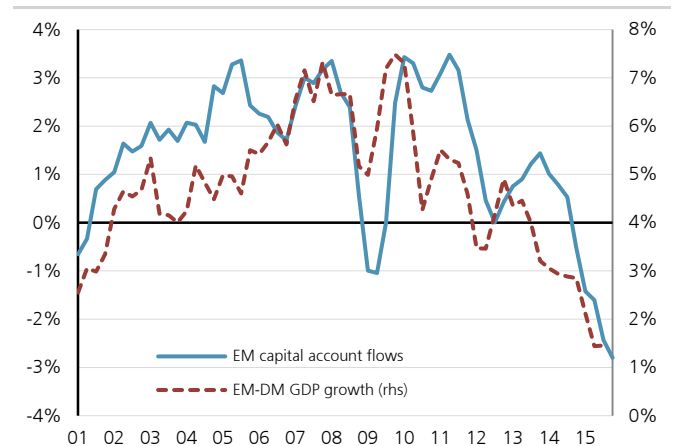
No major positioning liquidation or external deleveraging yet in EM

**Figure 30: EM current account and capital account breakdown**



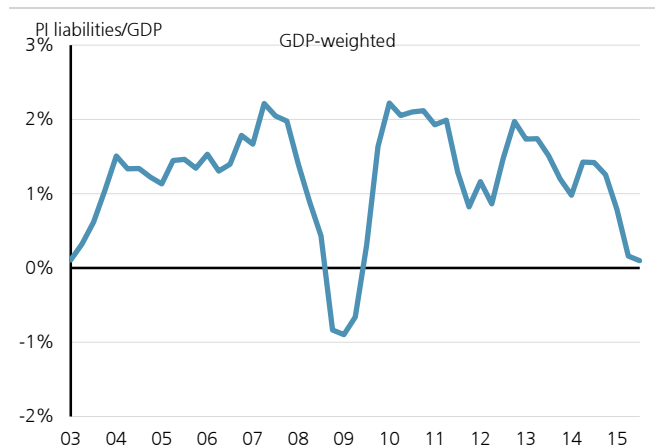
Source: Haver, UBS. EM represents GDP weighted average of 22 EM countries

**Figure 31: EM capital account flows have traditionally been well correlated with EM-DM growth spreads**



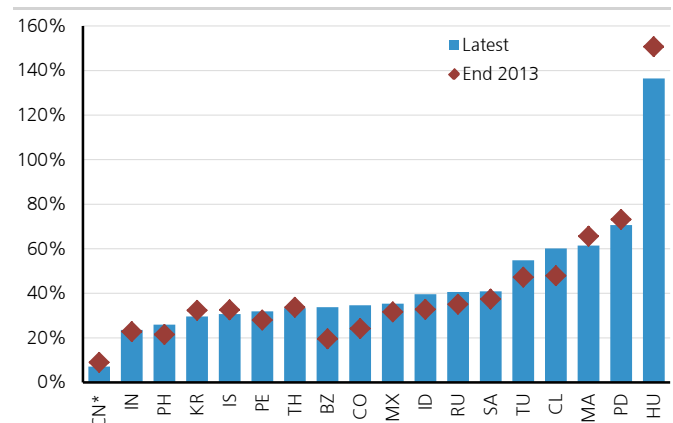
Source: Haver, UBS. EM capital flows shown here is GDP weighted average of 22 EM countries

**Figure 32: Portfolio investment liabilities (% of GDP)**



Source: Haver, UBS

**Figure 33: Gross external debt (BIS defined) to GDP**



Source: Haver, UBS. \*China number denotes external debt denominated in foreign currencies only, and is obtained from local sources

## Q: Is EM showing any classic signs of currency undervaluation?

The analysis above has highlighted the importance of exports and GDP growth in influencing EM currency direction over sustained periods. Do leading indicators suggest a positive inflection point is in sight? We attempt to answer this question by looking at trends in EM's global export share, the evolution of export prices and shipment/inventory ratios in key EM manufacturing economies, and the level of G3 import volumes.

- First, we find that **EM exporters are still struggling to expand their market share in G4 imports** (Figure 35). This is hardly what one would expect to see if currencies were significantly undervalued. Even in volume terms, the ratio of EM export volumes to DM import volumes is visibly plateauing (Figure 34), indicating that EM competitiveness is under pressure and that EM is struggling from the weakness in intra-EM trade.

**Is EM gaining market share, able to increase export prices, and is the price effect or income effect more important?**

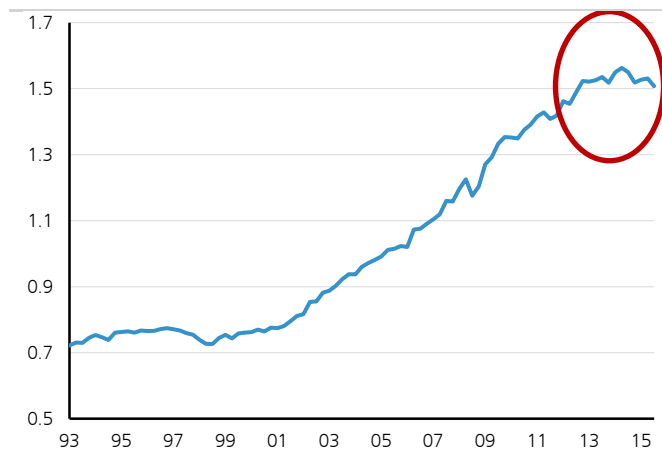


- Similarly, **export prices for key manufacturing economies such as Korea and Taiwan remain under clear pressure** (Figure 36). Even in local currency terms, export prices have been falling significantly through 2015 and in early 2016 even after EUR/USD bottomed in March 2015, indicating that EM is having to cut costs significantly to retain export share.

- Last but not least, we have long argued that the income elasticity of EM exports (i.e. global demand) is far stronger than the price elasticity (EM exchange rates) in determining export performance (Figure 37). In this context, **the lack of recovery in G3 import volumes remains an important drag on EM currencies** (Figure 38).

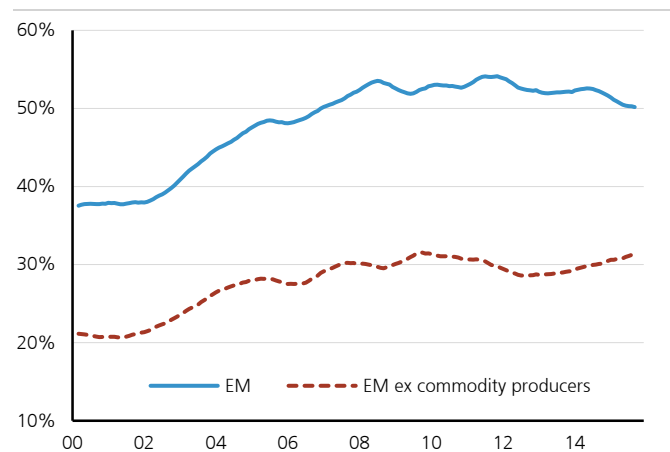
Overall, while we are mindful that a phase of USD consolidation inspired by a more dovish Fed could help EM FX volatility ease modestly in the coming weeks, we struggle to find justification for a sustained phase of EM currency gains. We prefer to focus on relative value trades rather than chasing USD-EM aggressively lower from here.

**Figure 34: EM export volumes/DM import volumes**



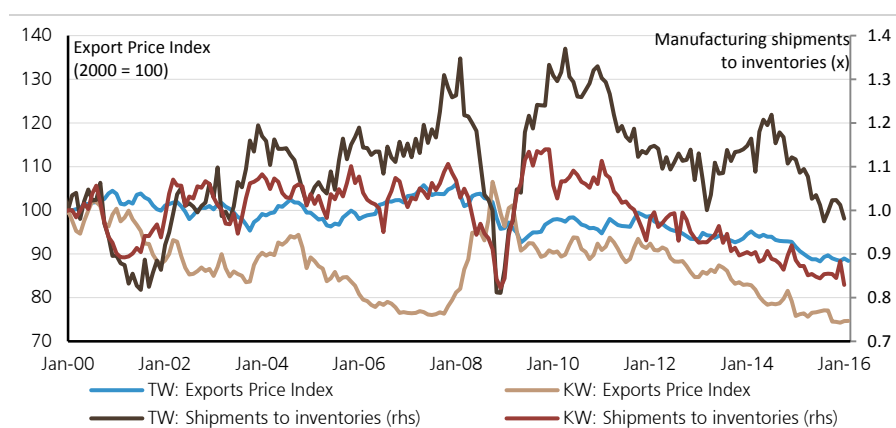
Source: Haver, UBS

**Figure 35: EM's share of G4 imports**



Source: Haver, UBS

**Figure 36: Korea and Taiwan: shipments to inventories and export prices**



Source: Haver, UBS

**Figure 37: Results from regressing EM exports growth (% y/y) on REER changes (% y/y) and G3 GDP growth (% y/y), Q1 2000 - Q4 2015\***

|              | REER         | G3 GDP growth |
|--------------|--------------|---------------|
| Korea        | -0.10        | 3.64          |
| Thailand     | -0.13        | 4.45          |
| Brazil       | <b>-0.18</b> | <b>3.83</b>   |
| Mexico       | 0.12         | 3.12          |
| South Africa | -0.13        | 3.12          |
| Turkey       | 0.06         | 2.02          |
| Poland       | -0.05        | 3.14          |
| Malaysia     | <b>-0.60</b> | <b>4.43</b>   |
| Taiwan       | <b>0.41</b>  | <b>5.11</b>   |
| Indonesia    | -0.30        | 4.07          |
| Israel       | <b>0.34</b>  | <b>4.79</b>   |
| Russia       | 0.03         | 2.39          |
| Singapore    | -0.18        | <b>4.06</b>   |
| EM average   | -0.05        | 3.70          |

Source: Haver, UBS\* Bolded values denote significance at a 90% confidence level

**Figure 38: G3 (US, European, and Chinese) import volume growth (% y/y)**



Source: Haver, UBS

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