Get ready for EM reserve accumulation

By Jan Dehn

Emerging Markets (EM) currencies are rallying against the Dollar. EM central banks will soon be forced to intervene, so central bank reserves will go up. Based on eighteen years of data we find that EM reserves increase four times faster than currencies during EM currency bull markets, but decline by less than half the speed of currencies during bear markets in EM FX.

A further 10% appreciation in EM currencies – which we think is extremely feasible – could increase the level of FX reserves for the eighteen EM countries in the GBI EM GD index from USD 2.2trn (19% of the world total) to USD 3.1trn. On the other hand, we would only expect EM reserves to decline to about USD 2.1trn if EM currencies give up 10%. These estimates may be affected by numerous country specific effects, but we do not believe that the most important of these – the reaction function of EM central banks to changes in FX – will change materially.

The implication for EM central banks and other institutional investors is clear: begin to diversify reserves now, because (a) EM reserves will rise going forward and (b) there will be improving liquidity and better returns in non-Dollar currency markets, including EM FX.

Better currency dynamics in EM

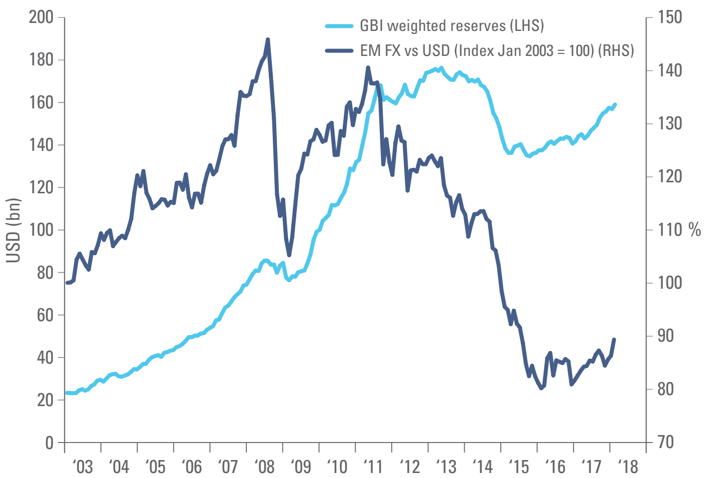
EM currencies began to rally against the Dollar in Q1 2016 and flows suggest that there is more to come. One of the most important implications of the resurgence in EM currencies is that EM central banks reserves will go up. While EM central banks are still relatively tolerant of currency appreciation, mainly because EM currencies are still relatively competitive, this is likely to change over time. As real effective exchange rates continue to appreciate, EM central banks will increasingly intervene to moderate the appreciation of their own currencies in order to protect exporters and to avoid other perceived macroeconomic distortions. They will do so by printing money to buy up the Dollars flowing into their markets. Even if they sterilise these operations, so that domestic interest rates remain stable, FX reserves will rise. As reserves rise and the Dollar continues to decline there will also be growing pressures on EM central banks to begin to diversify away from the Dollar in order to protect the purchasing power of their reserves and to take advantage of the improving liquidity and better returns in other currencies, including EM FX.

Implications for reserves

What does the positive outlook for EM currencies imply for the scale of reserve accumulation by EM central banks? Figure 1 shows the relationship between EM nominal exchange rates and central bank FX reserves from 2003 to 2018. Both the exchange rate and reserves series in this chart have been weighted by the JP Morgan GBI EM GD index (henceforth referred to as GBI), which is the most commonly used benchmark index for EM local currency government bond markets. We have done this to make the numbers relevant to investors in EM local markets most of whom benchmark to this index. The most striking feature in Figure 1 is that EM FX reserves have increased far more quickly in percentage terms than EM currencies during EM currency bull markets and that reserves have declined by proportionately less than currencies during EM currency bear markets.

EM FX reserves increase more than currencies in bull markets but decrease less than currencies in bear markets

Fig 1: **EM currencies and EM FX reserves (GBI weighted, 2003-2018)**



Source: Ashmore, Bloomberg, JP Morgan, data as at 31 January 2018.

Continued overleaf

Figure 2 illustrates the same point in tabular form. There have been three distinct episodes of EM currency appreciation and two distinct episodes of EM currency weakness since 2003. During the three bull markets in EM currencies, central banks have, on average, accumulated reserves at a speed, which is 3.9 times faster than the percentage change in EM currencies. During bear markets in EM, currencies reserves have declined only 0.4 times the percentage change in EM currencies. The asymmetry in changes in reserves with respect to currency moves exists for two specific reasons. First, EM central banks tend to intervene heavily during bull markets to prevent excessive currency appreciation. Second, EM central banks allow currencies to weaken during bear markets rather than trying to defend their currencies.

Fig 2: **Central bank reserve sensitivities to changes in EM FX in bull and bear markets**

Direction of EM FX market	Period	% change in EM FX	% change in EM central bank reserves	Ratio: change in reserves / % change FX	Average ratio
Bull market	Jan 2003 - Aug 2008	39%	262%	6.7	3.8
	Mar 2009 - Apr 2011	26%	88%	3.4	
	Feb 2016 - Jan 2018	11%	15%	1.4	
Bear market	Sep 2008 - Feb 2009	-20%	-9%	0.4	0.4
	May 2011 - Jan 2016	-42%	-12%	0.3	

Source: Ashmore, Bloomberg, IMF, data as at 31 January 2018.

Sensitivities

Based on the ratios in Figure 2 it is straight forward to obtain rough estimates of how much EM currency reserves could change in different scenarios for EM currencies. The scenarios are illustrated in Figure 3. Using index weighted reserves, we find that if EM currencies decline by 10% from current levels reserves will only drop by USD 6bn from USD 159bn to USD 153bn, which is actually a higher level of reserves than during the worst of the bear market for EM currencies in 2015. On the other hand, if EM currencies appreciate 10% from here the average EM country in the GBI index will have USD 220bn of FX reserves, i.e. USD 61bn more than today.

Fig 3: **Excepted change in EM currency reserves for given changes in EM currencies**

Change in EM FX	EM FX reserves (GBI weighted, USD bn)	Total reserves (GBI countries, USD bn)
-10%	153	2,131
-8%	155	2,147
-6%	156	2,164
-4%	157	2,180
-2%	158	2,196
0%	**159**	**2,212**
2%	171	2,382
4%	184	2,551
6%	196	2,721
8%	208	2,890
10%	220	3,059

Source: Ashmore, Bloomberg, JP Morgan, data as at 31 January 2018.

A 10% increase in EM currencies versus the Dollar could push up EM reserves by USD 900bn to USD 3.1trn, based on the past relationship between currencies and reserves

Index weighted estimates understate the actual increase in reserves, because indices severely limit the importance of larger countries with a lot of reserves, such as Brazil and Russia. Figure 4 shows how central bank reserves are distributed across regions and countries, based on data from January 2018. The combined value of FX reserves controlled by the eighteen countries in the GBI index is a substantial USD 2.2trn, or 19% of total FX reserves in the world. If all these countries were to experience a 10% increase in their currencies versus the Dollar, their reserves would go up to USD 3.1trn, all else even. If their currencies were to decline by 10% their reserves would only decline to USD 2.1trn.

Fig 4: **Distribution of global central bank FX reserves as of January 2018**

Region	Reserves (USD bn)	% of global reserves	GBI index weight (%)	GBI weighted reserves (USD bn)
World	**11,457**	**100%**		
Emerging Markets	**8,726**	**76%**		
GBI	***2,212***	***19%***	***100%***	***159***
Argentina	62	0.5%	1%	0.5
Brazil	384	3.3%	10%	38.4
Chile	38	0.3%	2%	0.9
Colombia	48	0.4%	7%	3.3
Czech Republic	148	1.3%	4%	5.8
Hungary	27	0.2%	5%	1.3
Indonesia	130	1.1%	10%	12.4
Malaysia	102	0.9%	6%	5.9
Mexico	173	1.5%	10%	16.7
Peru	64	0.6%	3%	1.7
Philippines	82	0.7%	0%	0.2
Poland	108	0.9%	9%	9.6
Romania	45	0.4%	3%	1.3
Russia	443	3.9%	8%	34.3
South Africa	46	0.4%	8%	3.8
Thailand	209	1.8%	8%	16.7
Turkey	89	0.8%	7%	6.4
Uruguay	16	0.1%	0%	0.0
Non-GBI	***6,513***	***57%***		
China	3,140	27.4%		
India	415	3.6%		
Egypt	37	0.3%		
Nigeria	41	0.4%		
Slovakia	1	0.0%		
Other EM	2,880	25.1%		
Developed economies	**2,731**	**24%**		
Japan, Switzerland	1,952	17.0%		
Other	779	6.8%		

Source: Ashmore, Bloomberg, IMF, JP Morgan, data as at 31 January 2018.

Continued overleaf

What could affect these estimates?

These estimates of reserve sensitivity to changes in exchange rate are obviously only approximations based on the historical relationship between EM currencies and changes in FX reserves. The most important factor in this relationship is the reaction function of EM central banks with respect to their currencies. We do not think that EM central bank reactions functions have changed materially. After all, their large stocks of reserves proved helpful in 2008/2009 and also as instruments to smooth currencies during the outflows during the Quantitative Easing (QE) period (2010-2015).

Still, the estimates may prove inaccurate for a number of reasons, other than unexpected changes in central bank reaction functions. EM central banks are likely to become more sensitive to currency appreciation over time, which means that they intervene more as their currencies appreciate. If so, the pace of reserve accumulation will accelerate. Also, different EM countries have different tolerances for currency appreciation depending on productivity, the state of the business cycle, the dependence on commodities versus manufactures, etc. Currency wars could also emerge between EM central banks, since the largest EM central banks have more capacity to push up currencies of other (smaller) EM countries than the other way around due to their larger overall stocks of FX reserves. The extent to which this happens depends on how aggressively different EM central banks diversify into EM currencies, when they alter the currency composition of their reserves. Finally, the specific impact in each country obviously also depends on how far their currencies move in response to basic country-specific macroeconomic and political developments.

The biggest risk to EM reserve accumulation is the possibility of a rapid unwinding of global imbalances

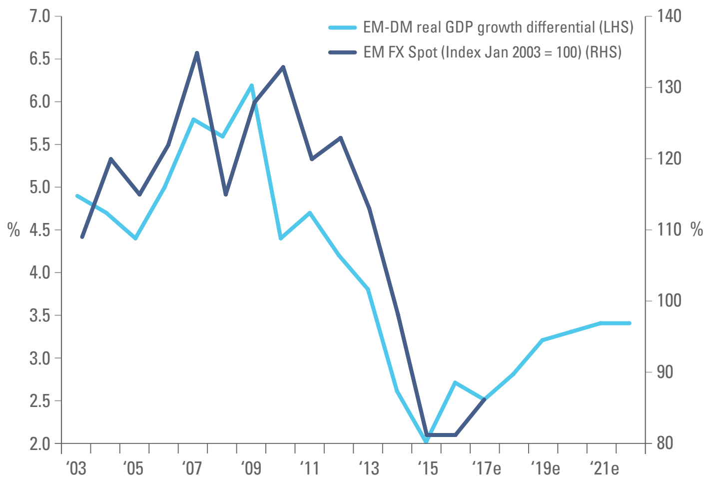
Global imbalances

Perhaps the biggest risk to the estimates for reserve accumulation outlined above is presented by the possibility of a more rapid unwinding of global imbalances. Since the 1980s EM countries have accumulated more than 75% of the world's reserves on the back of export surpluses from selling goods and services to consumers in developed countries. The latter have been able to spend due to falling interest rates and massive increases in debt. However, this model does not appear to be sustainable going forward. Developed markets will likely have to inflate and devalue their way out of their debt stocks, which will make it tougher for EM countries to export, at least to the same extent as in the past. This means that EM countries will have to rely more on domestic demand-led growth, which in turn implies higher imports and erosion in current account balances – with negative implications for reserve accumulation. We expect these dynamics to play out relatively slowly over time, so in the shorter term reserves should still largely reflect movements in the capital account rather than the current account. Still, the risk of a more disruptive unwinding of global imbalances should not be discounted entirely as central banks in developed economies begin to raise rates.

What are prospects for EM currencies?

Our view – as outlined in numerous recent publications – is that EM currencies have room to appreciate as least 20% against the Dollar of which at least half remains following the strong performance of EM FX in the past two years.[1] Note that EM currencies declined by 45% between 2011 and 2015. The reason why EM currencies are unlikely to recover the full 45% is that EM countries have normal business cycles, so they can be expected to have higher inflation rates than developed economies. If for example EM inflation averages 4.5% over the 2017-2021 period (which is our base case) and if the US has an average inflation rate of 2.5% over the same period, then a 20% recovery in EM currencies is entirely consistent with past ranges for EM real effective exchange rates. Note that EM inflation of 4.5% is also consistent with positive real yields in EM bond markets over the whole period given that yields are likely to average about 6%, in our view. In short, we do not see any signs of major mispricing in EM local markets, neither in currencies or yields, unlike in developed markets.

Fig 5: **EM growth premium and EM FX**



Source: Ashmore, IMF, Bloomberg, data as at 31 January 2018.

Diversify!

The likely rise in EM currency reserves will be viewed by markets and ratings agencies as credit positive. The main implication is that EM central banks, sovereign wealth funds as well as institutional investors should start to diversify away from their excessive exposures to the US Dollar in favour of EM currencies. EM currency markets continue to recover – a process which began in Q1 2016. This process has powerful positive feedback loops, which further reinforces the trend of higher EM currencies versus the Dollar. For example, inflows to EM local markets will increase growth rates by easing financial conditions, which in turn will lead to further inflows due to the very strong positive correlation between EM growth and EM FX (Figure 5).

In our view EM central banks will also hike more, faster and for longer than central banks in developed economies. At the same time, capital flight from the overvalued QE sponsored markets will sap economic dynamism in developed markets, whose investment returns now look distinctly more challenging than a few years ago.

[1] See for example *"2018 EM fixed income outlook"*, The Emerging View, 14 December 2017.

Continued overleaf

Contact

Head office

Ashmore Investment Management Limited
61 Aldwych, London
WC2B 4AE

T: +44 (0)20 3077 6000

@AshmoreEM

www.ashmoregroup.com

Bogota
T: +57 1 316 2070

Dubai
T: +971 440 195 86

Jakarta
T: +6221 2953 9000

Mumbai
T: +91 22 6608 0000

New York
T: +1 212 661 0061

Riyadh
T: +966 11 483 9100

Singapore
T: +65 6580 8288

Tokyo
T: +81 03 6860 3777

Other locations
Lima
Shanghai

Bloomberg page
Ashmore <GO>

Fund prices
www.ashmoregroup.com
Bloomberg
FT.com
Reuters
S&P
Lipper