

# **Economic Commentary**

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# Some thoughts on Fed tapering and capital flows to emerging markets

Emerging-market currencies are on the run. The decision of the US Federal Reserve in December to start reversing its quantitative easing (QE) policy, reducing ("tapering") its monthly security purchases by \$10 billion to \$75 billion starting January 2014 as a first step, followed by its subsequent decision to reduce it further to \$65 billion from February, is widely regarded as the core reason for this turn of events.

Market expectations are that the Fed will systematically continue on this path and that QE will be completely phased out by the end of 2014.

The end of QE is expected to affect financial markets via three channels, viz. reducing global liquidity and capital flows to relatively risky asset classes, including emerging markets, the normalisation of market volatility at its pre-crisis level, and an increase in the level of long-term interest rates globally. The first two channels will require a one-off adjustment to the change in conditions, while the last factor (viz. higher interest rates) will have a more lasting impact.

### Quantitative easing

QE was delivered in three stages. The first stage (QE1) was initiated in November 2008 and lasted 17 months, resulting in the FED purchasing \$1,7 trillion in mortgage-backed securities. The aim was primarily to encourage the flow of credit from banks by removing toxic assets from their balance sheets. QE2 lasted from November 2010 to June 2011, viz. seven months, during which the Fed bought \$595 billion in treasury securities.

QE3 commenced in September 2012, promising open-ended purchases of mortgage-backed securities and treasuries to the value of \$85 billion per month to stimulate the housing market and bank lending. The Fed furthermore embarked on "twisting" the yield curve by selling short-term securities and buying longer-term securities with the proceeds. If the Fed were to proceed by reducing its security purchases by \$10 billion at every upcoming FOMC meeting until they have been phased out completely, QE3 would have amounted to \$1.6 trillion in total.

The cumulative result of the sequential rounds of QE will then amount to a massive expansion in the size of the Fed's balance sheet, with total assets increasing by \$3,9 trillion to \$5,1 trillion by the end of 2014 (\$3,4 billion to date).

Some of these funds found their way into riskier assets in search of higher yields (the US 10-year government bond yield declined from 4% at the start of QE to a low of 1,6% in Q3 2012 (currently 2,7%)). Most of it remained in fixed-interest markets, with increased interest in high-yield corporate and emerging-market debt. Equity markets benefited from QE mostly through the support provided to higher valuations by the decline in long-term interest rates.

However, a large part of this amount ended up in increased bank reserves instead of new lending. Between December 2008 and December 2013 the excess reserves held at the Fed by US banks increased from \$628 billion to \$2 416 billion, neutralising more than half of the liquidity injection from QE.

As indicated in Graph 1, according to the Institute for International Finance the inflow of capital to emerging markets in the past five years was not that exceptional, amounting to a return to pre-Lehmann levels after a sharp contraction in late 2008. Capital flows to emerging-market economies as a percentage of global GDP have declined from a peak of 2,5% in 2005 to 1,5% currently. Portfolio investment, which is the most fickle by nature, accounted for only 10% and 5% of total private net inflows in 2012 and 2013 respectively.

\$ billion, quarterly data; IIF EM 7 = BRIC, Turkey, Mexico and Indonesia, "IIF EM 30" = full IIF sample

400
300
200
100
-100
2005Q1
2007Q1
2009Q1
2011Q1
2013Q1

**Graph 1. Emerging Market Capital Inflows** 

Source: Institute for International Finance

One should therefore be careful not to overestimate possible outflows of capital from emerging markets as a result of the end of QE.

#### Tapering talk

The first indication that the Fed was contemplating an end to QE was provided by its chairman, Ben Bernanke, in his testimony to the US Congress on 22 May 2013. Financial markets reacted sharply to this pronouncement, with the severity of the reaction at least partly due to its unexpected nature. The subsequent backtracking by the Fed at its September FOMC meeting further highlighted the unsettling effect of poor communication on market expectations.

Apart from a spike in US treasury yields, the announcement of 22 May caused a withdrawal of capital from emerging markets with the currencies of some countries, including the rand, coming under severe pressure.

In a study of the effect of "tapering talk" on emerging markets, Barry Eichengreen and Poonam Gupta came to the conclusion that although countries that had experienced a large prior appreciation in their real exchange rate, as well as a large increase in its current account deficit, were impacted relatively more severely, differences in economic fundamentals did not play the dominant role. The most important differentiating factor was the size of a country's financial markets, with those countries that had large financial markets bearing the brunt of the market reaction.

The importance of the size, liquidity and foreign openness of a country's financial markets in explaining the impact of "tapering talk" once again points to the possibility of more liquid emerging markets serving as a proxy for the asset class as a whole. Investors piled out of these markets because they offered them the opportunity to react quickly to the change in perceived fortunes for

emerging markets as an asset class, with some countries (including South Africa) facing a disproportionate adjustment and being punished for being more developed financially.

The case for continuing capital flows to emerging markets

Market reaction regarding the possible consequences of the Fed's tapering decision for emergingmarket countries has centred on the possibility of a sudden stop in capital flows to emerging markets or even a reversal of such flows.

However, it is possible that the improvement in emerging-market fundamentals in the past decade, on-going financial development, and the improved understanding of emerging-market economies due to increased investor interest imply the need to rethink the validity of the sudden stop paradigm. Future adjustments in emerging markets may well be more gradual and smooth than in the past. The positive change in investors' attitude towards local-currency-denominated emerging-market debt likewise implies that the concept of "original sin" has to be reconsidered.

Although push factors such as low US interest rates encouraging capital flows to emerging markets are set to weaken, pull factors such as positive growth differentials (although to a lesser extent) and further financial development will remain in place. Emerging markets have developed into a mainstream asset class to which investors are still in the process of gaining exposure.

Portfolio positioning is supportive, with widespread underweighting of emerging-market equities in particular (including South Africa, although more for structural reasons because of weak growth prospects than cyclical reasons). Whether these underweight positions are closed depends largely on prospects for economic and earnings growth, which in turn depends on the success of structural reforms. Although some rebalancing in favour of developed-market assets must be expected as the world normalises, the underlying interest in emerging markets will not disappear.

Capital flows to emerging markets as a group therefore do not appear to be at excessive risk. The World Bank, for example, expects capital flows to developing countries to decline by only 0,6% of GDP between 2013 and 2016. As illustrated in Graph 2, the secular trend in portfolio flows to emerging markets remains positive, although volatile, reflecting their growing role in the global economy, increasing income and wealth levels, continuing financial development and increasing global financial integration. However, some differentiation between individual countries according to fundamental strengths and weaknesses must be expected.

\$ billion, trend estimated with HP filter; EPFR data 300 **Equities** 250 200 Trend 150 100 Bonds 50 Trend 0 -50 2006 2008 2010 2012 2004

**Graph 2. Cumulative Equity and Bond Flows into EM Funds** 

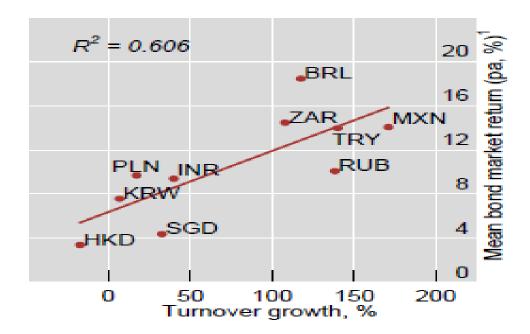
Source: IIF

#### Structural change in currency trading

There is a tendency among commentators on exchange rate movements to focus exclusively on macro factors and to ignore the microstructure of foreign exchange markets. However, there have been important changes in the latter in recent years, as borne out by the 2013 BIS Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity that was released late last year, which may well affect how emerging-market currencies respond to Fed tapering.

The salient changes are the following:

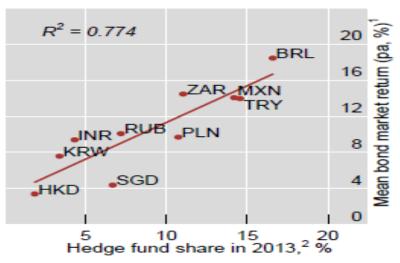
- Global FX turnover increased by 35% from 2010 to 2013, viz. from \$4 trillion to \$5,4 trillion per day. Turnover in emerging-market currencies increased by an even greater 71% during this period, especially in the OTC market. Key emerging-market currencies now account for 17% of global forex trading, compared with 12% in 2007. The most important reason for this rise was the increasing diversification of international asset portfolios. Carry trades did not play a significant role due to unattractive returns.
- Turnover in emerging market currencies has grown much more rapidly than trade in goods and services, pointing to their growing "financialisation", with trading of emerging market currencies strongly related to cross-border financial flows. Investor positioning in emerging markets increasingly took place in currency markets rather than asset markets. Turnover increased most in currencies where local bond market investments offered attractive returns (including the rand), with participation of hedge funds being particularly strong (see Graphs 3 and 4). Coming off a low base, turnover in forex derivatives linked to emerging-market currencies showed strong growth, indicating increased hedging and speculative interest.



**Graph 3. Emerging Markets Forex Turnover and Bond Returns 2010-2013** 

Source: Bank for International Settlements

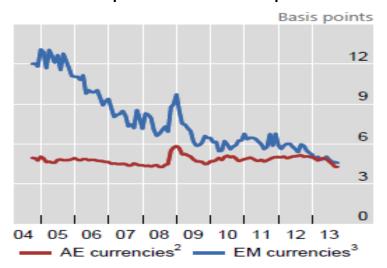
Graph 4. Hedge Funds' Share in Emerging Markets Forex Turnover 2010-2013



Source: Bank for International Settlements

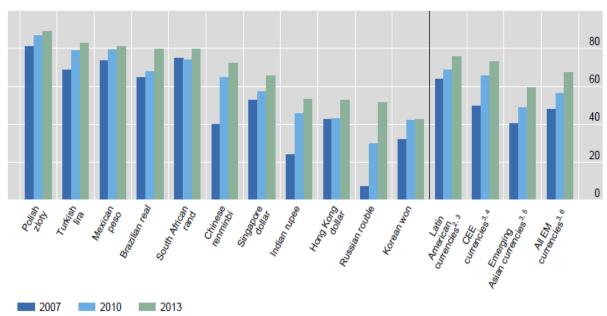
- The inter-dealer market has grown very little and the trading volumes of non-financials (companies) have contracted. Rising volumes have mostly been due to increased trading by non-dealer financial institutions such as lower-tier banks (on behalf of their clients), institutional investors, and hedge funds, accounting for two thirds of the increase in trading. Dealers in forex now display much larger diversity and heterogeneity in strategies hedge funds in particular are known for quantitative strategies that are often executed through automated trading systems, although still constrained by insufficient liquidity in some currencies. A significant part of the increase in trading was due to hedging of international bond portfolios by these institutions.
- Trading costs (e.g. as measured by bid-ask spreads) and search costs have dropped, making more strategies profitable and contributing to the diversification in market participants. The biggest decline has been in emerging-market currencies where bid-ask spreads are now equal to those for developed-country currencies at approximately 4 basis points against the US dollar compared with 12 basis points eight years ago. (Graph 5). Together with increased liquidity, it is now much easier and cheaper for investors to change their positioning in emerging markets.

Graph 5. Relative bid-ask spreads



Source: Bank for International Settlements

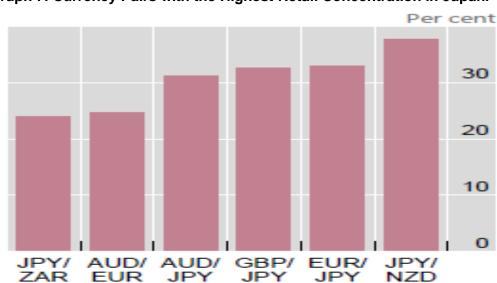
 The trading of emerging-market currencies is increasingly being internationalised, with more that 50% of trading taking place in offshore centres, mainly London and New York. (See Graph 6.)



**Graph 6. Offshore Share of Total Forex Turnover (%)** 

Source: Bank for International Settlements

Trading in the rand has more than doubled from 2010 to \$30 billion last year, accounting for 1,1% of global forex trading. Retail spot trading in the rand is particularly active in Japan (see Graph 7), which accounts for the lion's share (36%) of retail trade in the spot market and suggests that QE in Japan is just as important to the fortunes of the rand as QE in the USA. It also ties in with the observation that the recent sell-off in emrging markets was led by retail investors.



Graph 7. Currency Pairs with the Highest Retail Concentration in Japan.

Source: Bank for International Settlements

To conclude: Trading in emerging-market currencies has increased sharply and has become much more sophisticated and diverse, displaying characteristics that are increasingly similar to those of developed-market currencies. It therefore creates the possibility for these currencies to adjust much more smoothly to changing conditions and to avoid outright currency crises, which should result in reduced volatility.

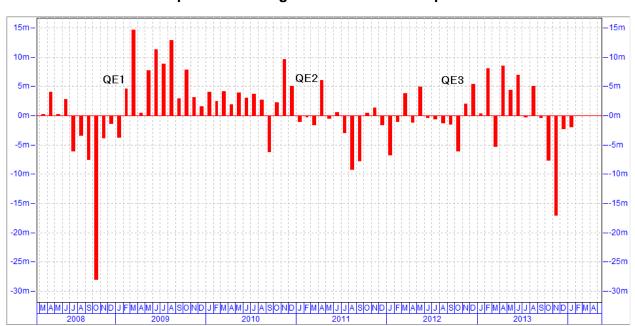
## Positioning South Africa

There is general agreement that countries with large external deficits (that are therefore the most dependent on continuing capital inflows to finance those deficits), weak fiscal positions, and liquid financial markets with substantial foreign holdings of local assets, are the most vulnerable. South Africa has unceremoniously been included in a grouping referred to as the "Fragile Five" (along with Brazil, Turkey, India, and Indonesia) because of its current account deficit nearing 7% of GDP, a budget deficit in excess of 4% of GDP with government struggling to bring it down, government debt nearing 45% of GDP, and relatively liquid markets making it easy for foreign investors to adjust asset holdings.

Concern regarding South Africa's "fragility" has already been expressed in a marked depreciation in the exchange rate of the rand. Addressing this vulnerability would require a tightening in macroeconomic policy at a time when the economy is already struggling to maintain a 2% growth rate. We have already seen the first step being taken by the SARB last week.

But exactly how exposed is South Africa to the possible negative effect of Fed tapering on capital flows?

In its Global Economic Prospects 2014 report the World Bank argues that emerging markets face the greatest threat from a contraction in portfolio investment flows. With reference to portfolio investment, there is no compelling evidence that net foreign purchases of South African equities have benefited greatly from the Fed's quantitative easing policies, as demonstrated in Graph 8. In fact, cumulative net purchases for the five years up to the end of 2013 amounted to R8,8 billion, compared with R16,6 billion for the previous five years (Graph 9).



**Graph 8. Net Foreign Purchases of SA equities** 

Souce: I-Graph

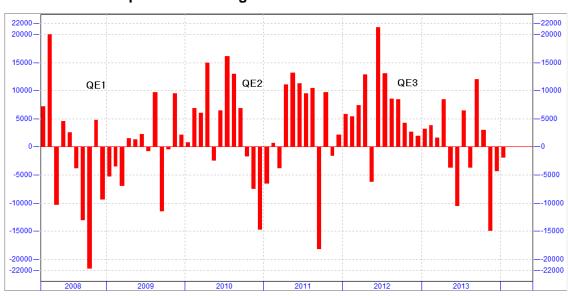
It is also telling that SA equity prices increased at the time of the market sell-off in response to Ben Bernanke's testimony to the US Congress on 22 May 2013 when he first hinted that tapering was in the offing. According to the study by Eichengreen and Gupta, 25 out of 38 emerging-market countries experienced a fall in equity prices at the time. It is ironic that in spite of \$23 billion being withdrawn from emerging-market equities in 2013, investors *increased* their exposure to deficit countries as a group (according to research published by HSBC).



**Graph 9. Cumulative Net Foreign Purchases of SA Equities** 

Souce: I-Graph

As far as net foreign purchases of rand-denominated South African bonds are concerned (see Graph 10), there has been a marked increase in foreign interest in recent years as in many other emerging-market countries. This is borne out by cumulative net foreign purchases for the five years to the end of 2013 amounting to R16,6 billion compared with net sales of R12,2 billion for the previous five years (Graph 11). Foreign holdings of rand-denominated South African government bonds increased to more than 30% of the total by the end of 2013 – up from less than 10% at the time QE started in late 2008.



**Graph 10. Net Foreign Purchases of SA Bonds** 

Souce: I-Graph

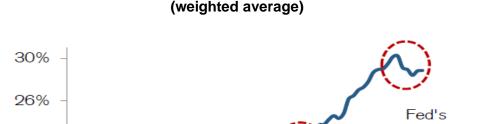


**Graph 11. Cumulative Net Foreign Purchases of SA Bonds.** 

Souce: I-Graph

However, the extent to which this increase in foreign holdings of South African bonds is attributable to quantitative easing is debatable. As the graph shows, the biggest increase in net foreign purchases occurred between mid-2011 and mid-2012, viz. in anticipation of South Africa being included in the Citi World Government Bond Index on 30 September 2012 and subsequently. However, given that the increase in foreign interest in SA bonds was similar to that for its emerging-market peers, the common influence of QE was probably dominant (see Graph 12).

One could also interpret the increased foreign interest in emerging-market local currency bonds as part of the ongoing financial development of the countries in question, although facilitated by QE. If so, interest in this "new" asset class will not disappear after QE has ended.



Graph 12. Non-residents Share in EM-10 Local Currency Government Bonds (weighted average)

Source: Credit Suisse

As long as South Africa remains a constituent of this index, requiring inter alia that it maintains its investment grade sovereign credit rating, it will act as an incentive for foreign investors to hold South African bonds and a brake on foreign withdrawal in the event of an emerging-market sell-off.

South Africa is also less vulnerable than many other emerging-market countries to a reduction in capital flows into emerging corporate bond markets as it did not experience a surge in new issuance similar to that in many other emerging-market countries. BIS statistics furthermore indicate that cross-border borrowing from international banks by South African banks has hardly increased in the past five years and is limited in extent – in October 2013 foreign loans amounted to 2,5% of total equity and loans for South African banks, making SA less vulnerable to an increase in interest rates in developed markets.

It is also striking that another indicator of hot money flows, viz. bank deposits by non-residents, has hardly budged in the past five years – their current level is almost unchanged at R100 billion compared to when the Fed started with QE in November 2008. One should bear in mind that in order to benefit from the carry trade foreigners have to take an uncovered position in the rand and that the historical volatility of the exchange rate of the rand makes this a very risky strategy.

Although South Africa has experienced net sales of equities and bonds since the Fed first indicated in mid-2013 that it was contemplating an end to quantitative easing, monthly sales have been within one standard deviation with the exception of November 2013. One could also argue that factors peculiar to different asset classes, e.g. historically high valuations in the case of equities (the price-earnings ratio for the JSE All Share Index rose to almost 19 in Q4 2013 compared with a 10-year average of 14,9) played a decisive role in investors' decision to take profits, rather than it being due to expectations of Fed tapering.

It should furthermore be borne in mind that the withdrawal of central bank stimulus will in any case depend on a sustained improvement in economic growth and employment, which will be to the benefit of emerging-market growth. If this is accompanied by a weaker rand in response to dollar strength the current account balance may well improve.

It can also not be ruled out that reduced foreign portfolio inflows will be accompanied by reduced domestic portfolio outflows as a weaker (and probably undervalued) rand will make offshore investment less attractive to local investors. The weakness in the rand will by itself temper enthusiasm for foreign investors to sell SA assets; indeed, at some point a weaker exchange rate will make the case for re-engagement compelling. In other words, in assessing net portfolio flows the benefits of a flexible exchange rate should not be underestimated.

#### Conclusion

To conclude, although real the risk to emerging-market capital flows emanating from Fed tapering should be put into context. Capital flows depend on much more than quantitative easing, and the development trajectory on which emerging markets find themselves cautions against the simplistic application of historical paradigms. The current turmoil in emerging markets perhaps has more to do with the re-pricing of assets after reconsidering the challenges faced by emerging market economies and their ability to respond to them through sound policy.