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Currencies

The ‘Trilemma’ and De-Dollarisation

Bottom line. Some emerging countries are confronting a policy ‘trilemma’, and will likely allow their currencies to appreciate. However, investors should be aware that money supply growth in these countries may not immediately translate into high inflation, because money demand is also rising, partly due to ‘de-dollarisation’. Thus, these EM currencies are likely to rally gradually, not abruptly.

The concept of ‘trilemma’. With a relatively open capital account, a central bank cannot simultaneously target the inflation rate and the exchange rate. Several non-G10 countries are starting to be pressured by this ‘trilemma’ into choosing which of its three legs they will break.

Factors that may support money demand. Money supply continues to rise in these non-G10 economies with large balance of payments surpluses. However, this will not lead to excessive inflation if money demand also grows. In fact, in most of these countries, money demand has indeed grown, due to (i) a structural improvement in the local financial markets and (ii) de-dollarisation.

Expect more currency appreciation, but be patient. We believe that most of the non-G10 economies confronting this ‘trilemma’ will ultimately let their exchange rates adjust. However, due to this structural increase in money demand, inflation may stay low, reducing the urgency to revalue. For the 19 countries in our sample, inflation in 1Q was 2.8%, down from 3.4% in 2006.

Money demand in Euroland. Euroland’s M3 growth has averaged above 10% this year, compared to nominal GDP growth of only 4.5%, oddly with few signs of an acceleration in inflation. Part of this puzzle could be due to a rising money demand, as the EUR is increasingly seen as an attractive, liquid and viable alternative reserve currency.

Recent Reports

Sovereign Wealth Funds and Bond and Equity Prices Stephen Jen & David Miles	May 31, 2007
We Are ‘Global Re-Balancing Optimists’ Stephen Jen & Luca Bindelli	May 31, 2007
Dealing with China’s BoP Surplus: Not Straightforward Stephen Jen	May 17, 2007

The 'Trilemma' and De-Dollarisation

Summary and conclusions

Many emerging markets are now confronting a difficult 'trilemma' on whether to (i) stabilise inflation and (ii) target the exchange rate while (iii) keeping a relatively open capital market — three macroeconomic objectives that cannot be satisfied at the same time. As a result, some central banks (e.g., some SE Asian countries, Russia and some LatAm economies) have been forced to allow their exchange rates to appreciate to help alleviate rising inflationary pressures, i.e., the exchange rate is becoming the 'weakest link' in the macro stabilisation process in these economies, providing currency investors with interesting opportunities while the G3 markets are so quiet.

In this note, I argue that this trend is likely to continue, but caution that some structural and cyclical factors may, to some extent, help these economies cope with the 'trilemma'. While we fully agree with the notion that many non-G10 currencies will gradually appreciate against both the dollar and the euro, because of mounting inflationary pressures arising from large balance of payments (BoP) surpluses, we believe it is important to highlight a couple of subtle processes — related to changing *money demand* — that are at work that may temper the speed with which these economies let their currencies appreciate.

The idea of the 'trilemma'

In theory, with an open capital account, a country cannot target the inflation rate and the exchange rate at the same time. Attempts to raise interest rates to arrest inflationary pressures could, in turn, attract capital inflows. As a result, the exchange rate could appreciate, undermining the central bank's objective on the exchange rate. This policy spillover effect is particularly powerful in the current environment where carry trades are a fad. Similarly, attempts to support or depress an exchange rate would have monetary implications, unless these operations are fully sterilised.

For emerging markets with less developed money and financial markets, this 'trilemma' could be particularly acute. Confronted with these three-way trade-offs, different countries may have different policy reactions. For example, Thailand and Colombia chose to impose capital controls to block out the inflow of capital (removing the third leg of the 'trilemma'). Russia, meanwhile, has allowed the ruble to appreciate to alleviate inflationary pressures. Until recently, most Asian central banks have targeted exchange rates more than they have targeted inflation.

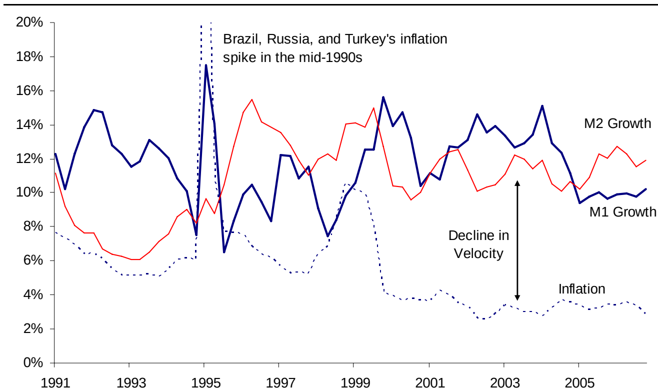
Two factors raising money demand in EM

While the logic of this 'trilemma' is quite clear, in practice, how rapidly a positive BoP shock propagates through money *supply* to affect inflation and, in turn, the urgency with which central banks allow currency appreciation is a function of how fast money *demand* strengthens. The faster the pace of increase in money demand, the more difficult it would be for growing money supply to lead to inflationary pressures.

There are two main factors pushing up money demand in many emerging markets:

- **Factor 1. Structural improvement in the local financial and monetary systems.** In general (and this applies to both developed and developing countries), structural developments in the financial and monetary systems in an economy enhance the demand for the local money. This means that monetary aggregates could gradually rise, as a percentage of nominal GDP, and such a trend would not be inconsistent with stable inflation.

Exhibit 1
High Money Growth; Low Inflation



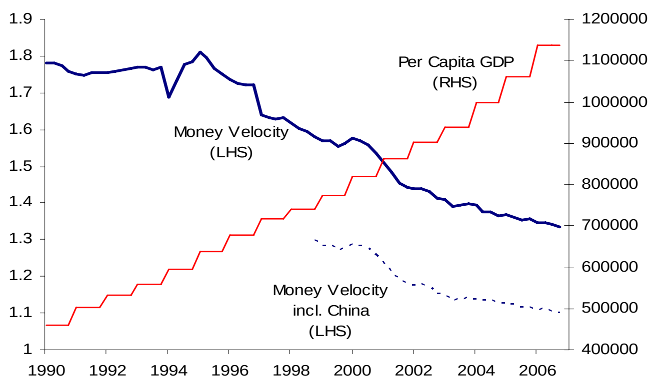
Source: Haver, Morgan Stanley Research

I believe that, a decade after the last financial crisis in Asia, and more than a decade after the last meltdown in Latin America, financial markets in many emerging economies may indeed have experienced meaningful enough improvement that a trend decline in money velocity in these countries may have helped contain inflationary pressures, despite surging monetary aggregates. Exhibit 1 shows the GDP-weighted trends in M1, M2 and inflation in 19 selected economies (China, Hong Kong, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan, Thailand, Brazil, Mexico, Russia, Hungary, Poland, Czech Republic, Turkey, UAE and

Saudia Arabia) and their inflation rates. On average, inflation for these countries has been remarkably tame, relative to the rapid growth in the monetary aggregates. Specifically, the gap between the growth rates of M1 and M2 and inflation denotes a deceleration in money velocity, or a structural increase in money demand.

At the same time, there is a steady negative relationship between the per capita income of an economy — which is a proxy for the level of development of the country or its financial system — and money velocity: the wealthier the economy, the lower the money velocity or the higher the Marshallian-k. Exhibit 2 shows that, for this collection of 19 countries, this relationship holds.

Exhibit 2
Weighted Average Money Velocity



Source: Haver, Morgan Stanley Research

- **Factor 2. De-dollarisation.** In addition to the structural improvement in the local financial markets, there could be another reason why money demand in these industrialising countries has grown sufficiently to hold down inflation: the process of 'de-dollarisation'. 'Dollarisation', on the other hand, is a term used to describe the process of investors in industrialising countries substituting a trusted foreign currency (most often the dollar) for its local currency. In times when an industrialising country experiences financial stress, 'dollarisation' could take place if dollars were perceived to be less risky. A distinction is usually made between 'currency dollarisation' (holding cash in dollars for transactions purposes) and 'financial dollarisation' (holding USD-denominated assets or liabilities). Dollarisation and the reverse process — de-dollarisation — could contribute to unstable money demand, and disrupt monetary management. This process has been particularly well-studied and documented in Russia.

In light of the large BoP surpluses of many of these industrialising countries, the popular view on the dollar in these countries, against their local currencies, may not be as positive as before. As a result, de-dollarisation could have a broad-based effect on money demand, helping to hold down inflation, despite rapid growth in money supply.

Our thoughts
We have the following thoughts:

- **Thought 1. More currency appreciation.** Confronted with this 'trilemma', many developing economy central banks will likely permit further currency appreciation. Brazil, India, Indonesia, Malaysia, Russia, Turkey and perhaps even GCC countries will let the exchange rate be the shock absorber, while retaining their inflation objective and refraining from imposing capital controls.

- **Thought 2. However, we need to be patient.** We need to recognise that inflationary pressures in these countries are really not that great yet, and that the need for these countries to let their currencies move is far from urgent. The 19-country average CPI inflation in 1Q was only 2.8%, *down* from 3.4% in 2006. Except for Hungary, India and the UAE, no other country in our sample has shown a clear acceleration in inflation from this low level.

- **Thought 3. Think about money demand for the EUR.** Euroland M3 growth has averaged above 10% this year, compared to nominal GDP growth of around 4.5% (hence the ECB's reference M3 growth rate of 4.5%). However, money demand may have surged for the EUR, as it is increasingly seen as a legitimate, liquid and viable reserve currency. Rapid monetary growth could be consistent with low inflation, if changes in money demand are properly accounted for.

- **Thought 4. Be careful using money aggregate to measure 'liquidity'.** One key objection (of several) I have to analysts using monetary aggregates to measure 'liquidity' is that this approach makes no reference to structural changes to the demand of and supply for money.

Bottom line
Some emerging countries are confronting a policy 'trilemma', and will likely allow their currencies to appreciate. However, investors should be aware that money supply growth in these countries may not immediately translate into high inflation, because money demand is also rising, partly due to 'de-dollarisation'. Thus, these EM currencies are likely to rally gradually, not abruptly.

Appendix: Selected Recent Briefing Notes

We Are 'Global Re-Balancing Optimists'*	31 May 07	Tracking the World's Official Reserves*	11 Jan 07
Sovereign Wealth Funds and Bond and Equity Prices*	31 May 07	Quarterly Currency Valuation Update*	11 Jan 07
Regionalization and the 'Ballast Effect'	17 May 07	Cyclical Dollar Correction in 1H; May Change in 2H	4 Jan 07
Dealing with China's BoP Surplus: Not Straightforward	17 May 07	A Retrospective on 2006: A Cyclical Dollar Downturn*	14 Dec 06
Gradually Rotate into Dollar Shorts Against EM	10 May 07	Four Reasons to Buy the Swedish Krona *	7 Dec 06
The World Is Indeed De-Coupling	3 May 07	Is This a USD Story or a EUR Story?	06 Nov 06
How Big Could Sovereign Wealth Funds Be by 2015?	3 May 07	Re-Rating Euroland; Another Euro Overshoot	22 Nov 06
Russia: The Newest Member of the 'SWF Club'	26 Apr 07	Central Banks Contributing to Low FX Volatility?	26 Oct 06
No Need to Look Under the Rocks for Reasons	19 Apr 07	GPIF Outflows Still a Headwind for JPY	12 Oct 06
HKD: The Latest Flavour in Carry Trades	12 Apr 07	Income Surpluses and Currencies	12 Oct 06
Protectionism Poses Another Risk to the Dollar	4 Apr 07	Resumption of Equity Inflows Key to Our Call on AXJ	5 Oct 06
Big Potential for Further Japanese Retail Outflows	4 Apr 07	Why Is the JPY So Weak?*	28 Sep 06
'Asset Shortage Hypothesis' – Geographical Dimension	29 Mar 07	Official Reserves a Source of Stability, Except in 2002	28 Sep 06
CHF Mortgage Loans Ex-Switzerland Are Small	29 Mar 07	The Glass Is 80% Full	21 Sep 06
Another Bout of Generalized USD Weakness in 2Q	22 Mar 07	Recession Predictor – Update and Extensions*	21 Sep 06
Proposing an 'Asset Shortage Hypothesis'*	22 Mar 07	Sovereign Wealth Funds and the Official FX Reserves	14 Sep 06
March Madness	15 Mar 07	US Recession, De-Coupling, and the Dollar*	7 Sep 06
Tracking the Tectonic Shift in Foreign Reserves & SWFs	15 Mar 07	Thoughts on the Global Funneling Hypothesis	31 Aug 06
'JPY Carry Trades' the Undeserved Scapegoat	9 Mar 07	A 'Global Funneling Hypothesis' for EUR/JPY	17 Aug 06
Quarterly Currency Valuation Update*	9 Mar 07	Uniformity of Treatment: China vs the GCC Countries	10 Aug 06
Introducing an Equity Market Cap Tracker*	9 Mar 07	World Interest Rates Normalizing, Not Restrictive	10 Aug 06
Benign Economic Fundamentals Will Reign	1 Mar 07	The Global Business Cycle and Currencies	20 Jul 06
Structural Capital Outflows from Asia Ex-Japan*	1 Mar 07	Sterling Now Number Three on the Popularity List	13 Jul 06
Buy USD/JPY, EUR/USD, EUR/JPY and EUR/CHF	22 Feb 07	Risk of Repatriation by the US Real Money Accounts	29 Jun 06
Low Investment Is the Main Source of Global Liquidity	22 Feb 07	De Jure 'AMU' Unnecessary and Unlikely	22 Jun 06
Equity Outflows versus Forward Hedging	15 Feb 07	Don't Blame the BoJ for the Bloated Global Asset Prices	15 Jun 06
Who's Afraid of Large Capital Inflows?	15 Feb 07	World Interest Rates	8 Jun 06
Slightly Flattening the Paths for EUR/USD and USD/JPY	08 Feb 07	The Real Diversifiers Are American, Not Asian	18 May 06
Further Thoughts on the JPY Carry Trades*	08 Feb 07	The Structural Integrity of the De Facto Dollar Zone	4 May 06
The SNB Won't Stand in the Way of a Weakening CHF*	01 Feb 07	The Dollar to Depreciate Gradually This Year	20 Apr 06
Protectionism and Currencies	25 Jan 07	GCC's Monetary Union and the Dollar	20 Apr 06
Accelerating the Rate of Crawl of USD/CNY	25 Jan 07	The Math of the Coming Decline in the Dollar	12 Apr 06
No Instant Satisfaction from Liberalization of Outflows	17 Jan 07	CAD in Overshoot Territory	30 Mar 06

* = Co-Authored.

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