Currency Wars: What do Effective Exchange Rates Tell Us?
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On October 27th, South Korea joined the ranks of countries striving to limit the upwards pressure on their currency when its Central Bank announced that it was considering taxing capital inflows. If these measures end up being applied in one form or another, South Korea would become the first (traditionally financially liberalised) OECD country to reinstate capital controls. This brings the list of countries intervening on the value of their currency [directly or indirectly] to more than 23. This is an unwelcome but hardly surprising development: as policy interest rates in the US are at near-zero levels and monetary policy is geared towards managing the yield curve, emerging countries throughout the world are scrambling to protect themselves from massive capital inflows.

Unfortunately, the apparent legitimacy of these concerns ignores one fundamental element, namely the asymmetric nature of the shock that has hit the global economy: as private deleveraging remains incomplete while public deleveraging has barely started, demand in industrialised countries is set to remain subdued in the years to come, while in the developing and emerging countries it remains on a growth track. This fundamental asymmetry will need to be compensated for by some form of adjustment in relative prices.

This adjustment in exchange rates is being resisted for understandable economic reasons. For an emerging country the relevant policy variable is not just the bilateral exchange rate between itself and its trading partners in the advanced world but a vector of exchange rates that also includes those of its competitors in the emerging world. Individually, it thus makes sense for a country to lean against appreciation if it expects its trading rivals to do the same. This highlights one of the coordination problems in today's currency jousting: appreciation of the emerging countries' currencies might be desirable on an aggregate basis, but it requires all of these currencies to appreciate simultaneously.

Box 1.1 Methodology
The two indicators computed here are simply equal to the weighted average, for each of the two blocs, of the individual REER of each country vis-à-vis the opposite bloc. Trade-weights are used both for computing the country REER and for averaging across countries of the same bloc. The methodology is identical to that used in Pisani-Ferry and Cohen-Setton (2007). Formally, let $I, J, K$ be three different regions. If $X_{i,j}$ is country $i$'s trade with partner $j$ in region $J$, then

$$X_{i,J} = \sum_{j \in J} X_{i,j}$$

is the total trade of $i$ with region $J$. Let $e_{i,j}$ be the bilateral exchange rate between $i$ and $j$. Country $i$'s bilateral (real) exchange rate with country $J$ is

$$E_{i,J} = \sum_{j \in J} \frac{X_{i,j}}{X_{i,J}} \times e_{i,j}$$

Thus the effective exchange rate between region $I$ and region $J$ is

$$E_{I,J} = \sum_{i \in I} \frac{X_{i,J}}{X_{I,J}} \times E_{i,J}$$

The bilateral trade volumes correspond to the sum of imports and exports. The sample is restricted to the top 20 countries in terms of world trade, plus the euro area. CPI is used as the price index.
Getting a clear picture of the extent of appreciation is in fact addition complex, owing to the fact that appreciating vis-a-vis the dollar does not signify an across-the-board appreciation with respect to the advanced countries’ group.

It is, however, possible to construct a simple, summary indicator that helps monitor the evolution of exchange rates between advanced and emerging economies. It is already common within international organizations to compute trade-weighted real effective exchange rates for individual countries with respect to groups of other countries. This allows an assessment of the general direction a country’s currency is taking. A simple extension is to construct an effective exchange rate between two groups of countries (Box 1).

We construct the index between two blocs of countries, « advanced » and « emerging ». The sample is not comprehensive but it contains all major countries: it is comprised of the top 20 countries in terms of total trade (excluding euro-area countries), plus the euro area. In order to ensure a minimal degree of homogeneity with respect to the shock of the financial crisis, the group of industrialised countries includes only western countries plus Japan (countries such as Singapore, or South Korea, thus fall into the other group)1.

Figure 1 gives the nominal effective exchange rate of emerging countries vis-à-vis advanced countries. Between July 2007 and September 2008 this index barely changed, then in the wake of the Lehman collapse it indicated a sharp depreciation of the emerging countries’ currency, followed by a stabilisation since spring 2009. In September 2010, the latest month for which data are available, the index for emerging countries was down almost 25% in comparison to July 2007. In fact

1 Advanced countries (Australia, Canada, Euro Area, Japan, Switzerland, Sweden, United States, United Kingdom) and Emerging countries (Brazil, China, Hong Kong, India, Korea, Malaysia, Mexico, Poland, Russia, Saudi Arabia, Thailand, United Arab Emirates)
emerging countries have on average been depreciating, not appreciating. This result is in part unsurprising. In end-2008 most emerging market currencies depreciated largely following the financial meltdown as capital flew out in search of safer investments to store value. What is more striking is that the depreciation has been both widespread and lasting. Figure 3 shows that in September 2009 several Asian currencies had appreciated somewhat with respect to their spring 2007 dollar exchange rate but that this was not true of Korea, Mexico, Poland or Russia.

![Figure 3: Selected nominal exchange rates against USD (July 2007 = 100)](chart)

Source: Datastream, WM Reuters, Bruegel calculations

However the exchange rate vis-à-vis the US dollar is not the most appropriate yardstick as over the last two years it has depreciated vis-à-vis most advanced economies’ currencies – especially the yen, which is an important currency for Asian trade partners. Taking into account all advanced economies instead of the US slightly changes the picture (Figure 4): the effective exchange rate of all emerging countries in our sample is found to have depreciated in comparison to the situation in July 2007. In other words the exchange rate adjustment which we claim is a necessary part of the global rebalancing has simply not taken place.
This observation highlights the collective action dimension of the exchange rate policies of the emerging countries. On average, their currencies are not strong. On the contrary they remain relatively weak. But no country will want to let its currency appreciate as long as the other partners do not follow suit.