

## China: Determining Extent of “Hot Money” Flows

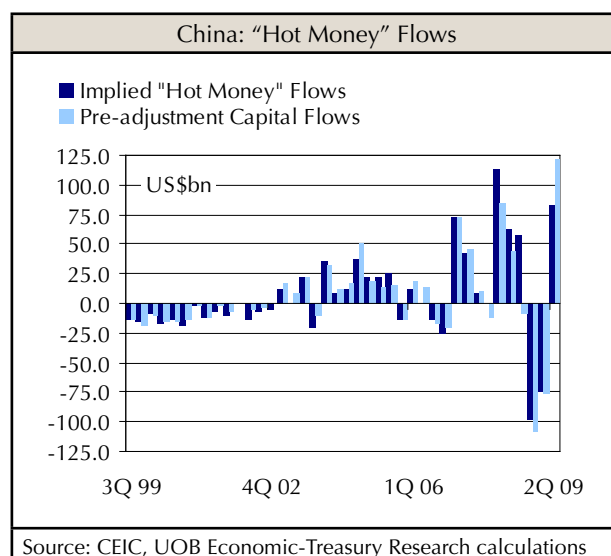
The surge in China’s asset prices has again revived the role of “hot money”. Media reports in China suggested that as much as US\$122bn of “hot money” or speculative funds has flowed into China in 2Q09. Beside the stock market, property market is another indication, where volume for above-RMB40,000psm real estate in Shanghai rose to 306 units in June, exceeding the combined volume in Jan-May, with foreign buying reported to have accounted for 20% of the transactions.

It is difficult to ascertain the extent of these “hot money” flows due to lack of published data and the numerous channels through which to move capital, despite a largely closed capital account. The movements of “hot money” or speculative capital have evolved into higher level of sophistication, far away from the days of over or under-declaration of export and import invoices, thus making monitoring and detection even more difficult. Some known current methods of bypassing China’s capital account restrictions include underground money transfers (地下钱庄) and private fund swaps/exchanges, while corporates exploit payments/receipts through technical/business services, imports of luxury goods, under the cover of official FDI capital, fund swaps/exchanges with related corporations, among others.

Given these constraints, one way of estimating the extent of unofficial capital flows is through the various components in balance of payments, including official foreign reserves, trade balances, and foreign direct investment (FDI). The quoted US\$122bn figure above is one such method, by assuming movements in the official forex reserve balance being the sum of movements in trade account, FDI, and “unknown” capital flows. With three of the variables known, the remainder is then assumed to be “hot money” or speculative flows. However, this method is not a true reflection as it ignores the effect of interest income and the revaluation impact of exchange rate changes (or mark-to-market) on the portfolio.

We improve on the previous method one step further by incorporating the effect of interest income and mark-to-market changes to the portfolio to arrive at a more reasonable estimate of the amount of these “hot money” or unofficial capital flows. Given that the detailed holdings of China’s FX reserves are not disclosed (as is commonly the case for most central banks), assumptions need to be made as to the breakdown of currency composition within the portfolio, the tenure of holdings, and estimated yields on the assets (assuming all the reserves are only invested in interest-bearing government papers).

As shown in the table and chart below, our estimates show that China’s “hot money” flows were mostly negative in early 2000s to late 2002, reflecting capital leaving the country due to uncertainty on the outlook of China post the Asian financial crisis. In this instance, both measures (adjusted and



unadjusted) were largely consistent and have negligible variances.

Nevertheless, we also found these capital flows have turned more volatile since 2004, as capital moved into Chinese assets in anticipation of a change in RMB exchange rate regime (which was eventually depegged against the USD on 21 July 2005).

Our estimates show a surge of at least US\$83bn of hot money into China in 2Q09 (30% smaller than the US\$122bn estimated using the simple method), reversing two consecutive quarters of outflows after the global credit crisis deepened late 2008, and amounts to about 2% of China's GDP.

The influx of these capital flows should help explain the surge in both property and equity prices in China (Shanghai Composite is up more than 90% YTD so far, compared to 18% in MSCI World Index), but it is still not exactly clear as to the extent of speculative money flows in pushing up asset prices. Nevertheless, "hot money" flows is likely to be taking the cue from China's accommodative monetary policy and fiscal stimulus measures.

In terms of monetary policy response, the movements of capital flows themselves are a cause for concern given its size and volatility and its impact on the financial system. This would be an important factor to consider with China's eventual opening up of its capital accounts. However, the difficulties are determining the amount of speculative flows and then their extent in affecting asset prices. This improved method is one way of estimating the amount of flows into and out of China. The more challenging part is to ascertain the extent these speculative flows contribute to asset price increases.

Over the next 3-6 months, we expect PBoC to maintain its accommodative monetary policy stance and to keep policy interest rates unchanged, given the fragile nature of the current recovery, although there signs that excess liquidity is increasingly being drained off the system as the central bank restarted its bill issuance. As for the exchange rate, it is clear from our estimation that revaluation contributes significantly to the forex reverse balance and this is one factor the central bank would keep the USD/RMB steady for now. We look for USD/RMB to end 2009 at around 6.82 vs. current level of 6.83.

China: Assessing The Extent of "Hot Money" Flows (US\$bn)										
	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09
Change in FX Reserves	135.69	130.59	100.99	94.64	153.92	126.66	96.76	40.44	7.71	177.87
Change in Trade Balance	46.51	66.23	73.24	76.02	41.45	58.24	83.34	114.31	62.51	34.87
FDI Flows	17.00	18.99	17.19	30.34	27.41	24.98	21.98	33.93	21.78	21.23
Interest Revenue	6.91	8.16	8.41	8.84	10.09	11.72	12.13	11.46	9.93	12.46
Revaluation Gains (Loss)	-7.61	-5.37	-6.70	-20.08	-38.57	-30.14	-78.84	-21.53	-11.37	26.33
<b>Implied Capital Flows</b>	<b>72.88</b>	<b>42.58</b>	<b>8.85</b>	<b>-0.48</b>	<b>113.54</b>	<b>61.86</b>	<b>58.15</b>	<b>-97.73</b>	<b>-75.14</b>	<b>82.98</b>

Source: CEIC; UOB Economic-Treasury Research calculations

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