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Japan's foreign reserves expanded from US$946 billion in September 2007 to US$996 billion in November, an increase of US$50 billion in four months. There are two possible explanations for such a rapid growth in Japan's foreign reserves in the final months of 2007: (1) the MoF conducted stealth interventions in USD/JPY or EUR/JPY; or (2) Japan's reserve holdings may not be as USD-biased as we had thought, i.e., the EUR weighting may be higher than the widely assumed 10%.

We simply rule out (1), as speculating (1) would be tantamount to accusing the MoF of fabricating data, which is inconceivable. The MoF publishes detailed daily data on currency interventions, which show that the last time it intervened was on March 16, 2004. Not only is such a transparent policy commendable, but investors should also appreciate the monumental shift in the MoF's philosophy towards currency intervention in general. Under Mr Watanabe's[5] watch during July 2004 to July 2007, the MoF refrained from intervention as Mr Watanabe believed that decades of one-sided intervention actually damaged market psychology, and made the USD/JPY market one-sided, pitting private sector investors (or the market) against the MoF. Stepping back and refraining from intervening would, Mr Watanabe believed, ironically allows there to be two-way risk/trade in the market, which should in turn obviate the need for intervention. This strategy worked extraordinarily well. Even when USD/JPY approached 100 in December 2004, Mr Watanabe did not intervene. The Japanese economy was much weaker back then than it was in 4Q07. If it didn't intervene back then, it wouldn't have intervened last quarter: we reject the speculation that the MoF conducted stealth intervention.

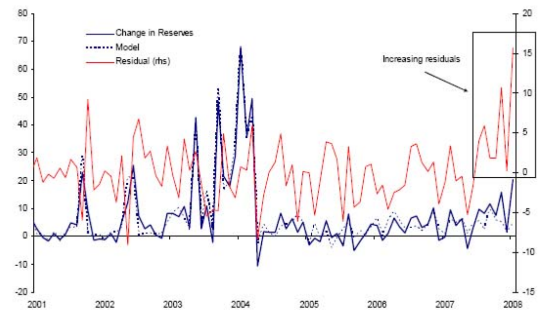
This leaves (2) as the remaining explanation. If the exposure to EUR is higher than 10%, in contrast to the prevailing presumption, how did this come about? One possible explanation is that, during 2000-03, the MoF conducted EUR/JPY interventions. Indeed, according to the data published by the MoF, during this time, the MoF bought a total of €4.3 billion[6]. Without rebalancing, the appreciation in EUR/USD may have gradually pushed up the weight on EUR in the total reserve portfolio.

To assess the implied weighting on USD and EUR, we ran simple regressions in which we regress the change in foreign exchange reserves on the return on the underlying assets and currency valuation changes. We also include intervention flows to the model. We find that during the 'intervention period' (up to 2004), the implied weighting on USD and EUR was 87.3% and 12.7%, respectively[7]. For the period after 2004 – which we consider the 'non-intervention period' – the implied weighting was 79.9% and 21.1% for USD and EUR, respectively. (For the entire sample, the weightings were 82.5% and 17.5%.)

Though this result is sensible and the explanation compelling, there is a slight wrinkle. The residuals of these regressions spiked during 2007, suggesting that there might have been another break in the currency weighting in 2007 (see Exhibit 1). We suspect one of two possibilities:

Exhibit 1

Suspiciously High Residuals in 2007



Source: Ministry of Finance Japan, Morgan Stanley Research

The first hypothesis we have is that the BoJ may have begun to invest its share (around US$40 billion) of the official reserves more aggressively.[8] The BoJ now outsources some of its reserve holdings to fund managers, and it is conceivable that its reserves may have a higher exposure to EUR and/or not be entirely held in sovereign instruments. However, the BoJ's reserve holdings are too small to generate US$30-38 billion of 'excess' reserve growth in the recent months.

Second, the MoF, in an attempt to enhance its investment returns so as to make it more difficult for a prospective SWF to justify managing a part of its reserve holdings, is now investing in a more proactive way. (A new division has been set up at the MoF to day-trade its reserve holdings.) It could have bought EUR/USD or have simply been a good day-trader, without significantly altering the USD:EUR weighting. We suspect that this latter hypothesis is a more likely explanation of the anomalies in 2007.

Bottom Line

The world's official reserves continue to grow very rapidly, by around US$150 billion a month, reaching US$6.4 trillion around end-2007. In terms of both stocks and flows, Asia and the Middle East dominate official reserve holdings. At the country-specific level, Japan's rapid reserve growth in 4Q07 was a puzzle. We do not believe that the MoF conducted stealth interventions, but suspect that it may have bought EUR/USD, i.e., diversified, and the rise in EUR/USD exposed the higher weighting on EUR, which we guesstimate to be around 21%, compared to what we had presumed to be the case (10%).

[5] Mr Watanabe was Vice Minister for International Affairs at the MoF, while Mr Tanigaki was the Minister of Finance.

[6] During this time, the MoF bought US$402 billion worth of dollars, against JPY.

[7] We also included the GBP in the regressions, but the model suggested a weight of 0%.

[8] Japan's official reserves are split between the BoJ (US$50 billion) and the MoF (US$946 billion).