Foreign Participation in the US Treasury Market: The Tail That Wags the Dog ?

Summary:

- *The continued build-up in foreign exchange reserves among Asian Central banks has become increasingly worrisome and can impart significant risks in the future.*
- *Going forward, however, we could presumably witness a more moderate accumulation of reserves by Asian central banks, which are primarily denominated in USD.*
- *While Asian long-term net purchases of UST debt continued at a fairly healthy pace in 2004, anecdotal evidence suggests that the pace of increase could continue to ease gradually.*
- *The depth and liquidity of the UST debt market is expected to be able to absorb any abrupt changes in the balance of supply and demand.*
- *The menacing U.S. current account balance remains a deep-seated concern because the continued deterioration is unsustainable. However, it is unclear what the potential consequences are for the U.S. and global economies when the adjustment takes place, for it has no historical precedent.*

FX Reserve Accumulation: Too Much of a Good Thing Can be Bad

In retrospect, following the 1997-1998 Asian financial crisis, Asian central banks (excluding Japan) in general have continued to build their foreign exchange reserves to astronomical levels. Asian (ex. Japan) foreign exchange reserves have grown by over 200% from about $500 billion in 1997 to more than $1.5 trillion in 2004. Over the last three years (2002-2004), Asian (ex. Japan) reserves have been growing at a 20%+ pace on average, which is almost double the average rate of growth in the prior six years. To be sure, undue accumulation of reserves by Asian (ex. Japan) central banks has its costs, and among them are lop-sided dependence on export-led growth, sharp growth in money supply and credit expansion because of the difficulty in conducting sterilized intervention, which inevitably fuels upside inflationary pressures, potential asset price "bubbles", avoidance of essential structural reforms, significant unrealized losses in reserves in the event of a sharp USD depreciation and the list goes on. Similarly, the Asian Development Bank, sometime in the second-half of last year, urged the respective Asian countries to utilize their amplified holdings of reserves to "expand trade and lower the cost of investments around the region". As a result, it is only natural for the Asian central banks excluding Japan to gradually temper future purchases of U.S. Treasuries (UST) for precautionary reasons. However, abrupt sales of a large chunk of UST and/or public disclosures/announcements by Asian central banks of such moves would be counter-productive, for it could potentially cause a self-fulfilling sell-off in UST and a disorderly retreat in the USD.

Asian Foreign Exchange Reserve Holdings: A Growing Issue

While the absolute level of Asian central banks' reserves reached

Asian Central Bank Holdings of FX Reserves

End of Period: (in $ bn)	Dec 04	% Share	Dec 03	% Share	Dec 02	% Share	2004 vs 2003 % change	2003 vs 2002 % change
Japan	844.5	34.8%	673.5	35.6%	469.7	33.0%	25.4%	43.4%
China	609.9	25.1%	403.3	21.3%	286.4	20.1%	51.3%	40.8%
Taiwan	241.7	9.9%	206.6	10.9%	161.7	11.4%	17.0%	27.8%
South Korea	199.1	8.2%	155.4	8.2%	121.4	8.5%	28.1%	28.0%
India	131.2	5.4%	103.2	5.4%	71.1	5.0%	27.2%	45.1%
Hong Kong	123.6	5.1%	118.4	6.3%	111.9	7.9%	4.4%	5.8%
Singapore	112.8	4.6%	96.3	5.1%	82.3	5.8%	17.1%	17.1%
Malaysia	66.7	2.7%	44.9	2.4%	34.6	2.4%	48.7%	29.7%
Thailand	49.8	2.1%	42.1	2.2%	38.9	2.7%	18.2%	8.3%
Indonesia	36.3	1.5%	36.3	1.9%	32.0	2.3%	0.1%	13.3%
Phillipines	14.4	0.6%	13.9	0.7%	12.8	0.9%	3.6%	8.0%
Total Asia Ex. JP	1,585.5	65.2%	1,220.3	64.4%	953.2	67.0%	29.9%	28.0%
Total Asia	2,430.1	100.0%	1,893.8	100.0%	1,422.9	100%	28.3%	33.1%

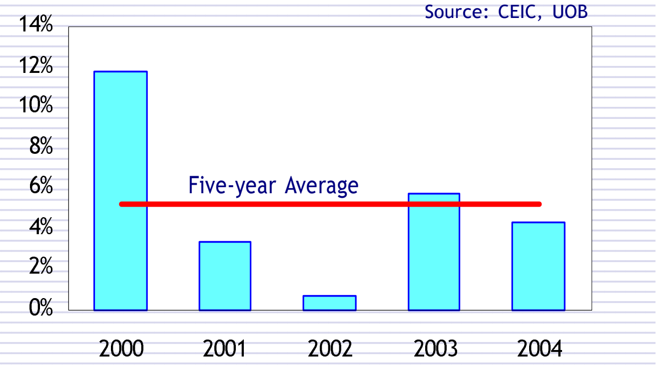
Source: CEIC, UOB

a record high of over $2.0 trillion in 2004, the apparent moderation in growth was entirely driven by Japan. To be sure, reserve holdings of Asia excluding Japan have continued to grow. Nevertheless, nascent evidence in early 2005 suggests that the pace of growth in reserve-build could become more moderate for the following reasons: 1) Asian economies have become more resilient and able to absorb greater appreciations in their exchange rates, 2) Inflation pressures have begun to build, and instead of raising interest rates, Asian policymakers have allowed their exchange rates to appreciate, 3) To allow some consistency with their balance of payments surplus and 4) Expectations of a RMB band-widening move.

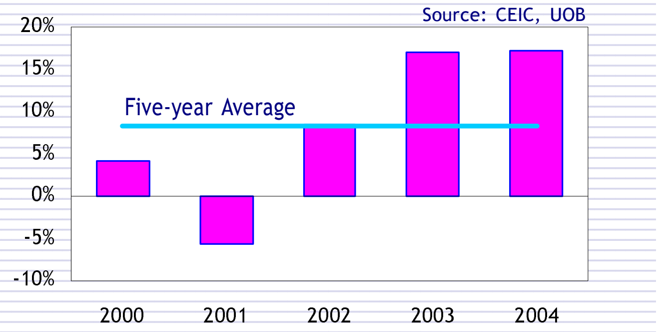
Although Japan's share fell somewhat in 2004, it has the largest foreign reserve holdings in the world, with over $800 billion. China, Taiwan and South Korea combined had over $1 trillion in reserve holdings in 2004.

Both China and Malaysia boosted their foreign reserves sharply in 2004, presumably in order to defend their pegs following large capital inflows into the countries. In addition, Thailand continued to grow their reserves, and kept its currency within an "acceptable" range. Most Asian central banks' pace of reserve-build peaked sometime during early 2004 except for China and Thailand. In South Korea and Singapore, there was a slight pick-up in the rate of reserve-build between September-December 2004, but moderated thereafter.

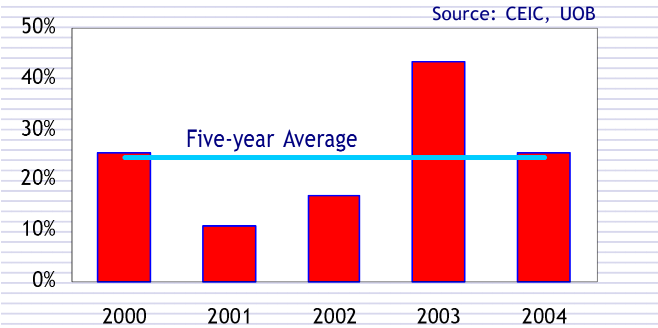
Hong Kong FX Reserve Growth



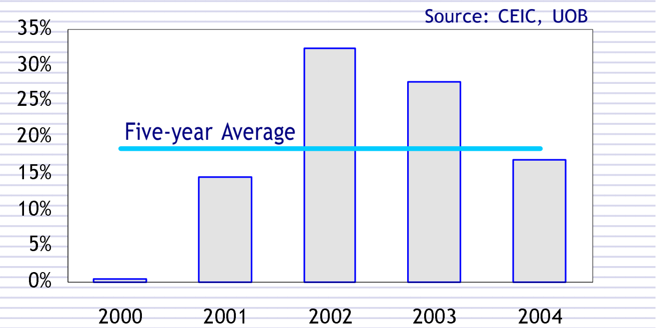
Singapore FX Reserve Growth



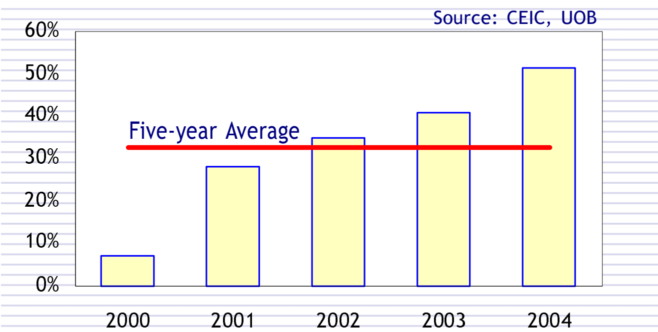
Japan FX Reserve Growth



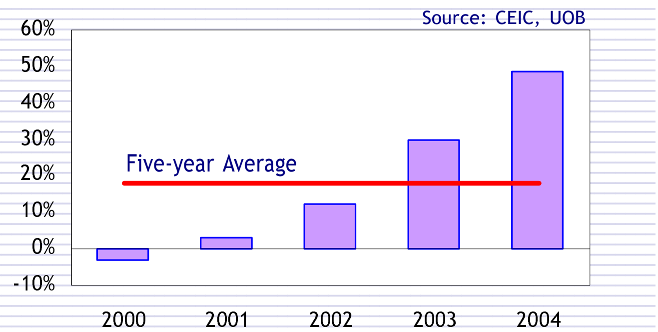
Taiwan FX Reserve Growth



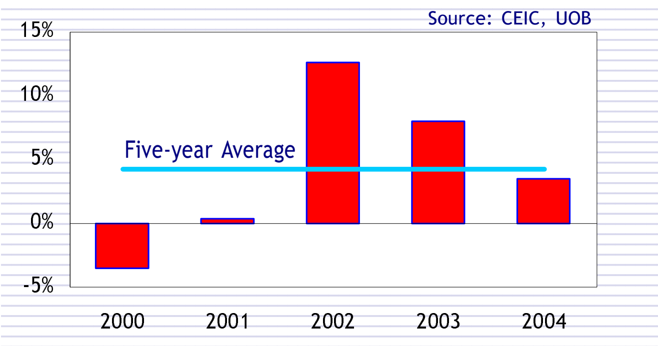
China FX Reserve Growth



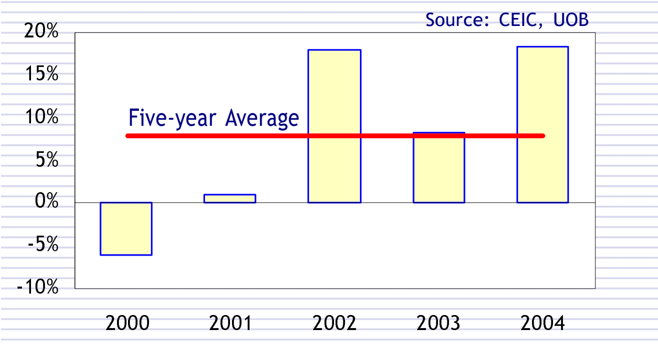
Malaysia FX Reserve Growth



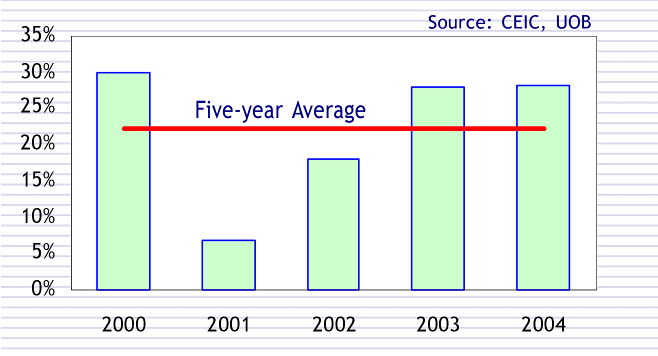
Philippines FX Reserve Growth



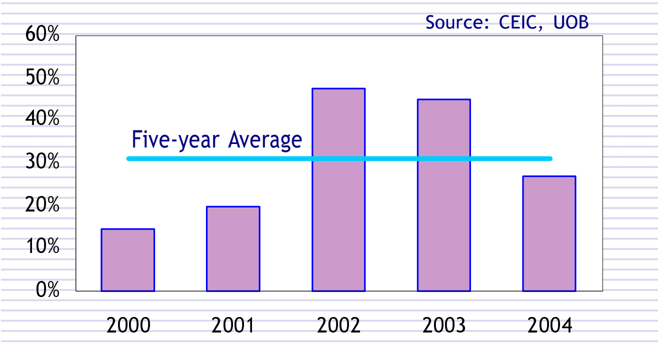
Thailand FX Reserve Growth



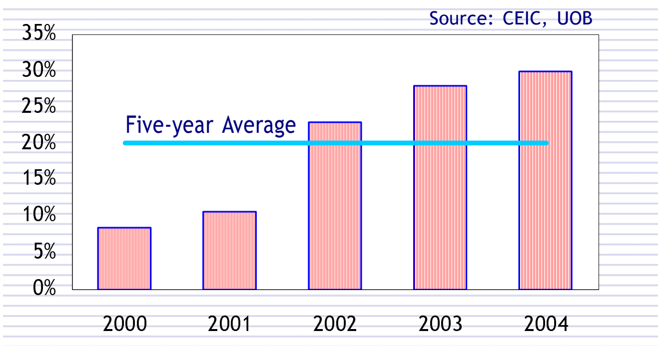
Korea FX Reserve Growth



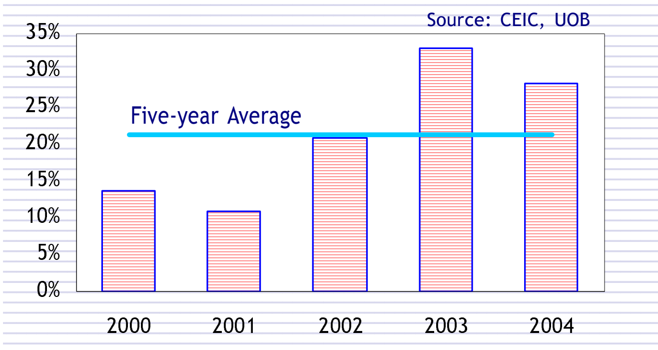
India FX Reserve Growth



Total Asia Ex-Japan FX Reserve Growth



Total Asia FX Reserve Growth



Net Long-Term (maturity greater than one-year) Portfolio Flows of U.S. Treasuries: Still Buying but at a Slower Pace

Net long-term purchases of UST by foreigners (both official and private) continued to increase in 2004 after bottoming-out in 2000--nevertheless, the data exclude short-term (less than one- year) UST holdings. The data on short-term UST holdings are less detailed and include holdings of the Bank for International Settlements. Hence, while the available data is more conducive to the understanding of central bank demand for long-term UST, it is far from perfect, because official institutions could act through private intermediaries. In addition, the U.S. Treasury does not maintain a breakdown of the composition of UST holdings (short-term bills and long-term notes) by foreign central banks, and the actual demand and supply data of individual foreign central banks.

Country-specific: Japan continued their net purchases of UST, which rose to a record high of $166 billion at the end of 2004. Singapore became a net buyer of UST in 2004 after five consecutive years of net selling. While China was still a net buyer of UST in 2004, the pace of increase has moderated somewhat from $30 billion in 2003 to slightly below $20 billion in 2004. Similarly, net purchases of UST by Hong Kong fell to about $1 billion in 2004 from $6 billion in the previous year. In addition, net purchases of UST by Korea peaked at close to $13 billion in 2002 and moderated to about $6 billion in 2004. Taiwan became a net buyer of UST over the last two years from a slightly negative net position in 2002. Both India and Thailand, however, were the only net sellers of UST in 2004. In sum, while Asian net purchases of UST continued at a fairly healthy pace in 2004, the rate of net purchases of UST has moderated in 2004 when compared to the previous year. The pace of private net purchases of long-term UST debt has clearly eased: net purchases went from $113 in 2002 to $160 billion in 2003 and then to $154 billion in 2004. Official holders, on net, bought over $200 billion in long-term UST debt in 2004--while still increasing, the pace of increase had also moderated somewhat.

US Treasury Debt Holders: Implications and Assumptions

Foreigners owned roughly 50% of the overall marketable UST debt in 2004, with total foreign central bank holdings at 30%. Some analysts have wondered about the consequences of a UST debt sell-off by foreign central banks and the probability of such a move. Anecdotal evidence suggests that a large proportion of foreign UST holdings are concentrated at the short-end of the curve, and that Treasury yields at the short-end are less sensitive to fluctuations in supply and demand. Some analysts, however, have indicated that foreign central bank demand for long-term Treasury debt has

Net Long-Term Purchases of U.S. Treasuries*

	2002	2003	2004	Difference 2003 vs 2002	Difference 2004 vs 2003
Japan	30,498	148,348	166,383	117,850	18,035
China	24,077	30,149	18,895	6,072	(11,254)
Taiwan	(597)	9,072	7,156	9,669	(1,916)
S. Korea	12,935	4,897	5,856	(8,038)	959
SG	(2,591)	(1,308)	3,470	1,283	4,778
Indonesia	770	670	1,166	(100)	496
HK	(9,059)	6,237	1,082	15,296	(5,155)
Malaysia	861	(258)	439	(1,119)	697
Phillipines	179	461	140	282	(321)
India	(855)	485	(127)	1,340	(612)
Thailand	(1,917)	(5,987)	(443)	(4,070)	5,544
Asia (as above)	***54,301***	***192,766***	***204,017***	138,465	11,251
Europe	***43,678***	***54,083***	***92,987***	10,405	38,904
Official	***7,149***	***113,486***	***203,143***	106,337	89,657
Private	***112,772***	***160,454***	***153,615***	47,682	(6,839)
Total	***119,921***	***273,940***	***356,758***	154,019	82,818

* Official and private net purchases in million $
Source: TIC, CEIC and UOB

Holders of UST Debt ($ Billion)

	Total Marketable UST Debt	Held by Fed and State and Local	Privately Held Within the U.S.	Held Abroad	Foreign Central Bank Holdings	Asian Holdings
2001	3,016	745	1,208	1,063	619	548
2002	3,262	828	1,180	1,254	763	646
2003	3,655	877	1,239	1,539	938	923
3Q04	3,856	933	1,118	1,805	1,144	1,110
2004E*	3,983	950	1,163	1,870	1,189	1,127
		% Of Total Marketable UST	% Of Total Marketable UST	% Of Total Marketable UST	% Of Total Marketable UST	% Of Total Marketable UST
2001		25%	40%	35%	21%	18%
2002		25%	36%	38%	23%	20%
2003		24%	34%	42%	26%	25%
3Q04		24%	29%	47%	30%	29%
2004E*		24%	29%	47%	30%	28%

* Some estimates are from Roubini and Setser, *Will the Bretton Woods 2 Regime Unravel Soon? The Risk of a Hard Landing in 2005-2006*
Source: Treasury Bulletin, Treasury/Fed and Bond Market Association

suppressed long-term yields by at least 50bps to as much as 150bps; however, actual data on individual central bank purchases remain sketchy, at best. Nevertheless, Federal Reserve officials including Chairman Greenspan have indicated that the UST debt market is highly liquid and deep; hence, it is expected to be able to absorb any abrupt changes in the balance of supply and demand. More importantly, Asian central bank holders of US-denominated assets are unlikely to jettison their existing stock of US assets, put upward pressure on yields, and allow the USD to depreciate sharply for three reasons: 1) Relative appreciation in their exchange rates would cause a serious loss of competitiveness and a significant impact on their growth rates, 2) Sharp unrealized losses on their reserve holdings would result in the event of a pronounced USD depreciation and 3) A disorderly and abrupt U.S. financial market dislocation does not bode well for the global financial and economic backdrops.

There are reasons to believe, however, that Asian central banks are going to gradually temper their purchases of new US-denominated assets for precautionary reasons in order to ensure that they are not too leveraged on the U.S. as the imbalances continue to deteriorate. Furthermore, in the event of a RMB band-widening move, USD/Asians would have more leeway to appreciate (possibly slower reserve accumulation) and still be relatively competitive in the global export market.

The Intractable US Current Account Imbalance

We expect the U.S. current account deficit to have widened to 5.6% of GDP in 2004 from a tad below 5.0% in 2003. By our calculations, foreign central banks were forecasted to have financed about 73% of the U.S. current account deficit in 2004, down from 2003's estimated financing support of roughly 90%.

Nevertheless, we believe that in order to have a meaningful adjustment of the current account deficit to more sustainable levels, perhaps in the 3% range (assuming a stable U.S. net international investment position of about -50%), it must entail a cyclical slowdown of the U.S. economy, an orderly depreciation of the USD (through a 30% depreciation in the real broad trade-weighted USD index[1]) against the backdrop of higher interest rates and a sustained pick-up in growth rates among its largest trading partners. Naturally, if the last factor fails to materialize, the first two factors will have to bear a greater share of the adjustment. In view of the higher U.S. propensity to import, our back-of-the-envelope calculations[2] suggest that a slowdown in the U.S. economy would presumably contribute more to an improvement in the current account (through slower domestic final demand) than a proportional pickup in growth among its largest trading partners, all else equal. Undoubtedly, it would be ideal if the latter could support more of the current account adjustment, but the available evidence to-date implies that it is simply a surreal proposition at this point in time. All in all, while the menacing U.S. current account deficit is undoubtedly unsustainable and will revert to a more "normal" threshold in the future, it is unclear what the potential consequences are for the U.S. and global economies when the adjustment takes place, for it has no historical precedent.

Conclusion

Asian central bank reserve holdings have grown to astronomical levels of late, if left unaddressed, serious shortcomings could develop as a consequence. Nevertheless, there is some evidence in early 2005 that suggests that Asian central banks have begun to ease the growth pace of reserve accumulation. Whether or not this phenomenon becomes more evident in 2005 is an open question. While the share of USD reserve holdings among foreign central banks has been relatively stable, roughly in the 65% to 70% range, a number of economists have broached the topical issue of foreign UST holdings and the possible consequences of an unexpected sell-off in UST debt. Although it is quite impossible to envision an extreme risk-aversion to UST debt or a sustained sell-off of existing official UST holdings at this point in time, it is not difficult to rationalize a more modest or even slower pace of new UST demand going forward. In fact, there is nascent evidence that the pace of net purchases of long-term UST debt has begun to moderate somewhat, but it is unclear as to whether this phenomenon would unravel in the coming years. Nonetheless, the oft-mentioned U.S. current account imbalance continues to be a growing concern for the U.S. and global economic backdrops, and could prospectively cause unforeseen consequences for the UST market and the USD.

($ Billion)	2001	2002	2003	2004E
Current Account Flow	-385	-474	-531	-659
Change in USD Reserves*	83	185	486	480
Estimated Current Acct. Financing	22%	39%	92%	73%

* 2003 data includes the $45 billion PBoC transfer

Source: BIS, BEA and UOB estimates

[1] We assume a rule-of-thumb that the current account improves by about $10 billion for every 1% depreciation in the real broad trade-weighted USD index.

[2] We assume an income elasticity to import of 1.5 and an export elasticity of 1.0. With nominal imports at $1,800 billion and nominal exports at $1,200 billion, a 3% U.S. GDP slowdown would reduce imports by 0.7% of GDP, whereas a 3% global GDP increase would only expand U.S. exports by 0.3% of GDP.