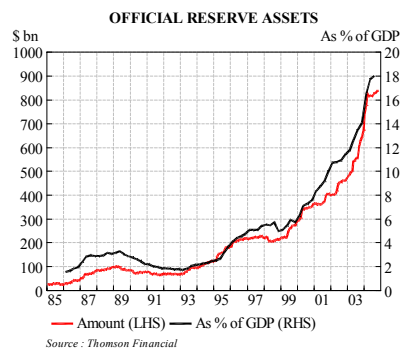


THE RISE IN JAPAN'S FOREIGN EXCHANGE RESERVES: WHAT DANGERS? WHAT BENEFITS?

- In the last 10 years, Japan's official reserve assets have grown by a factor of 7 to \$840bn. This is a huge amount, and much larger than the reserves held by other OECD countries. It is the result of intervention in the foreign exchange market aimed at combating the rise in the yen. This intervention reached unprecedented levels in 2003 and 2004.
- This process is likely to continue in 2005. What are its dangers and where will it end? Strong intervention results in high short-term public debt. In addition, the amounts involved mean that the Japanese Finance Ministry is bearing substantial foreign exchange and interest rate risk. At the moment, however, the process is resulting in significant profits, since Japanese short rates are near-zero.

An exceptional build-up of reserves

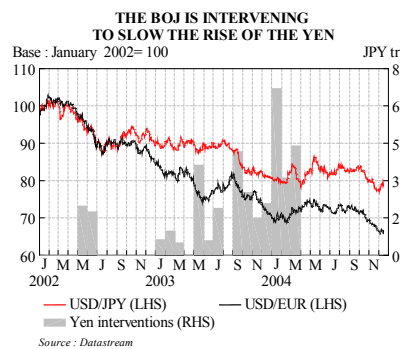
Japan's MoF intervenes in the foreign exchange market to slow the rising of the yen. Since 1999, this intervention has grown to an unprecedented level. It peaked in 2003, when intervention totalled almost 4% of GDP. As a result, in only 10 years, Japan's official reserve assets have risen by a factor of almost 7 to \$840bn.



If we regard the UK and eurozone's foreign exchange reserves as normal - ignoring the USA, due to the dollar's special status - Japan's reserves look excessive. On this comparison, Japan should only have reserves of around \$90bn.¹

\$ bn	Foreign exchange reserves	As % of GDP	As months of imports
Japan	817.7	19.0	22.35
Eurozone	179.5	2.2	1.90**
UK	36.7	2.0	0.87
USA	40.6	0.4	0.32
Australia	30.4	6.0	3.42
China*	514.5	35.6	13.75
South Korea	177.5	29.3	9.88

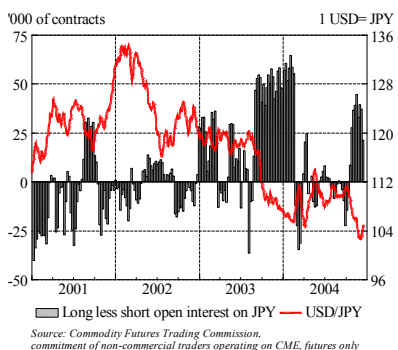
Sources: IMF, EIU, October 2004, * September 2004, excluding intra-region trade



The effectiveness of this huge and repeated - but unilateral - intervention is hard to gauge. Concerted intervention would probably have had a greater impact. If we compare the yen and the euro's performance against the dollar since 2002, and bearing in mind that the ECB has not intervened during the period, the MoF's intervention appears to have slowed the yen's rise. This is particularly clear in May 2003, and early 2004. Between September 2003 and mid-March 2004 - when the

¹Emerging Asian countries have even larger reserves than Japan. These reserves are probably justified in part by the greater instability of these economies, as illustrated by the 1997/98 Asian crisis. However, they also reflect the same desire among governments to limit any rise in their currencies against the dollar, or to rule it out completely in the case of countries that have adopted dollar pegs.

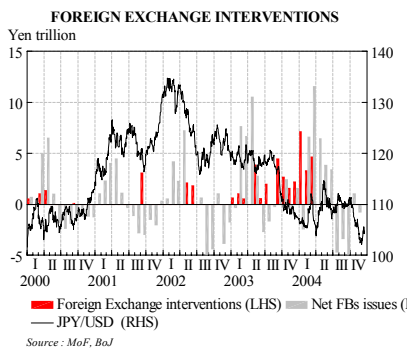
strongest intervention took place - the euro rose by 10.7% against the dollar and the yen 5.5%. In addition, the aggression of past intervention increases the credibility of future intervention. In late November, for example, when the yen was rising, traders were on the lookout for signs of renewed intervention, and were more concerned about their ability to unwind their positions quickly, with the result that speculative positions were much smaller than in late 2003 and early 2004.



Source: Commodity Futures Trading Commission, commitment of non-commercial traders operating on CME, futures only

As a result, the MoF's attempts to slow the yen's rise have been relatively successful. However, the surge in foreign exchange reserves exposes Japan to a host of difficulties, including problems with managing internal liquidity and increased foreign exchange and interest rate risk on foreign assets.

Sterilised intervention is easy to carry out as long as Japan pursues its quantitative monetary policy

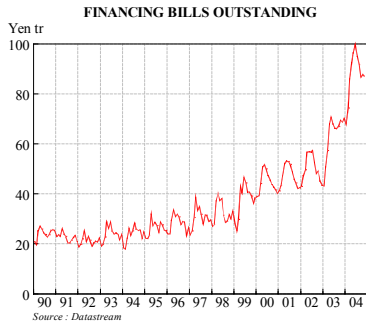


Source: MoF, BoJ

Intervention is the direct responsibility of the MoF, and is included in an account that falls outside the budget called the *FEFSA* (Foreign Exchange Fund Special Account). In the final analysis, intervention is funded by issuing Financing Bills² (FBs), which have a maturity of 13 weeks and are currently issued at very low rates (0.0007% in the late November auction). FBs are also used to cover the government's treasury requirements. The maximum amount of FBs that can be issued forms part of the budget, which is voted on by parliament. To make the regulations more flexible, the MoF and BoJ agreed in December 2003 that some of the intervention would pass through an account on the BoJ's balance sheet ('Foreign securities purchased from the FEFSA with resale clause'), with a limit of JPY10tn (\$ 95bn). Having reached JPY6.1 tn in March 2004, this account has been empty since June.

² This system was introduced in 1999. Previously, intervention was financed by issuing specific securities (*Tameken*).

The agreement allows intervention-related FB issuance to be spread over time. As a result, issuance of FBs continued after intervention ended in mid-March 2004.



As a result of the early 2004 intervention (JPY15.2tn), the amount of FBs outstanding increased by almost JPY20tn between January and November 2004. Sterilisation of foreign exchange intervention is helping to increase the amount of FBs outstanding, which is much higher than international standards. In addition, managing huge amounts of short-term public debt raises problems for the monetary authorities.

SHORT-TERM TREASURY SECURITIES OUTSTANDING

As % of GDP	Japan*	UK**	Germany***	France*
Outstanding	17.6	2.1	1.8	6.7

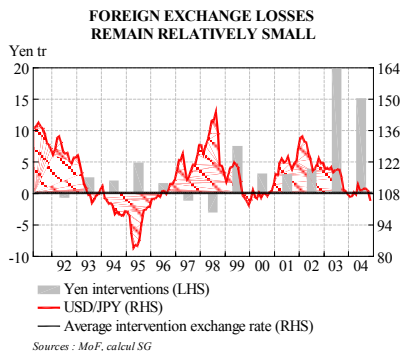
Japan's figures reflect only 13-week FBs, while those of other countries reflect securities with maturities of up to 1 year
 *: October 2004, **: June 2004, ***: September 2004.

Sources: Bank of Japan, UK National Statistics, Agence France Trésor, Bundesbank

The BoJ's quantitative monetary policy means that this short-term debt costs very little and is very easy to sell. Assuming that Japan pulls out of deflation in the medium term, this short-term debt will become more expensive, putting pressure on the public finances, which are already very weak. It will also become harder to refinance.

Foreign exchange losses remain small, but would be substantial in the event of a sharp rise in the yen

Japan does not break down its foreign exchange reserves by currency, although it has broken down its intervention by currency in the last few years. Most of the intervention has been against the dollar. On the reasonable assumption that all intervention has been against the dollar, we have estimated the average exchange rate at which reserves accumulated since April 1991 were bought. We assume that intervention carried out in a given month takes place at the average exchange rate for this month. This gives an average rate of JPY108.6 to the dollar. So an exchange rate of 105 would result in foreign exchange losses of JPY2tn (\$19bn), which remains limited given the amount of reserves involved. However, in a risk scenario (JPY90 to the dollar), losses would rise to JPY10tn (\$96bn or almost 2% of Japan's GDP).



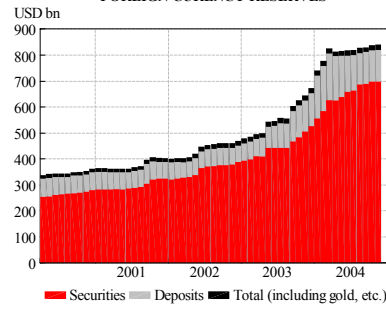
Sources: MoF, calcul SG

Highly advantageous carry

Since 2000, the proportion of total reserves invested in the bond market has averaged 75%, and the proportion held on deposit 22%. The remainder is held in gold, IMF reserves and SDRs. The breakdown of the portfolio by maturity is not made public. Taking into account the

nature of Japan's intervention and of US Treasury auctions, most of this portfolio is probably invested in T-Notes.

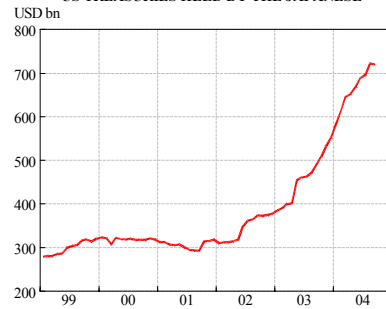
FOREIGN CURRENCY RESERVES



Source: Datastream

According to the US Department of the Treasury, Japan's net purchases of medium- and long-term US government securities was \$201bn on an annualised basis in October. Buying has accelerated since the intervention that took place in late 2003 and March 2004. This is reflected by the increase in Japan's portfolio of US Treasuries. Although this figure includes assets held by private investors, these make up a small proportion of the total. In the early 2004 intervention, buying of Treasuries was spread out over time so as not to disrupt the market, and continued after the intervention had stopped. Part of the reserves was initially stored as foreign-currency deposits.

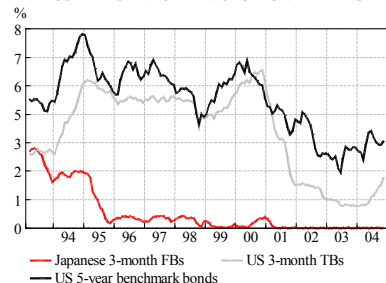
US TREASURIES HELD BY THE JAPANESE



Source: Datastream

Since the interest rate differential between the USA and Japan is strongly positive, Japan's foreign exchange reserves are generating substantial revenues. Between April 2000 and August 2004, intervention against the dollar totalled an estimated \$389bn, while the market value of foreign exchange reserves rose from \$324bn to \$808bn during the same period. As a result, profits on investments in securities and deposits in the last four-and-a-quarter years have totalled around \$95bn. We emphasise that this figure includes changes in the value of non-dollar foreign exchange reserves in dollar terms. It also excludes the cost of carry, since the interest rate on FBs is almost zero.

COMFORTABLE SPREAD BETWEEN US RATES AND JAPANESE 3-MONTH RATES



Source: Datastream

Overall, although foreign exchange reserves are creating substantial foreign exchange risk for the MoF, Japan's unique monetary policy means that it is not currently bearing the costs normally associated with excessive reserves. These include difficulties in managing internal liquidity and loss of interest revenue, and are being borne by emerging Asian countries. In the words of a Japanese proverb: it is impossible to reach the tiger's cubs without entering its lair. Combating the rise in the yen was and is the most pressing concern.

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