## DAILY GLOBAL COMMENTARY

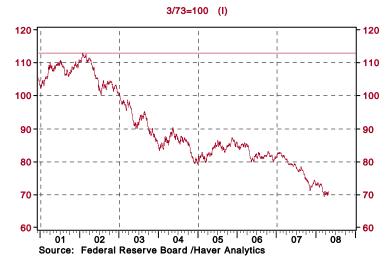
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## What Do We Know About Dollar Holdings in Official Foreign Exchange Reserves? *April* 25, 2008

The dollar's role as a reserve currency is widely debated even as its value continues to shrink. The trade weighted dollar at 70.84 on April 24, 2008 is down 37.2% from its peak reading of 112.89 on January 28, 2002 (see chart 1).

 ${\bf Chart \ 1} \\ {\bf Nominal \ Trade-Weighted \ Exch \ Value \ of \ US\$ \ vs \ Major \ Currencies} \\$ 



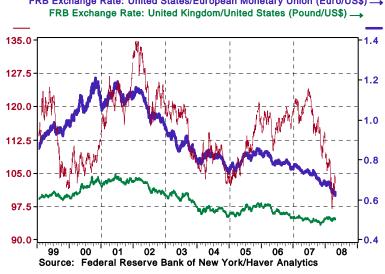
In nominal terms, the dollar has lost ground vis-à-vis the Japanese yen, euro, the pound sterling and most other currencies. Between January 28, 2002 and April 24, 2008, the dollar has depreciated 45.1%, 28.6%, and 21.9% vis-à-vis the euro, pound, and yen, respectively.

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Chart 2

← Foreign Exchange Rate: Japan (Yen/US\$)

FRB Exchange Rate: United States/European Monetary Union (Euro/US\$) →



The euro was established on January 1, 1999 at \$1.18 per euro. From late-2002 the euro has held above par and steadily gained strength. The fortunes of the yen and the pound have moved around, with the yen posting a consistent appreciation since mid-2007. The pound sterling has maintained an appreciating trend since early-2006.

What do we know about foreign exchange reserve holdings of central banks? A good place to start is the IMF's COFER quarterly database which can be accessed at <a href="http://www.imf.org/external/np/sta/cofer/eng/index.htm">http://www.imf.org/external/np/sta/cofer/eng/index.htm</a>. In this database, currencies are listed as foreign exchange reserves are U.S. dollar, euro, pound sterling, Japanese yen, Swiss franc, and other currencies. Foreign exchange reserves do not include holdings of a currency by the issuing country. The IMF classifies foreign exchange reserves as *allocated* and *unallocated* reserves. Unallocated reserves pertain to reserves of non-reporting countries and the identity of these currencies is not published. The identity of reporting and non-reporting countries is also confidential.

The share of the U.S. dollar in official holdings of foreign exchange reserves in illustrated in chart 3 and chart 4, with chart 3 showing the trend after the establishment of the euro.

The U.S. dollar made up 71.5% of all foreign exchange reserves that central banks held in 2001 – the largest share during the period 1987-2007. In 2007, it shrank to nearly 64.0% of official foreign exchange reserves (see chart 3).

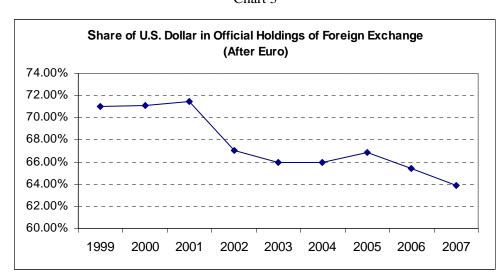
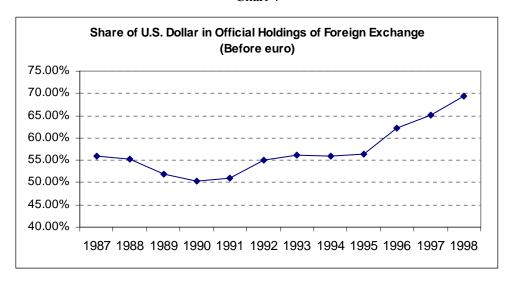


Chart 3

Source – IMF Annual Reports and COFER database

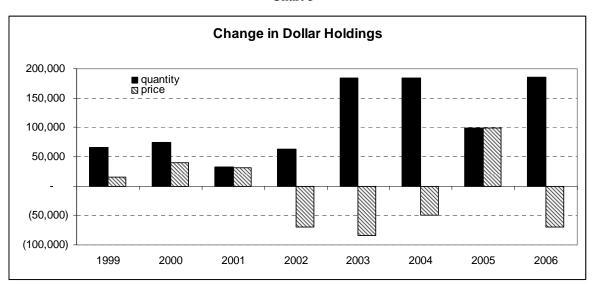
Chart 4



Source – IMF Annual Reports and COFER database

How have central banks behaved as the value of the dollar has changed? The IMF's annual report also publishes information about the composition of holdings of currencies due to changes in price and quantity. [Changes in prices and quantities are based on SDR values of foreign exchange.] Chart 5 shows that central banks acquired large quantities of the dollar as it depreciated. Effectively, central banks have bought low; we should commend their management acumen.

Chart 5



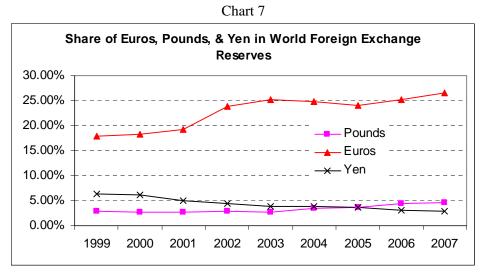
Source - IMF Annual Reports and COFER database

Chart 6 indicates that starting in 2002, central banks bought euros as the euro rose in value, with exception of 2005 they acquired euros when the price fell. Prior to 2002, holdings of euros increased as the price declined.

Chart 6 Change in Holdings of Euros 100,000 ■ quantity **■** price 80,000 60,000 40,000 20,000 (20,000)(40,000)1999 2000 2001 2002 2003 2004 2005 2006

Source - IMF Annual Reports and COFER database

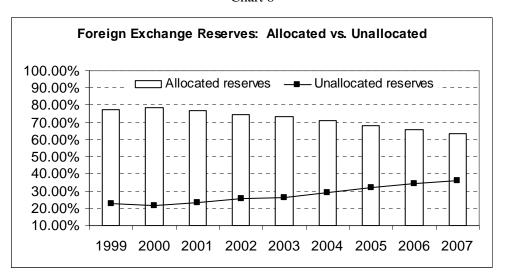
Just as the dollar's role has shrunk, the role of other currencies has risen. The euro is now the leader among the other major currencies, nary a surprise here. The euro's share in official foreign exchange reserves has risen from nearly 18.0% in 1999 to 26.5% by the end of 2007 (see chart 7).



Source – COFER database

As mentioned earlier, the IMF classifies official foreign exchange reserves as allocated and unallocated reserves. Unallocated reserves as a percentage of total official foreign exchange reserves have risen from roughly 21.0% of official foreign exchange reserves to 36.4% (see chart 8).

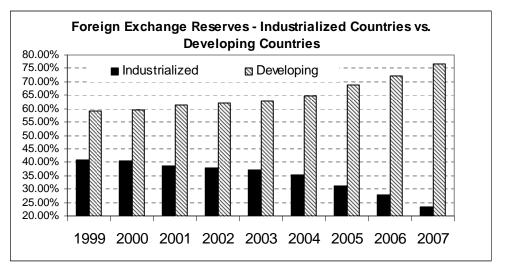
Chart 8



Source - COFER database

It is also interesting that official foreign exchange reserves of developing countries have increased from 60% in 1999 to a little over 75% in 2007 (see chart 9).

Chart 9



Source – COFER database

Digging further, we find that **unallocated official reserves of developing countries** (see chart 10) were roughly **48% of total official foreign exchange reserves** of developing countries in 2007. The composition of these unallocated foreign exchange reserves and the countries holding them are unknown. Nevertheless, we can draw some important conclusions without this information.

Foreign Exchange Reserves of Developing Countries -Allocated vs. Unallocated 80.00% Allocated Unallocated 70.00% 60.00% 50.00% 40.00% 30.00% 20.00% 1999 2007 2000 2001 2002 2003 2004 2005 2006

Chart 10

Source - COFER database

As expected the share of dollars in official foreign exchange reserves of developing countries has dropped (-8%) during 1999-2007 and the share of euros has risen (+9.0%) during the same period (see chart 11).

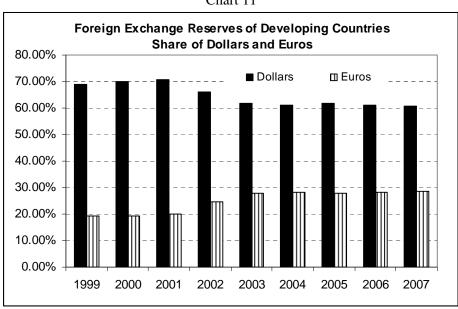


Chart 11

Source - COFER database

Conclusions: (1). Central banks have acted prudently in their acquisition of dollars, increasing their holdings as the price fell. (2) We see that roughly three-fourth of total official foreign exchange reserves is held by developing countries. Of this share, nearly 50% is unallocated reserves, the composition and holders are undisclosed. It is widely known that some of the large holders of foreign exchange reserves have their currencies pegged to the dollar (China, Saudi Arabia, and other Gulf countries, excluding Kuwait). (3). During the five years ended 2007 (The dollar's value peaked in 2002) the share of the dollar declined by 5.2% and that of the euro increased by 3.8% (see chart 11) in central banks holdings of foreign exchange reserves. (4) Holders of unallocated official reserves among developing countries will play a role in the place of the dollar in official reserve holdings in the future and its value in foreign exchange markets. (5) Most importantly, the dollar's share of central banks' official foreign exchange reserves is smaller than in 2001 but its place is quite predominant still and the share is significantly larger than it was during the 1990s.