TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

April–June 2004

During the second quarter of 2004, the dollar's trade-weighted exchange value increased 2.3 percent, as measured by the Federal Reserve Board's major currencies index, with the dollar appreciating 1.0 percent against the euro and 4.4 percent against the yen. The dollar appreciated broadly early in the period amid better-than-expected U.S. economic data and increasing expectations for U.S. monetary policy to tighten faster than previously expected. Later in the period, however, the dollar reversed some of these gains as concerns regarding the potential pace of monetary tightening in the United States moderated and market participants began to debate the impact of various factors on the dollar in a rising interest rate environment. The U.S. monetary authorities did not intervene in the foreign exchange market during the quarter.

DOLLAR APPRECIATES EARLY IN THE PERIOD

On May 13, the Federal Reserve's major currencies index of the dollar's exchange value rose to its highest level since September 2003, bolstered by strong economic data and rising yields in the United States. After several months of disappointing payrolls data, stronger-than-expected U.S. March and April employment reports indicated the economic expansion was finally spurring job growth. Interest rate futures reacted strongly to these reports amid the widespread perception that monetary policy tightening by the Federal Open Market Committee (FOMC) would be predicated on improvement in labor market conditions. In addition, a larger-than-expected rise in the

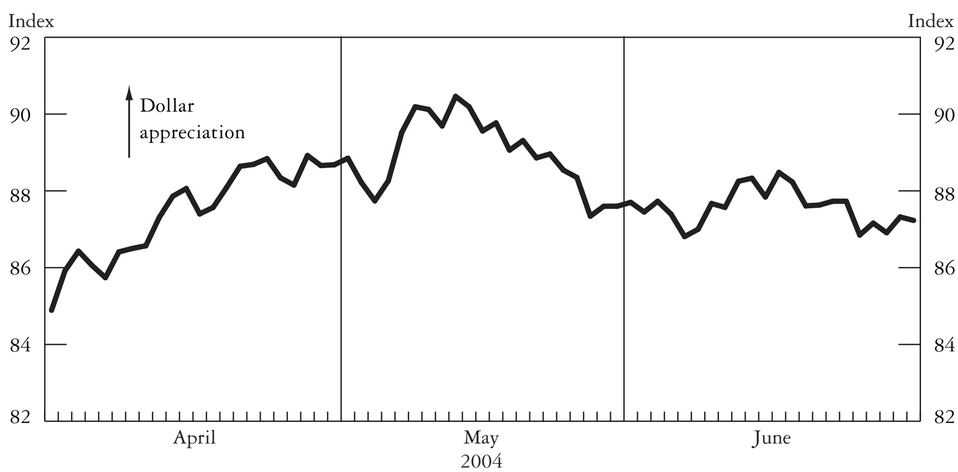
This report, presented by Dino Kos, Executive Vice President, Federal Reserve Bank of New York, and Manager, System Open Market Account, describes the foreign exchange operations of the U.S. Department of the Treasury and the Federal Reserve System for the period from April through June, 2004. Susan Stiehm was primarily responsible for preparation of the report.

consumer price index (CPI) in March raised concerns regarding potential price pressures in the United States and the possibility of a more aggressive response by the FOMC. Chairman Greenspan's testimony to the U.S. Senate's Joint Economic Committee on April 21 was interpreted as confirming the FOMC's willingness to respond with a faster pace of tightening if inflation rose more quickly than expected. From March 31 to May 14, implied rates on the federal funds futures contracts maturing in 2004 rose 19 to 71 basis points and Treasury yields increased by almost 100 basis points across the two-to-ten-year coupon curve.

Rising U.S. interest rates reduced the attractiveness of the dollar as a funding currency, leading many speculative investors to pare their short dollar positions. The dollar's appreciation was particularly pronounced against higher-yielding currencies as expectations increased for interest rate differentials to narrow. The dollar appreciated almost 11 percent against the Australian and New Zealand dollars and 6.7 percent against the Brazilian real by mid-May.

Chart 1

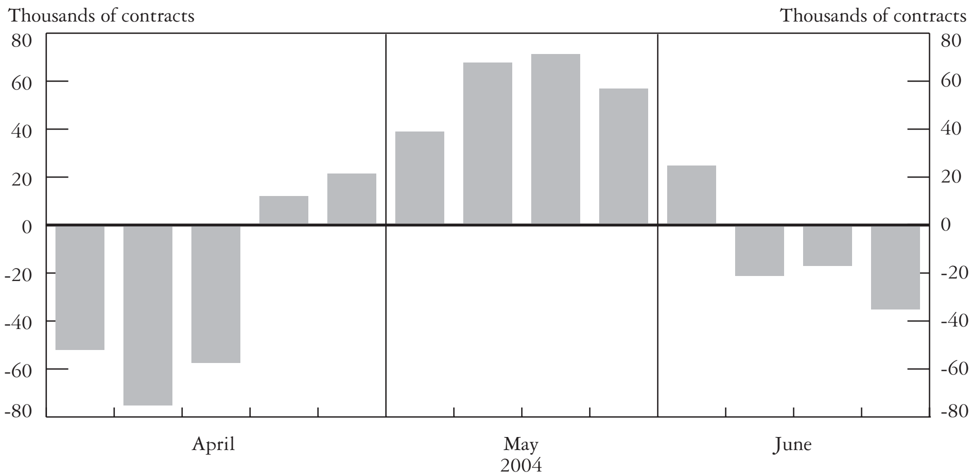
TRADE-WEIGHTED U.S. DOLLAR



Source: Board of Governors of the Federal Reserve System.

Chart 2

NET U.S. DOLLAR POSITIONS HELD BY NONCOMMERCIAL ACCOUNTS ON THE CHICAGO MERCANTILE EXCHANGE



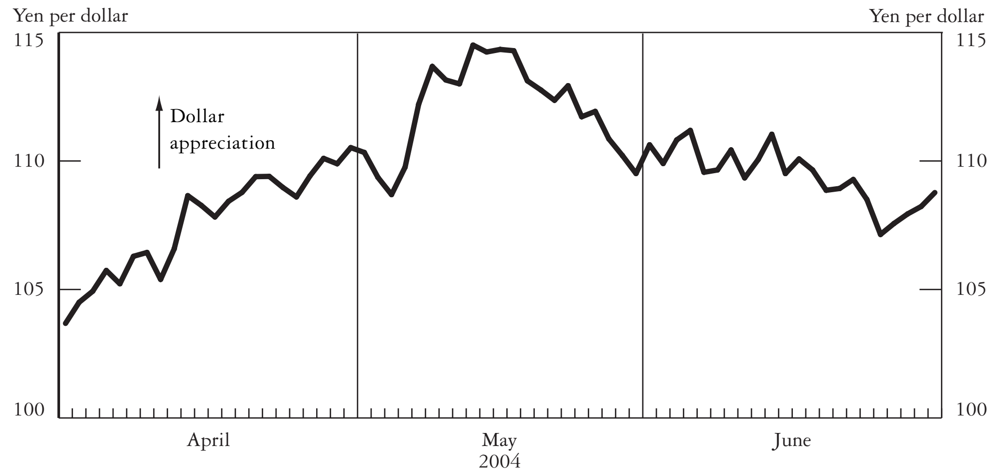
Source: Commodity Futures Trading Commission.

The yen depreciated nearly 9 percent against the dollar between March 31 and May 14 despite a series of stronger-than-expected Japanese economic data releases and a cessation of Japanese intervention activity to weaken the yen. In addition to broad dollar strength, market participants noted that net investment outflows following the end of the Japanese fiscal year on March 31 weighed on the yen as domestic investors allocated new funds abroad and foreign inflows did not compensate for this increase in outflows. According to the Japanese Ministry of Finance, weekly net outflows from Japanese stocks and bonds averaged ¥359 billion in April versus average net weekly inflows of ¥387 billion in March.

Potential risks to Japanese growth prospects, in the form of rising oil prices and possible official measures in China to slow economic activity, also weighed on the yen. At the end of April, press reports indicated that the Chinese central bank planned to raise interest rates by 50 basis points after the May 1st holiday. Analysts suggested potential monetary policy tightening measures in China could have a negative impact on demand for Japanese exports. The rise in oil prices also pressured Japanese asset markets, given Japan's heavy reliance on oil imports. Against this backdrop, increased Japanese equity market outflows may have contributed to yen weakness with the Nikkei declining 10.5 percent between April 26 and May 10. Japanese exporter sales of dollars were reportedly light during this period, further supporting the dollar's appreciation against the yen.

Chart 3

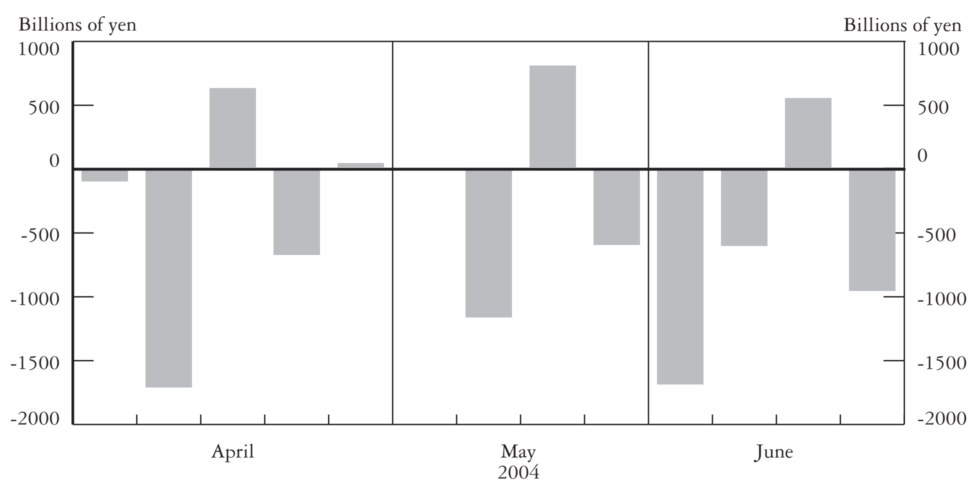
YEN AGAINST U.S. DOLLAR



Source: Bloomberg L.P.

Chart 4

WEEKLY JAPANESE AND FOREIGN INVESTOR FLOWS INTO JAPANESE EQUITIES AND BONDS

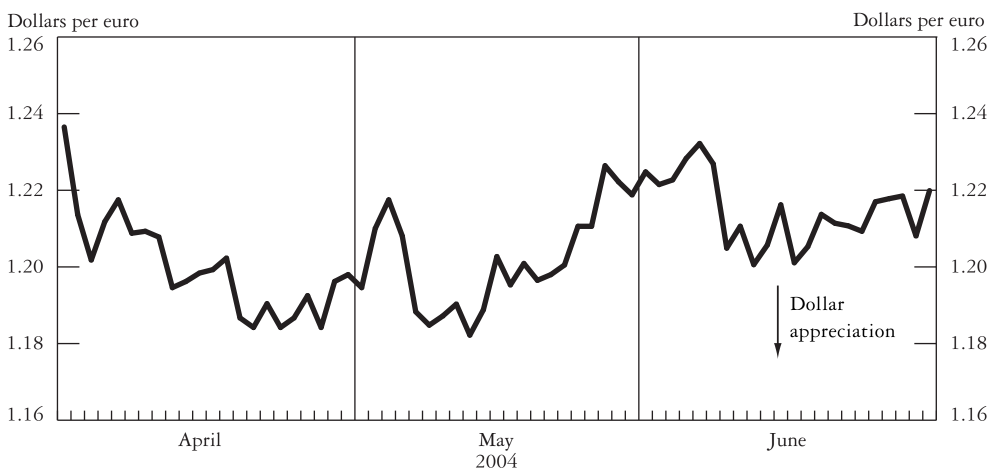


Source: Japanese Ministry of Finance.

The euro also depreciated against the dollar, falling as low as 1.1822 dollars per euro. In contrast to the expected monetary policy tightening by the FOMC, the European Central Bank's (ECB) governing council was not expected to begin raising rates in the near term, as economic data continued to suggest a steady, but sluggish, economic recovery in Europe. The spread between implied rates of the September 2004 euribor futures contract and the eurodollar futures contract declined by almost 29 basis points by mid-May, as expectations for tighter monetary policy in the United States increased. In addition, the U.S. ten-year Treasury yield rose in early April to exceed the German ten-year bund yield for the first time since October 2003, reflecting the divergence in expected growth prospects between the two economies.

Chart 5

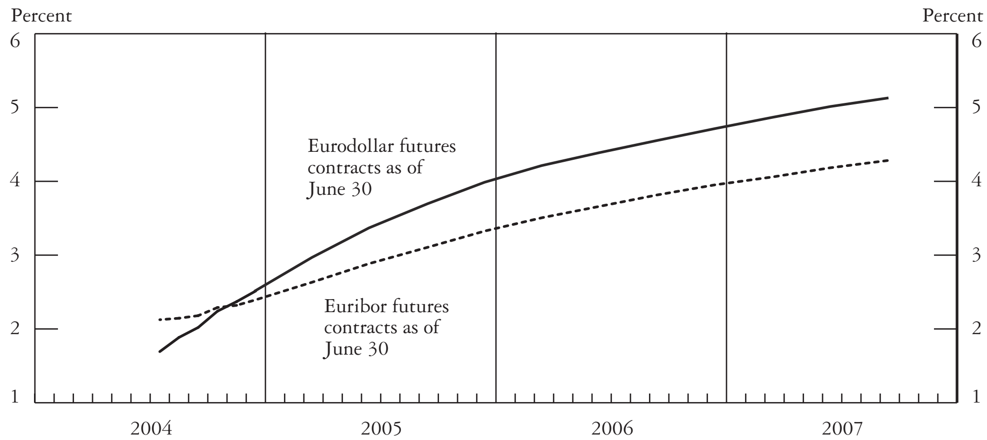
EURO AGAINST U.S. DOLLAR



Source: Bloomberg L.P.

Chart 6

IMPLIED RATES ON EURODOLLAR AND EURIBOR FUTURES CONTRACTS MATURING IN 2004 THROUGH 2007



Source: Bloomberg L.P.

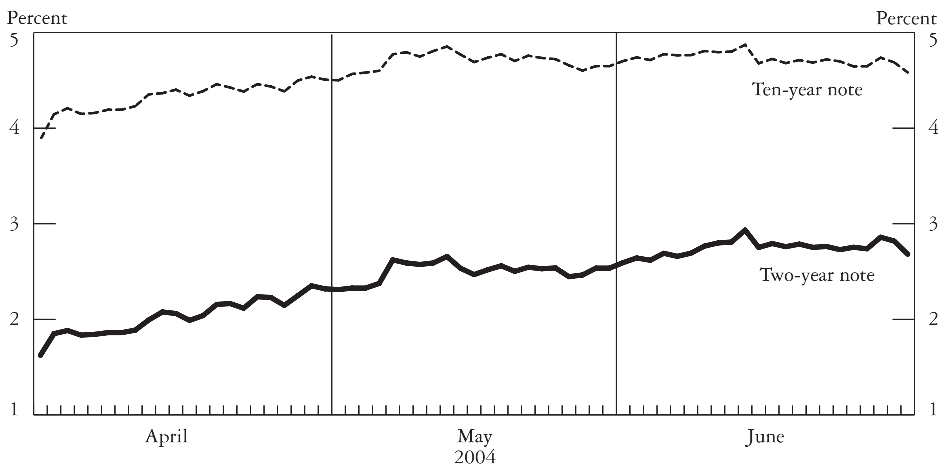
DOLLAR PARTIALLY REVERSES ITS GAINS

Later in the period, the dollar depreciated as concerns about aggressive monetary policy tightening by the FOMC moderated and discussions regarding the dollar's longer-term outlook intensified. As opposed to higher-than-expected CPI data in March, CPI data for April and May were largely in line with expectations and were perceived as reducing the likelihood of a 50-basis-point increase at the June FOMC meeting. As a result, the FOMC's decision to raise the federal funds target rate by 25 basis points to 1.25 percent on June 30 was within market participants' expectations. Ahead of the meeting, the relative stability in U.S. rates contributed to increased interest among shorter-term investors to reestablish leveraged positions in higher-yielding currencies. As uncertainty regarding U.S. monetary policy receded, market participants renewed discussions regarding the need for further dollar depreciation to address the U.S. current account deficit. Data released in June highlighted this concern as it showed the deficit expanding to a record $145 billion during the first quarter of 2004.

At the end of May, attacks on foreign oil workers in Saudi Arabia and the subsequent rise in oil prices may have also contributed to the dollar's decline. As nominal oil prices reached record levels, market participants discussed their possible impact on inflation and the rebound in U.S. economic growth. Market participants remained wary of price pressures in the U.S. economy and their possible affect on the value of the currency, as well as the potential for reduced foreign demand for U.S. bonds and equities. In addition, the increased geopolitical tension was cited as a background factor in the dollar's inability to sustain its initial appreciation.

Chart 7

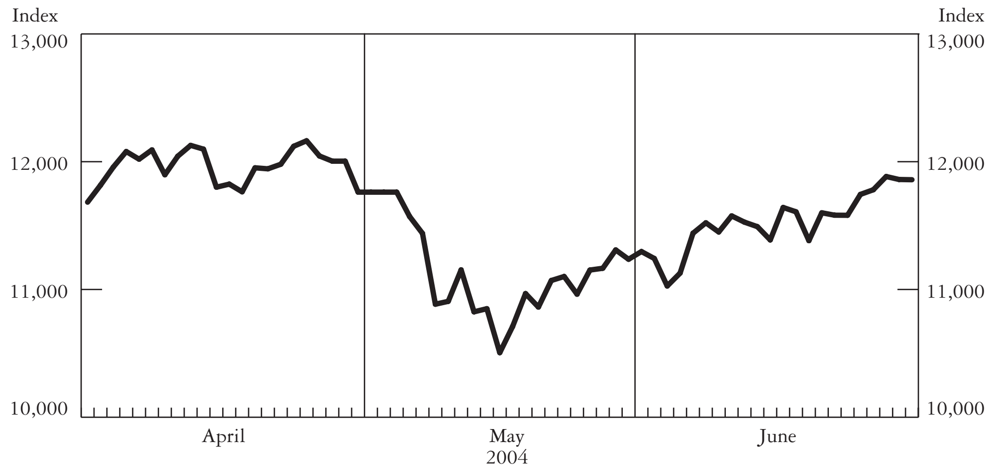
U.S. TREASURY YIELDS



Source: Bloomberg L.P.

In the second half of the quarter, the yen benefited from an improving outlook toward the Japanese economy as concerns regarding tighter global liquidity conditions receded. Stronger-than-expected Japanese data, including an upward revision to annualized first-quarter GDP to 6.1 percent, supported positive sentiment toward the yen. Also bolstering the yen was the Nikkei's recovery, as rumors of higher interest rates in China proved unsubstantiated and as oil prices eventually moderated after their sharp rise in the beginning of June. In addition, the lack of Japanese official intervention to weaken the yen against the dollar since mid-March further supported expectations for yen appreciation. However, market participants remained wary of renewed intervention and were sensitive to official statements concerning the yen exchange rate.

Chart 8
NIKKEI EQUITY INDEX



Source: Bloomberg L.P.

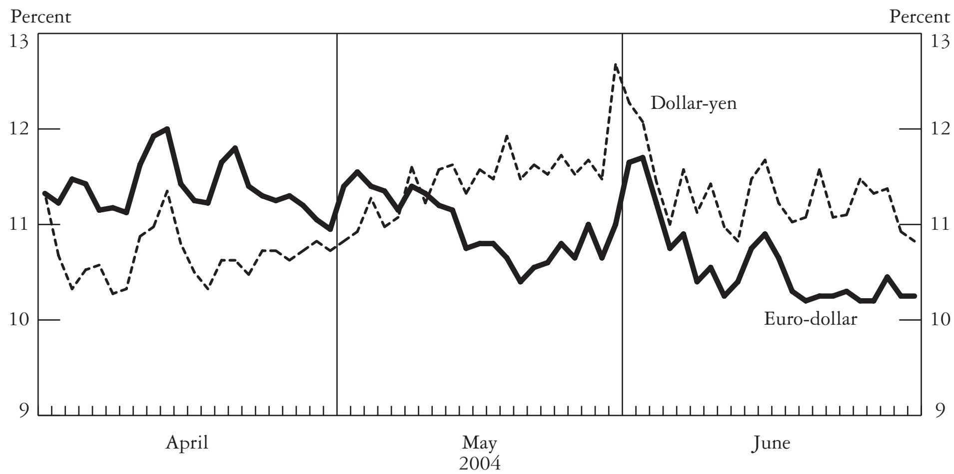
As market participants moderated their U.S. monetary policy expectations, the euro reversed some of its earlier decline against the dollar and remained rangebound for much of the second half of the quarter. Given the lack of conviction regarding the longer-term outlook for the dollar, many longer-term investors reportedly remained sidelined during the period. As a result, shorter-term, model-based accounts dominated trading activity, particularly in the euro-dollar currency pair, taking profits or stop losses after relatively small price moves.

OPTION-IMPLIED VOLATILITY DECLINES

Option-implied volatility in the currency markets rose sharply amid attacks in Saudi Arabia at the end of May and the subsequent rise in oil prices, with one-month option-implied volatility in the dollar-yen pair rising to as high as 12.68 percent. However, volatility declined later in the period for the euro-dollar and dollar-yen currency pairs to 10.25 percent and 10.83 percent, respectively. The price action in the foreign exchange options market was generally consistent with the divergence in market participants' outlook for economic growth in Japan and the euro area. One-month risk reversal data indicated a preference for dollar puts against the Japanese yen while showing some preference for dollar calls against the euro, as many market participants expected the yen to appreciate.

Chart 9

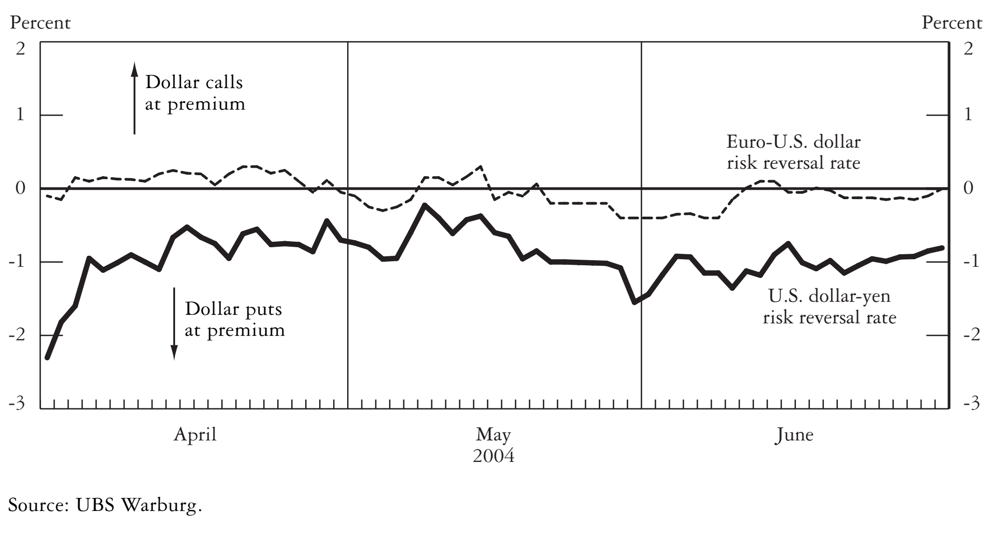
ONE-MONTH CURRENCY OPTION-IMPLIED VOLATILITY



Source: Bloomberg L.P.

Chart 10

ONE-MONTH U.S. DOLLAR-YEN AND EURO-U.S. DOLLAR RISK REVERSALS



Source: UBS Warburg.

TREASURY AND FEDERAL FOREIGN EXCHANGE RESERVES

The U.S. monetary authorities did not undertake any intervention operations during the quarter. At the end of the quarter, the current values of euro and yen reserve holdings totaled \$19.4 billion for the Federal Reserve's System Open Market Account and \$19.4 billion for the Treasury's Exchange Stabilization Fund. The U.S. monetary authorities invest their foreign currency balances in a variety of instruments that yield market-related rates of return and have a high degree of liquidity and credit quality. To the greatest extent practicable, the investments are split evenly between the System Open Market Account and the Exchange Stabilization Fund.

A significant portion of the U.S. monetary authorities' foreign exchange reserves is invested in European and Japanese government securities. On an outright basis, the U.S. monetary authorities hold German, French, and Japanese government securities. Under euro-denominated repurchase agreements, the U.S. monetary authorities accept sovereign debt backed by the full faith and credit of the following governments: Belgium, France, Germany, Italy, the Netherlands, and Spain. Foreign currency reserves are also invested at the Bank for International Settlements and in facilities at other official institutions. As of June 30, direct holdings of foreign government securities totaled \$20.9 billion, split evenly between the Federal Reserve and the Treasury. Foreign government securities held under repurchase agreements totaled \$4 billion at the end of the quarter and also were split evenly between the two authorities.

Table 1

FOREIGN CURRENCY HOLDINGS OF U.S. MONETARY AUTHORITIES BASED ON CURRENT EXCHANGE RATES

Millions of Dollars

		Changes in Balances by Source				
	Carrying Value March 31, 2004[a]	Net Purchases and Sales[b]	Investment Earnings[c]	Realized Profit/Loss on Sale[d]	Unrealized Profit/ Loss on Foreign Currency Revaluation[e]	Carrying Value June 30, 2004[a]
Federal Reserve System						
Open Market Account (SOMA)						
Euro	10,848.5	0	63.4	0	(99.5)	10,812.4
Yen	9,065.9	0	0.2	0	(434.9)	8,631.2
Total	19,914.4	0	63.6	0	(534.4)	19,443.6
U.S. Treasury Exchange						
Stabilization Fund (ESF)						
Euro	10,834.0	0	63.0	0	(99.4)	10,797.6
Yen	9,065.9	0	0.2	0	(434.9)	8,631.2
Total	19,899.9	0	63.2	0	(534.3)	19,428.8

[a] Carrying value of the reserve asset position includes interest accrued on foreign currency, which is based on "day of" accrual method.

[b] Net purchases and sales include daily foreign currency purchases from cash collected on maturities and coupons. In case of intervention or other official activity, amounts would be reflected and details footnoted.

[c] Investment earnings include accrued interest and amortization.

[d] Gains and losses on sales are calculated using average cost.

[e] Reserve asset balances are revalued daily at the noon buying rates.

Table 2

BREAKDOWN OF FOREIGN RESERVE ASSETS HELD

Carrying Value in Millions of Dollars, as of June 30, 2004

	U.S. Treasury Exchange Stabilization Fund (ESF)	Federal Reserve System Open Market Account (SOMA)
Euro-denominated assets:	**$10,797.6**	**$10,812.4**
Cash held on deposit at official institutions	$5,506.9	$5,525.1
Marketable securities held under repurchase agreements[a]	$2,011.9	$2,011.9
Marketable securities held outright[b]	$3,278.8	$3,275.4
German government securities	$1,678.2	$1,674.8
French government securities	$1,600.6	$1,600.6
Yen-denominated assets:	**$8,631.2**	**$8,631.2**
Cash held on deposit at official institutions	$1,444.3	$1,444.2
Marketable securities held outright[b]	$7,186.9	$7,186.9

[a] Sovereign debt obligations of Belgium, France, Germany, Italy, the Netherlands, and Spain are presently eligible collateral for reverse repo transactions.

[b] As of June 30, euro and yen securities holdings had Macaulay durations of 29.2 and 3.3 months, respectively.

Table 3

FEDERAL RESERVE SYSTEM OPEN MARKET ACCOUNT RECIPROCAL CURRENCY ARRANGEMENTS

Millions of Dollars

Institution	Amount of Facility	Outstanding as of June 30, 2004
Bank of Canada	2,000	0
Bank of Mexico	3,000	0
Total	5,000	0

U.S. TREASURY EXCHANGE STABILIZATION FUND RECIPROCAL CURRENCY ARRANGEMENT

Millions of Dollars

Institution	Amount of Facility	Outstanding as of June 30, 2004
Bank of Mexico	3,000	0
Total	3,000	0