TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

April–June 2012

During the second quarter, the U.S. dollar's nominal trade-weighted exchange value appreciated 2.4 percent as measured by the Federal Reserve Board's major currencies index. The dollar appreciated broadly, including a 5.3 percent rise against the euro, but depreciated 3.7 percent against the Japanese yen. The U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.

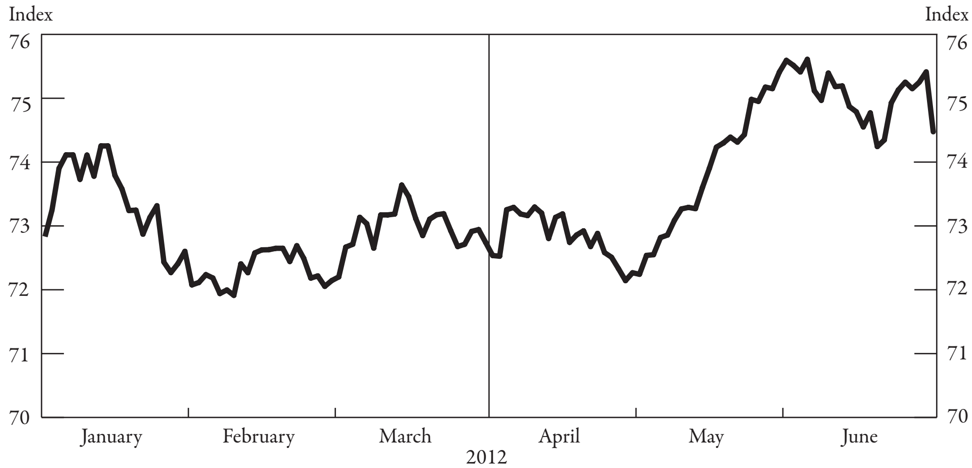
U.S. DOLLAR APPRECIATES BROADLY AMID RISING RISK AVERSION AND WEAKENING GLOBAL GROWTH OUTLOOK

During the second quarter, the U.S. dollar appreciated against most major currencies, with the exception of the Japanese yen. The dollar's appreciation predominantly reflected broad risk aversion stemming from rising concern over the euro-area sovereign and banking crisis and a weakening global growth outlook. These factors weighed on investor sentiment, prompting them to shift their portfolios away from higher-yielding investments and increase their demand for safe-haven alternatives. During the period, there were significant declines in global equity prices and other risky asset prices, and a rise in realized and implied volatility across a broad range of assets. This diminished sentiment was accompanied by a preference for dollar- and yen-denominated assets. During the quarter, the Japanese yen appreciated significantly against major currencies, as the U.S. dollar depreciated 3.7 percent against the yen. A 41-basis-point narrowing in the ten-year interest rate differential between the United States and Japan likely helped support the yen over the quarter.

This report, presented by Simon Potter, Executive Vice President, Federal Reserve Bank of New York, and Manager of the 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 2012. Kevin McNeil was primarily responsible for preparation of the report.

Chart 1

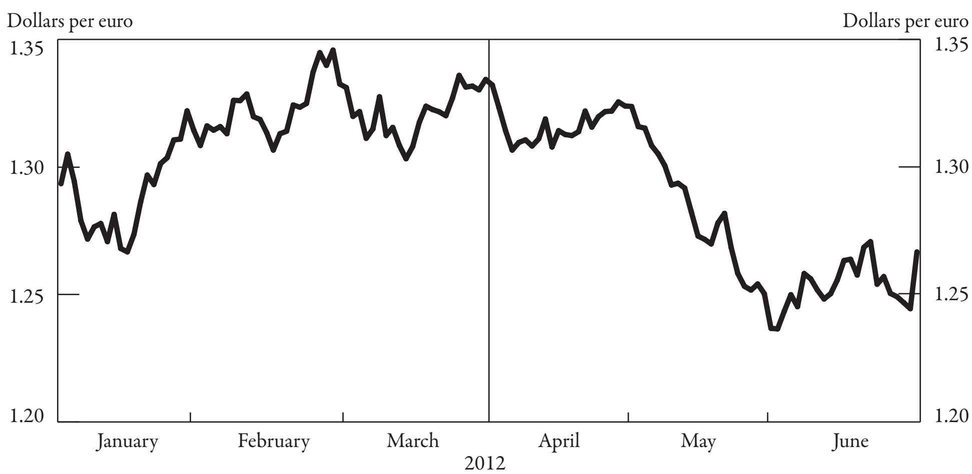
TRADE-WEIGHTED U.S. DOLLAR



Sources: Board of Governors of the Federal Reserve System; Bloomberg L.P.

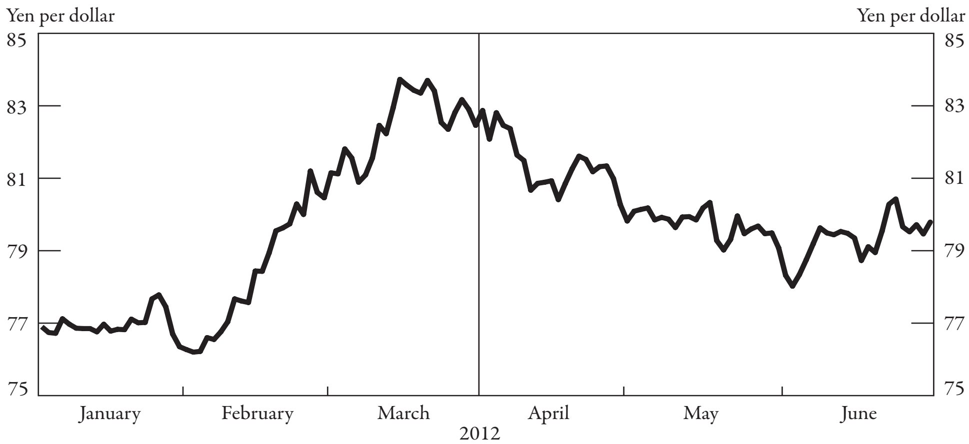
Chart 2

EURO–U.S. DOLLAR EXCHANGE RATE



Source: Bloomberg L.P.

Chart 3
U.S. DOLLAR–YEN EXCHANGE RATE

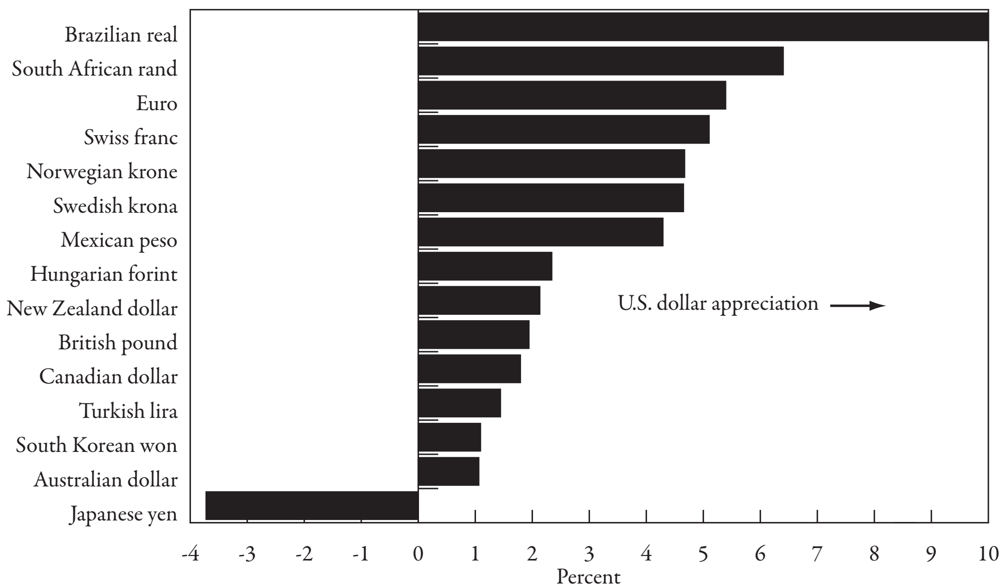


Source: Bloomberg L.P.

Reflecting the worsening global growth outlook—as evidenced by weaker-than-expected activity data in the United States, Europe, China, and other countries—the dollar appreciated noticeably against emerging market and commodity-sensitive currencies. In particular, the dollar appreciated more than 1 percent against the Australian dollar, between 4 and 5 percent against the Mexican peso and the Norwegian krone, and 10 percent against the Brazilian real. During the period, the S&P GSCI Commodity Spot Index fell 13 percent, led by a 20 percent decline in the front-month Brent crude oil futures contract. In addition, after declining notably in the previous quarter, foreign exchange implied volatilities of many of these currency pairs rose to their highest levels since December 2011. A similar increase in volatilities was observed across some other asset classes. For example, the VIX index of implied equity volatility in early June rose nearly 11 percentage points to approximately 27 percent, its highest level since late 2011.

Chart 4

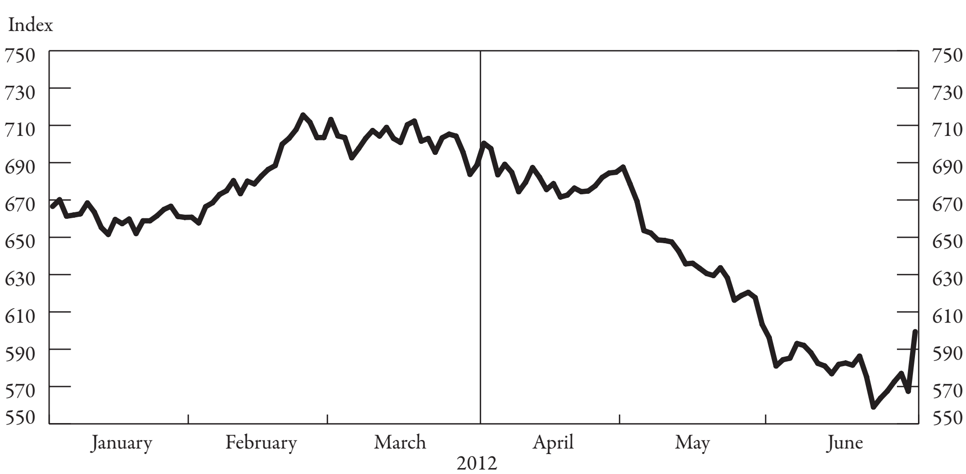
U.S. DOLLAR AGAINST SELECTED CURRENCIES DURING SECOND QUARTER



Source: Bloomberg L.P.

Chart 5

S&P GSCI COMMODITY SPOT INDEX



Source: Bloomberg L.P.

EURO DEPRECIATES AGAINST THE DOLLAR AS SOVEREIGN AND BANKING SECTOR CONCERNS INTENSIFY

During the quarter, the U.S. dollar appreciated 5.3 percent against the euro, as increased political uncertainty in Greece and renewed concerns about the ongoing euro-area sovereign and banking crisis prompted investors to further reduce their exposure to the region. Additionally, signs of a worsening economic outlook driven in part by weaker-than-expected activity in the euro area added to investor concerns.

Political uncertainty following the Greek parliamentary election in early May weighed on the euro, as the inconclusive result caused some investors to question the outlook for the country's official European Union/International Monetary Fund (IMF) aid program and its membership in the euro area. This uncertainty also increased concern about the risks associated with domestic bank deposit flight and broader contagion effects on other euro-area periphery countries.

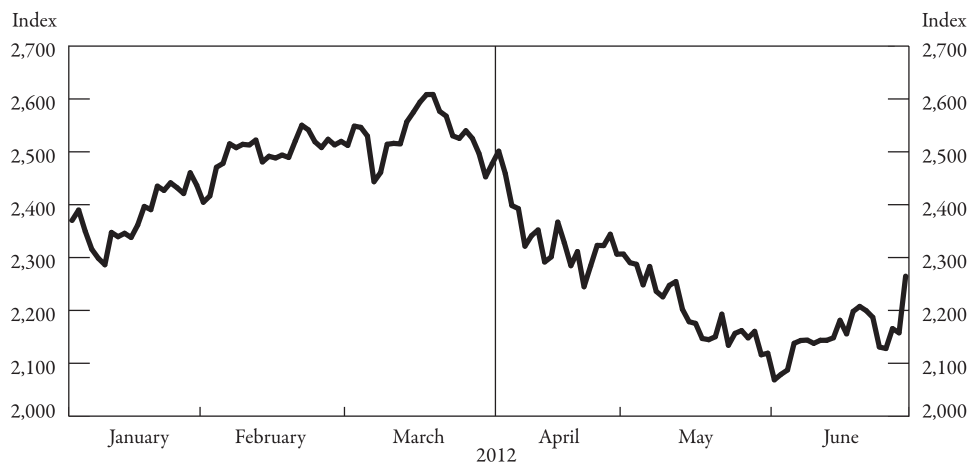
Spanish banking sector concerns, including the potential need for official euro-area financial support, also weighed on the euro during the quarter. Specifically, Spain's fourth largest bank, BFA-Bankia, presented a recapitalization plan in late May that included a larger-than-expected request for €19 billion, while the IMF and independent consultants estimated recapitalization needs for the rest of the Spanish banking system in an adverse scenario at between €40 billion and €60 billion.

Developments in these countries translated into higher risk premiums on some euro-area assets, as concerns increased that a broader set of countries could require official euro-area financial support. The Euro Stoxx 50 index declined approximately 17 percent during April and May, led by a roughly 27 percent decline in the Euro Stoxx Banks sub-index. From the beginning of the quarter through mid-June, the yield on ten-year Spanish sovereign debt rose about 180 basis points to 7.2 percent, while the yield on Italian ten-year sovereign debt rose about 100 basis points to more than 6.2 percent. These movements generally coincided with a broad depreciation of the euro, as the euro–U.S. dollar currency pair depreciated intraday to its two-year low of $1.2288 per euro on June 1. Also around this time, one- and three-month option implied volatilities on the euro–U.S. dollar pair reached their highest levels since early January.

Toward the end of the quarter, euro-area asset prices strengthened following the conclusion of a two-day euro-area Heads of Government Summit. Leaders announced plans to establish a single banking supervisor and to modify the terms under which the European Stability Mechanism (ESM) can be used. Most notably, these modifications included granting the ESM the ability to provide support directly to banks, with minimal conditionality imposed on the sovereign. In late June, the euro appreciated nearly 2 percent against the dollar, as short-term implied volatility on the currency pair declined, and Spanish and Italian sovereign yields declined notably.

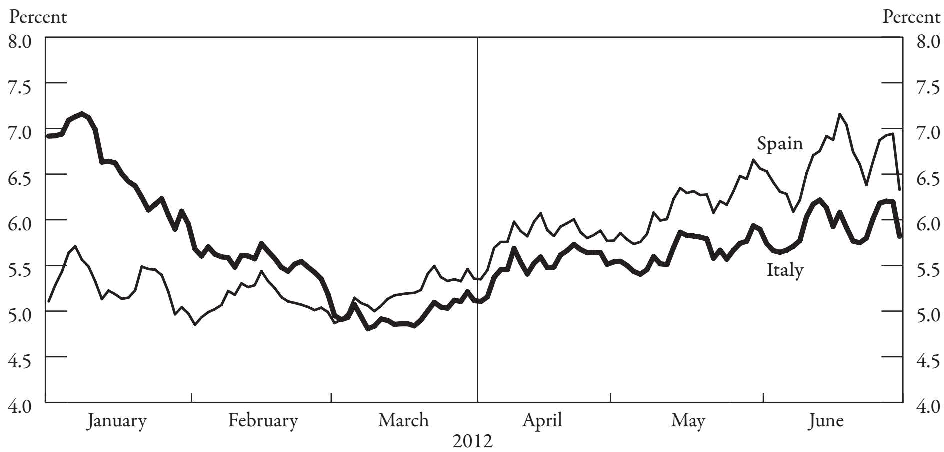
Chart 6

EURO STOXX 50 INDEX



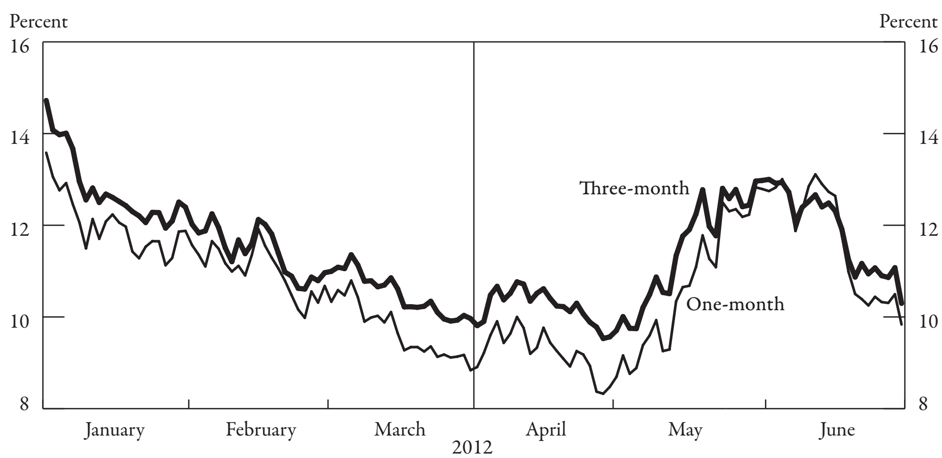
Source: Bloomberg L.P.

Chart 7
TEN-YEAR SPANISH AND ITALIAN GOVERNMENT BOND YIELDS



Source: Bloomberg L.P.

Chart 8
ONE-MONTH AND THREE-MONTH EURO–U.S. DOLLAR AT-THE-MONEY OPTION-IMPLIED VOLATILITY

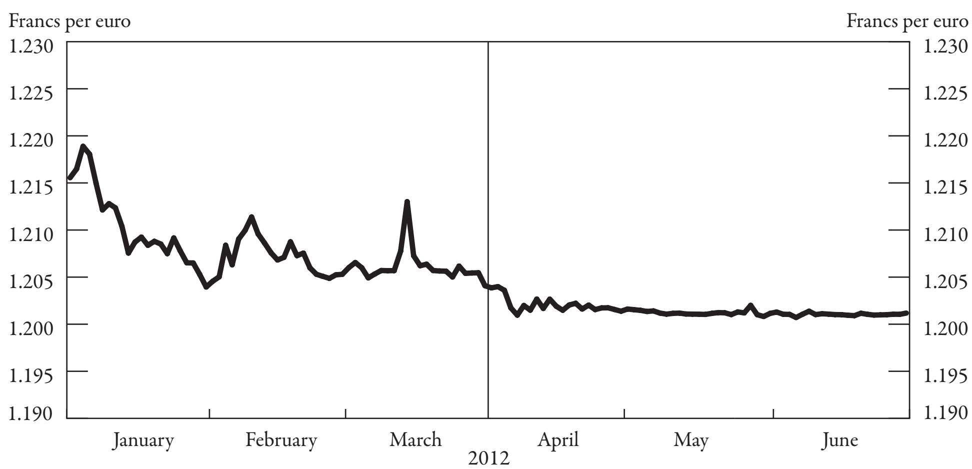


Source: Bloomberg L.P.

SWISS FRANC TRADES NEAR SWISS NATIONAL BANK'S EURO–SWISS FRANC CURRENCY FLOOR

The deterioration in risk sentiment also affected the Swiss franc. The euro–Swiss franc currency pair depreciated closer to the floor of 1.20 Swiss francs per euro announced by the Swiss National Bank (SNB) on September 6, 2011. This depreciation appeared to reflect increased euro-area uncertainty that resulted in increased safe-haven capital flows into the Swiss franc. The SNB stated that its foreign currency reserves had risen in May by 66.2 billion Swiss francs to 303.8 billion Swiss francs, reported by an SNB official to be largely the result of currency purchases to defend the minimum exchange rate against the euro. The franc depreciated 4.8 percent against the U.S. dollar during the second quarter.

Chart 9
EURO–SWISS FRANC EXCHANGE RATE



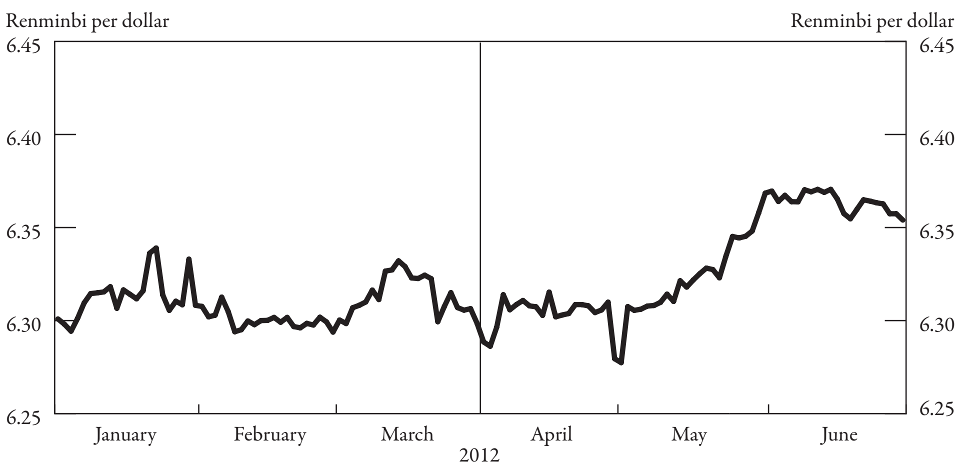
Source: Bloomberg L.P.

CHINESE RENMINBI DEPRECIATES AGAINST THE DOLLAR

During the period, the Chinese renminbi depreciated 0.9 percent against the dollar, one of the largest quarterly declines since officials formally de-pegged the currency from the U.S. dollar in 2005. Market participants pointed to several factors that might have driven officials to depreciate the currency, including diminished foreign exchange inflows attributable to both a weaker trade balance and lower capital account inflows, signs of a weaker growth trajectory, and accommodative policy actions. Such a moderation in the renminbi's appreciation trend has occurred in the context of measures enacted by Chinese authorities to make the currency more market-determined. Most notably, in mid-April, Chinese authorities widened the intraday trading band from +/-0.5 percent to +/-1.0 percent. Furthermore, the currency's depreciation is directionally consistent with that of other emerging market Asian currencies, many of which also depreciated against the dollar during the period.

Chart 10

U.S. DOLLAR–CHINESE RENMINBI EXCHANGE RATE



Source: Bloomberg L.P.

TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE HOLDINGS

The U.S. monetary authorities did not undertake any intervention operations during the quarter. As of June 30, the value of the U.S. Treasury's Exchange Stabilization Fund foreign-currency-denominated assets totaled $25.25 billion, comprised of euro and yen holdings. The Federal Reserve System Open Market Account holdings of foreign-currency-denominated assets totaled $25.27 billion, also comprised of euro and yen holdings.

Dollar Liquidity Swap Arrangements with Foreign Central Banks

On November 30, 2011, the Federal Reserve, in coordination with the Bank of Canada (BoC), the Bank of England (BoE), the Bank of Japan (BoJ), the European Central Bank (ECB), and the SNB, agreed to reduce the rate charged on the dollar liquidity swap arrangements and to extend authorization of these swap arrangements through February 1, 2013. The rate charged on the dollar liquidity swap arrangements was reduced from the U.S. dollar overnight index swap (OIS) rate plus 100 basis points to the OIS rate plus 50 basis points. In addition, as a contingency measure, these central banks agreed to establish temporary bilateral liquidity swap arrangements so that each central bank could provide liquidity, if necessary, in any of the respective currencies. As of June 30, the ECB had $27.97 billion swaps outstanding. The BoC, BoE, BoJ, and SNB did not have any outstanding swaps at the end of the quarter.

Foreign Exchange Reserve Holdings

The U.S. monetary authorities invest their foreign currency reserves 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 on an outright basis in German, French, and Japanese government securities. Another portion is invested in euro-denominated repurchase agreements, under which 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 $24.44 billion and foreign government securities held under repurchase agreements totaled $4.84 billion.

Table 1

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

Millions of U.S. Dollars

	Carrying Value, March 31, 2012[a]	Change in Balances by Source: Net Purchases and Sales[b]	Investment Earnings[c]	Realized Gains/Losses on Sales[d]	Unrealized Gains/Losses on Foreign Currency Revaluation[e]	Carrying Value, June 30, 2012[a]
Federal Reserve System Open Market Account (SOMA)						
Euro	14,307	0	29	0	(714)	13,622
Japanese yen	11,275	0	6	0	367	11,648
Total	25,582	0	36	0	(347)	25,270

	Carrying Value, March 31, 2012[a]	Change in Balances by Source: Net Purchases and Sales[b]	Investment Earnings[c]	Realized Gains/Losses on Sales[d]	Unrealized Gains/Losses on Foreign Currency Revaluation[e]	Carrying Value, June 30, 2012[a]
U.S. Treasury Exchange Stabilization Fund (ESF)						
Euro	14,284	0	29	0	(713)	13,600
Japanese yen	11,275	0	6	0	367	11,648
Total	25,559	0	36	0	(346)	25,249

Note: Figures may not sum to totals because of rounding.

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

[b] Net purchases and sales include foreign currency purchases related to official activity, repayments, and warehousing.

[c] Investment earnings include accrued interest and amortization on outright holdings.

[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 U.S. Dollars, as of June 30, 2012

	U.S. Treasury Exchange Stabilization Fund (ESF)[a]	Federal Reserve System Open Market Account (SOMA)[a]
Euro–denominated assets	**13,600.4**	**13,662.2**
Cash held on deposit at official institutions	6,761.6	6,783.4
Marketable securities held under repurchase agreements[b]	2,420.9	2,420.9
Marketable securities held outright	4,417.9	4,417.9
German government securities	1,870.4	1,870.4
French government securities	2,547.5	2,547.5
Japanese-yen–denominated assets	**11,648.1**	**11,648.1**
Cash held on deposit at official institutions	3,847.7	3,847.7
Marketable securities held outright	7,800.4	7,800.4
Reciprocal currency arrangements		
Euro–denominated assets		**27,969.1**
Other assets[c]		27,969.1
Japanese-yen–denominated assets		**0.0**
Other assets[c]		0.0
Swiss-franc–denominated assets		**0.0**
Other assets[c]		0.0
Canadian-dollar–denominated assets		**0.0**
Other assets[c]		0.0
British-pound–denominated assets		**0.0**
Other assets[c]		0.0

Note: Figures may not sum to totals because of rounding.

[a] As of June 30, the euro SOMA and ESF portfolios both had Macaulay durations of 9.2 months; the yen SOMA and ESF portfolios both had Macaulay durations of 11.7 months.

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

[c] Carrying value of outstanding reciprocal currency swaps with the European Central Bank, the Swiss National Bank, the Bank of Japan, the Bank of Canada, and the Bank of England.

Table 3

RECIPROCAL CURRENCY ARRANGEMENTS

Millions of U.S. Dollars

Institution	Amount of Facility	Outstanding as of June 30, 2012
	Federal Reserve System Open Market Account (SOMA)	
Bank of Canada	2,000	0
Banco de México	3,000	0
European Central Bank[a]	Unlimited	27,969
Swiss National Bank[a]	Unlimited	0
Bank of Japan[a]	Unlimited	0
Bank of Canada[a]	30,000	0
Bank of England[a]	Unlimited	0
	Unlimited	27,969
	U.S. Treasury Exchange Stabilization Fund (ESF)	
Banco de México	3,000	0
Total	3,000	0

[a]Temporary swap arrangement.