TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

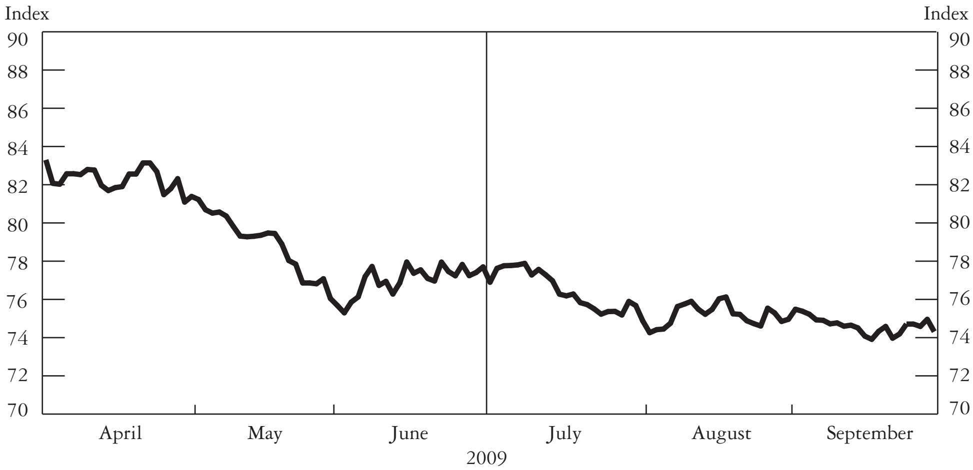
July–September 2009

During the third quarter of 2009, the U.S. dollar's trade-weighted exchange value depreciated 4.4 percent, as measured by the Federal Reserve Board's major currencies index. The dollar declined 4.1 percent against the euro and 6.9 percent against the Japanese yen. The U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.

Throughout the quarter, the U.S. dollar depreciated broadly against most major and emerging market currencies, as signs of a further improvement in global economic and financial conditions encouraged investors to reallocate capital away from the United States into overseas markets. These developments primarily reflected a reassessment of relative growth prospects across economies. The continued improvement in risk appetite and global financial market conditions also contributed to the dollar's decline, as investors sought to further unwind the significant "safe-haven" capital flows into U.S. assets observed at the beginning of the year.

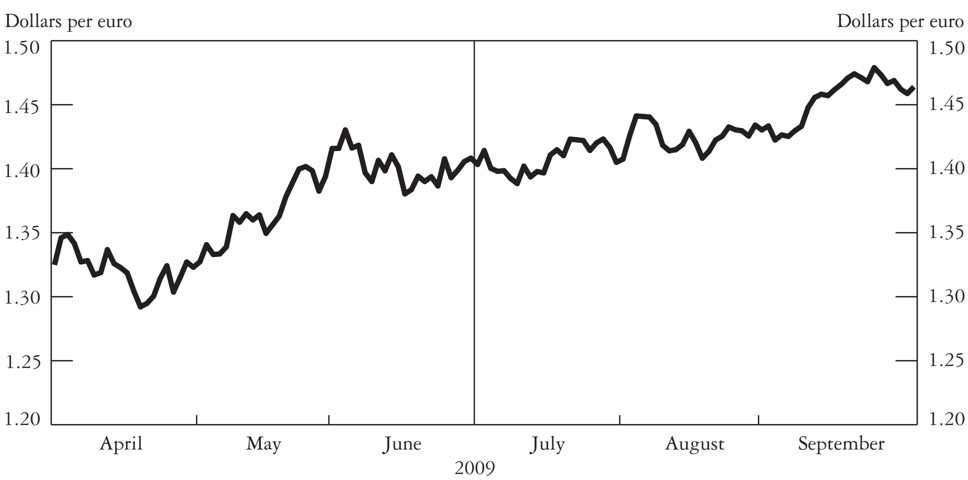
This report, presented by Brian Sack, Executive Vice President, Federal Reserve Bank of New York, and Manager of the System Open Market Account, describes the foreign exchange operations of the U.S. Department of the Treasury and the Federal Reserve System for the period from July through September 2009. Kenneth Forgit 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.

DOLLAR DECLINES AS IMPROVED INVESTOR SENTIMENT PROMPTS A REALLOCATION OF CAPITAL TO OVERSEAS MARKETS

During the quarter, signs of continued improvement in global economic conditions raised investors' expectations about the prospects for economic recovery. Similar to what occurred in the second quarter, the improvement in international investor sentiment toward the global economic outlook was a primary driver of the dollar's depreciation against major and emerging market currencies. This prompted U.S. and international investors to reallocate capital away from the United States, in particular, in favor of other countries considered relatively well positioned to benefit from the anticipated recovery in global activity. As in the previous quarter, these capital flows also partly reflected a reversal of the strong safe-haven flows into dollar-denominated assets observed after the credit crisis intensified in fall 2008.

U.S. economic data were generally interpreted as showing signs of recovery in the pace of activity. In particular, investor sentiment toward the U.S. economy was bolstered by better-than-expected manufacturing, production, and residential housing data as well as a noticeable slowdown in the pace of job losses. Moreover, following the notable decline in business inventories during the previous two quarters, rising business and consumer sentiment indicators were interpreted positively and as being consistent with an ongoing recovery in economic activity.

However, throughout the quarter, many investors perceived that economic conditions in overseas markets were recovering at a somewhat faster pace than in the United States, a factor that contributed to the depreciation of the dollar. In particular, economic activity in countries more closely linked to the global trade and commodity cycle, particularly China, Brazil, India, Korea, Australia, New Zealand, and Canada—continued to show stronger signs of an upturn. The improvement in these economies continued to reflect a recovery from the sharp slowdown many of them experienced when global trade waned and capital flows became disrupted after the failure of Lehman Brothers in September 2008. More generally, a noticeable pick-up in China's growth led to a broader increase in positive sentiment toward emerging markets and commodity-exporting economies. In particular, it encouraged many investors to anticipate that the significant monetary and fiscal stimulus measures deployed by Chinese policymakers earlier in the year could significantly bolster Asian and global growth prospects. Japanese economic activity also benefited from improved trade, as external demand recovered, although sentiment toward Japan's near-term economic prospects was briefly tempered in the period around the general election early in the quarter. In the euro area, a noticeable rise in business and consumer confidence surveys across the region, coupled with stronger-than-expected industrial production data, led to increased optimism about the region's economic prospects. Nonetheless, market participants continued to express some uncertainty about the sustainability of the U.S. and global economic outlooks going forward.

Consequently, market participants increasingly debated the possible timeframe over which global policymakers might begin winding down the extraordinary measures and policy stimulus employed throughout the financial crisis. The Group of Eight communiqué in July was interpreted as emphasizing a commitment by policymakers to maintain policy stimulus to support economic recovery; the Group's announcement bolstered positive investor sentiment as it dampened any expectations for a near-term removal of policy accommodation. At the same time, the stance of monetary policy among many major central banks was generally viewed as holding relatively steady over the near term.

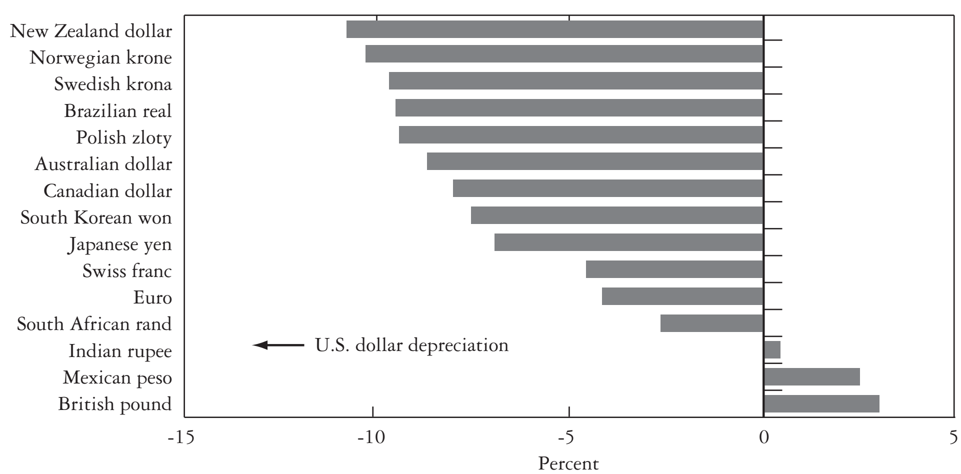
During the quarter, the Federal Open Market Committee (FOMC) kept its target for the federal funds rate at its current zero to 0.25 percent range and suggested that economic conditions are likely to warrant exceptionally low levels of the policy rate for an extended period. The FOMC also stated that the Federal Reserve would continue its plan to purchase up to a total of $1.25 trillion of agency mortgage-backed securities, up to $200 billion of agency debt, and $300 billion of Treasuries. Other major central banks signaled their intent to keep rates steady in light of continuing risks to the economic outlook. For example, the European Central Bank (ECB) maintained its policy rate at 1.00 percent while continuing to provide the financial system with liquidity through its longer term refinancing operations. Additionally, the Bank of Japan (BoJ) maintained its policy rate at 0.10 percent and extended its programs to facilitate corporate financing through year-end.

Notably, on August 6, the Bank of England (BoE) announced that it would expand its asset purchase facility further—by £50 billion, to £175 billion—while holding its policy rate steady at 0.5 percent. In its accompanying statement, the Monetary Policy Committee suggested that the U.K. recession appeared deeper than previously thought and that it should extend further the purchases of government and corporate debt, financed by the issuance of central bank reserves. Following the announcement, U.K. sovereign debt yields and the Bank of England's trade-weighted effective exchange rate index declined over the remainder of the quarter. In contrast, many interpreted comments from central bank officials in emerging and commodity-sensitive economies as indicating some increased willingness to begin removing monetary policy rate accommodation. Many market participants interpreted the Reserve Bank of Australia's (RBA) statement on August 4 as indicating an increased likelihood that it could begin to raise interest rates sooner than expected. Rising expectations that the RBA would soon increase policy rates reportedly helped support the Australian dollar's appreciation over the quarter, as did the rise in short-dated Australian sovereign debt yields.

Consistent with the improved outlook in their economies, the currencies of countries considered well positioned to benefit from an anticipated upturn in global trade and commodities markedly outperformed over the quarter. For example, the U.S. dollar depreciated between 7 and 11 percent against the Brazilian real, Korean won, Norwegian krone, and New Zealand, Australian, and Canadian dollars. These developments were reinforced by relatively favorable interest rate differentials between most of these currency pairs and the U.S. dollar.

Chart 3

U.S. DOLLAR AGAINST SELECTED CURRENCIES DURING THIRD QUARTER



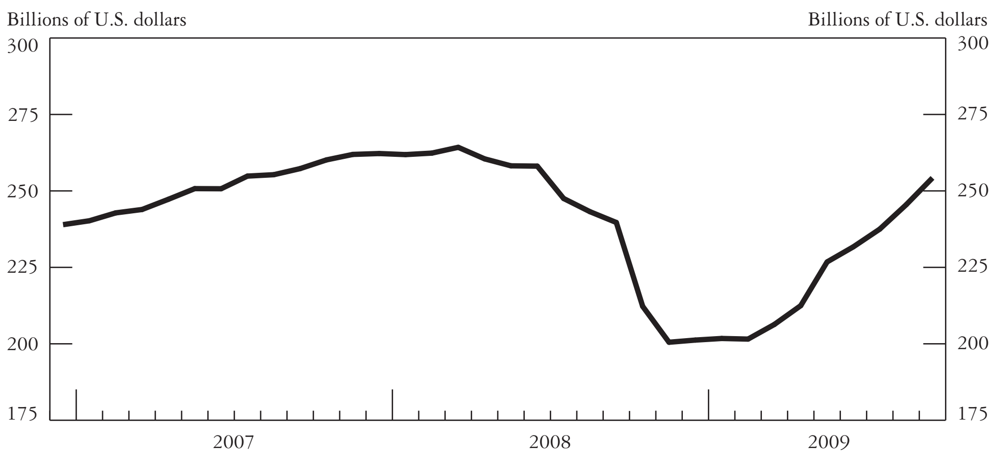
Source: Bloomberg L.P.

Dealers reported increased intervention activity among several emerging market central banks, as many sought to stem the pace of their domestic currencies' appreciation in response to strong capital inflows. As a result, many emerging market central banks reported a renewed accumulation of dollar reserves for the quarter. For example, the central banks of Brazil, Mexico, India, and Korea reported reserve balances increasing between $2 billion and $23 billion.

During the quarter, market participants also reported some interest among many reserve managers of emerging market central banks in selling the dollar against other major currencies, particularly the euro and pound. Most dealers interpreted this activity as routine reserve rebalancing activity by the central banks, as they sought to sell a portion of the dollars acquired during their domestic currency interventions in order to maintain a relatively steady currency allocation in their reserve holdings. Still, some market participants suggested that reports of interest by prominent emerging market central banks in selling the dollar against other major currencies weighed on broader investor sentiment toward the currency.

Chart 4

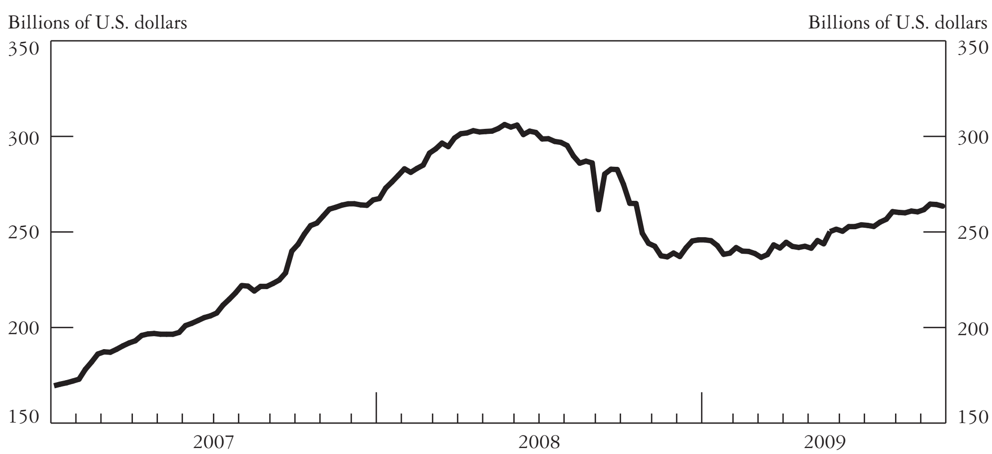
BANK OF KOREA INTERNATIONAL RESERVES



Sources: Bank of Korea; Bloomberg L.P.

Chart 5

RESERVE BANK OF INDIA INTERNATIONAL RESERVES

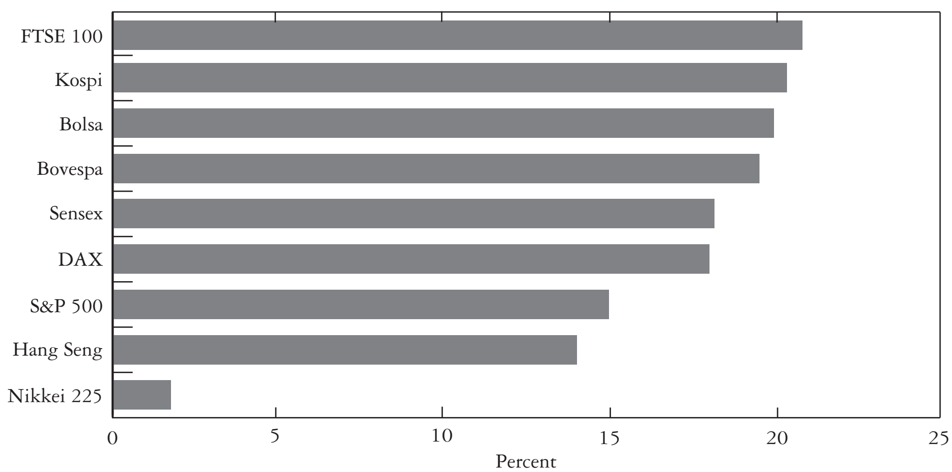


Sources: Reserve Bank of India; Bloomberg L.P.

The movements in major international equity markets were also consistent with investors' reappraisal of relative growth prospects and their reallocation of capital abroad. During the quarter, most major overseas equity indexes outperformed U.S. indexes. For example, the U.K. FTSE 100 rose 21 percent and the German DAX rose 18 percent, while the S&P increased 15 percent. Moreover, major emerging market indexes such as the Korean Kospi, Mexican Bolsa, and Brazilian Bovespa all noticeably outperformed, rising between 19 and 21 percent. Global credit indexes also advanced, reflecting improved economic sentiment and a further moderation in concern over global financial stability. The five-year investment-grade CDX indexes in the United States, for instance, narrowed by approximately 20 basis points; high-yield credit indexes in Europe and Japan also narrowed considerably.

Chart 6

PERFORMANCE OF SELECTED EQUITY INDEXES DURING THIRD QUARTER

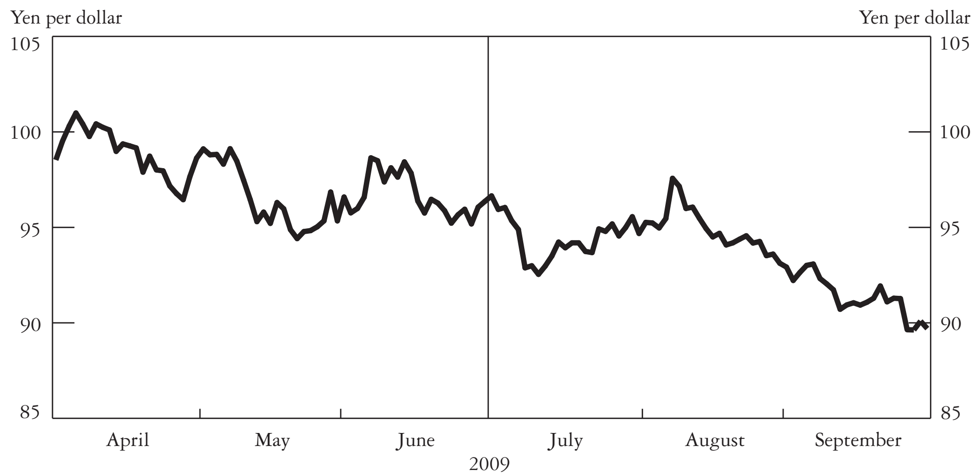


Source: Bloomberg L.P.

From early August through the end of the quarter, the Japanese yen notably outperformed other major currencies, appreciating by 5, 6, and 12 percent against the euro, U.S. dollar, and British pound, respectively. The yen's broad appreciation was attributed to a variety of factors. Many noted an increase in repatriation flows and hedging by Japanese exporters as the quarter drew to a close as a factor supporting the yen. Additionally, the yen reportedly benefited from the passage of the lower house elections on August 30, as it provided greater clarity on the near-term outlook for

Japanese economic policy. Finally, positive sentiment toward the yen also increased as institutional investors revised upward their forecasts for global trade and broader Asian economic activity. The yen ended the quarter around the ¥89.70 level against the dollar.

Chart 7
U.S. DOLLAR–YEN EXCHANGE RATE



Source: Bloomberg L.P.

LIQUIDITY CONDITIONS IN DOLLAR FUNDING CONTINUE TO IMPROVE

At the end of the third quarter, the outstanding amount of the swap lines between the Federal Reserve and other central banks totaled $57.1 billion, noticeably less than the $116.7 billion reported at the end of the second quarter. The decline in outstanding balances reflected the further improvement in dollar funding markets during the quarter. In particular, spreads between the U.S. dollar London Interbank Offered Rate and overnight index swaps, at the three-month tenor, declined by approximately 26 basis points, to 12 basis points. Market participants continued to attribute the further improvement in dollar funding markets in part to established liquidity and backstop facilities of the Federal Reserve and other central banks. Many also continued to note the improved performance of the financial sector as supporting these developments.

TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE HOLDINGS

The U.S. monetary authorities did not undertake any intervention operations during the quarter. The current value of the U.S. Treasury's Exchange Stabilization Fund foreign-currency-denominated assets totaled $25.9 billion, comprised of euro and yen holdings. The Federal Reserve System Open Market Account holdings of foreign-currency-denominated assets totaled $83.1 billion—consisting of $25.9 billion of foreign exchange reserve portfolio investments and $57.1 billion carrying value of outstanding swaps with authorized foreign central banks.

Temporary Reciprocal Currency Arrangements (Dollar Liquidity Swap Lines)
To facilitate the functioning of financial markets and provide liquidity in U.S. dollars abroad, on December 12, 2007, the FOMC authorized temporary reciprocal currency arrangements with the ECB and the Swiss National Bank (SNB). Subsequently, the FOMC extended new swap lines to various central banks. As of October 29, 2008, the authorized swap line amounts were $30 billion for the Bank of Canada (BoC), the RBA, Sveriges Riksbank, Banco Central do Brasil, Banco de México, the Bank of Korea, and the Monetary Authority of Singapore; and $15 billion for Norges Bank, Danmarks Nationalbank, and the Reserve Bank of New Zealand (RBNZ). The ECB, SNB, BoE, and BoJ had unlimited swap line amounts.

As of June 25, all reciprocal currency arrangements were authorized through February 1, 2010. As of September 30, the ECB had $43.7 billion outstanding, the BoJ had $1.5 billion outstanding, the BoE had $13 million outstanding, Danmarks Nationalbank had $580 million outstanding, Sveriges Riksbank had $2.7 billion outstanding, Norges Bank had $1.0 billion outstanding, the Bank of Korea had $4.1 billion outstanding, and Banco de México had $3.2 billion outstanding. The SNB and RBA no longer had any swaps outstanding; the BoC, the RBNZ, Banco Central do Brasil, and the Monetary Authority of Singapore had not utilized their swap lines.

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. 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 September 30, direct holdings of foreign government securities totaled $24.4 billion, split evenly between the Federal Reserve and the Treasury. Foreign government securities held under repurchase agreements totaled $5.3 billion at the end of the quarter and were also split evenly between the two authorities.

Table 1

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

Millions of U.S. Dollars

	Carrying Value, June 30, 2009[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, September 30, 2009[a]
Federal Reserve System						
Open Market Account (SOMA)						
Euro	14,494	0	55	0	631[f]	15,180
Japanese yen	9,966	0	13	0	772[f]	10,752
Total	24,461	0	68	0	1,404	25,932

	Carrying Value, June 30, 2009[a]	Change in Swaps Outstanding	Change in Accrued Interest Receivable	Change in Exchange Translation Liability on Foreign Exchange Swaps	Carrying Value, September 30, 2009[a]
Reciprocal currency arrangements					
Euro	60,822	(16,237)	(27)	(1,161)[f,g]	43,398
Swiss franc	369	(369)	(0)	(1)[f,g]	0
Japanese yen	18,078	(16,393)	(29)	(83)[f,g]	1,573
British pound	2,780	(2,490)	(5)	(272)[f,g]	13
Danish krone	3,973	(3,350)	(0)	(42)[f,g]	581
Australian dollar	269	(240)	(1)	(28)[f,g]	0
Swedish krona	11,811	(8,800)	(9)	(106)[f,g]	2,896
Norwegian krone	5,317	(4,000)	(6)	(185)[f,g]	1,126
Korean won	10,077	(5,950)	(13)	186[f,g]	4,300
Mexican peso	3,227	0	0	24[f,g]	3,251
Total	116,723	(57,828)	(89)	(1,667)	57,138

	Carrying Value, June 30, 2009[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, September 30, 2009[a]
U.S. Treasury Exchange Stabilization Fund (ESF)						
Euro	14,470	0	55	0	680	15,155
Japanese yen	9,966	0	13	0	772	10,752
Total	24,437	0	68	0	1,403	25,907

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, swap drawings and repayments, and warehousing.

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

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

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

[f] Valuation adjustments on swap-related holdings do not affect profit and loss because the impact is offset by the unwinding of the forward contract at the repayment date.

[g] Figures represent the exchange translation liability on reciprocal currency arrangements.

Table 2

BREAKDOWN OF FOREIGN RESERVE ASSETS HELD

Carrying Value in Millions of U.S. Dollars, as of September 30, 2009

	U.S. Treasury Exchange Stabilization Fund (ESF)[a]	Federal Reserve System Open Market Account (SOMA)[a]
Euro-denominated assets:	15,155.3	15,180.3
Cash held on deposit at official institutions	7,517.9	7,542.8
Marketable securities held under repurchase agreements[b]	2,642.6	2,642.6
Marketable securities held outright	4,994.8	4,994.8
German government securities	2,163.6	2,163.6
French government securities	2,831.2	2,831.2
Yen-denominated assets:	10,752.0	10,752.0
Cash held on deposit at official institutions	3,538.5	3,538.5
Marketable securities held outright	7,213.5	7,213.5
Reciprocal currency arrangements:		
Euro-denominated assets:		43,398.2
Other assets[c]		43,398.2
Japanese-yen–denominated assets:		1,573.4
Other assets[c]		1,573.4
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:		12.6
Other assets[c]		12.6
Danish-krone–denominated assets:		580.5
Other assets[c]		580.5
Australian-dollar–denominated assets:		0.0
Other assets[c]		0.0
Swedish-krona–denominated assets:		2,895.8
Other assets[c]		2,895.8
Norwegian-krone–denominated assets:		1,126.0
Other assets[c]		1,126.0
Korean-won–denominated assets:		4,300.3
Other assets[c]		4,300.3
Mexican-peso–denominated assets:		3,251.3
Other assets[c]		3,251.3

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

[a] As of September 30, the euro SOMA and ESF portfolios had a Macaulay duration of 9.5 and 9.6 months, respectively; the yen SOMA and ESF portfolios both had Macaulay durations of 10.8 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, the Bank of England, Danmarks Nationalbank, the Reserve Bank of Australia, Sveriges Riksbank, Norges Bank, the Reserve Bank of New Zealand, the Bank of Korea, Banco Central do Brasil, Banco de México, and the Monetary Authority of Singapore.

Table 3

RECIPROCAL CURRENCY ARRANGEMENTS

Millions of U.S. Dollars

Institution	Amount of Facility	Outstanding as of September 30, 2009
	Federal Reserve System Open Market Account (SOMA)	
Bank of Canada	2,000	0
Banco de México	3,000	0
European Central Bank[a]	Unlimited	43,662
Swiss National Bank[a]	Unlimited	0
Bank of Japan[a]	Unlimited	1,530
Bank of Canada[a]	30,000	0
Bank of England[a]	Unlimited	13
Danmarks Nationalbank[a]	15,000	580
Reserve Bank of Australia[a]	30,000	0
Sveriges Riksbank[a]	30,000	2,700
Norges Bank[a]	15,000	1,000
Reserve Bank of New Zealand[a]	15,000	0
Bank of Korea[a]	30,000	4,050
Banco Central do Brasil[a]	30,000	0
Banco de México[a]	30,000	3,221
Monetary Authority of Singapore[a]	30,000	0
	Unlimited	56,756
	U.S. Treasury Exchange Stabilization Fund (ESF)	
Banco de México	3,000	0
Total	3,000	0

[a] Temporary swap arrangement.