TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

July – September 2011

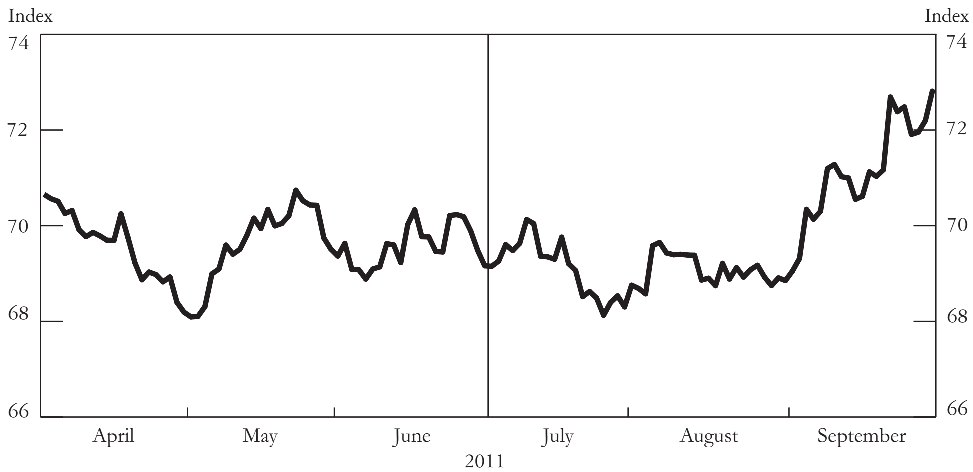
During the third quarter, the U.S. dollar's nominal trade-weighted exchange value appreciated 5.3 percent, as measured by the Federal Reserve Board's major currencies index. The dollar appreciated 8.3 percent against the euro, but depreciated 4.3 percent against the Japanese yen. The U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.

The trade-weighted dollar was little changed during the first two months of the quarter, but it appreciated significantly in early September, as concerns over the global growth outlook and sovereign debt challenges facing some euro-area countries intensified. The dollar's appreciation occurred against a backdrop of declining equity and commodity prices and elevated volatility across many asset classes, which prompted investors to seek the safety and liquidity of dollar-denominated assets.

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 2011. Roosevelt Bowman was primarily responsible for preparation of the report.

Chart 1

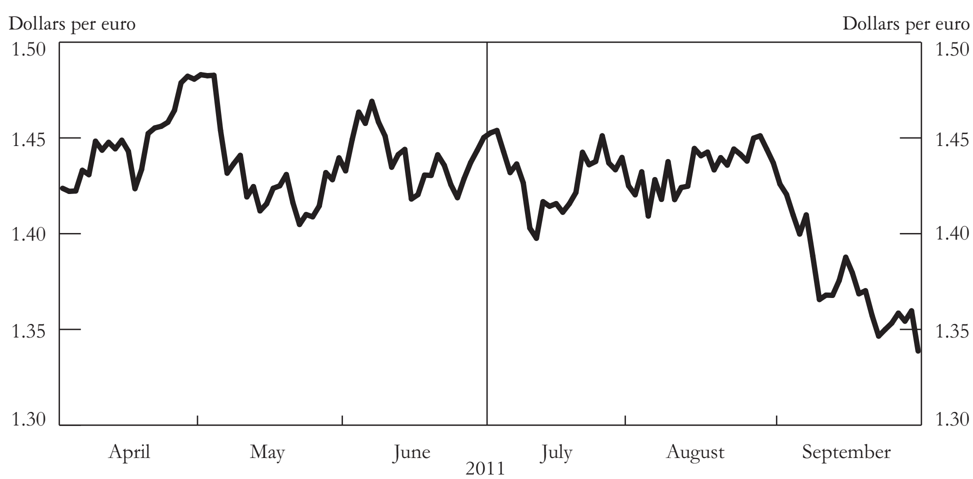
TRADE-WEIGHTED U.S. DOLLAR



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

Chart 2

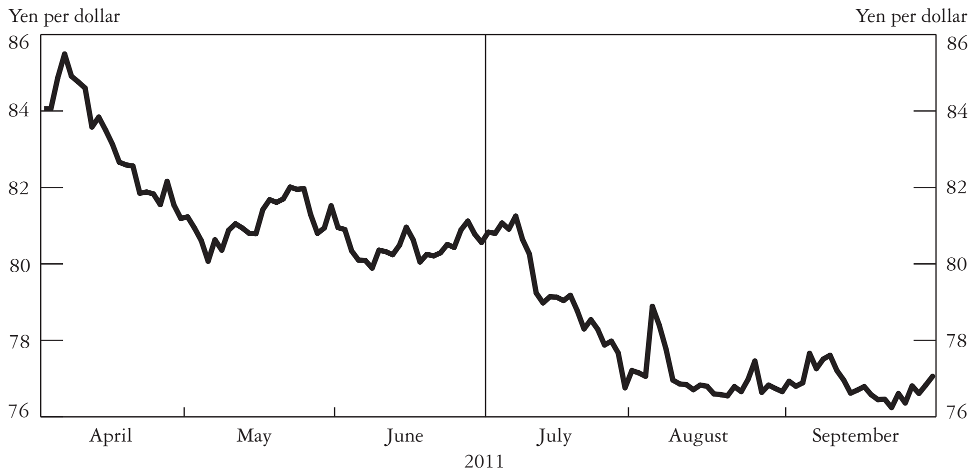
EURO–U.S. DOLLAR EXCHANGE RATE



Source: Bloomberg L.P.

Chart 3

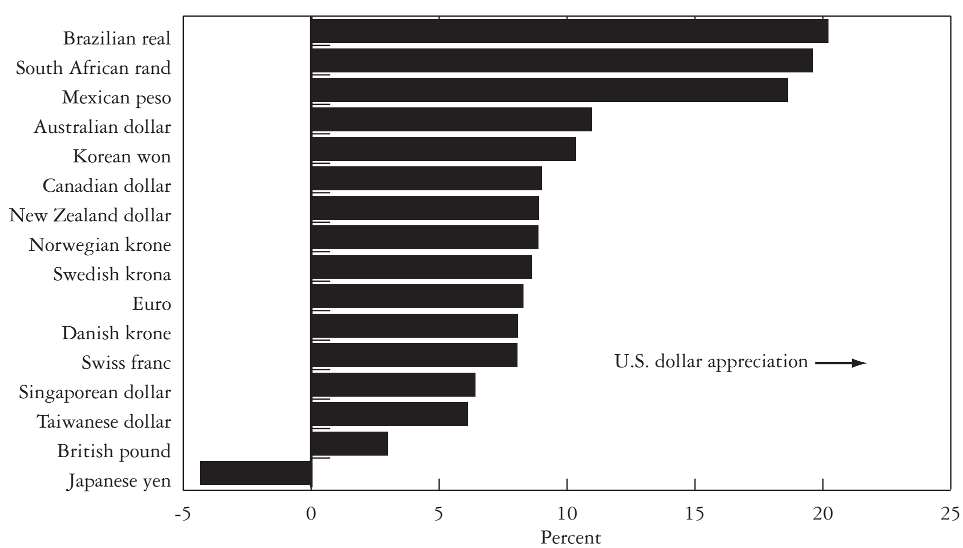
U.S. DOLLAR–YEN EXCHANGE RATE



Source: Bloomberg L.P.

Chart 4

U.S. DOLLAR AGAINST SELECTED CURRENCIES DURING THIRD QUARTER



Source: Bloomberg L.P.

DOLLAR APPRECIATES ON CONCERNS OVER THE GLOBAL GROWTH OUTLOOK

The U.S. dollar appreciated significantly against most major currencies during the third quarter, as the deterioration in investor sentiment toward the global growth outlook accelerated near the end of the quarter. These concerns were driven primarily by signs of slowing economic activity, as well as increasing uncertainty about fiscal issues in the euro area.

During the quarter, both domestic and global economic data exhibited signs of slowing growth. In the United States, market participants noted deteriorating labor market conditions exhibited by the below-consensus June and August nonfarm payroll releases and the persistently high unemployment rate. Additionally, U.S. GDP data released in mid-July showed that second-quarter growth was significantly below expectations and indicated a notable downward revision to the first-quarter growth rate, suggesting that the underlying trend in economic activity was not as robust as investors had previously expected. Similarly, growth in European and Asian economies appeared to slow during the quarter. Notably, the euro area's July industrial production figures and German and French second-quarter GDP data were below consensus expectations. In Asia, South Korea's July and August industrial production figures were also below consensus expectations.

Both the U.S. dollar and Japanese yen were supported by these developments, as investors sought to repatriate capital and reduce exposure to currencies particularly sensitive to commodities and trade. During the quarter, the dollar appreciated between 8 and 11 percent against commodity-sensitive G-10 (Group of Ten) currencies such as the Australian dollar, New Zealand dollar, and Canadian dollar, and more than 20 percent against some emerging-market currencies, such as the Brazilian real, Mexican peso, and South African rand. These movements were consistent with reduced investor risk appetite observed across asset classes. During the third quarter, the S&P 500 and Euro Stoxx indexes declined 14.3 and 23.1 percent, respectively, while the Nikkei decreased 11.4 percent. In commodity markets, the S&P GSCI Spot Index declined 11.6 percent over the same period, including a 17 percent decline in spot crude oil prices.

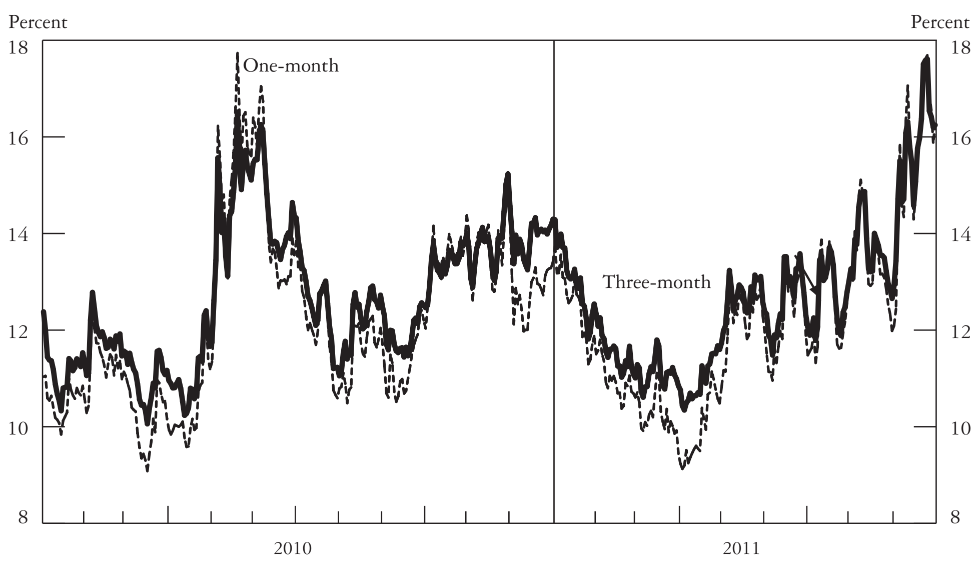
Events related to the U.S. fiscal outlook also contributed to elevated market uncertainty during the quarter, although the net effect on the dollar was inconclusive. Before the passage of the Congressional deficit reduction plan and the increase in the debt ceiling at the end of July, market participants expressed unease about the possible adjustments that would be needed if a debt ceiling agreement could not be reached. Broad market sentiment worsened when Standard and Poor's downgraded the U.S. sovereign debt rating to AA+ on August 5. The S&P 500 and S&P GSCI Spot indexes declined 6.7 and 3.9 percent, respectively, on August 8, the first trading session following the downgrade, while the U.S. dollar's nominal trade-weighted exchange value decreased 0.3 percent.

INTENSIFYING CONCERNS ABOUT THE FISCAL CRISIS IN EURO-AREA PERIPHERY COUNTRIES AND THE EUROPEAN BANKING SECTOR CONTRIBUTE TO THE EURO'S DEPRECIATION AGAINST THE DOLLAR

During the quarter, the dollar appreciated 8.3 percent against the euro, with much of the price action occurring in September. One-month option-implied volatility in the euro–dollar currency pair also rose to its highest level since May 2010. In addition to softening euro-area economic data, much of the euro's depreciation during the quarter was attributed to persistent concerns about the fiscal situation of euro-area periphery countries and the potential capital needs of the euro-area banking sector. These concerns prompted the sovereign debt spreads of several euro-area periphery countries to widen, equity indexes to decline, and foreign exchange option-implied volatility to rise. Specifically, ten-year spreads of Greek and Portuguese sovereign debt to German equivalents widened by 748 basis points and 117 basis points, respectively. Ten-year spreads of Italian and Spanish debt to German equivalents also widened by 179 and 83 basis points, respectively.

Chart 5

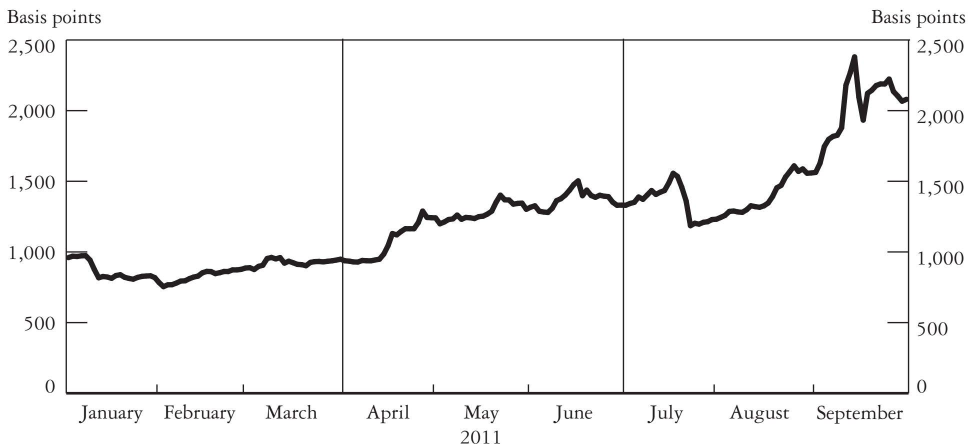
ONE-MONTH AND THREE-MONTH EURO–U.S. DOLLAR AT-THE-MONEY OPTION-IMPLIED VOLATILITY



Source: Bloomberg L.P.

Chart 6

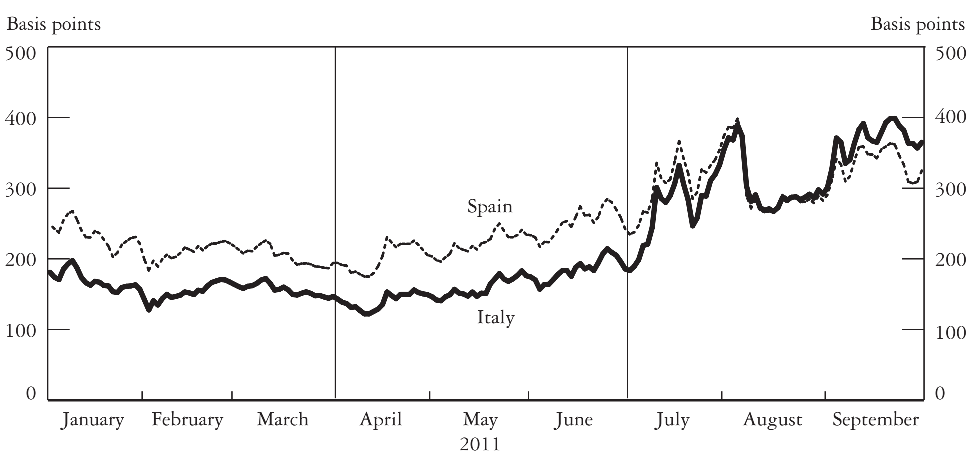
TEN-YEAR SPREADS OF GREEK SOVEREIGN DEBT TO GERMAN EQUIVALENTS



Source: Bloomberg L.P.

Chart 7

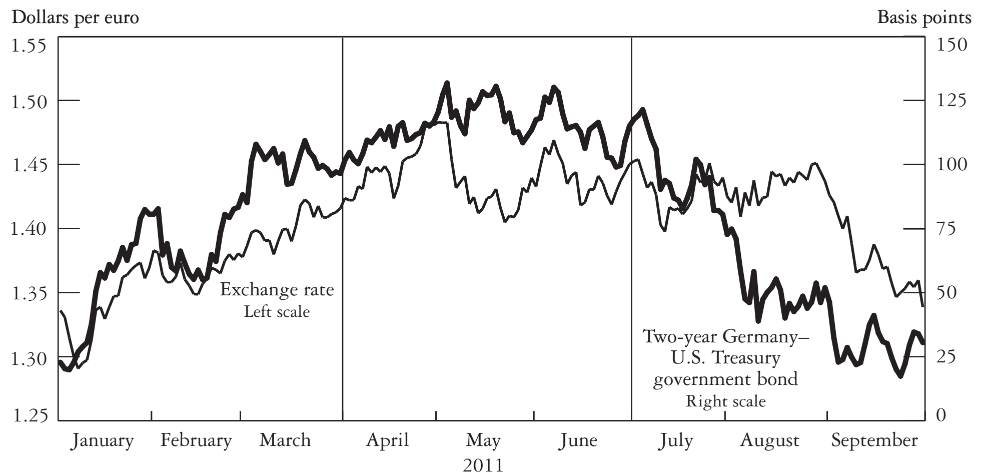
TEN-YEAR SPREADS OF ITALIAN AND SPANISH SOVEREIGN DEBT
TO GERMAN EQUIVALENTS



Source: Bloomberg L.P.

Chart 8

EURO–U.S. DOLLAR EXCHANGE RATE AND TWO-YEAR INTEREST RATE DIFFERENTIALS



Source: Bloomberg L.P.

Additionally, expectations that the European Central Bank (ECB) would remove its policy accommodation were lowered during the quarter, following a 25-basis-point rise in the main refinancing rate in early July. Indeed, the spread of the two-year German schatz yield over the two-year U.S. Treasury yield narrowed 84 basis points during the quarter to a level of 31 basis points, close to the narrowest levels of the year.

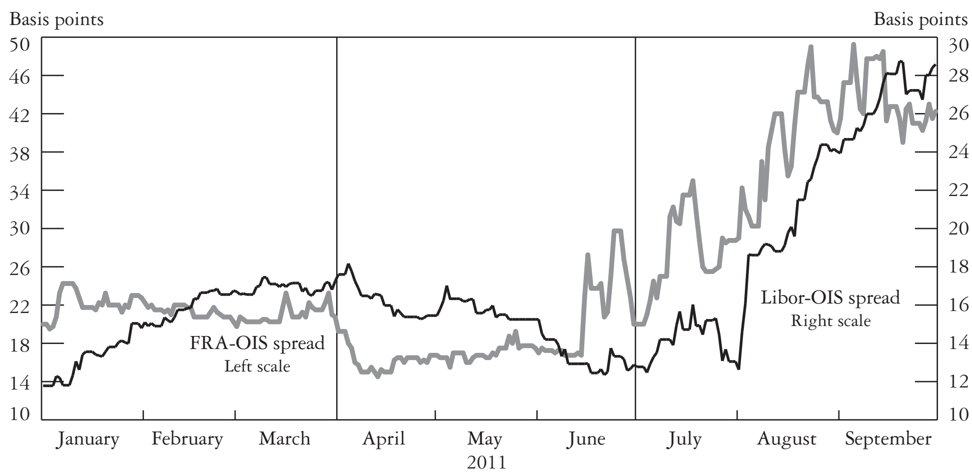
The asset price movements near the end of the quarter followed euro-area government and ECB developments that were positively received by market participants in the preceding months. On July 21, the heads of government of euro-area countries agreed to a range of policy measures that altered the program terms for countries currently under sovereign support arrangements and revised the structure of the European Financial Stability Facility to enhance its ability to support countries not aided by programs. On August 8, the ECB confirmed that it purchased Spanish and Italian sovereign debt for the first time, which supported a subsequent decline in Spanish and Italian yields.

However, in the following weeks, market participants expressed doubt regarding Greece's ability to implement the austerity measures required to secure additional tranches of aid. In regard to Italy, market participants also expressed disappointment with the Italian government's fiscal progress. More broadly, market observers expressed concerns about the fiscal adjustment prospects of some euro-area countries amid slowing euro-area and global economic data.

Given these concerns, investors also focused on banks' exposures to euro-area sovereign debt. The value of euro-area bank shares fell substantially during the quarter, with the Euro Stoxx Banks index declining 34.3 percent, a somewhat larger decline than experienced by the U.S. S&P financial sector index. During the quarter, funding pressures emerged for some European financial firms, as stresses in unsecured offshore U.S. dollar funding markets increased noticeably. These pressures resulted in a shortening in the tenors of available funding to European banks and in the widening of spreads on some interest rates that are often used to measure funding stress. For example, the spread between the three-month U.S. dollar Libor (London interbank offered rate) and three-month OIS (overnight indexed swap) rate widened by 16 basis points, while the spread between the three-month FRA (forward rate agreements) three months forward and the three-month OIS rate three months forward widened by 22 basis points. Both spreads reached levels last observed in July 2010. Although not to the same extent as the strains seen in offshore dollar funding, the euro-area fiscal crisis continued to weigh on investor sentiment and hamper liquidity conditions in euro funding markets, with national central banks reporting notable increases in Italian, Spanish, and French banks' use of ECB funding facilities since mid-July.

Chart 9

LIBOR-OIS AND FRA-OIS SPREADS



Source: Bloomberg L.P.

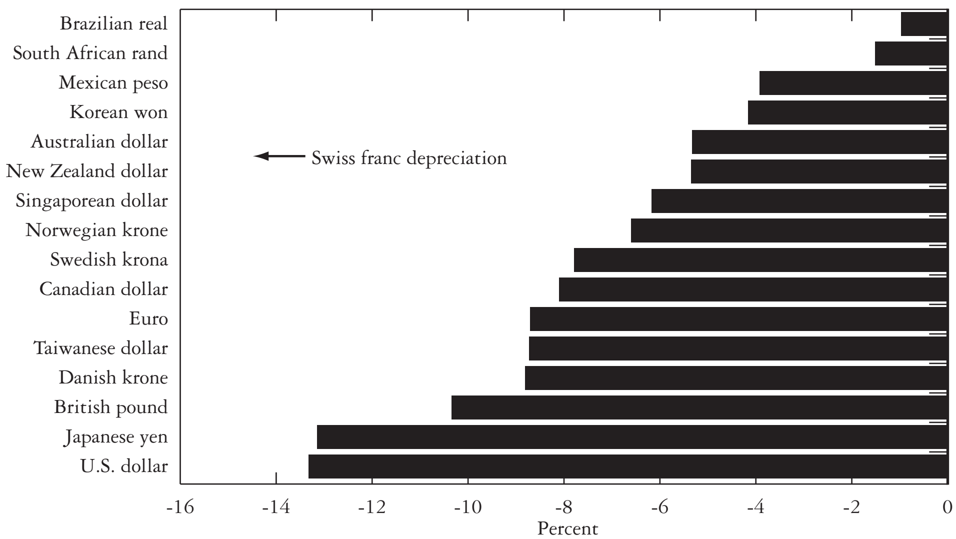
Notes: The chart shows the spreads between the three-month U.S. dollar Libor and the three-month overnight indexed swap rate (Libor-OIS) and the U.S. dollar three-month forward rate agreement three months forward and the three-month overnight indexed swap rate (FRA-OIS). Libor is the London interbank offered rate.

SAFE-HAVEN FLOWS INTO THE SWISS FRANC AND JAPANESE YEN PROMPT CENTRAL BANK INTERVENTION

The aforementioned deterioration of risk sentiment resulted in investor demand for traditional "safe-haven" currencies such as the Swiss franc and the Japanese yen, prompting Swiss and Japanese authorities to act to stem persistent currency appreciation. On August 4, Japan's Ministry of Finance directed the Bank of Japan (BoJ) to intervene unilaterally in currency markets to weaken the value of the Japanese yen by purchasing U.S. dollars. Japanese Finance Minister Yoshihiko Noda suggested that the recent yen strength had been "one sided" and threatened the country's economic recovery. The yen depreciated as much as 3.7 percent against the dollar on an intraday basis immediately following the announcement of the intervention, although the currency pair subsequently retraced and settled into the approximate ¥76 to ¥77 per dollar range for the remainder of the quarter.

Similarly, Swiss authorities enacted a series of measures to stem Swiss franc appreciation during the quarter. The Swiss National Bank (SNB) lowered its three-month Swiss franc Libor target range from 0 to 75 basis points to 0 to 25 basis points and increased sight deposits to CHF 200 billion by ceasing liquidity-draining repo operations, purchasing SNB bills, and transacting in the foreign exchange swap market. Subsequently, on September 6, the SNB announced a target floor value of 1.20 Swiss francs per euro and reportedly intervened in the foreign exchange market, stating that it was "prepared to buy foreign currency in unlimited quantities." The Swiss franc depreciated against the euro and dollar following the announcement, and finished the quarter at 1.21565 francs per euro. The depreciation of the franc and the prospect of further intervention by Japanese authorities lent additional support to the dollar, as investors sought the safety and liquidity of U.S. dollar-denominated securities.

Chart 10
SWISS FRANC AGAINST SELECTED CURRENCIES
FROM SEPTEMBER 5, 2011, TO SEPTEMBER 30, 2011



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 September 30, the value of the U.S. Treasury's Exchange Stabilization Fund foreign-currency-denominated assets totaled $26.37 billion, comprised of euro and yen holdings. The Federal Reserve System Open Market Account holdings of foreign-currency-denominated assets totaled $26.89 billion—consisting of $26.39 billion of foreign exchange reserve portfolio investments and $500 million of outstanding swaps with authorized foreign central banks.

Dollar Liquidity Swap Arrangements with Foreign Central Banks

On June 29, 2011, the Federal Reserve announced an extension of the existing dollar liquidity swap lines with the Bank of Canada (BoC), the Bank of England (BoE), the ECB, and the SNB through August 1, 2012.[1] On September 15, 2011, the BoE, the ECB, the BoJ and SNB—in coordination with the Federal Reserve—announced three-month U.S. dollar operations starting in

[1]The swap arrangement with the BoJ was extended at its policy meeting on July 12.

October that will be in effect through year-end. The BoE, the ECB, the BoJ, and the SNB have unlimited swap lines, while the BoC has a $30 billion swap line. As of September 30, the ECB had $500 million outstanding, and the BoC, BoE, BoJ, and SNB 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 $25.5 billion, split evenly between the Federal Reserve System Open Market Account and the U.S. Treasury Exchange Stabilization Fund. Foreign government securities held under repurchase agreements totaled $5.0 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

		Change in Balances by Source				
	Carrying Value, June 30, 2011[a]	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, 2011[a]
Federal Reserve System						
Open Market Account (SOMA)						
Euro	15,431	0	60	0	(1,144)	14,347
Japanese yen	11,502	0	8	0	537	12,047
Total	26,934	0	67	0	(606)	26,394

		Change in Balances by Source				
	Carrying Value, June 30, 2011[a]	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, 2011[a]
U.S. Treasury Exchange						
Stabilization Fund (ESF)						
Euro	15,406	0	60	0	(1,142)	14,324
Japanese yen	11,502	0	8	0	537	12,047
Total	26,909	0	67	0	(605)	26,371

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 September 30, 2011

	U.S. Treasury Exchange Stabilization Fund (ESF)[a]	Federal Reserve System Open Market Account (SOMA)[a]
Euro-denominated assets:	**14,324.0**	**14,347.1**
Cash held on deposit at official institutions	7,137.4	7,160.5
Marketable securities held under repurchase agreements[b]	2,505.4	2,505.4
Marketable securities held outright	4,681.3	4,681.3
German government securities	1,993.3	1,993.3
French government securities	2,688.0	2,688.0
Yen-denominated assets:	**12,047.4**	**12,047.3**
Cash held on deposit at official institutions	3,975.5	3,975.5
Marketable securities held outright	8,071.9	8,071.9
Reciprocal currency arrangements:		
Euro–denominated assets:		**500.0**
Other assets[c]		500.0
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 September 30, the euro SOMA and ESF portfolios both had Macaulay durations of 9.4 months; the yen SOMA and ESF portfolios both had Macaulay durations of 11.6 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 September 30, 2011
	Federal Reserve System Open Market Account (SOMA)	
Bank of Canada	2,000	0
Banco de México	3,000	0
European Central Bank[a]	Unlimited	500,000,000
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	500,000,000
	U.S. Treasury Exchange Stabilization Fund (ESF)	
Banco de México	3,000	0
Total	3,000	0

[a] Temporary swap arrangement.