TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

October–December 2009

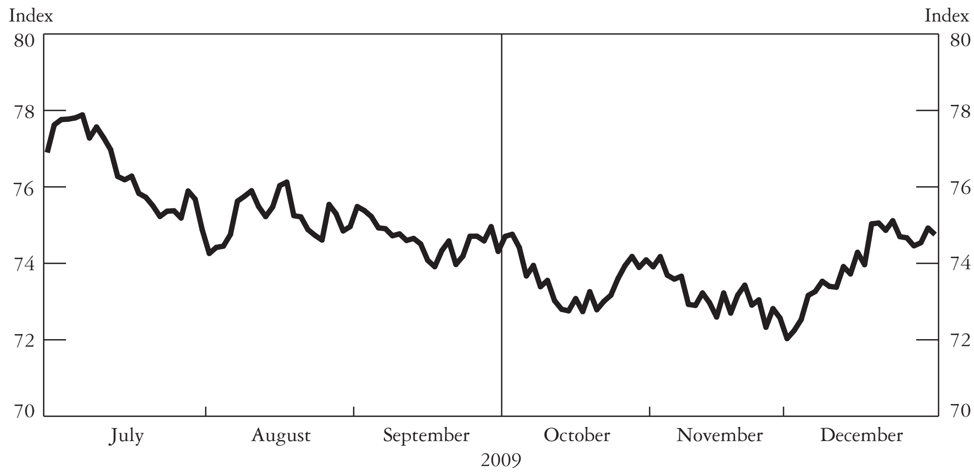
During the fourth quarter of 2009, the U.S. dollar's trade-weighted exchange value appreciated 0.6 percent, as measured by the Federal Reserve Board's major currencies index. The dollar appreciated 2.2 percent against the euro and 3.7 percent against the Japanese yen. The U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.

The U.S. dollar's performance could be characterized by two distinct periods in the quarter. Throughout October and November, the dollar depreciated broadly against most major and emerging-market currencies, as signs of improvement in global economic and financial conditions continued from the third quarter. However, in December, the dollar appreciated broadly against most major and emerging-market currencies, as better-than-expected domestic economic data shifted the outlook for relative growth differentials in favor of the United States.

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 October through December 2009. Jason Miu was primarily responsible for preparation of the report.

Chart 1

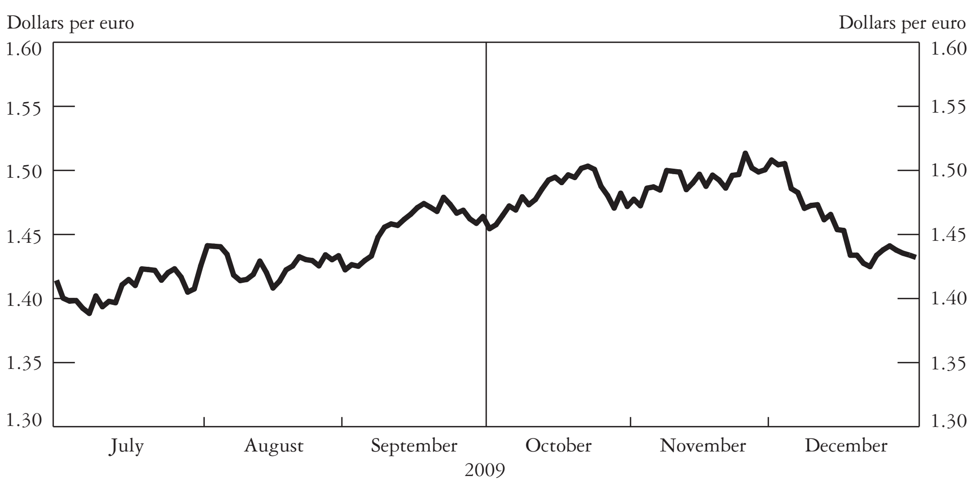
TRADE-WEIGHTED U.S. DOLLAR



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

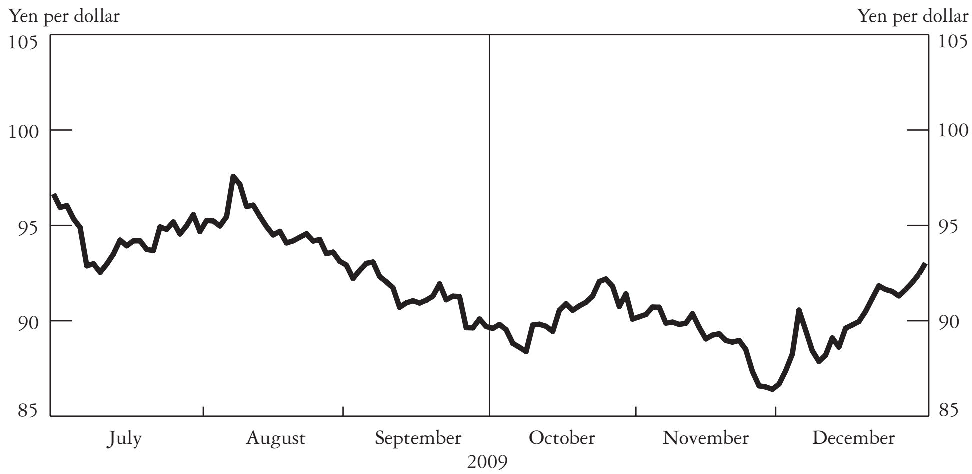
Chart 2

EURO–U.S. DOLLAR EXCHANGE RATE



Source: Bloomberg L.P.

Chart 3
U.S. DOLLAR–YEN EXCHANGE RATE



Source: Bloomberg L.P.

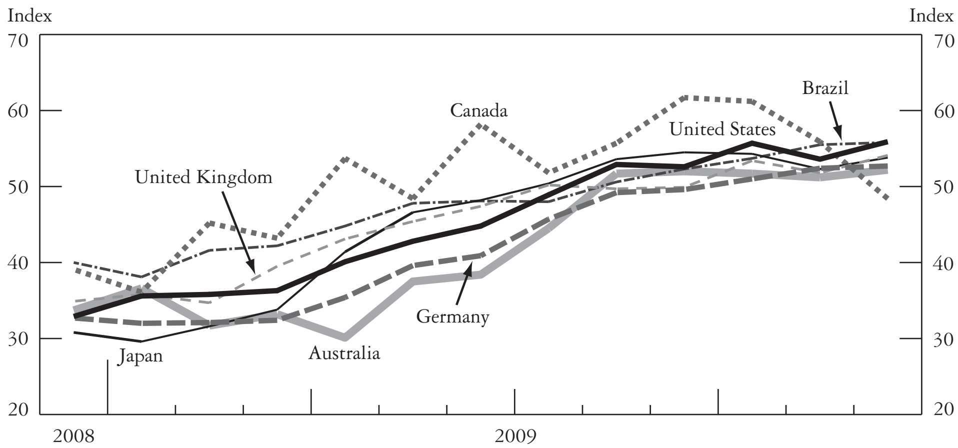
DOLLAR CONTINUES TO DEPRECIATE IN OCTOBER AND NOVEMBER

During October and November, international economic indicators continued to bolster investors' expectations about the prospects for global growth. In addition, global capital flows reflected a continued reversal of the safe-haven flows into dollar-denominated assets observed at the height of the credit crisis, although perhaps to a lesser extent than what was seen in previous quarters. Together, these factors prompted the dollar to depreciate against most major and emerging-market currencies in the first two months of the quarter. In fact, on December 1 the Federal Reserve's trade-weighted dollar index declined to its lowest level in more than a year.

Data on global manufacturing and trade, as well as confidence surveys, were among the factors supporting investors' improving expectations for economic recovery. In the United States, some market participants pointed to better-than-expected retail sales and home sales data as bolstering the improved outlook for growth. In foreign markets, economic data in countries more closely linked to the global trade and commodity cycle, such as Australia, Brazil, Canada, China, India, New Zealand, and South Korea, continued to show signs of an upturn. For example, stronger-than-expected exports, industrial production, and domestic consumption in China and South Korea supported investor perceptions of a revitalization of the global economy. Additionally, improving domestic economic data and strength in Australia's and New Zealand's regional trade partners in Asia bolstered expectations for the two countries. Reflecting these developments, consensus growth forecasts for 2010 were revised upward across developed as well as emerging economies.

Chart 4

PURCHASING MANAGERS INDEX: SELECT COUNTRIES

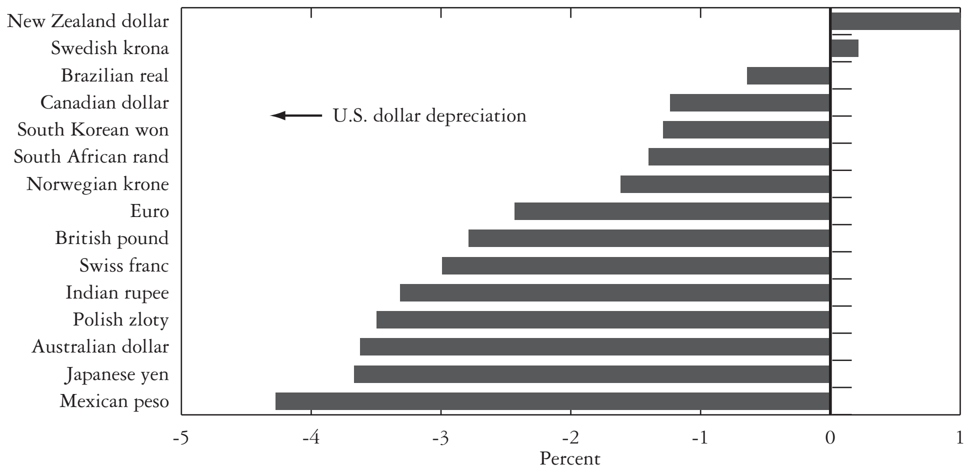


Source: Bloomberg L.P.

These developments were also reflected in bilateral exchange rate movements, as currencies expected to benefit from an upturn in the global economy appreciated against the U.S. dollar. The Australian dollar and the Mexican peso appreciated 3.8 and 4.5 percent, respectively, against the U.S. dollar during the period, while the Brazilian real, Canadian dollar, and South African rand also continued to appreciate. The shift in perceived growth prospects was also reflected by movements in nominal interest rate differentials, which widened in favor of most of these currencies against the U.S. dollar. Narrowing interest rate differentials also supported the Japanese yen's 3.8 percent appreciation against the dollar over this period, although a decline in investor risk appetite at the end of November contributed notably to the yen's gains.

Chart 5

U.S. DOLLAR AGAINST SELECTED CURRENCIES DURING OCTOBER AND NOVEMBER 2009



Source: Bloomberg L.P.

Price action in major asset classes sensitive to the global growth outlook also continued to perform well in October and November. During this time, commodity markets notably outperformed, with crude oil rising 9.4 percent. In addition, most major U.S. and international equity indexes appreciated modestly, while five-year investment-grade credit derivative indexes in the United States and Europe narrowed. Investor appetite for corporate credit products was also evident in the narrowing of spreads on benchmark cash bond indexes, as asset managers continued to allocate funds to the sector.

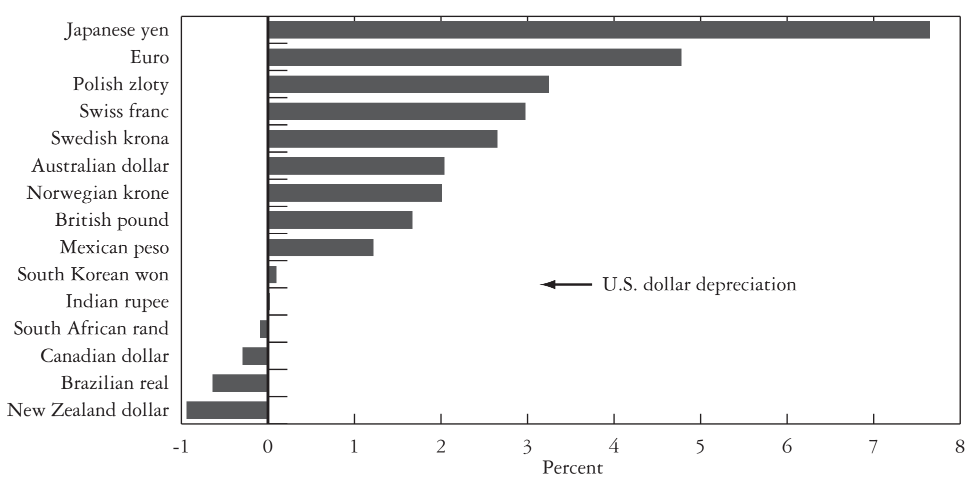
In the early part of the quarter, market participants continued to discuss the extent to which some emerging-market central banks' rebalancing activity contributed to the depreciation in the U.S. dollar. Dealers reported some ongoing interest among many reserve managers of emerging-market central banks to sell the U.S. dollar against other major currencies, particularly the euro and pound. This activity was generally interpreted as routine reserve rebalancing, as the reserve managers 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. Nevertheless, some market participants suggested that reports of interest by emerging-market central banks in selling the dollar against other major currencies weighed on broader investor sentiment toward the dollar.

DOLLAR APPRECIATES AS RELATIVE GROWTH PROSPECTS ARE REAPPRAISED IN DECEMBER

In December, the Federal Reserve's trade-weighted dollar index appreciated 3.0 percent, as investors became more optimistic about U.S. growth prospects. Further, market participants increased their focus on sovereign risks abroad, in particular within the euro area, and noted a dampened outlook for growth in Japan. The cumulative economic data during the last month of the quarter contributed to the perception that perhaps the U.S. outlook was relatively more resilient than previously expected. As such, the dynamics of the dollar price action appeared to shift in December, becoming even more driven by investor assessments of relative growth prospects and nominal interest rate differentials. This dynamic contrasted with that earlier in the quarter when currency markets were led more by general improvements in investor risk appetite, as reflected by rising equity and credit markets globally.

Chart 6

U.S. DOLLAR AGAINST SELECTED CURRENCIES DURING DECEMBER 2009



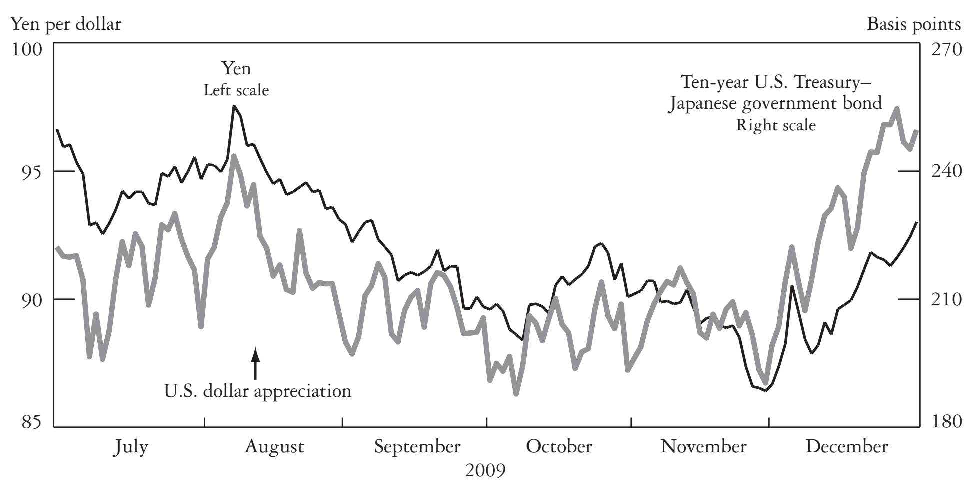
Source: Bloomberg L.P.

Better-than-expected data, including employment, retail sales, and consumer confidence, strengthened the outlook for the United States relative to other economies in December. Some market participants pointed to the November nonfarm payroll report as providing the strongest evidence to date that the pace of deterioration had slowed substantially and buoyed hope that positive employment growth could occur sooner than previously expected. At the same time, economic data in other major economies were perceived to be more mixed. For example, business surveys and consumer sentiment in the euro area showed a slower pace of improvement. In Japan, sentiment was weighed on by expectations that the economy could receive less support from inventory rebuilding and fiscal stimulus, while third-quarter GDP was lower than expected, and inflation readings remained negative. Economic data in other Asian economies remained more robust. For example, China showed a strong rebound in trade, while lending, industrial activity, and consumer demand also exceeded expectations.

The improvement in the U.S. outlook relative to other major economies was evidenced in the shift in interest rate differentials of benchmark sovereign debt. Yields on both two- and ten-year U.S. Treasury securities rose relative to similar tenor benchmark debt of Germany and Japan. During December, the U.S. dollar appreciated 4.7 percent and 7.6 percent, respectively, against the euro and Japanese yen. Notwithstanding the general improvement in sentiment, investors expressed ongoing uncertainty over the sustainability and durability of the U.S. and global outlooks going forward.

Chart 7

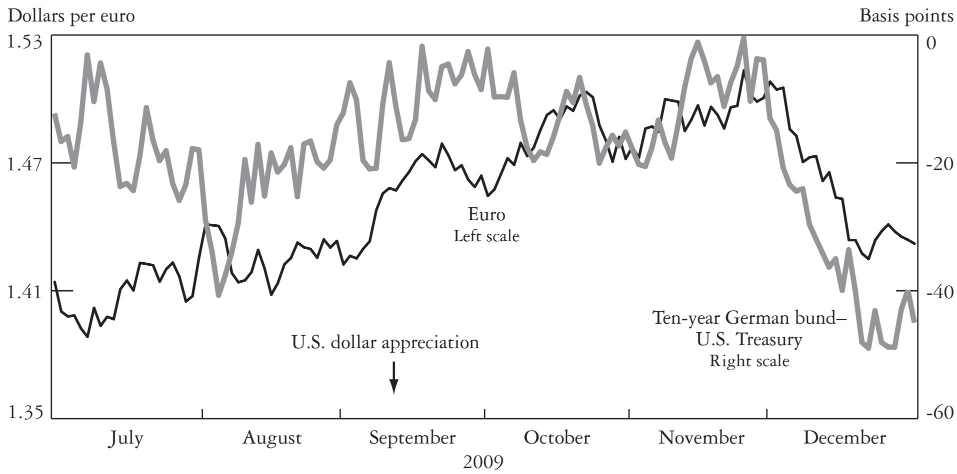
U.S. DOLLAR–YEN EXCHANGE RATE AND TEN-YEAR INTEREST RATE DIFFERENTIALS



Source: Bloomberg L.P.

Chart 8

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



Source: Bloomberg L.P.

A renewed focus on the outlook for sovereign credit risk, primarily in the periphery of Europe—and, to a lesser extent, perceived strains in the banking sector—weighed on the outlook for the euro area and the United Kingdom. Market participants discussed the degree to which fiscal pressures could prompt a consolidation of fiscal spending, which could create further headwinds as the economy was showing signs of improvement. The fiscal outlook for Greece garnered the most attention, especially against the backdrop of significant upward revisions to its budget deficit. Greece's deteriorating fiscal position prompted the credit rating agencies to downgrade the country's ratings by one notch during the quarter while keeping the ratings on a negative outlook. The rating agencies highlighted the country's unfavorable competitive position within the euro area, large external deficit, and "weak credibility" of its fiscal institutions and policy framework as reasons for the downgrade. A contraction in Greece's third-quarter GDP further underscored concerns about the fiscal outlook.

Fiscal pressures were also evident in other euro-area countries. Ratings on Portugal and Spain were put on negative outlook by Standard and Poor's, owing to rising fiscal deficits and sizable macroeconomic imbalances, and Ireland was downgraded earlier in the quarter by Fitch Ratings. Although there appeared to be no direct connection, fiscal concerns were exacerbated by the lingering discussion of Dubai's "standstill" on the debt of government-related entity Dubai World and a real estate subsidiary in late November. This announcement tested market assumptions about the implicit support of these and other government-related entities and was followed by a wave of downgrades of more than a dozen Dubai-related entities. Uncertainty over the nature of the standstill and overseas exposures also put pressure on foreign banking sector shares, in particular in the United Kingdom. Even though the exposures were largely manageable, this event and the nationalization of an Austrian bank again directed attention to western European banks' exposure to emerging markets.

The shift in sentiment toward the euro area relative to the United States was evident in investor positioning, as dealer reports and International Money Market noncommercial positioning data suggested a fairly sharp unwind of investors' long euro positions during the quarter from the largest long position in nearly two years. Moreover, options markets moved sharply to reflect increasing demand for protection against near- and long-term dollar appreciation against the euro.

During the quarter, market participants continued to debate the outlook for monetary policy, and specifically the timeframe over which central banks would unwind the extraordinary stimulus employed through the recent financial crisis. The Federal Reserve's Federal Open Market Committee (FOMC) kept the target for the federal funds rate at the current zero to 0.25 percent range and reiterated that economic conditions were "likely to warrant exceptionally low levels of the federal funds rate for an extended period." In addition, at its November meeting, the FOMC announced that the Federal Reserve would purchase less agency debt than the previously announced maximum due to the limited availability of the securities. In December, the FOMC announced that it, along with the Board of Governors of the Federal Reserve System, anticipated that most of the Federal Reserve's special liquidity facilities would expire on February 1, 2010. Despite no significant change in market expectations during the period, investors continued to discuss the sequence and timing of the Federal Reserve's exit from accommodative policies and debated the outlook for the agency mortgage-backed securities program, which is scheduled to end by the close of first-quarter 2010.

The European Central Bank (ECB) and Sveriges Riksbank also left their policy rates unchanged at 1.0 percent and 0.25 percent, respectively, while announcing a number of changes aimed at normalizing their open market operations in 2010. The improvement in global growth prospects prompted other central banks to begin tightening their monetary policy stance. The Reserve Bank of Australia (RBA) and Norges Bank both raised rates at their policy meetings during the quarter. The RBA raised its policy target by a cumulative 75 basis points and cited the "resumed growth" in the global economy, particularly in Asia, where "recovery has been much quicker to date," as reasons for the removal of policy accommodation. Norges Bank noted similar improvements both domestically and abroad in its decisions while also highlighting reduced uncertainty over the economic outlook.

In Japan, further measures by the central bank to ease monetary conditions at an unscheduled December policy meeting reinforced expectations that rates were likely to remain low and contributed to the depreciation of the yen that month. At this policy meeting, the Bank of Japan (BoJ) introduced a three-month liquidity facility to provide funding of up to ¥10 trillion at the policy rate, and later clarified further its understanding of medium- to long-term price stability. In the United Kingdom, the Bank of England (BoE) expanded the size of its Asset Purchase Facility by £25 billion, to £200 billion. Analysts largely interpreted this action as a tapering of the purchase program to avoid asset market volatility, although debate continued on the likelihood of further expansion of the program.

LIQUIDITY CONDITIONS IN DOLLAR FUNDING CONTINUE TO IMPROVE AHEAD OF YEAR-END

Liquidity conditions in dollar funding markets continued to improve during the fourth quarter. Spreads between the U.S. dollar Libor (London interbank offered rate) and overnight index swaps at the three-month tenor reached approximately 9 basis points at the end of the quarter, a 3 basis point decline over the period. Despite the continued improvement in funding conditions, market participants reported some typical year-end-related paring back of activity, as the tenor of money market activity contracted modestly and the level of activity declined. Nevertheless, year-end stresses in the money markets were significantly less pronounced than they were last year and more in line with previous years. Consistent with the improvement in funding markets, the use of the Federal Reserve's swap lines with other central banks declined $46.5 billion during the fourth quarter to a total outstanding amount of $10.3 billion at year-end. In December, the Federal Reserve announced that it will be working with its central bank counterparties to end its temporary liquidity swap arrangements by February 1, 2010.

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 foreign-currency-denominated assets of the U.S. Treasury's Exchange Stabilization Fund totaled $25.2 billion, comprised of euro and yen holdings. The Federal Reserve System Open Market Account holdings of foreign-currency-denominated assets totaled $35.5 billion—consisting of $25.3 billion of foreign exchange reserve portfolio investments and $10.3 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 December 16, 2009, all reciprocal currency arrangements have been authorized through February 1, 2010. As of December 31, the ECB had $6.5 billion outstanding, the BoJ had $0.5 billion outstanding, and Banco de México had $3.2 billion outstanding. The SNB, the BoE, the RBA, Sveriges Riksbank, the Bank of Korea, Norges Bank, and Danmarks Nationalbank 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 December 31, direct holdings of foreign government securities totaled $23.8 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 $5.2 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, September 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, December 31, 2009[a]
Federal Reserve System						
Open Market Account (SOMA)						
Euro	15,180	0	53	0	(311)[f]	14,923
Japanese yen	10,752	0	13	0	(415)[f]	10,349
Total	25,932	0	66	0	(726)	25,272

	Carrying Value, September 30, 2009[a]	Change in Swaps Outstanding	Change in Accrued Interest Receivable	Change in Exchange Translation Liability on Foreign Exchange Swaps	Carrying Value, December 31, 2009[a]
Reciprocal currency arrangements					
Euro	43,398	(37,156)	(14)	285[f,g]	6,514
Swiss franc	0	0	0	0[f,g]	0
Japanese yen	1,573	(985)	(1)	(68)[f,g]	519
British pound	13	(13)	0	0[f,g]	0
Danish krone	581	(580)	0	0[f,g]	0
Australian dollar	0	0	0	0[f,g]	0
Swedish krona	2,896	(2,700)	(3)	(193)[f,g]	0
Norwegian krone	1,126	(1,000)	(2)	(124)[f,g]	0
South Korean won	4,300	(4,050)	(5)	(245)[f,g]	0
Mexican peso	3,251	0	0	(20)[f,g]	3,231
Total	57,138	(46,484)	(25)	(366)	10,264

	Carrying Value, September 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, December 31, 2009[a]
U.S. Treasury Exchange						
Stabilization Fund (ESF)						
Euro	15,155	0	53	0	(310)	14,898
Japanese yen	10,752	0	13	0	(415)	10,350
Total	25,907	0	66	0	(725)	25,248

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 December 31, 2009

	U.S. Treasury Exchange Stabilization Fund (ESF)[a]	Federal Reserve System Open Market Account (SOMA)[a]
Euro-denominated assets:	14,898.2	14,922.6
Cash held on deposit at official institutions	7,371.4	7,395.9
Marketable securities held under repurchase agreements[b]	2,590.8	2,590.8
Marketable securities held outright	4,936.0	4,936.0
German government securities	2,081.9	2,081.9
French government securities	2,854.0	2,854.0
Yen-denominated assets:	10,349.5	10,349.5
Cash held on deposit at official institutions	3,403.7	3,403.6
Marketable securities held outright	6,945.8	6,945.8
Reciprocal currency arrangements:		
Euro-denominated assets:		6,513.5
Other assets[c]		6,513.5
Japanese-yen–denominated assets:		519.1
Other assets[c]		519.1
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
Danish-krone–denominated assets:		0.0
Other assets[c]		0.0
Australian-dollar–denominated assets:		0.0
Other assets[c]		0.0
Swedish-krona–denominated assets:		0.0
Other assets[c]		0.0
Norwegian-krone–denominated assets:		0.0
Other assets[c]		0.0
South-Korean-won–denominated assets:		0.0
Other assets[c]		0.0
Mexican-peso–denominated assets:		3,230.9
Other assets[c]		3,230.9

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

[a] As of December 31, the euro SOMA and ESF portfolios both had Macaulay durations of 9.5; the yen SOMA and ESF portfolios both had Macaulay durations of 11.2 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 December 31, 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	6,506
Swiss National Bank[a]	Unlimited	0
Bank of Japan[a]	Unlimited	545
Bank of Canada[a]	30,000	0
Bank of England[a]	Unlimited	0
Danmarks Nationalbank[a]	15,000	0
Reserve Bank of Australia[a]	30,000	0
Sveriges Riksbank[a]	30,000	0
Norges Bank[a]	15,000	0
Reserve Bank of New Zealand[a]	15,000	0
Bank of Korea[a]	30,000	0
Banco Central do Brasil[a]	30,000	0
Banco de México[a]	30,000	3,221
Monetary Authority of Singapore[a]	30,000	0
Total	Unlimited	10,272
	U.S. Treasury Exchange Stabilization Fund (ESF)	
Banco de México	3,000	0
Total	3,000	0

[a] Temporary swap arrangement.