TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

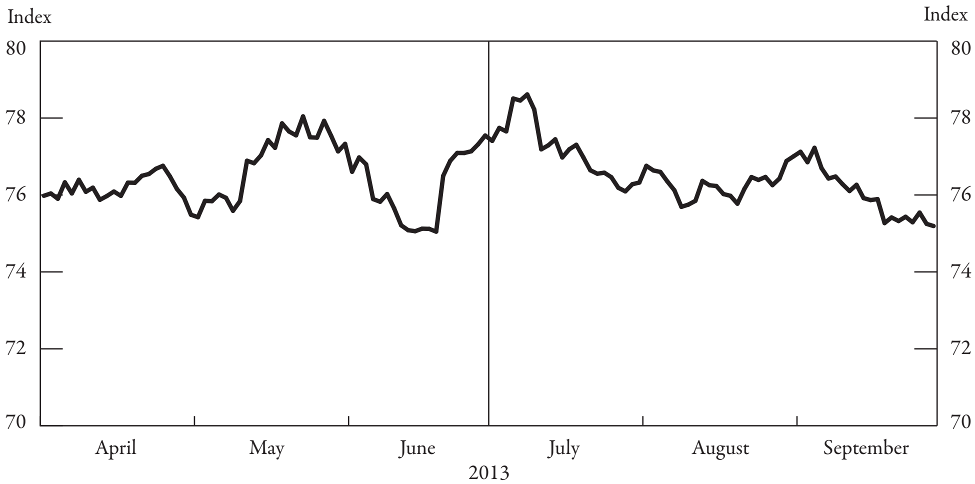
July–September 2013

During the third quarter, the U.S. dollar's nominal trade-weighted exchange value decreased 3.0 percent as measured by the Federal Reserve Board's major currencies index. The dollar depreciated against most major currencies, on net, as relative softness in U.S. economic data and the continuation of asset purchases by the Federal Reserve prompted investors to pare back dollar exposures established in the second quarter. The dollar depreciated 3.8 percent and 0.9 percent against the euro and Japanese yen, respectively, though its performance against emerging market and cyclically sensitive currencies varied widely. The U.S. monetary authorities did not intervene in the foreign exchange markets during 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 July through September 2013. Evan Kereiakes was primarily responsible for preparation of the report.

Chart 1

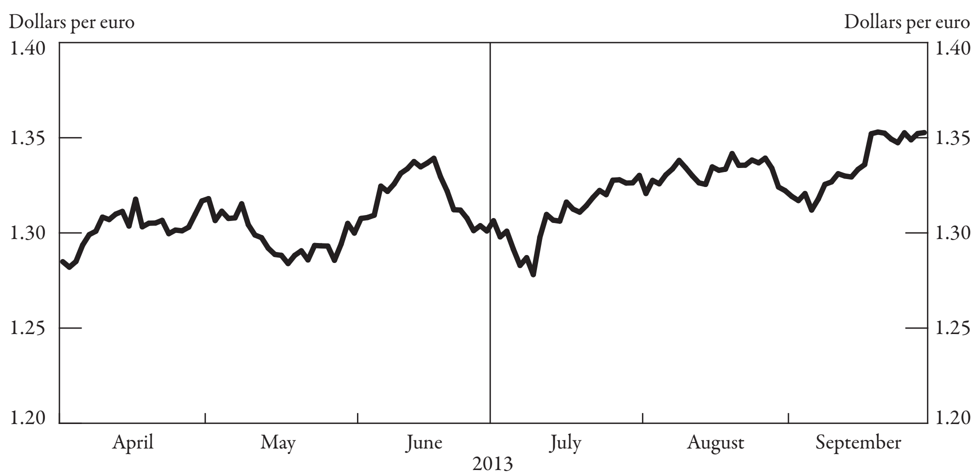
TRADE-WEIGHTED U.S. DOLLAR



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

Chart 2

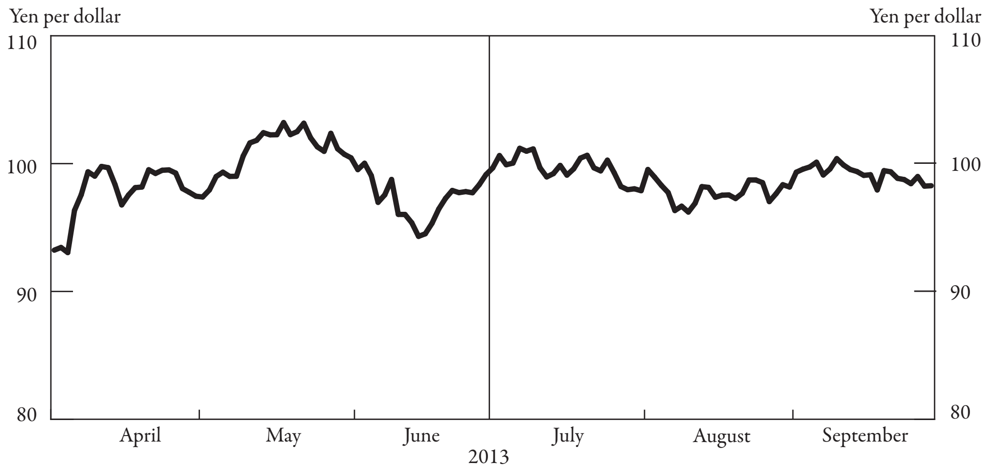
EURO–U.S. DOLLAR EXCHANGE RATE



Source: Bloomberg L.P.

Chart 3

U.S. DOLLAR–YEN EXCHANGE RATE



Source: Bloomberg L.P.

U.S. DOLLAR DEPRECIATES AGAINST MAJOR CURRENCIES AS U.S. DATA UNDERPERFORM RELATIVE TO OTHER MAJOR ECONOMIES' DATA AND AS FED LEAVES POLICY UNCHANGED

During the third quarter, the trade-weighted U.S. dollar depreciated 3.0 percent, on net, after reaching its highest level since July 2010 early in the quarter. The dollar's depreciation over most of the quarter occurred amid some signs of softening in U.S. economic data relative to the second quarter and the trajectory of data in other major economies, as well as the reevaluation of the outlook for U.S. monetary policy. Most notably, the July and August U.S. employment reports were interpreted as disappointing, as headline nonfarm payrolls printed below expectations, while the drop in the unemployment rate remained driven in part by declining labor force participation. Housing data were also mixed over the quarter, as mortgage rates increased and housing starts were weaker than expected, while homebuilder sentiment and house prices increased. These mixed U.S. data contrasted with generally improving euro area and U.K. growth indicators and prompted some investors to pare back long U.S. dollar positions established during the second quarter.

The U.S. dollar depreciated between 1 and 2 percent against major currencies immediately following the decision by the Federal Open Market Committee (FOMC) at its September meeting to maintain the stance of monetary policy given the recent tightening in financial conditions, the need for sustained labor market improvement, and fiscal headwinds. Specifically, the outcome of the FOMC meeting was interpreted as more accommodative than expected given growing market expectations that the pace of the Federal Reserve's asset purchases would be pared back. This expectation also contributed to the rise in Treasury and agency mortgage-backed-security yields, both of which reached their highest levels since mid-2011. In addition, the Committee members' projections for the path of the federal funds rate were released for the first time for yearend 2016, and were below the level expected by market participants. These factors prompted investors to reevaluate the U.S. economic outlook and the path of monetary policy, and contributed to a further paring back of long U.S. dollar positions.

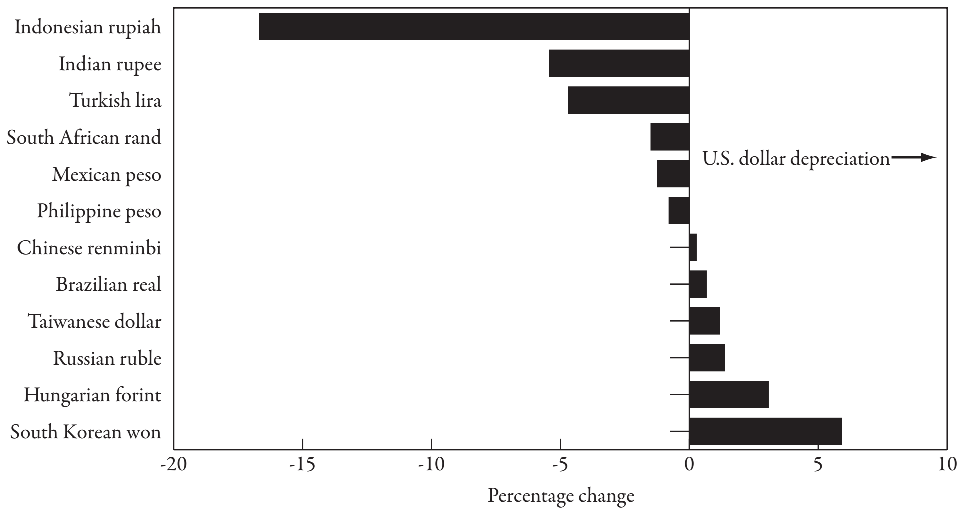
U.S. DOLLAR IS MIXED AGAINST EMERGING MARKET CURRENCIES AS VOLATILITY REMAINS ELEVATED

The U.S. dollar was mixed against emerging market currencies during the third quarter as shifting U.S. monetary policy expectations and the outlook for higher developed market interest rates remained a key driver.[1] As expectations for a reduction in the pace of policy accommodation from the Federal Reserve solidified through much of July and August, the U.S. dollar appreciated notably against several emerging market currencies, in many cases reaching its highest level since 2009. Early in the quarter, rising U.S. and other developed country interest rates reduced the relative attractiveness of many emerging market assets, contributing to the trend of continuing capital outflows by foreign investors that began in the second quarter. However, emerging market currencies mostly stabilized later in the quarter, particularly as U.S. yields declined following the disappointing August employment report and the aforementioned September FOMC decisio n to maintain the pace of asset purchases.

[1] This version of the document has been updated to refer to developments during the third quarter rather than the second. This document was updated on November 22, 2013.

Chart 4

U.S. DOLLAR PERFORMANCE AGAINST EMERGING MARKET CURRENCIES DURING THIRD QUARTER



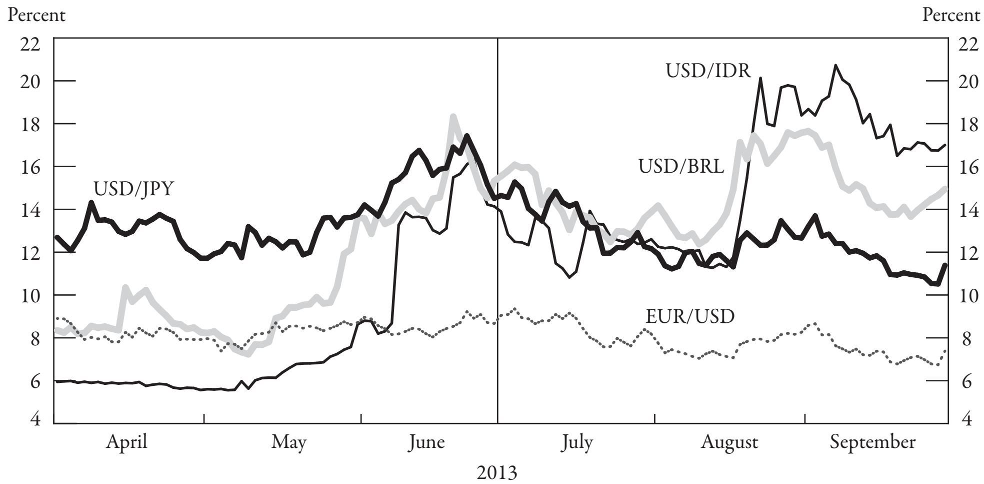
Source: Bloomberg L.P.

Country-specific factors also affected emerging market currency performance, as investors generally continued to reduce exposures to countries with above-target inflation, relatively large current account and fiscal deficits, and softening growth outlooks. During July and August, the U.S. dollar appreciated between 5 and 11 percent against the Turkish lira, Brazilian real, Indian rupee, and Indonesian rupiah, while depreciating between 1 and 3 percent against the Korean won and several Eastern European currencies. Implied volatility on several emerging market currency pairs also rose notably during this time, in contrast with more subdued implied volatility in major currency pairs.

Amid this volatility, monetary authorities in some emerging market countries implemented policy measures intended in part to address currency depreciation, elevated volatility, and broader domestic economic issues. Most notably, India and Indonesia unexpectedly increased their target policy rates and either established or expanded bilateral swap arrangements with other Asian central banks, among other measures. Monetary authorities in both countries reportedly sold reserves throughout the third quarter, as official reserve levels declined by $7.9 billion and $2.4 billion, respectively. Elsewhere, the Central Bank of Brazil formalized its official currency operations by introducing daily forward liquidity swaps and weekly spot dollar repurchase operations, which contributed to a stabilization of the Brazilian real in late August.

Chart 5

ONE-MONTH AT-THE-MONEY OPTION-IMPLIED VOLATILITY FOR SELECTED DEVELOPED AND EMERGING MARKET CURRENCIES



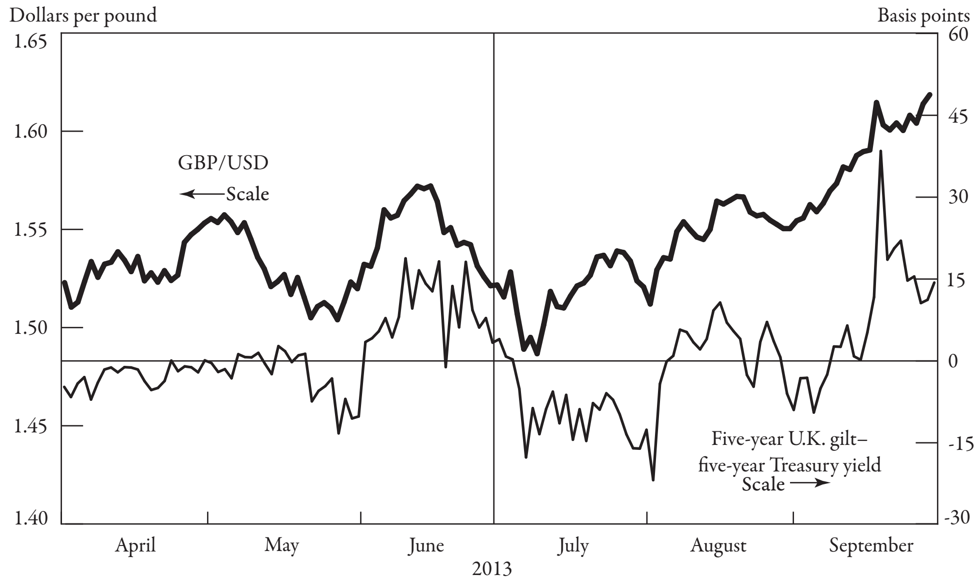
Source: Bloomberg L.P.

EURO AND BRITISH POUND APPRECIATE AMID STRONGER EURO AREA AND U.K. ECONOMIC DATA

The U.S. dollar depreciated by 3.8 percent and 6.0 percent against the euro and British pound, respectively, as euro area and U.K. economic data continued to show signs of improvement. Euro area surveys of manufacturing and service sector activity for the third quarter were better than expected, while second-quarter GDP data were positive on a quarter-over-quarter basis for the first time in two years. In the United Kingdom, second-quarter GDP growth accelerated modestly, and manufacturing and labor market data were better than expected. The appreciation of the euro and the pound was consistent with the 7 and 11 basis point widening in the German bund and U.K. gilt five-year interest rate differentials with five-year Treasury yields, reflecting the better euro area and U.K. economic data relative to U.S. data.

The European Central Bank (ECB) and the Bank of England (BoE) provided forward guidance on policy rates over the quarter. At its July policy meeting, the ECB's Governing Council said that "key interest rates" would "remain at present or lower levels for an extended period of time," a departure from its previous statement that it does not precommit, though this elicited minimal currency response. At the same time, the BoE signaled that it would study the merits of using forward guidance, prompting a 2.5 percent depreciation of the pound following the announcement. However, the actual BoE policy announcement in August was seen as less accommodative than expected, as market participants viewed the employment and inflation thresholds as potentially limiting the duration for which the policy would be in effect.

Chart 6
U.K.–U.S. FIVE-YEAR INTEREST RATE DIFFERENTIAL VERSUS GBP/USD



Source: Bloomberg L.P.

U.S. DOLLAR REMAINS IN NARROW RANGE AGAINST JAPANESE YEN

The U.S. dollar was relatively stable against the Japanese yen during the quarter, as there were few new developments in Japan that significantly influenced currency moves. The dollar-yen currency pair traded within the narrow ¥97 to ¥100 per-dollar range for the better part of the quarter. This stability followed a roughly 26 percent appreciation of the dollar against the yen in the previous three quarters as Japanese authorities announced and implemented significant expansionary monetary and fiscal policies. Several data releases pointed to a continuation of the trend of economic improvement since the April announcement by the Bank of Japan (BoJ) of its Qualitative and Quantitative Easing program, including strong second-quarter GDP growth of 3.8 percent. Toward the end of the quarter, the yen began to modestly appreciate against most major currencies as near-term U.S. fiscal uncertainties resulted in modest safe-haven flows.

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 $23.45 billion, comprising euro and yen holdings. The Federal Reserve System Open Market Account holdings of foreign-currency-denominated assets totaled $23.47 billion, also comprising euro and yen holdings.

Liquidity Swap Arrangements with Foreign Central Banks

On December 13, 2012, the Federal Reserve, in coordination with the Bank of Canada (BoC), the BoE, the BoJ, the ECB, and the Swiss National Bank (SNB), agreed to extend the authorization of the U.S. dollar and foreign currency liquidity swap arrangements through February 1, 2014. The rate on the dollar liquidity swap arrangements was unchanged at the U.S. dollar overnight indexed swap rate plus 50 basis points. As of September 30, the ECB had $511 million outstanding under the U.S. dollar liquidity swaps, of which $186 million was in three-month tenors and $325 million was in a one-week-tenor transaction. The BoC, BoE, BoJ, and SNB had no 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 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. The amount of euro-denominated reserves held on deposit at official institutions remained elevated in the third quarter, given extremely low rates in euro-denominated money markets, although the amount of yen-denominated deposits has remained fairly steady over recent quarters. A smaller portion of the reserves is currently invested in euro-denominated repurchase agreements, under which the U.S. monetary authorities may 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 $22.24 billion and foreign government securities held under repurchase agreements totaled $4.47 billion.

Table 1

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

Millions of U.S. Dollars

		Changes in Balances by Source				
	Carrying Value, June 30, 2013[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, 2013[a]
Federal Reserve System Open Market Account (SOMA)						
Euro	14,085	0	19	0	569	14,673
Japanese yen	9,386	0	3	0	88	9,478
Total	23,471	0	23	0	657	24,151

		Changes in Balances by Source				
	Carrying Value, June 30, 2013[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, 2013[a]
U.S. Treasury Exchange Stabilization Fund (ESF)						
Euro	14,063	0	19	0	568	14,650
Japanese yen	9,386	0	3	0	88	9,478
Total	23,449	0	23	0	656	24,127

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, 2013

	U.S. Treasury Exchange Stabilization Fund (ESF)[a]	Federal Reserve System Open Market Account (SOMA)[a]
Euro-denominated assets	**14,649.8**	**14,673.1**
Cash held on deposit at official institutions	7,643.3	7,666.5
Marketable securities held under repurchase agreements[b]	2,233.3	2,233.3
Marketable securities held outright	4,773.3	4,773.3
German government securities	2,391.5	2,391.5
French government securities	2,381.8	2,381.8
Japanese-yen–denominated assets	**9,477.6**	**9,477.5**
Cash held on deposit at official institutions	3,132.7	3,132.7
Marketable securities held outright	6,344.9	6,344.9
Reciprocal currency arrangements		
Euro-denominated assets		**511**
Other assets		511
Japanese-yen–denominated assets		**0**
Other assets[c]		0
Swiss-franc–denominated assets		**0**
Other assets[c]		0
Canadian-dollar–denominated assets		**0**
Other assets[c]		0
British-pound–denominated assets		**0**
Other assets[c]		0

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

[a] As of September 30, the euro SOMA and ESF portfolios had Macaulay durations of 9.2 months; the yen SOMA and ESF had Macaulay durations of 11.8 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, and the Bank of England.

Table 3

RECIPROCAL CURRENCY ARRANGEMENTS

Millions of U.S. Dollars

Institution	Amount of Facility	Outstanding as of September 30, 2013
	Federal Reserve System Open Market Account (SOMA)	
Bank of Canada	2,000	0
Banco de México	3,000	0
European Central Bank[a]	Unlimited	511
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	511
	U.S. Treasury Exchange Stabilization Fund (ESF)	
Banco de México	3,000	0
	3,000	0

[a]Temporary swap arrangement.