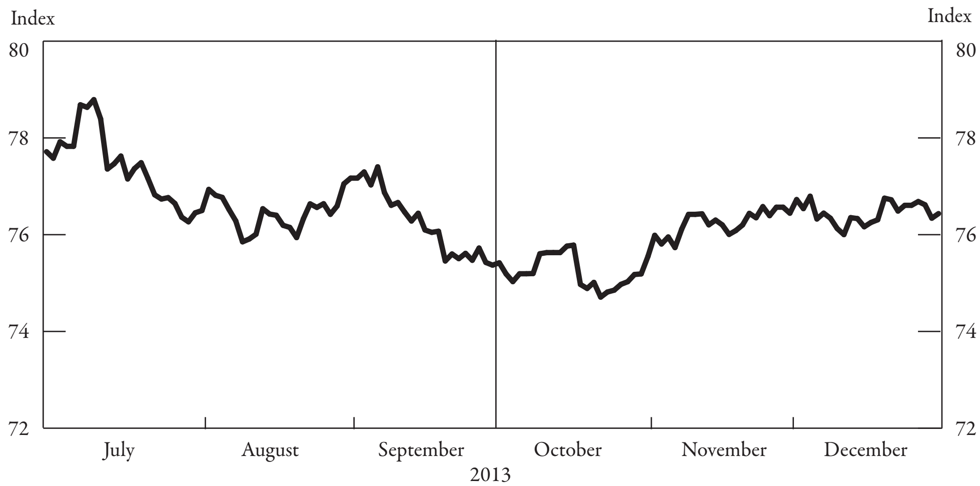
TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

October–December 2013

During the fourth quarter, the U.S. dollar's nominal trade-weighted exchange value appreciated 1.4 percent as measured by the Federal Reserve Board's major currencies index. The U.S. dollar appreciated against the Japanese yen as well as against major emerging market and cyclically sensitive currencies. In contrast, the dollar depreciated 1.6 percent against the euro and 2.2 percent against the British pound. The U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.

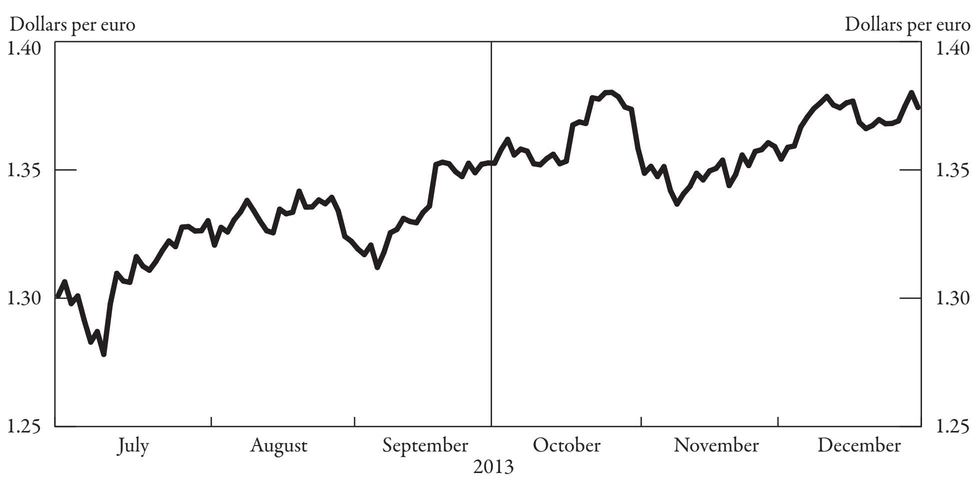
This report, presented by Simon Potter, Executive Vice President, Federal Reserve Bank of New York, and Manager of the System Open Market Account, describes the foreign exchange operations of the U.S. Department of the Treasury and the Federal Reserve System for the period from October through December 2013. Evan Kereiakes was primarily responsible for preparation of the report.

Chart 1
TRADE-WEIGHTED U.S. DOLLAR



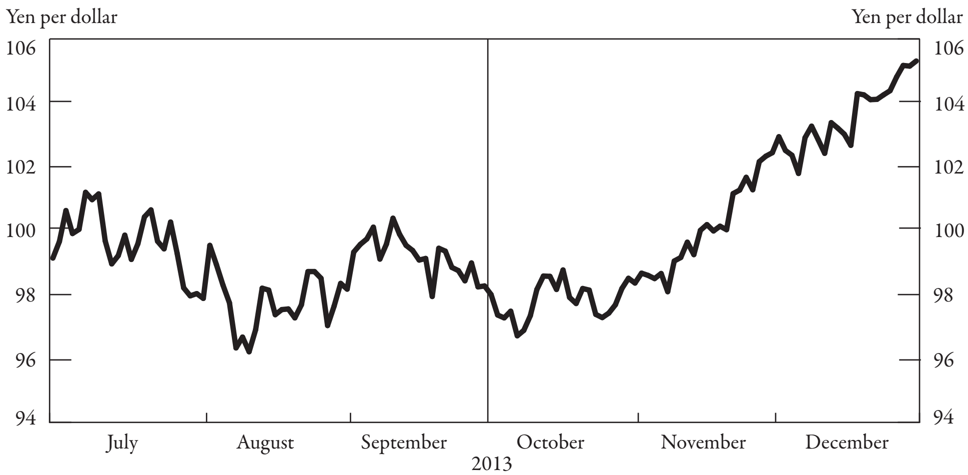
Source: Board of Governors of the Federal Reserve System; Bloomberg L.P.

Chart 2
EURO–U.S. DOLLAR EXCHANGE RATE



Source: Bloomberg L.P.

Chart 3
U.S. DOLLAR–YEN EXCHANGE RATE



Source: Bloomberg L.P.

SHIFTS IN FEDERAL RESERVE MONETARY POLICY EXPECTATIONS ARE KEY DRIVER OF U.S. DOLLAR APPRECIATION

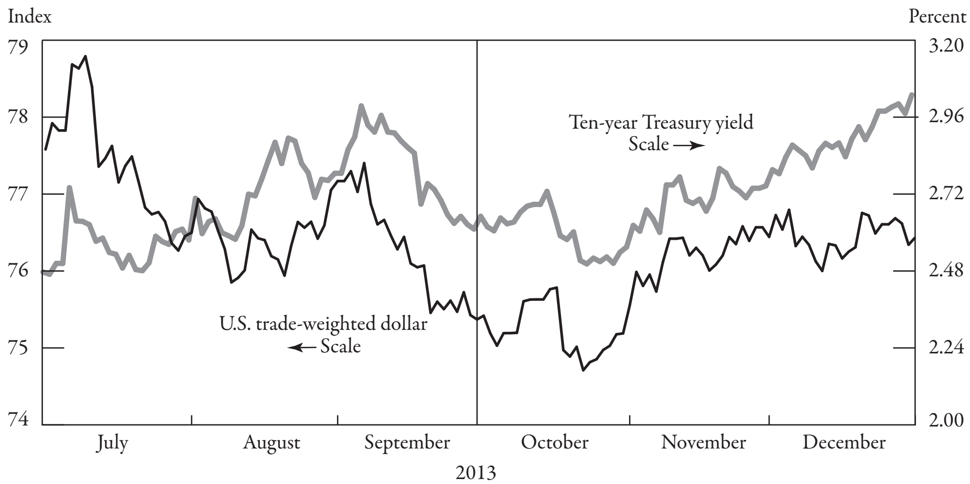
During the fourth quarter, the trade-weighted U.S. dollar appreciated 1.4 percent on improving U.S. economic data, growing expectations that the Federal Reserve would reduce the pace of asset purchases by the end of the first quarter of 2014 and rising U.S. Treasury yields.

Early in the quarter, uncertainty concerning the economic impact of the U.S. government shutdown prompted market participants to push out their expected timing of an eventual reduction in the pace of Federal Reserve asset purchases, which weighed on the dollar. However, at its October meeting, the Federal Open Market Committee (FOMC) provided a more benign outlook for the potential effect of the fiscal impasse on economic growth. Additionally, confidence in the pace of economic activity was further bolstered by economic data releases such as better-than-expected October and November payrolls and third quarter GDP. As a result, market participants solidified their expectations for a reduction in the pace of the Federal Reserve's asset purchases in the near term, with the median expectation for the first reduction occurring in the first quarter of 2014, according to the Federal Reserve Bank of New York's December survey of primary dealers.

The FOMC reduced the pace of its asset purchases by $10 billion at its December meeting, somewhat earlier than expected by market participants. During the two weeks following the FOMC decision, the trade-weighted dollar appreciated a modest 0.24 percent, while two-year and ten-year U.S. Treasury yields increased 6 and 19 basis points, respectively. Although the decision to reduce the pace of asset purchases was made earlier than expected, market contacts attributed the more muted

Chart 4

TRADE-WEIGHTED U.S. DOLLAR AND TEN-YEAR TREASURY YIELD



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

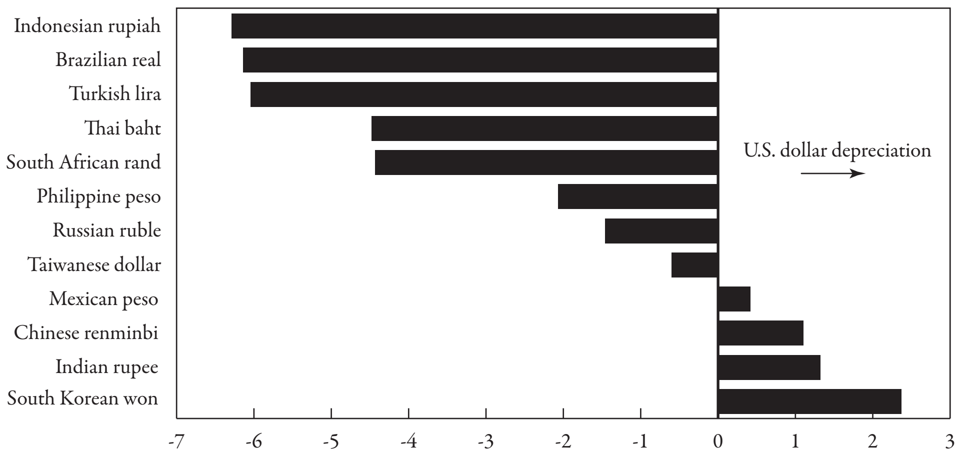
response in currency markets to the simultaneous strengthening of the forward guidance and the likelihood that many investors had positioned for such a policy shift in the near term. During the quarter, the U.S. dollar appreciated 1.4 percent on a trade-weighted basis, and the ten-year Treasury yield increased 42 basis points.

U.S. DOLLAR APPRECIATES AGAINST EMERGING MARKET CURRENCIES AMID RISING TREASURY YIELDS AND COUNTRY-SPECIFIC DEVELOPMENTS

During the fourth quarter, emerging market currencies remained sensitive to shifts in U.S. monetary policy expectations, particularly the timing of a potential slowing in the pace of asset purchases. After a modest appreciation in the wake of the FOMC's decision at the September meeting to leave the pace of asset purchases unchanged, many emerging market currencies resumed their depreciation trend as expectations for a more imminent reduction in the pace of asset purchases by the Federal Reserve solidified over the fourth quarter. Rising U.S. Treasury yields reduced the relative attractiveness of emerging market assets, contributing to portfolio outflows that weighed on emerging market currencies. Additionally, market participants remained focused on the global implications of the growth and policy outlook in China and the impact on emerging markets more broadly.

Country-specific developments exacerbated emerging market currency depreciation, particularly among countries with current account deficits, elevated inflation, and weaker growth, such as Turkey, Brazil, and Indonesia—countries whose currencies depreciated approximately 6 percent each against the U.S. dollar. Political tensions in Turkey also weighed on its currency, as market participants

Chart 5
U.S. DOLLAR PERFORMANCE AGAINST EMERGING MARKET CURRENCIES DURING FOURTH QUARTER



Source: Bloomberg L.P.

highlighted uncertainty about the shifting mix of policy tools, such as reserve sales, policy tightening, and macroprudential measures employed by its central bank to address inflation pressures and currency weakness. In Brazil, pressure increased on the real as the amount of the central bank's daily dollar swap auctions, which had been extended into 2014, were lower than market expectations. The Indonesian rupiah came under additional pressure as the country's central bank reduced its reserve sales, readings on growth continued to deteriorate, and inflation remained persistently elevated.

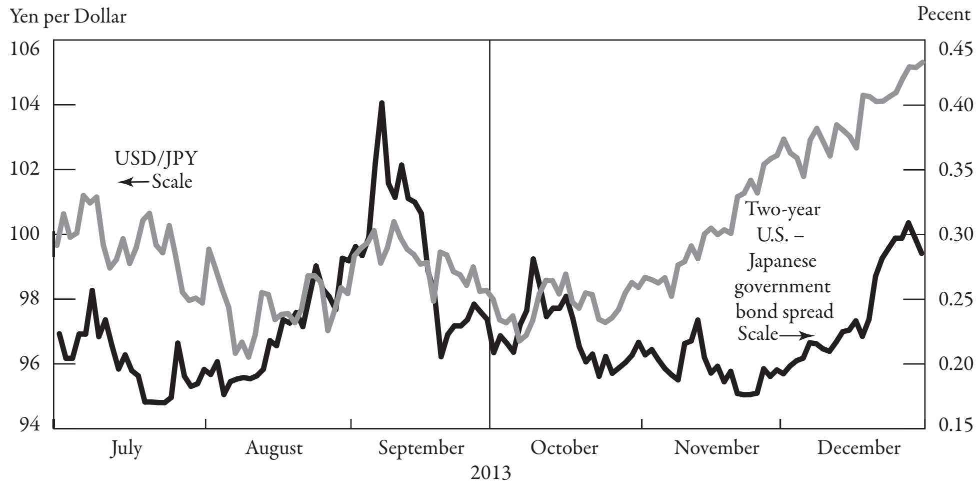
Contrary to the prior two quarters, the Mexican peso and Indian rupee appreciated against the U.S. dollar amid improved market sentiment, owing to the passage of reforms and improving external fundamentals. The Mexican peso was supported by the passage of a more ambitious energy sector reform bill, which is expected to attract foreign investment into the sector and prompted one credit rating agency to raise Mexico's credit rating by one notch to triple-B-plus, in line with other major rating agencies. The Indian rupee was supported by data showing a narrowing of its current account deficit, in part due to restrictions on gold imports, as the Reserve Bank of India raised its policy rate in the face of elevated inflation readings.

U.S. DOLLAR APPRECIATES AGAINST JAPANESE YEN ON DIVERGENT POLICY TRAJECTORIES

The U.S. dollar appreciated 7.2 percent against the Japanese yen owing to expectations for divergent policy trajectories between the Bank of Japan (BoJ) and the Federal Reserve, as seen in shorter-dated

Chart 6

U.S.–JAPAN TWO-YEAR NOMINAL INTEREST RATE DIFFERENTIAL VERSUS U.S. DOLLAR–JAPANESE YEN EXCHANGE RATE



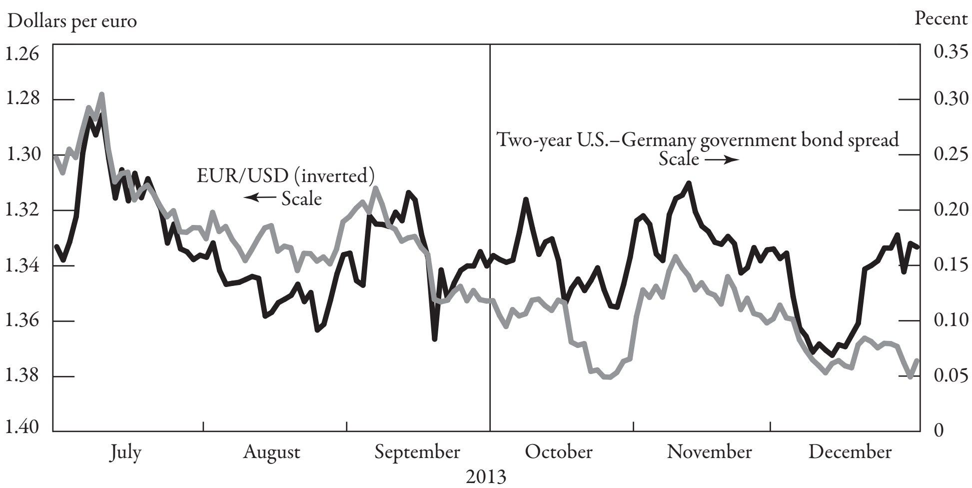
interest rate differentials. While the BoJ made no changes to its monetary policy during the fourth quarter, market participants interpreted the central bank's repeated resolve to increase inflation to the price stability target of 2 percent as a sign that additional policy action may be under consideration. Although Japanese economic data pointed to continued improvement and inflation readings over the quarter rose, survey-based inflation expectations continued to imply that future readings would remain below the BoJ's target of 2 percent over the next two years, prompting expectations for further accommodative policy action in 2014.

Separately, the Japanese government concluded its review of the Government Pension Investment Fund and recommended gradually reallocating the fund's investments toward riskier assets, including domestic equities and foreign assets. This shift contributed to expectations that other major investors or pension funds could follow suit, supporting Japanese equities and contributing to further yen depreciation.

DOLLAR DEPRECIATES AGAINST EURO DESPITE THE ECB POLICY RATE CUT

The U.S. dollar depreciated 1.6 percent against the euro despite expectations for further policy accommodation by the European Central Bank (ECB). The euro remained supported by improving fundamentals, such as a positive current account surplus. In addition, the euro was supported against the dollar as a result of upward pressure on euro-area money market rates. This was attributable to several factors, including declining excess reserves stemming from the ongoing repayment of longer-term refinancing operations and comments from ECB President Mario Draghi that were viewed as

Chart 7
U.S.–EUROPE TWO-YEAR NOMINAL INTEREST RATE DIFFERENTIAL
VERSUS EURO–U.S. DOLLAR EXCHANGE RATE



reducing the likelihood of a deposit rate cut. These factors outweighed the depreciation seen earlier in the quarter as weaker-than-expected October euro-area CPI caused most market participants to price in a greater chance that the ECB would cut its main refinancing operation (MRO) rate in the near term. In a slightly earlier-than-expected move, the ECB cut its MRO rate from 50 basis points to 25 basis points at its November policy meeting.

Separately, the U.S. dollar depreciated 2.2 percent against the British pound, owing to better-than-expected U.K. labor and economic data. This development led to a shift in expectations for an earlier tightening in U.K. monetary policy, which led to higher short- and long-term interest rates. The Bank of England's (BoE) quarterly inflation report released in November reflected the improving data, as the bank's economic forecasts indicated that the unemployment threshold on its forward guidance would be crossed in the third quarter of 2015, four quarters earlier than previously forecasted.

TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE HOLDINGS

The U.S. monetary authorities did not undertake any intervention operations during the quarter. As of December 31, the value of the U.S. Treasury's Exchange Stabilization Fund foreign-currency-denominated assets totaled $23.79 billion, comprised of euro and yen holdings. The Federal Reserve System Open Market Account holdings of foreign-currency-denominated assets totaled $23.81 billion, also comprised of euro and yen holdings.

Liquidity Swap Arrangements with Foreign Central Banks

On October 31, 2013, the FOMC announced the conversion of existing temporary liquidity swap arrangements to standing arrangements that will remain in place until further notice.[1] Previously, the Federal Reserve, in coordination with the Bank of Canada (BoC), the BoE, the BoJ, the ECB, and the Swiss National Bank (SNB), had agreed to extend the authorization of the temporary U.S. dollar and foreign currency liquidity swap arrangements through February 1, 2014. As of December 31, the ECB had $272 million outstanding under the U.S. dollar liquidity swaps, all in three-month tenor transactions. The BoC, BoE, BoJ, and SNB had no outstanding swaps at the end of the quarter. On December 12, a small-value U.S. dollar liquidity swap exercise was performed with some foreign central banks that have liquidity swap arrangements with the Federal Reserve Bank of New York.[2] The purpose of these small-value operations is to test the operational readiness of the swap arrangements.

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 slightly elevated in the fourth 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 was 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 December 31, direct holdings of foreign government securities totaled $21.61 billion and foreign government securities held under repurchase agreements totaled $5.09 billion.

[1] See http://www.federalreserve.gov/newsevents/press/monetary/20131031a.htm.

[2] See http://www.ny.frb.org/markets/opolicy/operating_policy_131212.html.

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, September 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, December 31, 2013[a]
Federal Reserve System Open Market Account (SOMA)						
Euro	14,673	0	20	0	265	14,958
Japanese yen	9,478	0	3	0	(627)	8,854
Total	24,151	0	23	0	(362)	23,812

		Changes in Balances by Source				
	Carrying Value, September 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, December 31, 2013[a]
U.S. Treasury Exchange Stabilization Fund (ESF)						
Euro	14,650	0	20	0	264	14,934
Japanese yen	9,478	0	3	0	(627)	8,854
Total	24,127	0	23	0	(362)	23,788

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 December 31, 2013

	U.S. Treasury Exchange Stabilization Fund (ESF)[a]	Federal Reserve System Open Market Account (SOMA)[a]
Euro-denominated assets	**14,933.9**	**14,957.5**
Cash held on deposit at official institutions	7,506.3	7,530.0
Marketable securities held under repurchase agreements[b]	2,549.4	2,549.4
Marketable securities held outright	4,878.1	4,878.1
German government securities	2,442.3	2,442.3
French government securities	2,435.8	2,435.8
Japanese-yen–denominated assets	**8,854.0**	**8,854.0**
Cash held on deposit at official institutions	2,926.4	2,926.3
Marketable securities held outright	5,927.7	5,927.7
Reciprocal currency arrangements		
European Central Bank[c]		**272**
Bank of Japan[c]		**0**
Swiss National Bank[c]		**0**
Bank of Canada[c]		**0**
Bank of Englands[c]		**0**

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 9.2 months; the yen SOMA and ESF portfolios both 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 December 31, 2013
	Federal Reserve System Open Market Account (SOMA)	
Bank of Canada	2,000	0
Banco de México	3,000	0
European Central Bank	Unlimited	272
Swiss National Bank	Unlimited	0
Bank of Japan	Unlimited	0
Bank of Canada	30,000	0
Bank of England	Unlimited	0
	Unlimited	272
	U.S. Treasury Exchange Stabilization Fund (ESF)	
Banco de México	3,000	0
	3,000	0