TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

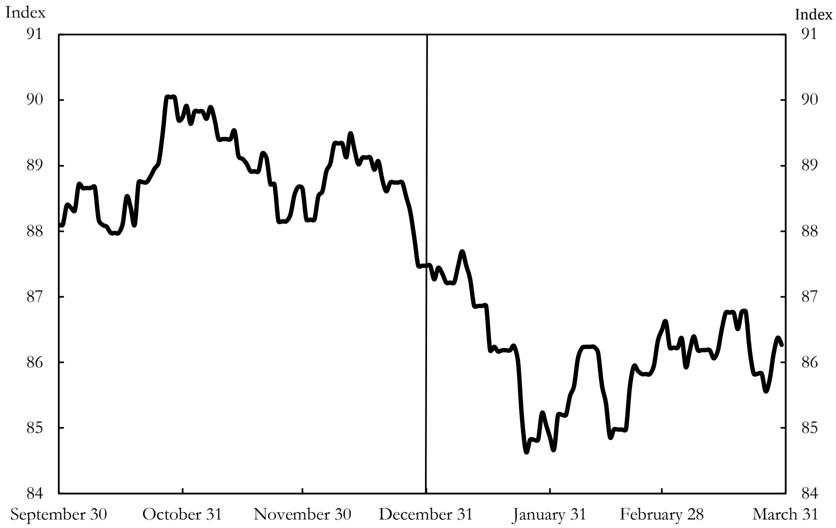
January – March 2018

The U.S. dollar, as measured by the Federal Reserve Board's trade-weighted major currencies index, depreciated 1.4 percent in the first quarter of 2018. The dollar was viewed as driven by a variety of factors, including the greater scope for monetary tightening abroad, improving global growth, and an anticipated rise of U.S. fiscal and current account deficits. Among major currencies, the dollar depreciated 2.6 percent against the euro and 5.7 percent against the Japanese yen, and appreciated 2.6 percent against the Canadian dollar. The dollar depreciated against most emerging market currencies, including 7.5 percent against the Mexican peso and 3.6 percent against the Chinese renminbi. The Federal Reserve and U.S. Treasury did not intervene in 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 January through March 2018. Patrick Douglass was primarily responsible for preparation of the report.

Chart 1

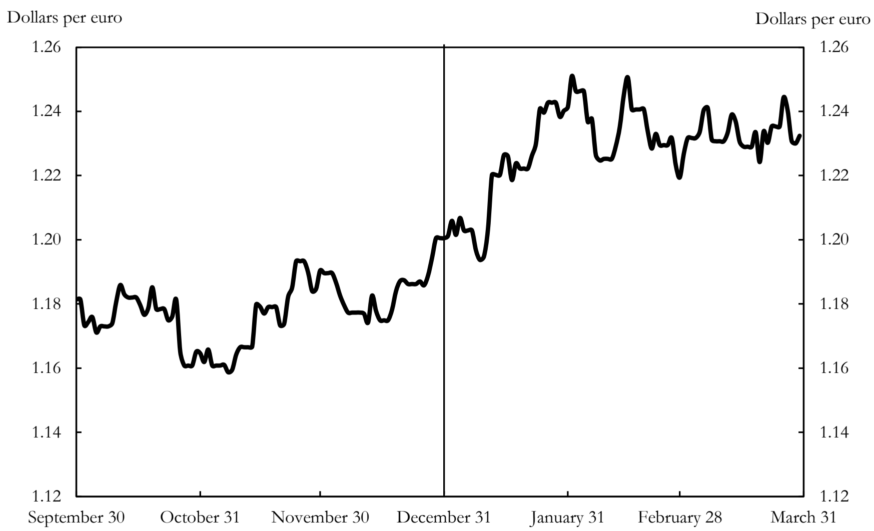
MAJOR CURRENCY TRADE-WEIGHTED U.S. DOLLAR



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

Chart 2

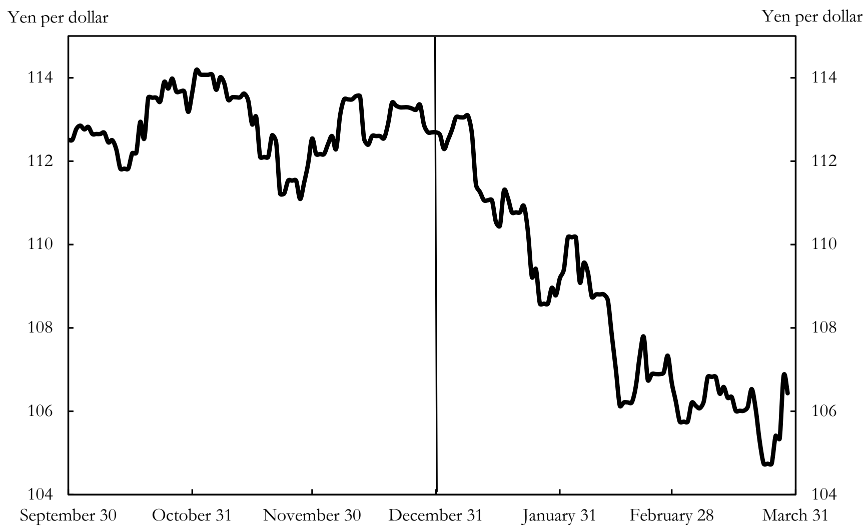
EURO–U.S. DOLLAR EXCHANGE RATE



Source: Bloomberg L.P.

Chart 3

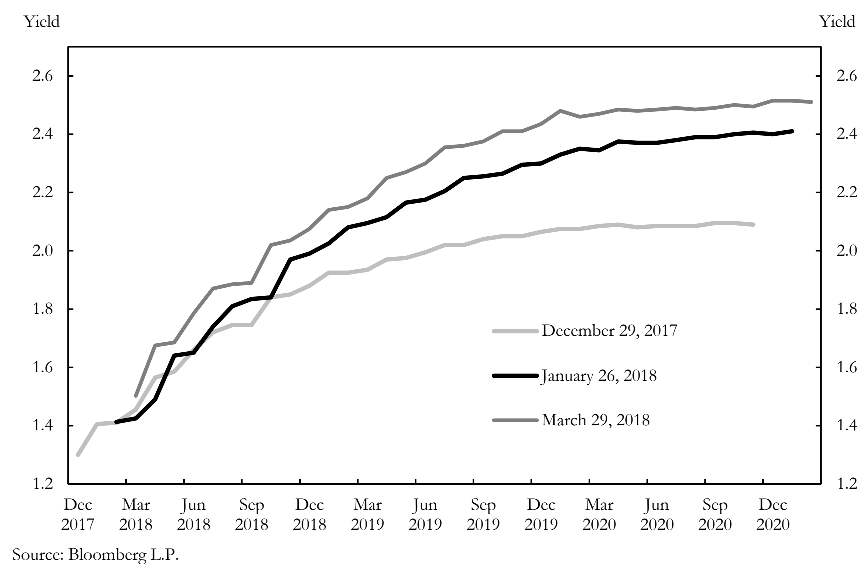
U.S. DOLLAR–YEN EXCHANGE RATE



Source: Bloomberg L.P.

Chart 4

MARKET-IMPLIED RATES ON FEDERAL FUNDS FUTURES



Source: Bloomberg L.P.

U.S. DOLLAR DEPRECIATION CONTINUES ON STRUCTURAL AND IDIOSYNCRATIC FACTORS

The trade-weighted U.S. dollar depreciated an additional 1.4 percent in the first quarter of 2018, reflecting a combination of structural and idiosyncratic factors. As was the case in late 2017, U.S. dollar depreciation occurred despite a further increase in U.S. interest rate differentials vis-à-vis advanced economy peers. Investors broadly attributed this decoupling to relative policy expectations, noting that U.S. policy rates are close to their estimated terminal rate, while other advanced economies—including the euro area, the United Kingdom, Japan, and Canada—are viewed as still in the early stages of policy normalization. In support of this view, market contacts noted that the euro–dollar exchange rate now has a fairly close correlation with the policy rate slope differential between the United States and the euro area. U.S. growth differentials with the rest of the world were also seen as contributing to U.S. dollar depreciation. While U.S. growth is expected to remain robust, higher forecasted growth elsewhere could increase the attractiveness of other G10 currencies. These expectations were partly shaped by the fact that growth in the euro area has outpaced growth in the United States for the past two years while Chinese growth saw a modest acceleration for the first time since 2010.

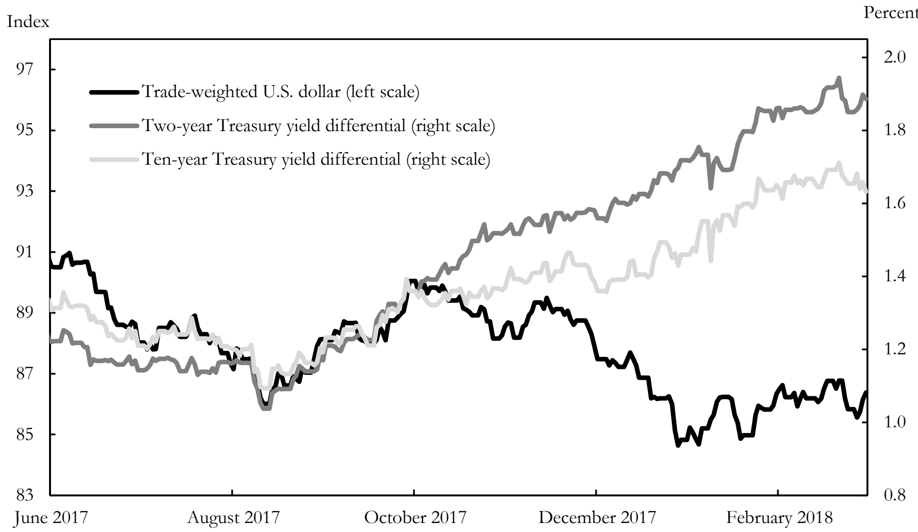
Following the passage of U.S. tax reform legislation last year, the possibility of a rise in the U.S. fiscal and current account deficits (often referred to as "twin deficits") was viewed as a potential new factor weighing on the U.S. dollar. In particular, some market participants expect that the fiscal stimulus amid limited economic slack could stimulate import growth and widen the current account deficit while resulting in only a modest acceleration in short-term GDP growth. Market contacts have highlighted a number of current factors in conjunction with the twin deficits that could potentially drive U.S. dollar depreciation going forward: fiscal expansion amid limited spare capacity, high current U.S. public debt levels, global competition for capital, and a perceived shift in U.S. economic policy.

Idiosyncratic factors were also seen as driving the dollar in the first quarter. In January, concerns over U.S. official comments regarding the U.S. dollar were viewed by some as contributing to dollar depreciation. The dollar was also seen as facing pressure from heightened trade tensions following U.S. announcements of new tariffs on various imported goods. Indeed, on days of heightened trade concerns, the U.S. dollar typically weakened against other major currencies, such as the euro, yen, and Swiss franc, while strengthening against emerging market currencies.

U.S. monetary policy developments were seen as playing a modest role in driving the dollar in the first quarter. At its March 21 meeting, the Federal Open Market Committee (FOMC) raised the federal funds rate 25 basis points, as expected, and reiterated its expectations for a total of three rate hikes over the year. In addition, the median of FOMC participants' target rate projections in the Summary of Economic Projections (SEP) was revised slightly higher for 2019, 2020, and the longer term. While market contacts interpreted the FOMC statement and SEP materials as indicating a strengthening of the economic outlook by the Committee, and as consistent with a slightly more rapid removal of policy accommodation beyond 2018 than had been expected, the U.S. dollar depreciated modestly on the day. The nominal Treasury yield curve shifted up over the quarter, with the most pronounced move coming in January amid an improved outlook for domestic and foreign economic growth.

Chart 5

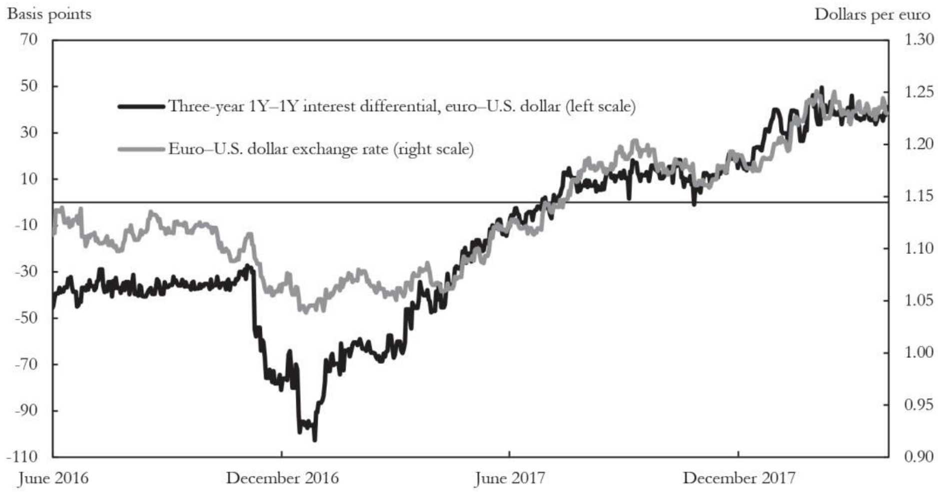
TRADE-WEIGHTED U.S. DOLLAR AND INTEREST RATE DIFFERENTIALS



Sources: Bloomberg L.P.; Board of Governors of the Federal Reserve System; New York Fed staff calculations.

Chart 6

MARKET PROXY FOR SCOPE FOR INTEREST RATE INCREASES



Source: Bloomberg L.P.

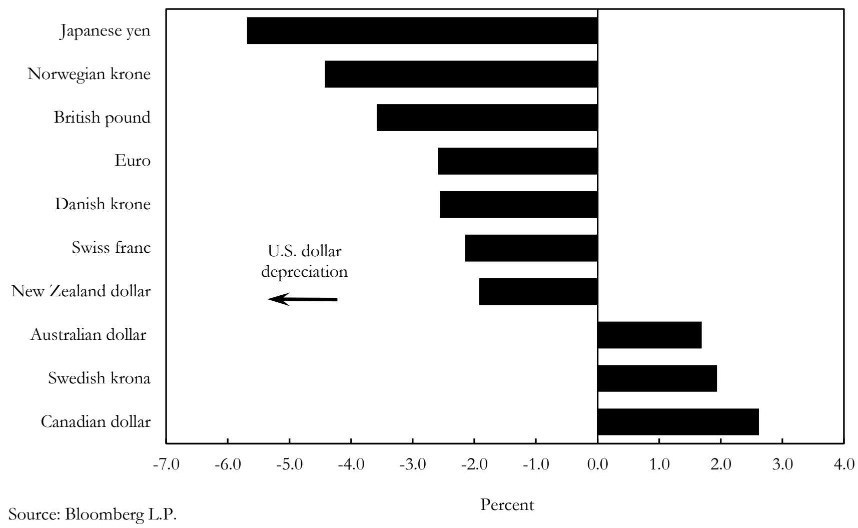
EURO SUPPORTED BY STRONG ECONOMIC DATA, ECB COMMUNICATIONS, AND PERCEIVED REDUCTION IN POLITICAL RISK

The U.S. dollar depreciated 2.6 percent against the euro in the first quarter amid strong euro area economic activity, less accommodative signals from the European Central Bank (ECB), and a perceived reduction of political risk in the euro area.

As was the case during much of last year, euro area economic data, such as the purchasing managers index, remained strong relative to the United States, contributing to broad euro strength against the U.S. dollar. Market participants also linked euro strength to evolving communication from the ECB. The ECB's December meeting minutes, released on January 11, were viewed by market participants as signaling less monetary policy accommodation, resulting in a notable appreciation of the euro against the U.S. dollar. In particular, the minutes noted that the ECB Governing Council's communication would need to evolve in the case of positive economic developments, and stated that forward guidance could be revisited. Several weeks later, at a press conference following the ECB's January 25 meeting, President Draghi's use of positive language to describe the euro area's economic outlook was seen by market participants as signaling a shift toward less monetary accommodation, driving euro appreciation and increases in euro area sovereign yields. In March, German Chancellor Merkel's preliminary agreement to form a coalition government and the passing of the Italian election were viewed as supportive of the euro on the margin insofar as they reduced political risk in the region.

Chart 7

U.S. DOLLAR PERFORMANCE AGAINST G-10 CURRENCIES DURING THE FIRST QUARTER



Source: Bloomberg L.P.

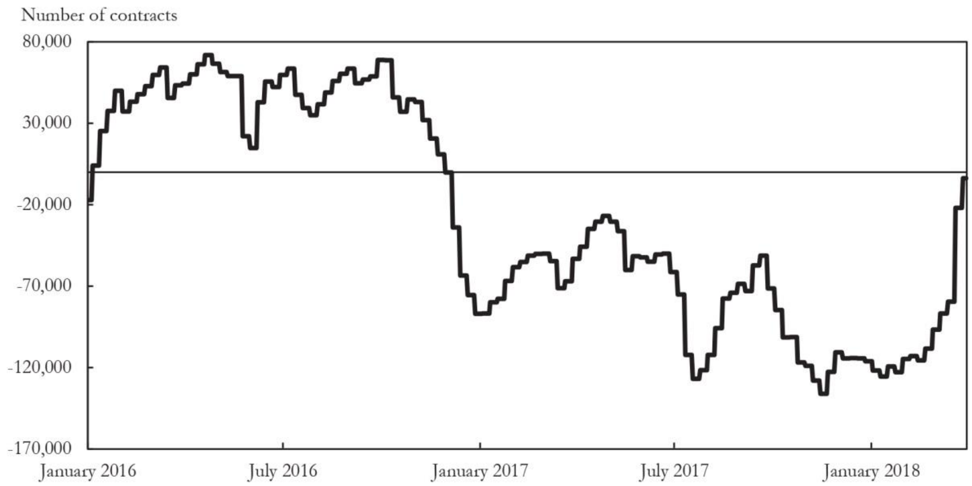
JAPANESE YEN APPRECIATES NOTABLY AMID BOJ POLICY ADJUSTMENT, SAFE HAVEN INFLOWS, AND POSITIONING DYNAMICS

The U.S. dollar depreciated 5.7 percent against the Japanese yen in the first quarter, driven by monetary policy developments, safe haven inflows in response to rising financial market volatility, and technical factors. On January 9, the Bank of Japan (BoJ) announced that it had reduced its bond purchases in the ten- to twenty-five-year part of the curve, which was viewed as driving a 1.5 percent appreciation of the yen against the dollar and a 2 basis point increase in ten-year Japanese government bond yields over the following two days. Later in the quarter, the yen experienced bouts of appreciation as financial market volatility drove investors to increase their allocations of yen-denominated assets, which are widely regarded as safe by investors. Indeed, the yen appreciated notably against the dollar following the global equity market selloff in February and heightened trade tensions in March.

Positioning dynamics and repatriation flows were seen as an additional factor contributing to yen appreciation in the first quarter. At the start of the year, the yen was one of the few currencies in which noncommercial market participants held a net short position against the dollar, according to data from the Commodity Futures Trading Commission. Contacts noted that the unwinding of these short positions may have exacerbated yen strength over subsequent months as positioning moved to a more neutral level. At the margin, some market participants noted that the repatriation of earnings by Japanese corporations ahead of fiscal year-end and a slowdown in the accumulation of U.S. assets by Japanese investors may also have contributed to yen strength.

Chart 8

NET LONG YEN POSITIONING



Sources: Bloomberg L.P.; Chicago Mercantile Exchange.
Note: A negative number indicates net short positioning.

EMERGING MARKET CURRENCIES BROADLY STRENGTHEN AGAINST THE DOLLAR, LED BY THE MEXICAN PESO AND CHINESE RENMINBI

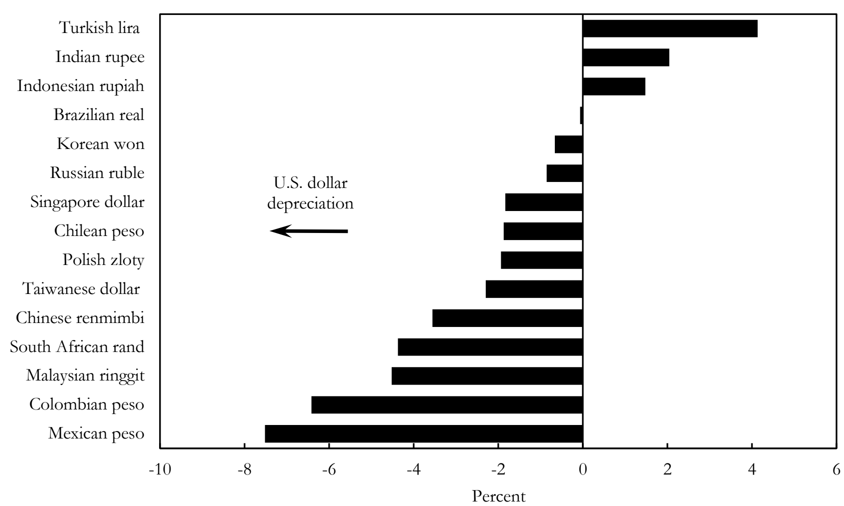
The U.S. dollar broadly depreciated against emerging market currencies in the first quarter, with the JP Morgan Emerging Markets Currency Index rising 1.8 percent. Within the Federal Reserve Board's trade-weighted dollar index, U.S. dollar weakness was most pronounced against the Mexican peso and the Chinese renminbi.

In contrast to the perceived increase in trade concerns in some regions, trade concerns among the North American Free Trade Agreement (NAFTA) countries were viewed by market contacts as easing. Indeed, investors broadly attributed the U.S. dollar's 7.5 percent depreciation against the Mexican peso to increased optimism that Mexico's negotiations with the United States regarding NAFTA would culminate in a new agreement rather than a NAFTA termination. Market contacts were particularly attentive to signs of continued progress on key areas of contention, including rules of origin, the NAFTA dispute resolution mechanism, and the renegotiation timeline. The decision by Banco de México (BdM) to raise its policy rate an additional 25 basis points in February was also viewed as supportive of the currency. Separately, the U.S. dollar appreciated 2.6 percent against the Canadian dollar in the first quarter. However, market participants primarily attributed this to more-accommodative-than-expected communications from the Bank of Canada (BoC), rather than NAFTA-related developments.

The U.S. dollar's 3.6 percent depreciation against the Chinese onshore renminbi in the first quarter was attributed to a number of factors, including China's stable growth backdrop, relatively balanced capital flows amid continued capital controls, and a perceived increase in policymaker tolerance for renminbi strength at a time of rising trade tensions with the United States. Some market participants noted that the currency was also supported by Chinese corporates, which have reportedly begun to unwind some of their long-dollar, short-renminbi positions that had been accumulating since 2015. In late March, reports that renminbi-denominated bonds would be included in the Bloomberg-Barclays Global Aggregate Index were viewed as boosting sentiment on the currency and contributing to a modest appreciation against the U.S. dollar. After their annual work conference, the People's Bank of China and China's State Administration of Foreign Exchange released a statement expressing their commitment to continuing recent reforms toward a more market-oriented exchange rate as well as two-way capital account liberalization—comments that were viewed by some as signaling policymaker preference for greater two-way volatility in the U.S. dollar–Chinese renminbi exchange rate.

Chart 9

U.S. DOLLAR PERFORMANCE AGAINST EMERGING MARKET CURRENCIES DURING THE FIRST QUARTER



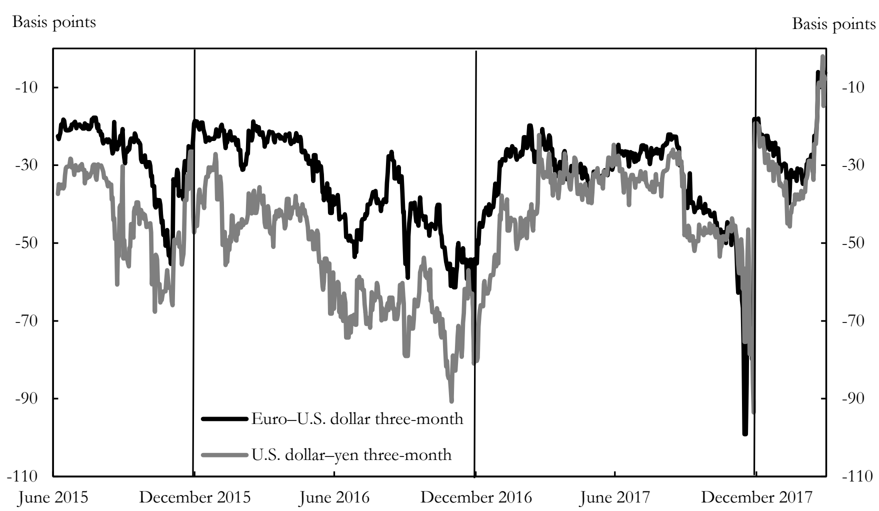
Source: Bloomberg L.P.

FOREIGN EXCHANGE SWAP BASIS SPREADS NARROW AMID REPORTED REDUCTION IN FOREIGN EXCHANGE HEDGING DEMAND

During the first quarter, the three-month foreign exchange swap basis spreads of key U.S. dollar currency pairs initially widened as demand for prefunding increased ahead of the March 31 quarter-end period.[1] According to market participants, these swap basis spreads then narrowed notably toward the end of the quarter, suggesting that prefunding activity had slowed. Reduced foreign exchange hedging demand by foreign investors further contributed to this narrowing; contacts said the decrease in demand stemmed in part from a reduction in these investors' holdings of dollar assets.

Chart 10

FOREIGN EXCHANGE SWAP-IMPLIED BASIS SPREADS



Source: Bloomberg L.P.

[1] The foreign exchange swap basis represents the premium to borrow dollars in the foreign exchange swap market relative to the London Interbank Offered Rate.

TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE HOLDINGS

The Federal Reserve and U.S. Treasury did not undertake any intervention operations during the quarter. As of March 31, the value of the U.S. Treasury's Exchange Stabilization Fund (ESF) foreign-currency-denominated assets totaled $22.2 billion, comprised of euro and yen holdings. The Federal Reserve System Open Market Account (SOMA) holdings of foreign-currency-denominated assets also totaled $22.2 billion, comprised of euro and yen holdings.

Foreign Exchange Reserve Holdings

The Federal Reserve and U.S. Treasury invest their foreign currency reserves, which are held in the SOMA and the ESF, in a variety of instruments that yield market rates of return in their respective currencies and have a high degree of liquidity and credit quality. The Authorization for Foreign Currency Operations defines the permitted investments for the SOMA foreign currency portfolio.

The Open Market Trading Desk of the Federal Reserve Bank of New York (the Desk) utilizes an investment framework for the management of the foreign currency assets. The framework involves a routine affirmation of objectives and constraints from policymakers. The Desk then utilizes an investment approach designed to meet those objectives to maximize return subject to maintaining sufficient liquidity and a high degree of safety.

In terms of the composition of foreign currency reserves, a significant portion of the Federal Reserve and U.S. Treasury's foreign exchange reserves remained invested on an outright basis in German, French, Dutch, and Japanese government securities. Foreign currency reserves may also be invested at the Bank for International Settlements and in instruments at other official institutions, such as the Deutsche Bundesbank, the Banque de France, and the Bank of Japan. To the greatest extent practicable, the investments are split evenly between the SOMA and the ESF.

As of March 31, the euro reserves held by both the SOMA and the ESF totaled $26.8 billion, an increase from $26.2 billion, owing to foreign exchange translation effects as the dollar depreciated against the euro. Cash held in euro-denominated deposits at official institutions increased to $12.9 billion from $12.1 billion, while direct holdings of euro-denominated government securities decreased to $14.0 billion from $14.1 billion. The amount of yen-denominated deposits and government securities held by the SOMA and the ESF rose to $17.6 billion from $16.6 billion at quarter-end, which was mostly attributable to the appreciation of the yen against the dollar.

Consistent with the current Authorization for Foreign Currency Operations, the Desk conducts small-value exercises for the foreign currency reserves as a matter of prudent advance planning. No inference about policy should be drawn from these exercises. In the first quarter, the Desk entered into a small-value euro-denominated repurchase agreement and conducted small-value euro-denominated deposit tests.

Liquidity Swap Arrangements with Foreign Central Banks

As of March 31, the ECB had $5.0 billion of swaps outstanding. The BoJ, BoC, Bank of England, and Swiss National Bank did not have any dollar swaps outstanding at the end of the quarter.

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, December 31, 2017[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, March 31, 2018[a]
Federal Reserve System Open Market Account (SOMA)						
Euro	13,105	0	(7)	0	325	13,423
Japanese yen	8,293	0	0	0	507	8,800
Total	21,398	0	(6)	0	832	22,223

		Changes in Balances by Source				
	Carrying Value, December 31, 2017[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, March 31, 2018[a]
U.S. Treasury Exchange Stabilization Fund (ESF)						
Euro	13,085	0	(7)	0	324	13,402
Japanese yen	8,293	0	0	0	507	8,800
Total	21,377	0	(6)	0	831	22,202

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, as well as 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 March 31, 2018

	U.S. Treasury Exchange Stabilization Fund (ESF)[a]	Federal Reserve System Open Market Account (SOMA)[a]
Euro-denominated assets	**13,402.2**	**13,423.0**
Cash held on deposit at official institutions	6,420.5	6,441.3
Marketable securities held under repurchase agreements[b]	0.0	0.0
Marketable securities held outright	6,981.7	6,981.7
German government securities	2,099.7	2,099.7
French government securities	3,204.0	3,204.0
Dutch government securities	1,678.0	1,678.0
Japanese yen-denominated assets	**8,800.1**	**8,800.1**
Cash held on deposit at official institutions	7,244.9	7,244.9
Marketable securities held outright	1,555.2	1,555.2
Reciprocal currency arrangements		
European Central Bank[c]		5,011
Bank of Japan[c]		0
Swiss National Bank[c]		0
Bank of Canada[c]		0
Bank of England[c]		0
Banco de México[c]		0

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

[a] As of March 31, the SOMA and the ESF euro portfolios had Macaulay durations of 23.22 and 23.26 months, respectively; both the SOMA and ESF yen portfolios had Macaulay durations of 3.88 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, and Banco de México.

Table 3

RECIPROCAL CURRENCY ARRANGEMENTS

Millions of U.S. Dollars

Institution	Amount of Facility	Outstanding as of March 31, 2018
	Federal Reserve System Open Market Account (SOMA)	
Reciprocal currency arrangement		
Bank of Canada	2,000	0
Banco de México	3,000	0
Standing dollar liquidity swap arrangement		
European Central Bank	No preset limit	5,011
Swiss National Bank	No preset limit	0
Bank of Japan	No preset limit	0
Bank of Canada	No preset limit	0
Bank of England	No preset limit	0
	No preset limit	5,011
Standing foreign currency liquidity swap arrangements		
European Central Bank	No preset limit	0
Swiss National Bank	No preset limit	0
Bank of Japan	No preset limit	0
Bank of Canada	No preset limit	0
Bank of England	No preset limit	0
	No preset limit	0
	U.S. Treasury Exchange Stabilization Fund (ESF)	
Banco de México	3,000	0
	3,000	0