
TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

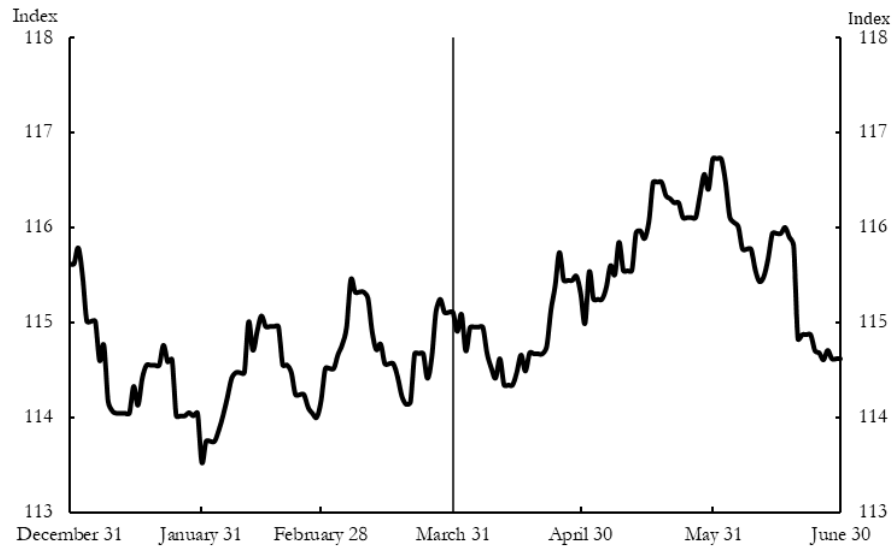
April – June 2019

During the second quarter of 2019, the U.S. dollar, as measured by the Federal Reserve Board’s broad trade-weighted dollar index, depreciated 0.4 percent amid multiple cross-currents. The main driver cited by investors as weighing on the dollar over the quarter was a decline in market expectations for the path of the Federal Reserve’s interest rate policy. However, the dollar was supported by investor uncertainty stemming from U.S.–China trade tensions, the continued higher rate of economic growth in the United States compared to most major U.S. trading partners, and a shift in market expectations toward increased monetary policy accommodation from central banks in some advanced and emerging economies. On a bilateral basis, the U.S. dollar depreciated 2.7 percent against the Japanese yen, 1.9 percent against the Canadian dollar, and 1.4 percent against the euro; the dollar appreciated 2.7 percent against the British pound and 2.3 percent against the onshore Chinese renminbi. The Federal Reserve and U.S. Treasury did not intervene in foreign exchange markets during the quarter.

This report, presented by Lorie Logan, Senior Vice President, Federal Reserve Bank of New York, System Open Market Account Manager pro tem, describes the foreign exchange operations of the U.S. Department of the Treasury and the Federal Reserve System for the period from April through June 2019.

Chart 1

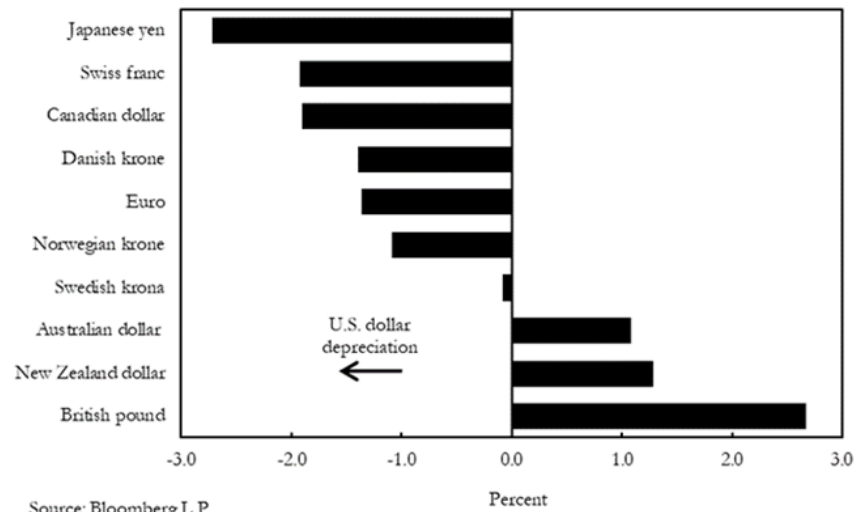
TRADE-WEIGHTED NOMINAL BROAD U.S. DOLLAR INDEX



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

Chart 2

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



Source: Bloomberg L.P.

U.S. DOLLAR DEPRECIATES MODESTLY AMID CROSS-CURRENTS

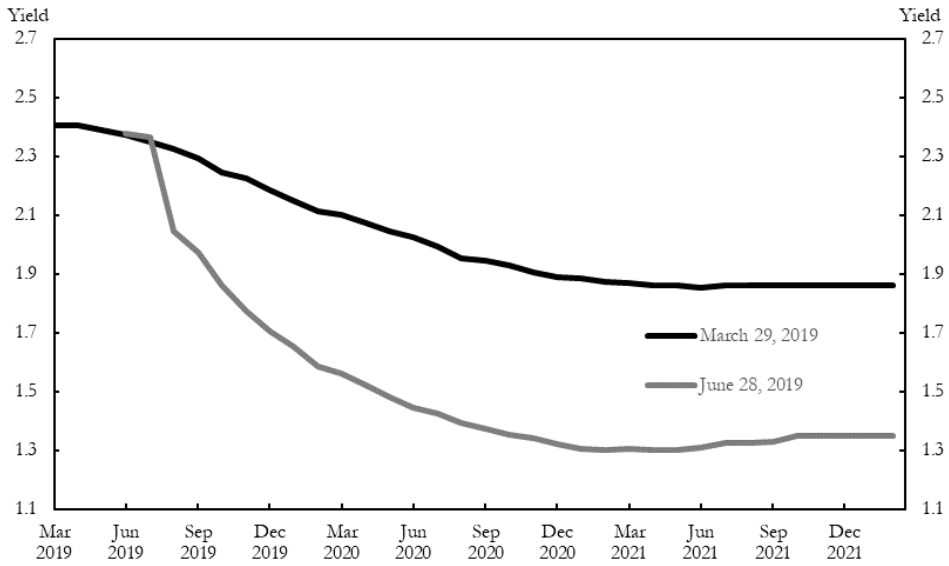
During the second quarter of 2019, the U.S. dollar, as measured by the Federal Reserve Board's [broad trade-weighted dollar index](#), depreciated 0.4 percent amid multiple cross-currents.¹ Several factors contributed to depreciation pressure on the dollar. These include the decline in the market-implied monetary policy path for the United States, which contacts attributed in part to a perceived increase in uncertainty surrounding the economic outlook, softer U.S. growth data, continued below-target inflation data, and communication from some Federal Reserve policymakers that was perceived as indicating that a near-term decline in the target range for the federal funds rate was increasingly likely.

With respect to Federal Reserve communications, market participants broadly viewed communication from the June Federal Open Market Committee (FOMC) meeting as consistent with an increased likelihood of policy rate decreases during 2019. Contacts specifically cited the change in policy guidance in the FOMC statement from “patience” to “acting as appropriate to sustain the expansion,” as well as the larger-than-expected declines in some FOMC participants’ projections for the end-2019 target federal funds range in the June Summary of Economic Projections. These communications were cited as prompting a large decrease in federal funds futures-implied rates and contributing to the 51 basis point decline in the two-year Treasury yield over the quarter, a development widely viewed as driving dollar depreciation relative to other currencies late in the quarter.

¹ The Federal Reserve’s broad trade-weighted dollar index is based on twenty-six currencies, including both major developed market currencies and currencies of other important trading partners of the United States, including emerging markets.

Chart 3

MARKET-IMPLIED RATES ON FEDERAL FUNDS FUTURES



Source: Bloomberg L.P.

Chart 4

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.

However, investors noted that the aforementioned depreciation pressures were offset to a significant extent by the relative outperformance of the U.S. economy vis-à-vis most major U.S. trading partners, the continued elevated levels of U.S. interest rates relative to those of other G10 economies, and increasing expectations for additional policy accommodation by other major central banks. Indeed, policy communications from the European Central Bank (ECB) and some other central banks indicated a higher likelihood of policy easing, market-implied pricing of monetary policy expectations in most G10 and large emerging market economies declined, and the central banks of Australia, New Zealand, and some emerging market economies cut interest rates by either 25 or 50 basis points.

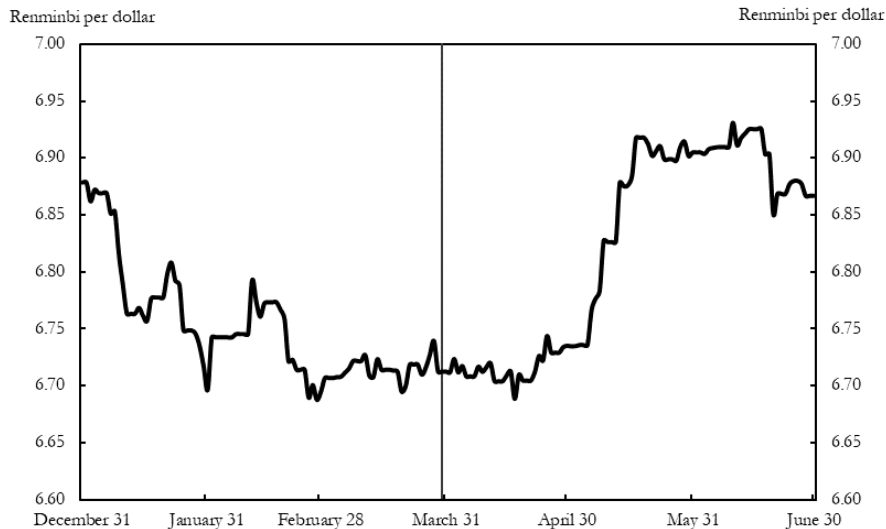
In addition, heightened risk aversion related to the deterioration in U.S.–China trade negotiations and increased demand for “safe haven” assets were cited as on net supporting the dollar.

ESCALATION IN U.S.–CHINA TRADE TENSIONS DRIVES RENMINBI DEPRECIATION AND YEN APPRECIATION

The U.S. dollar appreciated 2.3 percent against the onshore Chinese renminbi, amid a perceived increase in U.S.–China trade tensions. In May, the U.S. administration announced that it would increase the tariff rate imposed on \$200 billion of Chinese imports from 10 percent to 25 percent, and stated that the 25 percent tariff could eventually be expanded to include all Chinese imports. In addition, the U.S. decision to prevent U.S. firms from trading with Chinese technology firm Huawei was seen as escalating tensions. Taken together, these developments lowered market expectations for a U.S.–China trade deal.

Chart 5

U.S. DOLLAR–CHINESE RENMINBI (ONSHORE) EXCHANGE RATE

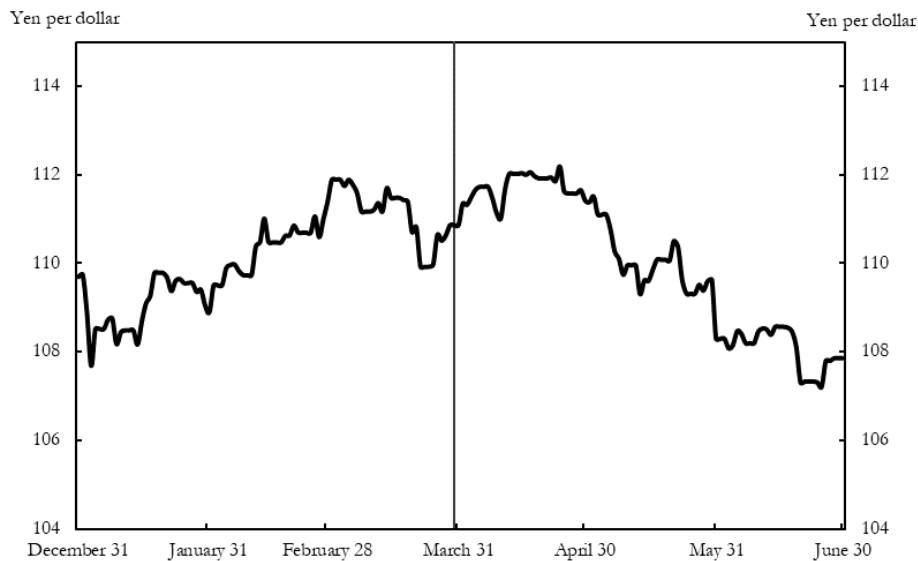


Source: Bloomberg L.P.

The U.S. dollar depreciated 2.7 percent against the Japanese yen in the second quarter, as the yen appreciated against all G10 currencies. Market contacts viewed the yen's appreciation as consistent with an increase in risk aversion during periods of increased market concerns over slowing global growth and heightened trade tensions. Contacts also noted the significant narrowing in interest rate differentials between U.S. Treasuries and Japanese government bonds as supporting the yen. Japanese economic data and monetary policy communications were broadly stable over the quarter, and market expectations for near-term changes in the Bank of Japan's accommodative monetary policy stance remained fairly subdued.

Chart 6

U.S. DOLLAR–YEN EXCHANGE RATE



Source: Bloomberg L.P.

More broadly, market participants viewed the increase in trade tensions as weighing on emerging market currencies in the second quarter. The dollar appreciated 0.3 percent against emerging market currencies in aggregate, as measured by the Federal Reserve's trade-weighted Emerging Market Economies Dollar Index. This appreciation occurred in spite of the downward shift in U.S. interest rate expectations, which was widely cited as supporting emerging market currencies. Much of this dollar appreciation occurred against currencies linked to the Chinese economy, such as the Korean won, Malaysian ringgit, and Taiwanese dollar.

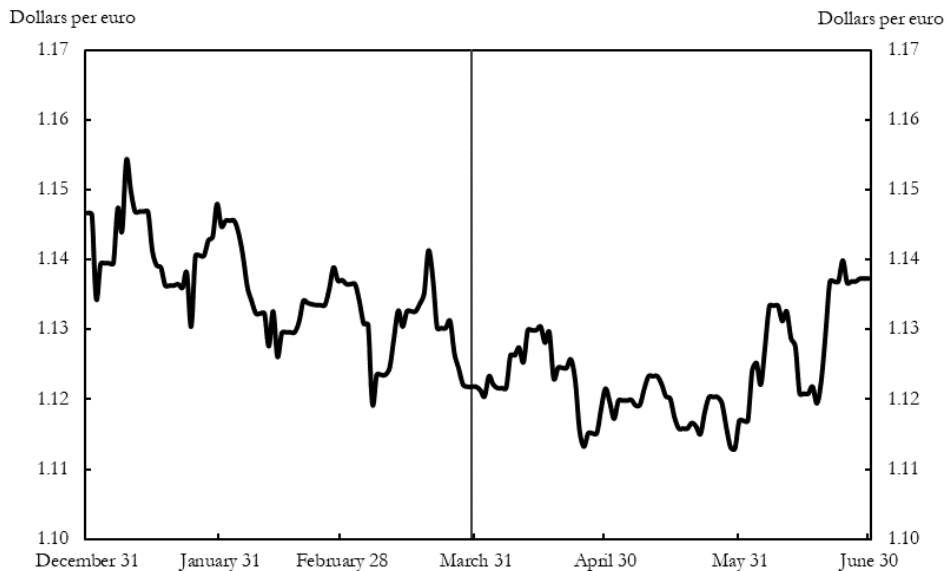
EURO APPRECIATES AGAINST THE DOLLAR DESPITE ECB SIGNAL FOR ADDITIONAL EASING

The U.S. dollar depreciated 1.4 percent against the euro in the second quarter, as shifting U.S. monetary policy expectations drove a significant reduction in the yield differential between U.S. and euro area rates. Indeed, U.S.–Germany two-year and ten-year spreads narrowed 36 and 14 basis points, respectively.

However, euro area interest rate expectations also shifted significantly lower over the quarter, concurrent with the narrowing in euro area inflation swaps at near- and longer-term horizons. Contacts cited this shift in market expectations toward greater ECB easing as limiting the extent of euro appreciation against the dollar. Indeed, market-implied euro area policy rates for year-end 2019 declined 14 basis points, as measured by the European overnight index swap (OIS) rates. European policy rates decreased further following a speech by ECB President Draghi that market participants viewed as increasing the likelihood of near-term policy rate cuts and additional asset purchases.

Chart 7

EURO–U.S. DOLLAR EXCHANGE RATE



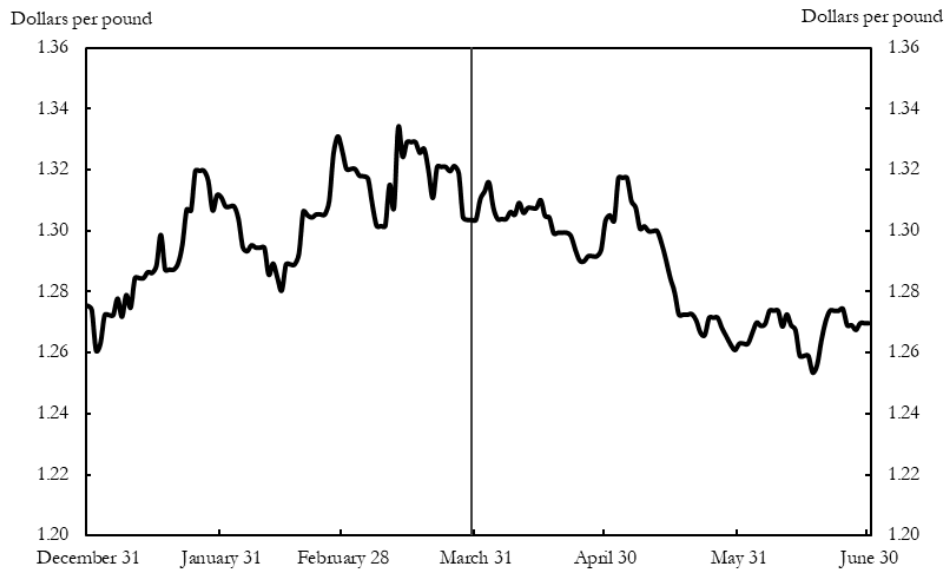
Source: Bloomberg L.P.

BRITISH POUND REMAINS SENSITIVE TO BREXIT-RELATED UNCERTAINTY

The U.S. dollar appreciated 2.7 percent against the British pound in the second quarter amid ongoing uncertainty regarding the United Kingdom’s withdrawal from the European Union (EU). Market participants viewed political developments during the quarter as increasing the probability of a no-deal “Brexit” scenario, which is viewed by market participants as the most disruptive scenario for the pound.

Chart 8

BRITISH POUND–U.S. DOLLAR EXCHANGE RATE



Source: Bloomberg L.P.

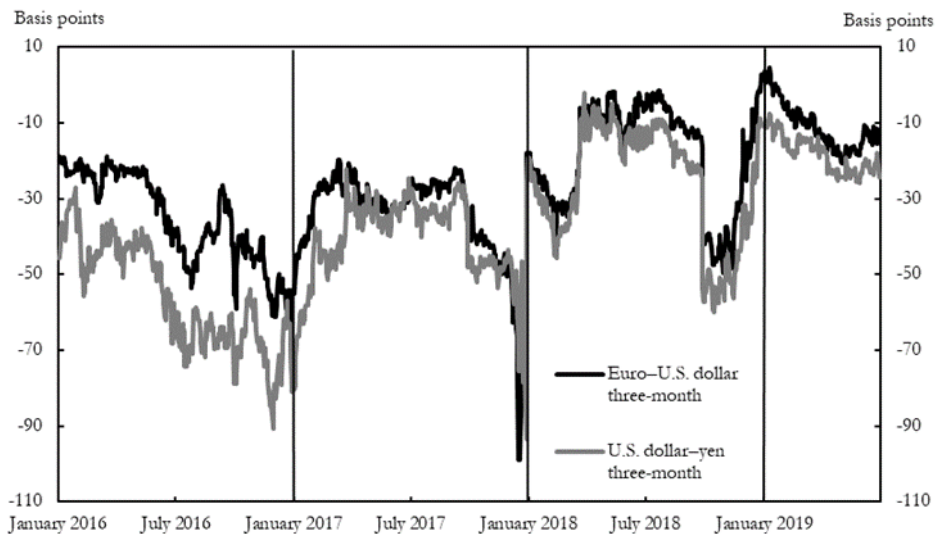
Specifically, Prime Minister May announced her resignation after the British parliament voted against the proposed EU withdrawal agreement. While the next Conservative Party leader had yet to be chosen in the second quarter, market participants interpreted the leadership race and resulting political uncertainty as increasing the likelihood of a no-deal Brexit scenario. Consistent with this view, the final two candidates for Conservative Party leader both expressed their willingness to accept a no-deal outcome in campaign communications made during the second quarter.

FOREIGN EXCHANGE SWAP MARKET STABLE; BASIS SPREADS LITTLE CHANGED

During the second quarter, three-month foreign exchange swap-implied basis spreads of key U.S. dollar currency pairs generally remained little changed and within the narrow levels exhibited throughout most of 2018. According to market participants, the narrowness of foreign exchange swap basis spreads compared to levels in recent years reflects two factors. First, the overall flatness of the U.S. Treasury yield curve has reduced the relative hedged return of U.S. dollar assets, resulting in lower demand for dollar funding and hedging in the foreign exchange swap market. Second, banks' ongoing adjustment to changes in the regulatory environment and corresponding improvement in their balance sheet management has helped reduce constraints on banks' supply of U.S. dollars in the foreign exchange swap market, especially around quarter- and year-end dates.

Chart 9

FOREIGN EXCHANGE SWAP-IMPLIED BASIS SPREADS



Source: Bloomberg L.P.

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 June 30, the value of the U.S. Treasury's Exchange Stabilization Fund (ESF) foreign-currency-denominated assets totaled \$21 billion, comprised of euro and yen holdings. The Federal Reserve System Open Market Account (SOMA) holdings of foreign-currency-denominated assets also totaled \$21 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, the Federal Reserve and U.S. Treasury's foreign exchange reserves [can be invested in German, French, Dutch, and Japanese government obligations](#) and in instruments at official institutions, such as the Bank for International Settlements and foreign central banks. To the greatest extent practicable, the investments are split evenly between the SOMA and the ESF.

As of June 30, the euro reserves held by both the SOMA and the ESF totaled \$24.7 billion, an increase from \$24.4 billion on March 31, owing to mark-to-market increases in the value of European government securities. Cash held in euro-denominated deposits at official institutions increased to \$13.4 billion from the prior quarter balance of \$12.8 billion, while direct holdings of euro-denominated government securities decreased to \$11.3 billion from \$11.6 billion. The amount of yen-denominated deposits and government securities held by the SOMA and the ESF increased to \$17.3 billion from \$16.9 billion at quarter-end, which was mostly attributable to the appreciation of the yen against the dollar.

Liquidity Swap Arrangements with Foreign Central Banks

As of June 30, the ECB had \$17 million of swaps outstanding. The Bank of Japan, Bank of Canada, Bank of England, and Swiss National Bank did not have any dollar swaps outstanding at the end of the quarter.

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 second quarter, the Desk entered into a small-value Canadian dollar–denominated repurchase agreement.

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, 2019 ^a
	Carrying Value, March 31, 2019 ^a	Net Purchases and Sales ^b	Investment Earnings ^c	Realized Gains/Losses on Sales ^d	Unrealized Gains/Losses on Foreign Currency Revaluation ^e	
Federal Reserve System Open Market Account (SOMA)						
Euro	12,203	0	(8)	0	159	12,354
Japanese yen	8,445	0	0	0	222	8,668
Total	20,648	0	(8)	0	381	21,022
U.S. Treasury Exchange Stabilization Fund (ESF)						
Euro	12,184	0	(8)	0	158	12,335
Japanese yen	8,445	0	0	0	222	8,668
Total	20,629	0	(7)	0	381	21,002

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 June 30, 2019

	U.S. Treasury Exchange Stabilization Fund (ESF) ^a	Federal Reserve System Open Market Account (SOMA) ^a
Euro-denominated assets	12,334.9	12,353.9
Cash held on deposit at official institutions	6,687.8	6,706.7
Marketable securities held under repurchase agreements ^b	0.0	0.0
Marketable securities held outright	5,647.1	5,647.1
German government securities	1,316.9	1,316.9
French government securities	2,821.2	2,821.2
Dutch government securities	1,509.0	1,509.0
Japanese yen-denominated assets	8,667.7	8,667.7
Cash held on deposit at official institutions	7,616.4	7,616.4
Marketable securities held outright	1,051.3	1,051.3
Reciprocal currency arrangements		
European Central Bank ^c		17
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 June 30th, the SOMA and the ESF euro portfolios had Macaulay durations of 22.22 and 22.26 months, respectively; both the SOMA and ESF yen portfolios had Macaulay durations of 1.57 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 June 30, 2019
<u>Federal Reserve System Open Market Account (SOMA)</u>		
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	17
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	17
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>U.S. Treasury Exchange Stabilization Fund (ESF)</u>		
Banco de México	3,000	0
	3,000	0