TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

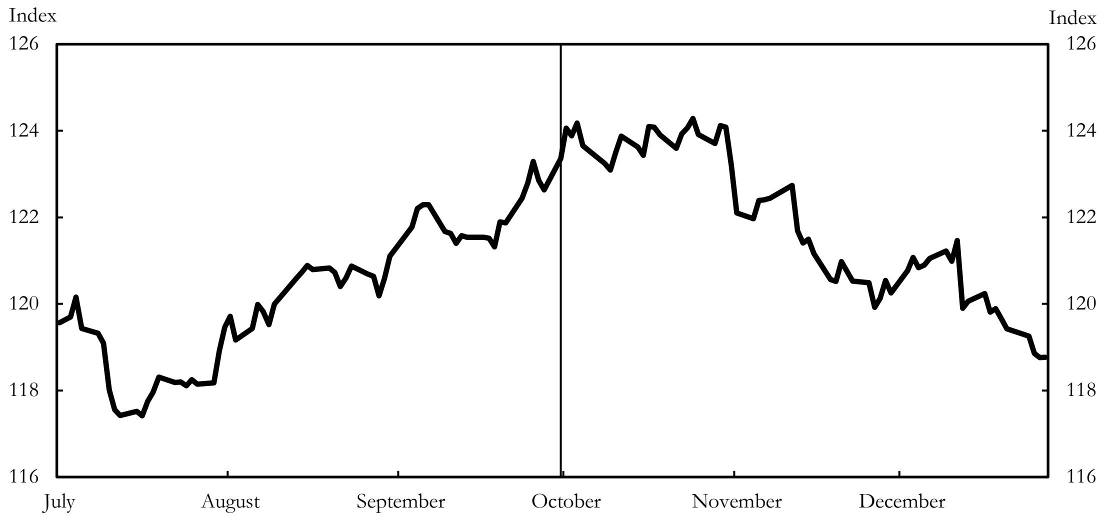
October - December 2023

During the fourth quarter of 2023, the U.S. dollar, as measured by the Federal Reserve Board's broad trade-weighted dollar index, depreciated 3.2 percent on net. The dollar depreciated against most advanced and emerging market currencies, driven largely by domestic economic data that indicated continued signs of U.S. disinflation and Federal Open Market Committee communications that contributed to a significant decline in nominal U.S. Treasury yields. The subsequent improvement in investor risk sentiment, as reflected in an increase in risk asset prices over the quarter, was also viewed as adding to broad dollar depreciation pressures. At the same time, official communications from several other advanced economy central banks were interpreted as less accommodative than expected, and these were also viewed by market participants on the margin as contributing to broad dollar depreciation. The dollar depreciated against most emerging market currencies, as the repricing of the path of monetary policy in the U.S. and the associated improvement in investor risk sentiment were seen as outweighing the impact of policy rate cuts by many emerging market central banks over the period. The Federal Reserve and U.S. Treasury did not intervene in foreign exchange markets during the quarter.

This report, presented by Roberto Perli, Federal Reserve Bank of New York System Open Market Account Manager, 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 2023. Cullen K. Kavoussi was primarily responsible for preparation of the report.

Chart 1

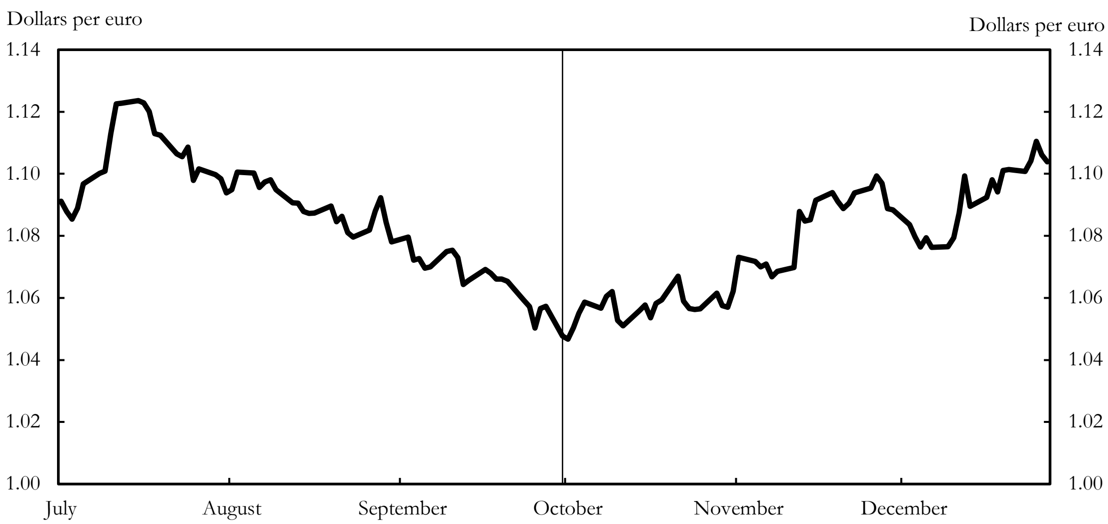
BROAD TRADE-WEIGHTED U.S. DOLLAR INDEX



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

Chart 2

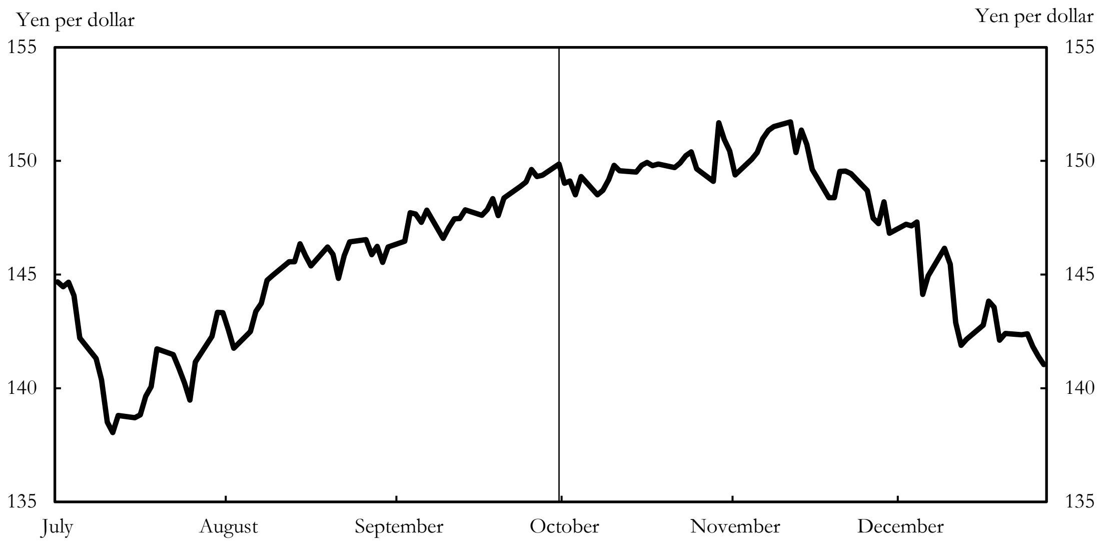
EURO–U.S. DOLLAR EXCHANGE RATE



Source: Bloomberg L.P.

Chart 3

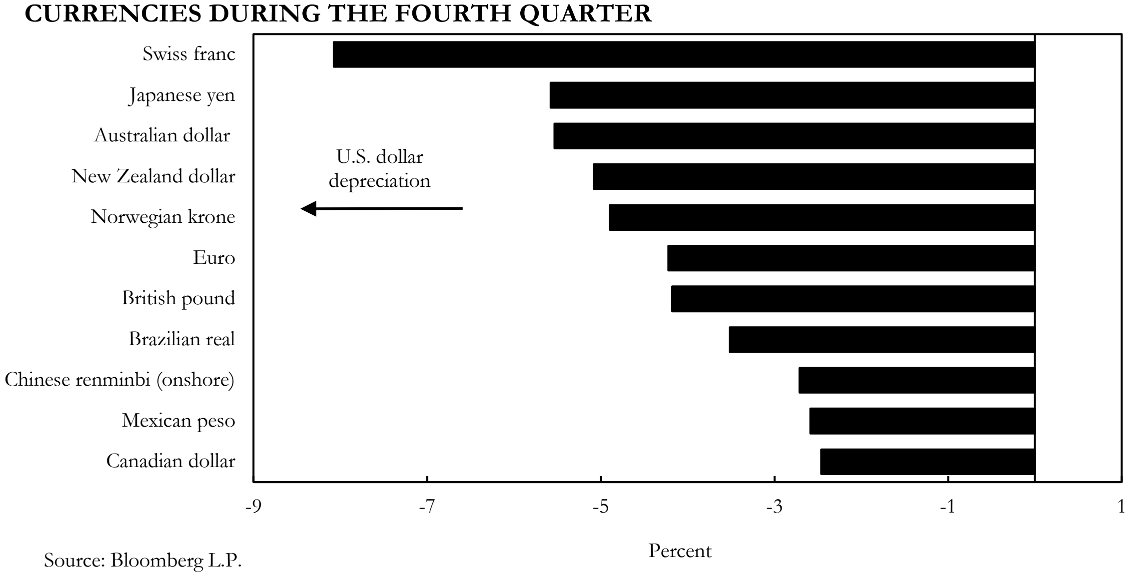
U.S. DOLLAR–YEN EXCHANGE RATE



Source: Bloomberg L.P.

Chart 4

U.S. DOLLAR PERFORMANCE AGAINST DEVELOPED AND EMERGING MARKET CURRENCIES DURING THE FOURTH QUARTER



Source: Bloomberg L.P.

U.S. DOLLAR DEPRECIATES ON FOMC COMMUNICATIONS, DECLINING U.S. YIELDS

During the fourth quarter of 2023, the U.S. dollar, as measured by the Federal Reserve Board's broad trade-weighted dollar index, depreciated 3.2 percent on net. The dollar depreciated broadly against most advanced and emerging market currencies, driven by Federal Open Market Committee (FOMC) communications that were viewed as signaling that the Committee may have reached the end of its monetary policy tightening cycle amid domestic economic data that indicated continued disinflation. Diminished perceived risks around further policy rate increases and rising expectations for an earlier start to, and larger amount of, policy rate cuts in 2024 contributed to a 79 basis point decline in two-year nominal U.S. Treasury yields and an improvement in investor risk sentiment, which were also cited as adding to dollar depreciation pressures.

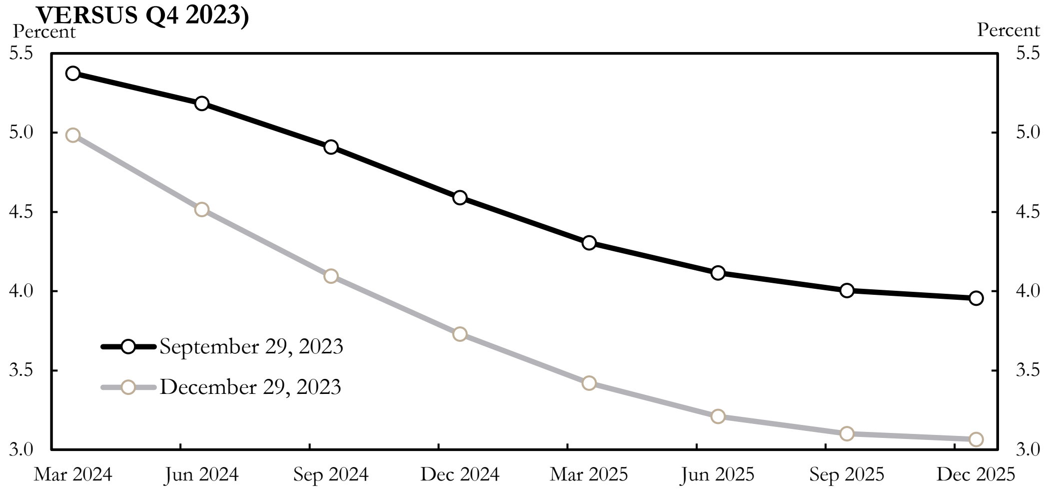
Overall, U.S. economic data releases during the quarter showed a continued trend of gradually decelerating inflation and a moderate slowdown in economic activity, which together were seen as reducing the likelihood of further Federal Reserve policy rate increases during the current cycle. In particular, the month-over-month headline and core consumer price index (CPI) for October printed at 0.0 percent and 0.2 percent, respectively, below consensus forecasts of 0.1 percent and 0.3 percent, which market contacts viewed as indicative of disinflationary trends. Additionally, the October and November Employment Situation reports were cited as evidence that U.S. labor markets were showing signs of slower job and wage growth. While indicators of consumption, such as retail sales data, remained strong relative to economic forecasts, Institute for Supply Management manufacturing and services data were mixed over the quarter.

Against this backdrop of continued disinflation and a slowing pace of economic growth, FOMC communications over the quarter were interpreted as indicating that the Federal Reserve may have reached the end of its tightening cycle, as it held the target range for the federal funds rate steady at its November and December meetings. Specifically, contacts noted Committee members' acknowledgement at the November FOMC meeting that the tightening in financial conditions, particularly given the sharp rise in longer-dated Treasury yields in the prior quarter, would likely weigh on economic activity and inflation and might limit the need for additional rate increases. Further, among the suite of communications at the December meeting, market participants were particularly attentive to downward revisions to Committee members' median expected level of the federal funds rate in the Statement of Economic Projections, which implied 75 basis points of projected rate cuts in 2024, compared to survey measures taken prior to the meeting that indicated consensus expectations of 50 basis points of cuts. Consistent with the market interpretation of FOMC communications over the quarter, implied rates on Secured Overnight Financing Rate (SOFR) futures contracts maturing by year-end 2024 and 2025 declined by 86 basis points and 89 basis points, respectively, on net.

The improvement in investor risk sentiment amid less-restrictive-than-expected FOMC communications was also seen as weighing on the dollar. The dollar maintained a negative correlation with U.S. equities, as the S&P 500 index rose more than 11 percent over the quarter. Additionally, an unwind of long-dollar speculative positioning may have exacerbated dollar depreciation pressures. Indeed, according to Commodity Futures Trading Commission data, aggregate speculative foreign exchange futures positioning as a share of open interest went from moderately long dollar at the start of the quarter to moderately short dollar at the end of the quarter.

Chart 5

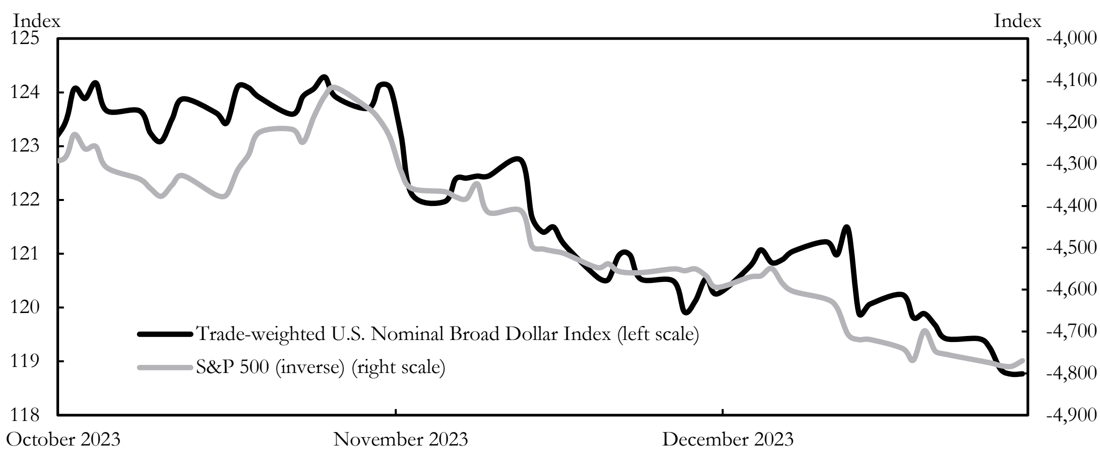
SOFR FUTURES-IMPLIED PATH OF FOMC POLICY (Q3 2023 VERSUS Q4 2023)



Source: Bloomberg L.P.

Chart 6

U.S. DOLLAR AND S&P 500 INDEX PERFORMANCE



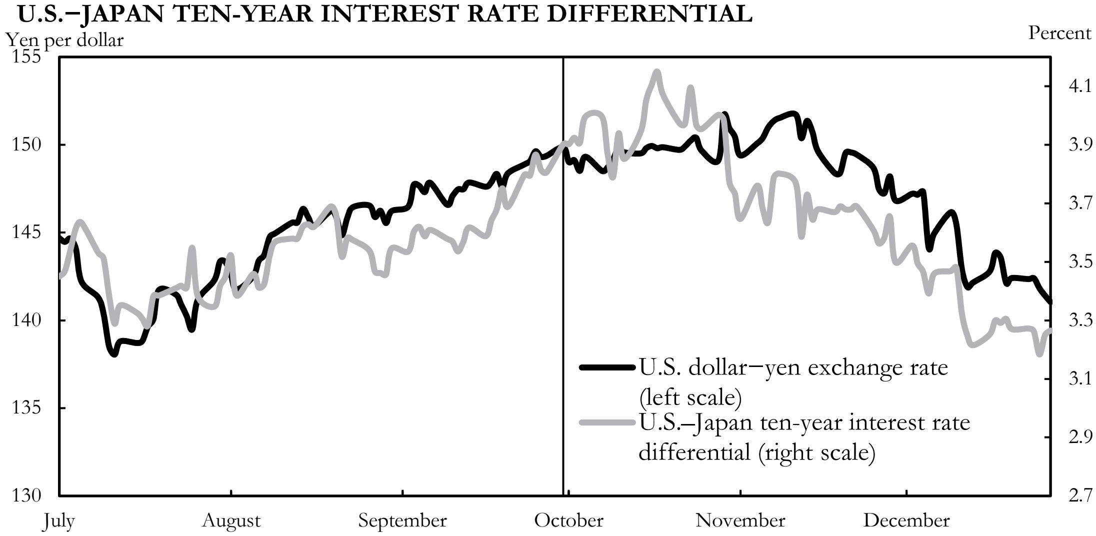
Sources: Board of Governors of the Federal Reserve System; Bloomberg L.P.

U.S. DOLLAR DEPRECIATES AGAINST THE JAPANESE YEN AMID NARROWING INTEREST RATE DIFFERENTIALS

The dollar depreciated 5.6 percent against the Japanese yen in the fourth quarter as the notable decline in nominal U.S. Treasury yields drove a significant narrowing of interest rate differentials in favor of Japan. At the same time, market speculation around further incremental steps toward monetary policy normalization in Japan was a key driver of the U.S. dollar–Japanese yen currency pair. At the October Bank of Japan (BoJ) monetary policy meeting, the central bank adjusted its yield curve control framework by recharacterizing the upper trading threshold for ten-year Japanese government bonds as a reference rather than a strict cap, which many market participants interpreted as a step toward removing the target on ten-year Japanese sovereign yields altogether. The U.S. dollar–Japanese yen currency pair also exhibited notable volatility in the days surrounding the BoJ's December meeting, as market participants viewed the central bank's communications as pushing back against a sharp buildup in market expectations for an imminent end to negative interest rate policy in the weeks prior to the meeting date.

Chart 7

U.S. DOLLAR−YEN EXCHANGE RATE AND U.S.−JAPAN TEN-YEAR INTEREST RATE DIFFERENTIAL



Source: Bloomberg L.P.

U.S. DOLLAR DEPRECIATES AGAINST THE EURO AMID BROAD DOLLAR WEAKNESS AND LESS-ACCOMMODATIVE-THAN-EXPECTED ECB COMMUNICATIONS

The dollar depreciated 4.2 percent against the euro over the fourth quarter, with market participants citing broad-dollar weakness amid the sharp decline in the market-implied path of FOMC policy and European Central Bank (ECB) communications that were interpreted as less accommodative than expected. Although the ECB kept its policy rate unchanged at its October and December Governing Council meetings, President Lagarde emphasized during each press conference that policy rate cuts were not yet being discussed. The ECB President also noted that upcoming wage and labor market data in the first half of 2024 will be important for informing the ECB's inflation forecasts, as the path of policy remains data-dependent. These communications were viewed as pushing back against rising market speculation that the deteriorating euro area growth outlook would prompt the central bank to lower its policy rate earlier in 2024 and by a larger magnitude than previously expected by market participants. Market participants suggested the euro's performance against the dollar over the quarter may also have been impacted by the improvement in investor risk sentiment, evidenced by a substantial increase in European equities throughout the period.

U.S. DOLLAR DEPRECIATES AGAINST MOST EMERGING MARKET CURRENCIES ON IMPROVED INVESTOR RISK SENTIMENT, NOTABLE TREASURY YIELD DECLINES

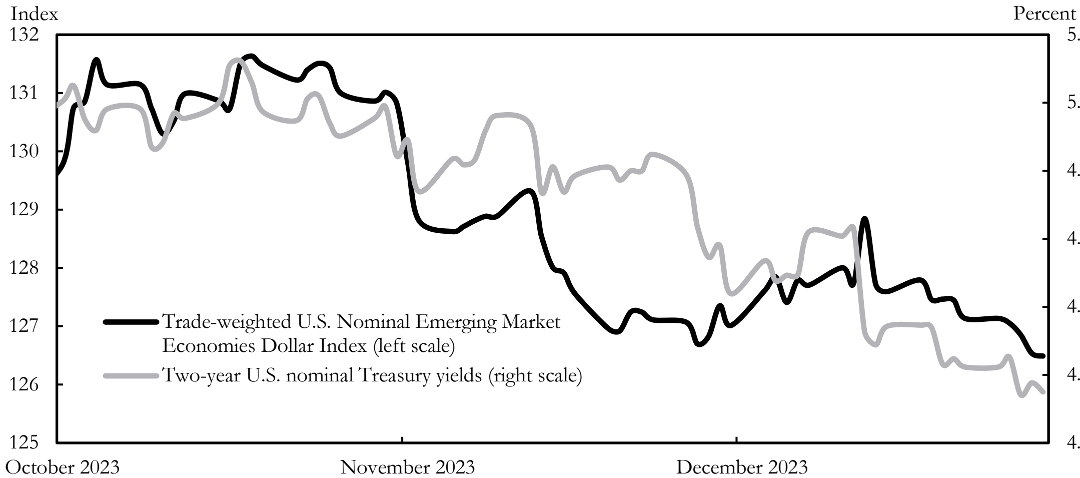
The dollar depreciated about 2.1 percent against emerging market currencies in nominal terms during the fourth quarter, as measured by the Federal Reserve's trade-weighted Emerging Market Economies Dollar Index. Following the November FOMC meeting, market participants predominantly attributed the appreciation of emerging market currencies to the substantial decline in nominal Treasury yields and global interest rate volatility, as well as the improvement in investor risk sentiment.

The dollar depreciated 2.7 percent on net against the Chinese renminbi over the quarter amid broad dollar weakness. Early in the quarter, market contacts were attentive to measures taken by the People's Bank of China to limit renminbi depreciation amid continued market focus on the deteriorating Chinese growth outlook and still-elevated U.S.–China interest rate differentials in favor of the dollar. These measures included publishing the daily dollar–renminbi fixing rate midpoint at a level in which the renminbi was stronger than market expectations and tightening liquidity in the offshore Chinese renminbi market.

The dollar depreciated against most Latin American currencies, most notably by 3.5 percent and 2.6 percent against the Brazilian real and Mexican peso, respectively. Market participants suggested the still-elevated real rates in Latin American economies may have supported local currencies against the dollar, despite policy rate cuts by most central banks in the region over the quarter. The Argentine peso was a notable outlier, as local authorities devalued the currency, resulting in a more than 50 percent depreciation against the dollar.

Chart 8

TRADE-WEIGHTED EMERGING MARKETS DOLLAR INDEX AND TWO-YEAR TREASURY YIELDS



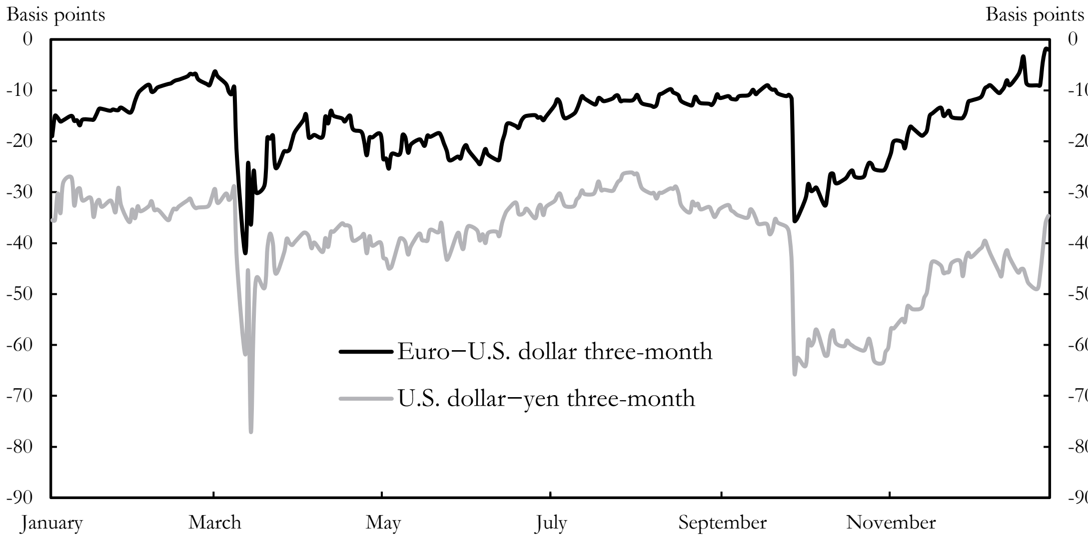
Sources: Board of Governors of the Federal Reserve System; Bloomberg L.P.

OFFSHORE U.S. DOLLAR FUNDING CONDITIONS REMAIN STABLE AMID AMPLE U.S. DOLLAR LIQUIDITY

Global offshore dollar funding conditions, particularly in the foreign exchange swap market, were stable during the quarter amid abundant dollar funding liquidity. In the weeks leading up to the year-end turn, short-term foreign exchange swap basis spreads for the euro–U.S. dollar and U.S. dollar–Japanese yen pairs gradually narrowed, indicating a decline in the premiums to borrow dollars. Market participants reported that foreign exchange swap market conditions remained orderly over the year-end turn amid lighter trading volumes and wider bid-ask spreads, typical for the final trading days of the year. Market participants noted various factors as contributing to the relatively benign trading and liquidity conditions around year-end, including sizable U.S. dollar prefunding activity among foreign market participants and active bank balance sheet risk management, amid still abundant dollar funding supply in offshore markets.

Chart 9

FOREIGN EXCHANGE THREE-MONTH SWAP-IMPLIED BASIS SPREADS



Source: Bloomberg L.P.

U.S. DOLLAR LIQUIDITY SWAP ARRANGEMENTS WITH FOREIGN CENTRAL BANKS

Aggregate swaps outstanding under the U.S. dollar liquidity swap arrangements with foreign central banks increased from $0.2 billion at the end of the third quarter of 2023 to $1.4 billion at the end of the fourth quarter of 2023, reflecting typical year-end increases in take-up. The aggregate amount of swaps outstanding at the end of the year was in line with prior year-end outstanding totals of $3.3 billion and $0.4 billion in 2021 and 2022, respectively. The ECB held all of the outstanding central bank liquidity swaps at the end of December, while the BoJ, Bank of England, Swiss National Bank, and Bank of Canada had no U.S. dollar swaps outstanding.

TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE HOLDINGS

The Federal Reserve and U.S. Treasury did not undertake any foreign exchange intervention operations during the quarter. As of December 31, 2023, the value of the Federal Reserve System Open Market Account (SOMA) foreign-currency-denominated assets totaled $18.7 billion, comprised of euro- and yen-denominated holdings. The value of the U.S. Treasury's Exchange Stabilization Fund (ESF) foreign-currency-denominated assets totaled $18.6 billion, comprised of euro- and yen-denominated 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.[1]

In terms of investment eligibility, the Federal Reserve and U.S. Treasury's foreign exchange reserves can be invested in German, French, Dutch, and Japanese government obligations; purchases of obligations of European sovereign issuers eligible to be held outright under agreements for repurchase of such securities; 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 December 31, 2023, the U.S. dollar value of euro-denominated deposits and government securities held by the SOMA and the ESF increased to $24.1 billion from $23.1 billion on September 30, 2023, and the U.S. dollar value of yen-denominated deposits and government securities increased to $13.3 billion from $12.5 billion on September 30, 2023. These changes were largely driven by foreign exchange translation effects.

[1] 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.

Table 1

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

Millions of U.S. Dollars

	Carrying Value, September 30, 2023[a]	Changes 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, 2023[a]
Federal Reserve System Open Market Account (SOMA)						
Euro	11,561	0	82	(125)	518	12,035
Japanese yen	6,254	0	(0)	0	378	6,632
Total	17,815	0	81	(125)	896	18,667

	Carrying Value, September 30, 2023[a]	Changes 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, 2023[a]
U.S. Treasury Exchange Stabilization Fund (ESF)						
Euro	11,543	0	81	(125)	518	12,017
Japanese yen	6,254	0	(0)	0	378	6,632
Total	17,797	0	81	(125)	895	18,648

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 "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, 2023

	U.S. Treasury Exchange Stabilization Fund (ESF)[a]	Federal Reserve System Open Market Account (SOMA)[a]
Euro-denominated assets	**12,016.6**	**12,035.4**
Cash held on deposit at official institutions	8,411.6	8,430.4
Marketable securities held under repurchase agreements[b]	0.0	0.0
Marketable securities held outright	3,605.0	3,605.0
German government securities	685.1	685.1
French government securities	1,848.4	1,848.4
Dutch government securities	1,071.5	1,071.5
Yen-denominated assets	**6,631.6**	**6,631.6**
Cash held on deposit at official institutions	6,333.0	6,332.9
Marketable securities held outright	298.6	298.6

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

[a]As of December 31, the SOMA and the ESF euro portfolios had Macaulay durations of 9.89 and 9.90 months, respectively; both the SOMA and ESF yen portfolios had Macaulay durations of 0.38 months.

[b]Debt obligations of the European sovereign issuers eligible to be held outright in the foreign currency reserves are eligible collateral for reverse repo transactions.

Table 3

RECIPROCAL CURRENCY ARRANGEMENTS

Millions of U.S. Dollars

Institution	Amount of Facility	Outstanding as of December 31, 2023
	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	Unlimited	1,357
Swiss National Bank	Unlimited	0
Bank of Japan	Unlimited	0
Bank of Canada	Unlimited	0
Bank of England	Unlimited	0
		1,357
Standing foreign currency liquidity swap arrangement		
European Central Bank	Unlimited	0
Swiss National Bank	Unlimited	0
Bank of Japan	Unlimited	0
Bank of Canada	Unlimited	0
Bank of England	Unlimited	0
		0
	U.S. Treasury Exchange Stabilization Fund (ESF)	
Banco de México	9,000	0
	9,000	0