# TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

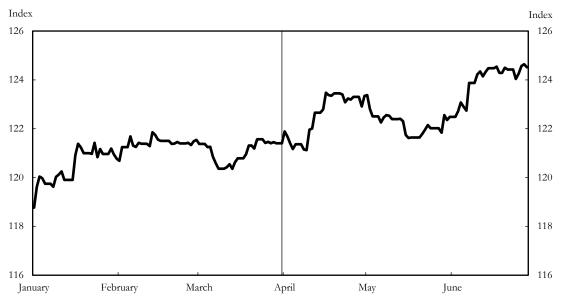
April - June 2024

During the second quarter of 2024, the U.S. dollar, as measured by the Federal Reserve Board's broad trade-weighted dollar index, appreciated 2.6 percent on net. Emerging market currencies accounted for the vast majority of the broad dollar move, as the dollar appreciated against the Brazilian real and Mexican peso by 11.6 percent and 10.6 percent, respectively. The dollar was driven by U.S. economic data suggesting resilient growth and continued tightness in the labor market as well as Federal Reserve communications, which contributed to both higher Treasury yields and a modest upward repricing of the Federal Reserve's path of policy. The dollar was further supported by an increase in risk premia stemming from idiosyncratic political risks abroad that weighed on specific currencies. On a bilateral basis, the dollar appreciated 6.3 percent against the Japanese yen and 0.7 percent against the euro. 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 April through June 2024. Colleen Keegan was primarily responsible for preparation of the report.

Chart 1

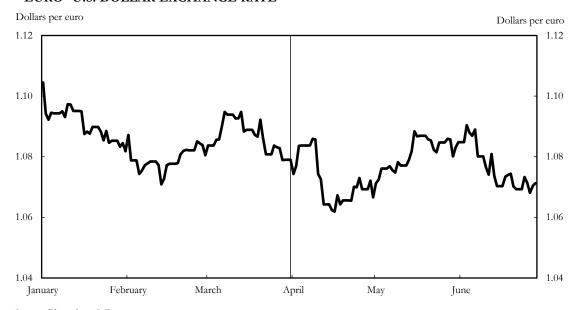
### BROAD TRADE-WEIGHTED U.S. DOLLAR INDEX



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

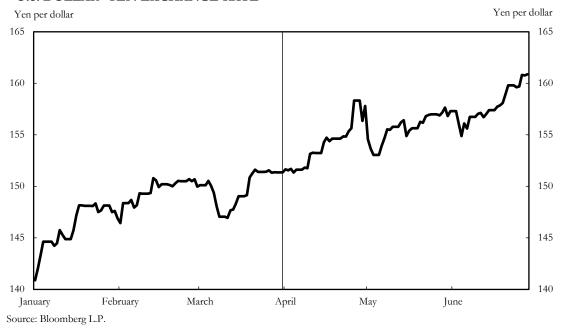
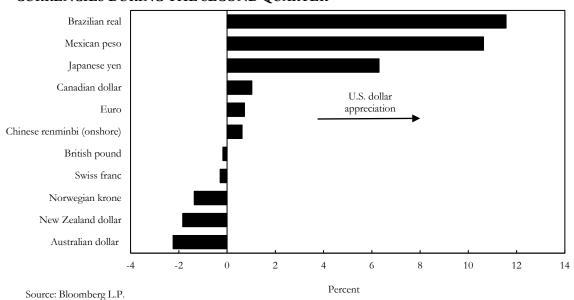


Chart 4
U.S. DOLLAR PERFORMANCE AGAINST DEVELOPED AND EMERGING MARKET CURRENCIES DURING THE SECOND QUARTER



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## U.S. DOLLAR APPRECIATES ON U.S. ECONOMIC RESILIENCE, MODEST REPRICING OF FEDERAL RESERVE POLICY, AND IDIOSYNCRATIC POLITICAL RISKS ABROAD

During the second quarter of 2024, the U.S. dollar, as measured by the Federal Reserve Board's broad trade-weighted dollar index, appreciated 2.6 percent on net, with emerging market currencies accounting for four-fifths of the move. The dollar was driven by U.S. data that suggested continued economic resilience and tightness in the labor market, which led to a rise in Treasury yields. Contacts also noted that the appreciation of the dollar was driven by Federal Open Market Committee (FOMC) communications that suggested a slightly later start to policy rate cuts than anticipated, as well as idiosyncratic political risks abroad that weighed on specific currencies versus the dollar, particularly the euro and the Mexican peso.

U.S. economic data prints during the quarter were broadly interpreted as indicative of resilient economic growth and continued tightness in the labor market. In particular, market participants were attentive to nonfarm payrolls data, which overall printed above consensus expectations in the second quarter. In addition, Purchasing Managers' Index (PMI) data gradually improved over the quarter as services, manufacturing, and composite PMIs all moved into expansionary territory. The above-expectations March consumer price index (CPI) report drove a discrete move higher in Treasury yields and broad dollar appreciation, though subsequent CPI prints in the second quarter were in line and below expectations with little impact on the dollar.

Against this backdrop, the FOMC left the federal funds target range unchanged, with contacts interpreting FOMC communications over the quarter as suggesting that policy rate cuts this year were likely to be fewer and to occur later than market participants had previously expected. Specifically, the upward revision to the year-end 2024 median rate in the Summary of Economic Projections released at the June FOMC meeting, which reflected just one 25 basis point rate cut, led markets to modestly reevaluate expectations for future policy easing. As such, markets pushed back the timing of the first fully priced-in 25 basis point cut to November from July, which had been the expectation at the end of the first quarter. On net, implied yields from federal funds futures for year-end 2024 increased by 24 basis points, as markets reduced the cumulative amount of easing priced from 69 basis points at the end of March to 45 basis points at the end of June.

Late in the quarter, idiosyncratic political risks abroad drove an increase in risk premia in specific currencies, specifically the euro and Mexican peso, leading to further dollar appreciation. The calling of snap parliamentary elections in France and a stronger-than-expected election result for Mexico's ruling party, which fueled speculation of potential constitutional changes, led to heightened political uncertainty in both jurisdictions. Despite the coincident decline in U.S. Treasury yields following the below-expectations May CPI report, the dollar appreciated notably in June as volatility, particularly in emerging market assets following the Mexican election results, drove an unwind of long positions in

high-yielding currencies popular in carry trading<sup>1</sup> strategies. French political uncertainty also contributed to euro weakness versus the dollar, though the magnitude of the move was relatively modest.

Chart 5 FEDERAL FUNDS FUTURES-IMPLIED PATH OF FOMC POLICY (Q1 2024 VERSUS Q2 2024) Percent Percent 5.5 5.5 5.0 5.0 4.5 4.5 End Q1 2024 4.0 4.0 End Q2 2024 35 3.5 Jun 2024 Sep 2024 Dec 2024 Mar 2025 Jun 2025 Sep 2025

Source: Bloomberg L.P.

# U.S. DOLLAR APPRECIATES AGAINST JAPANESE YEN AMID CONTINUED ACCOMODATIVE BANK OF JAPAN POLICY AND USE OF YEN IN CARRY TRADES

The dollar appreciated 6.3 percent against the Japanese yen amid communications from the Bank of Japan (BOJ) that were viewed by market participants as indicative of a continued accommodative policy stance following the BOJ's exit from negative interest rate policy earlier in the year. In particular, following the April and June BOJ policy meetings, market participants highlighted minimal additional detail on the precise timing and size of potential reductions in Japanese government bond (JGB) purchases and an emphasis on a gradual approach to policy normalization as prompting modest declines in JGB yields and broad yen depreciation.

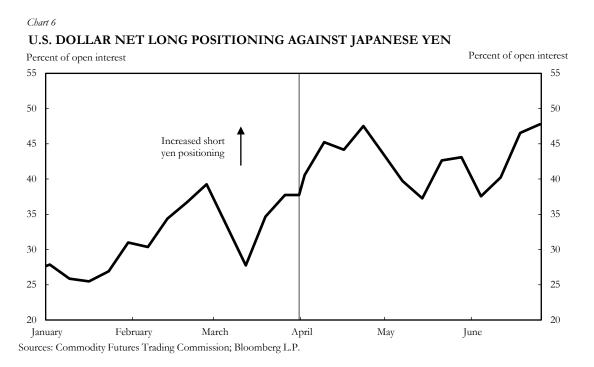
Despite a modest narrowing toward the end of the quarter, U.S.-Japan interest rate differentials remained wide in the second quarter, supporting the popularity of the yen as a funding currency for

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<sup>&</sup>lt;sup>1</sup> A carry trade involves borrowing in lower-yielding currencies (known as funding currencies) to invest in higher yielding (target) currencies and is a strategy that becomes less popular as foreign exchange volatility and associated risk rises.

carry trades and driving yen depreciation. Indeed, measures of implied volatility in major currency pairs remained near historically low levels, which encouraged the use of carry trading strategies. Consistent with reports of the yen's use as a funding currency, Commodity Futures Trading Commission data showed a notable increase in short yen positioning against the dollar over the quarter. Other factors cited as driving yen depreciation included Japanese investor activity, specifically the purchase of U.S. equities on an unhedged basis, and changes to the regulation of the Japanese tax-exempt investment scheme (Nippon Individual Savings Account, or NISA) earlier this year, which led to an increase in investment trust purchases of overseas assets.

Japan's Ministry of Finance published data indicating that it had intervened to support the currency in the amount of 9.8 trillion yen, marking the first such intervention to support the yen since October 2022.



EURO DEPRECIATES ON COMPARATIVELY WEAKER ECONOMIC DATA, MODESTLY WIDER INTEREST RATE DIFFERENTIALS, AND FRENCH POLITICAL UNCERTAINTY

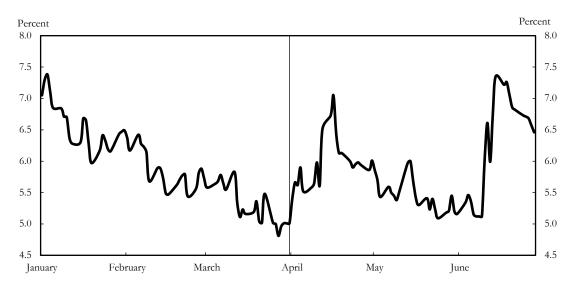
The dollar appreciated 0.7 percent against the euro over the second quarter, which market participants attributed to slightly weaker European data relative to U.S. data, a modest widening in U.S.—euro area interest rate differentials, and the increase in risk premium in the euro stemming from the surprise announcement of snap French parliamentary elections.

While first-quarter GDP and euro area PMIs in the first half of the quarter printed above expectations, below-expectations Producer Price Index, industrial production, and May PMI data indicated lingering economic weakness toward the end of the quarter. Euro area growth expectations were revised slightly higher over the quarter, though the absolute growth differential between the U.S. and euro area remained wide in favor of the U.S.

On net over the quarter, U.S.—euro area interest rate differentials widened modestly by about 16 basis points, driven primarily by increases in U.S. Treasury yields, which further weighed on the euro. Communications from ECB policymakers over the quarter, which highlighted moderating wage growth but continued strength in domestic price pressures, were broadly interpreted as reinforcing expectations for a first 25 basis point rate cut in June and a data-dependent approach beyond that. As was widely expected, the ECB reduced its policy rate by 25 basis points at the June meeting.

In mid-June, the euro discretely depreciated against the dollar following French President Emmanuel Macron's call for snap parliamentary elections in France. Market participants highlighted the elections as contributing to increased political uncertainty and heightened concerns over France's fiscal trajectory, leading to a higher risk premium across French assets. Following the announcement, one-month option-implied volatility in the euro-dollar pair rose sharply and the one-month 25-delta risk reversal declined further into negative territory, implying greater demand for protection against further euro depreciation versus the dollar.

Chart 7
EURO-U.S. DOLLAR ONE-MONTH OPTIONS-IMPLIED VOLATILITY



Source: Bloomberg L.P.

### U.S. DOLLAR APPRECIATES AGAINST MOST EMERGING MARKET CURRENCIES AMID IDIOSYNCRATIC POLITICAL RISKS

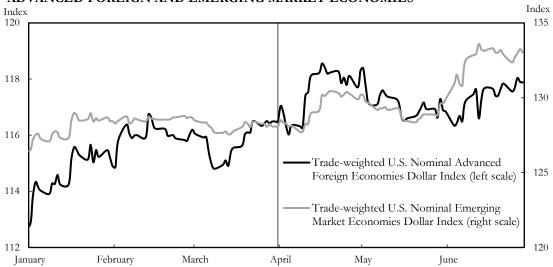
The dollar appreciated 3.9 percent against emerging market currencies during the second quarter, as measured by the Federal Reserve's trade-weighted Emerging Market Economies Dollar Index. Dollar appreciation was primarily driven by an unwind of long positions in high-yielding emerging market currencies used in carry trades amid an increase in risk premia in specific currencies on idiosyncratic political and fiscal risks.

Of note, the dollar appreciated 10.6 percent against the Mexican peso following a stronger-thanexpected election result for Mexico's ruling party, which fueled speculation of potential constitutional changes. Implied volatility in the dollar–peso pair rose notably over the quarter, reaching a year-to-date high. Given the ongoing low foreign exchange volatility environment and the popularity of the Mexican peso in carry trades as a liquid, high-yielding currency, long peso positioning had grown notably yearto-date. Consequently, contacts indicated that peso depreciation was exacerbated by a rapid unwind of extended long positioning following the election. The dollar also appreciated against the currencies of several other Latin American countries that faced domestic political and fiscal uncertainty. Of note, the dollar appreciated 11.6 percent against the Brazilian real and 7.8 percent against the Colombian peso.

Elsewhere, the dollar appreciated 0.6 percent against the Chinese renminbi amid widening U.S.—China interest rate differentials and mixed Chinese economic data. The dollar also appreciated against other Asian currencies, including the Korean won, Taiwanese dollar, and Thai baht, amid the modest upward repricing in the Federal Reserve's path of policy as well as portfolio outflows by local investors given strong U.S. equity market performance.

Chart 8

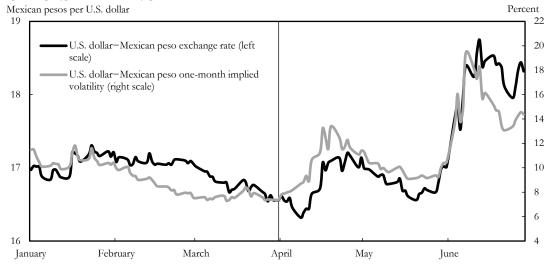
### U.S TRADE-WEIGHTED DOLLAR PERFORMANCE VERSUS ADVANCED FOREIGN AND EMERGING MARKET ECONOMIES



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

Chart 9

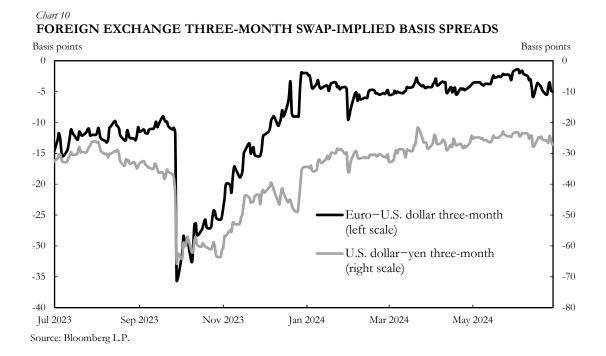
### U.S. DOLLAR-MEXICAN PESO EXCHANGE RATE AND ONE-MONTH OPTIONS-IMPLIED VOLATILITY



Source: Bloomberg L.P.

#### OFFSHORE U.S. DOLLAR FUNDING CONDITIONS REMAIN STABLE

Global offshore dollar funding conditions in the foreign exchange swap market were generally stable over the quarter. In June and over quarter-end, short-tenor swap basis spreads across some major currency pairs exhibited temporary widening, which market participants attributed to negative sentiment around the unexpected call for snap elections in France that resulted in some uncertainty around the political and fiscal trajectory.



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

Aggregate swaps outstanding of the U.S. dollar liquidity swap arrangements with foreign central banks held steady at \$0.2 billion at the end of the second quarter of 2024. All outstanding central bank liquidity swaps at the end of June were with the ECB, 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 June 30, the value of the Federal Reserve System Open Market Account (SOMA) foreign-currency-denominated assets totaled \$17.6 billion, comprised of euro- and yendenominated holdings. The value of the U.S. Treasury's Exchange Stabilization Fund (ESF) foreign-currency-denominated assets totaled \$17.6 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 <u>Authorization for Foreign Currency Operations</u> 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.<sup>2</sup>

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 June 30, 2024, the U.S. dollar value of euro-denominated deposits and government securities held by the SOMA and the ESF remained constant at \$23.6 billion, and the U.S. dollar value of yendenominated deposits and government securities decreased to \$11.6 billion from \$12.4 billion on March 31, 2024. This change was largely driven by foreign exchange translation effects.

<sup>2</sup> 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.

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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, March 31, 2024	Net Purchases and Sales <sup>b</sup>	Investment Earnings <sup>e</sup>	Realized Gains / Losses on Sales <sup>d</sup>	Unrealized Gains/Losses on Foreign Currency Revaluation <sup>c</sup>	Carrying Value, June 30, 2024*
Federal Reserve System Open Market Account (SOMA)						
Euro	11,824	0	85	(0)	(88)	11,821
Japanese yen	6,180	0	0	(0)	(371)	5,809
Total	18,004	0	85	(0)	(459)	17,630
	_		_			
	Carrying Value, March 31, 2024	Net Purchases and Sales <sup>b</sup>	Investment Earnings <sup>c</sup>	Realized Gains / Losses on Sales <sup>d</sup>	Unrealized Gains/Losses on Foreign Currency Revaluation <sup>c</sup>	Carrying Value, June 30, 2024°
U.S. Treasury Exchange Stabilization Fund (ESF)						
	11,805	0	85	(0)	(\$8)	11,803
Stabilization Fund (ESF)	11,805 6,180	0	85	(O) (O)	(88) (371)	11,803 5,809

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

<sup>\*</sup>Carrying value of the reserve asset position includes interest accrued on foreign currency, which is based on "day of" accrual method.

<sup>&</sup>lt;sup>h</sup>Net purchases and sales include foreign currency purchases related to official activity, repayments, and warehousing.

<sup>&#</sup>x27;Investment earnings include accrued interest and amortization on outright holdings.

 $<sup>^{\</sup>rm d}$ Gains and losses on sales are calculated using average cost.

<sup>&</sup>quot;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, 2024

	U.S. Treasury Exchange	Federal Reserve System	
	Stabilization Fund (ESF) <sup>a</sup>	Open Market Account (SOMA)	
uro-denominated assets	11,802.8	11,821.3	
Cash held on deposit at official institutions	8,532.5	8,551.0	
Marketable securities held under repurchase agreements <sup>b</sup>	0.0	0.0	
Marketable securities held outright	3,270.3	3,270.3	
German government securities	356.2	356.2	
French government securities	1,879.4	1,879.4	
Dutch government securities	1,034.7	1,034.7	
en-denominated assets	5,808.8	5,808.7	
Cash held on deposit at official institutions	5,478.8	5,478.8	
Marketable securities held outright	330.0	330.0	

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

As of June 30, the SOMA and the ESF euro portfolios had Macaulay durations of 8.74 and 8.76 months, respectively, both the SOMA and ESF yen portfolios had Macaulay durations of 0.14 months.

bDebt 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 June 30, 2024
	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	211
Swiss National Bank	Unlimited	0
Bank of Japan	Unlimited	0
Bank of Canada	Unlimited	0
Bank of England	Unlimited	0
		211
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 Stab	pilization Fund (ESF)
Banco de México	9,000	0
	9,000	0