
TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

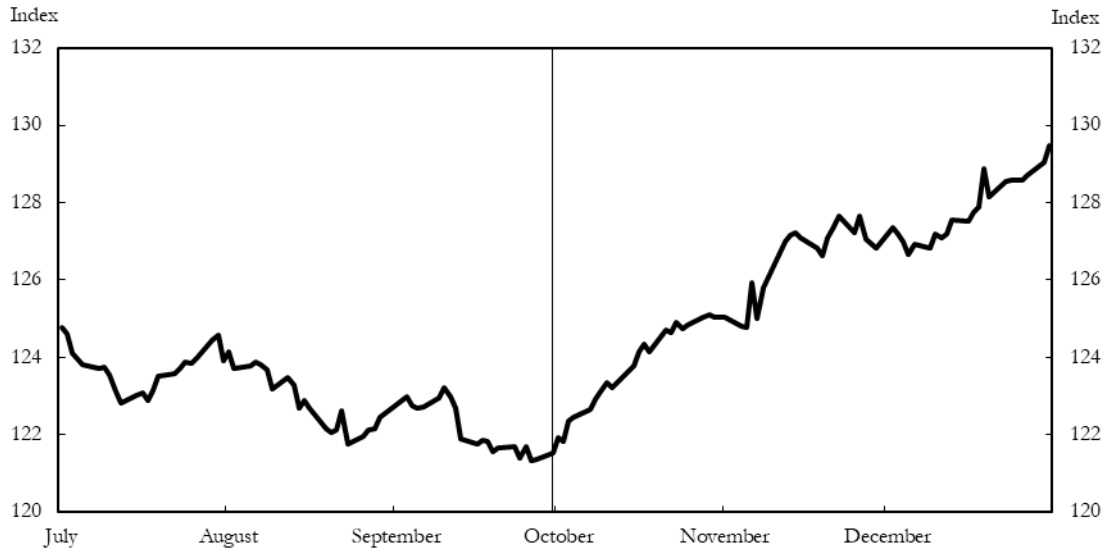
October – December 2024

During the fourth quarter of 2024, the U.S. dollar, as measured by the Federal Reserve Board’s [broad trade-weighted dollar index](#), appreciated 6.6 percent on net, the largest quarterly appreciation since the first quarter of 2020. The dollar appreciated against all advanced economy currencies and nearly all emerging market currencies, with the moves in advanced economy currencies accounting for just over half of the broad dollar move. The dollar’s appreciation was driven by the continued outperformance of U.S. economic growth relative to the rest of the world, slowing disinflation amid labor market strength, and Federal Reserve communications that were interpreted as less accommodative than expected and contributed to both higher Treasury yields and a notable upward repricing of the Federal Reserve’s path of policy. The dollar was further supported by expectations for shifts in economic policies by the incoming administration following the U.S. election in November. On a bilateral basis, the dollar appreciated 7.5 percent against the euro and 9.5 percent against the Japanese yen. 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 2024. Colleen Keegan was primarily responsible for preparation of the report.

Chart 1

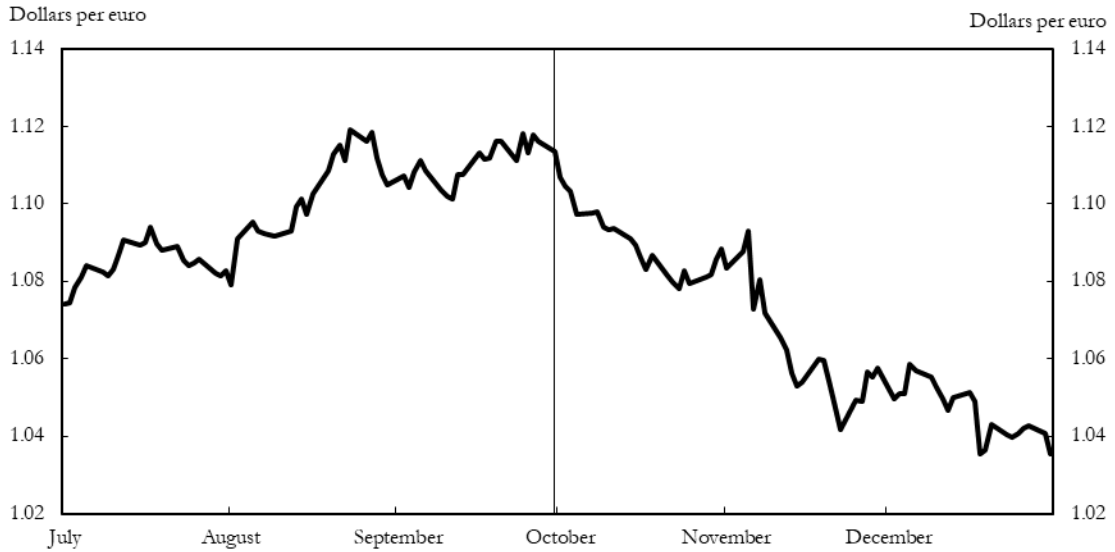
BROAD TRADE-WEIGHTED U.S. DOLLAR INDEX



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

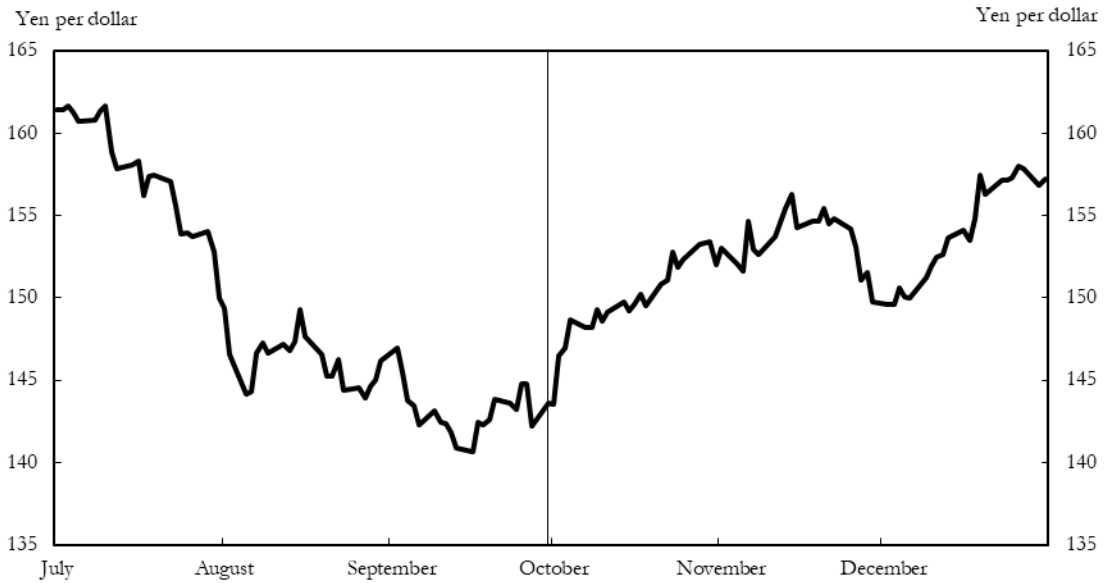
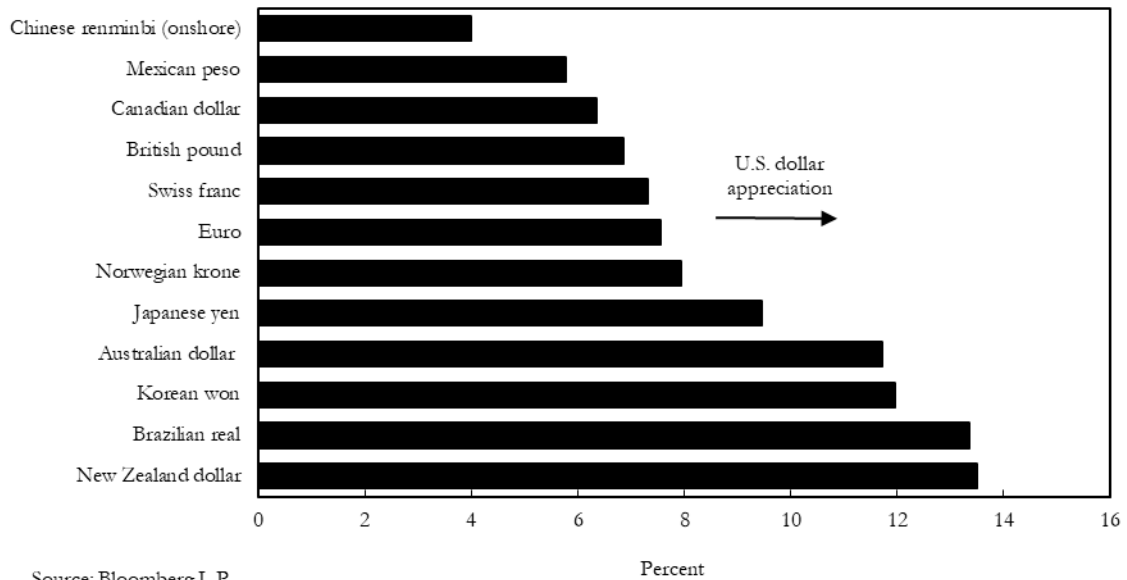


Chart 4

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



U.S. DOLLAR APPRECIATES ON U.S. ECONOMIC RESILIENCE, REPRICING OF FEDERAL RESERVE POLICY, AND EXPECTED CHANGES TO U.S. ECONOMIC POLICY

During the fourth quarter of 2024, the U.S. dollar, as measured by the Federal Reserve Board's broad trade-weighted dollar index, appreciated 6.6 percent on net, representing about three-quarters of the dollar's net appreciation in 2024. In the fourth quarter, the dollar appreciated against all advanced economy currencies and most emerging market currencies, with advanced economy currencies accounting for just over half of the broad dollar move. The dollar was driven by the continued outperformance of U.S. economic growth relative to the rest of the world, slowing disinflation amid labor market strength, and Federal Reserve communications that were interpreted as less accommodative than expected, contributing to a notable increase in Treasury yields and an upward repricing of the Federal Reserve's path of policy. Contacts also noted that the appreciation of the dollar reflected expectations for the incoming administration's economic agenda, with tariff and fiscal policies most in focus.

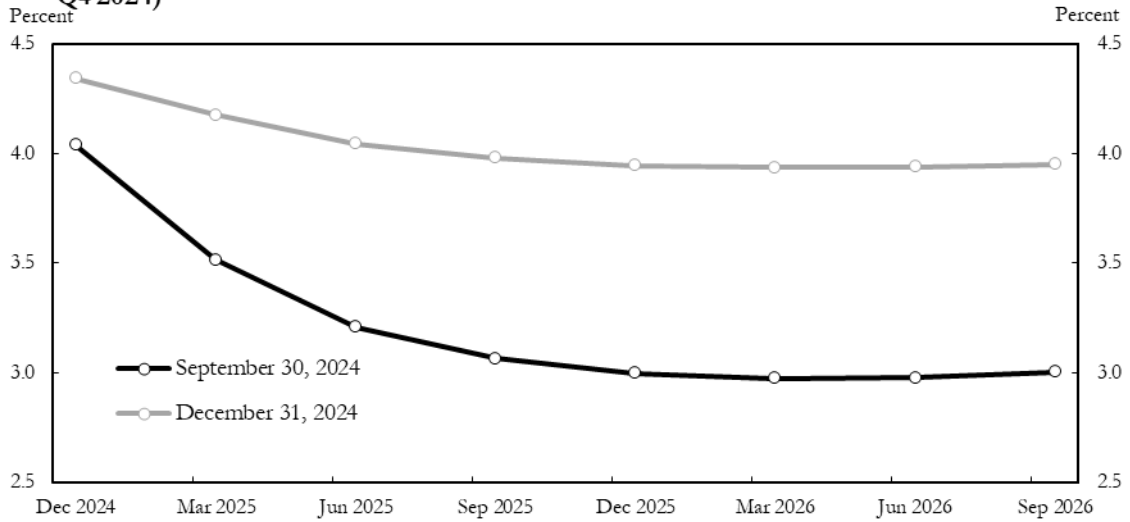
U.S. economic data during the quarter were broadly indicative of resilient economic growth, continued tightness in the labor market, and slowing disinflation, contributing to a notable rise in Treasury yields. In particular, the above-expectations September nonfarm payrolls data drove a discrete increase in Treasury yields and broad dollar appreciation. Market participants were also attentive to above-expectations third-quarter GDP data and the rise in the headline consumer price index back above 2.5 percent, which was viewed as suggesting a slowdown in disinflation. On net, nominal two-year Treasury yields rose by 60 basis points over the quarter, driving a widening of interest rate differentials in favor of the U.S. and supporting dollar appreciation.

While the Federal Open Market Committee (FOMC) lowered its federal funds target range by 25 basis points at both the November and December meetings, contacts interpreted Federal Reserve communications as suggesting that future policy rate cuts were likely to be fewer than market participants had previously expected. Specifically, the upward revision to the year-end 2025 median federal funds rate in the Summary of Economic Projections released at the December FOMC meeting, which reflected just two 25 basis point rate cuts, led markets to reevaluate expectations for future policy easing. On net over the quarter, implied yields from federal funds futures for year-end 2025 increased by 97 basis points, as markets reduced the cumulative amount of easing priced for 2025 from 138 basis points at the end of September to 41 basis points at the end of December.

Market participants were also attentive to the outcome of the U.S. presidential election in early November, which was viewed as putting appreciation pressure on the dollar. In particular, contacts cited expectations around the incoming administration's proposed economic policies, specifically more widespread use of tariff policy and expansionary fiscal policy, as potentially providing another source of support to the dollar.

Chart 5

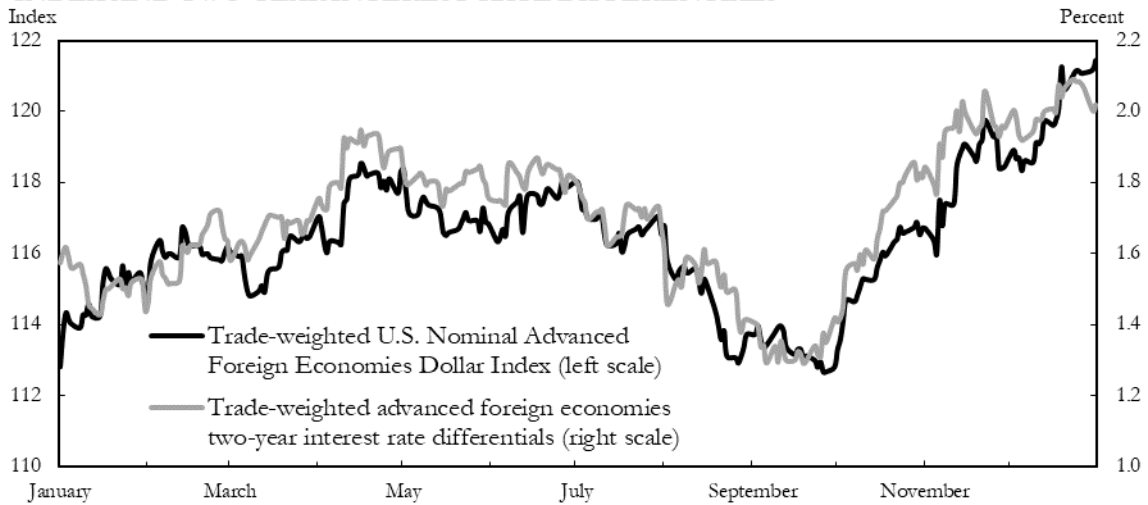
SOFR FUTURES-IMPLIED PATH OF FOMC POLICY (Q3 2024 VERSUS Q4 2024)



Source: Bloomberg L.P.

Chart 6

U.S. TRADE-WEIGHTED ADVANCED FOREIGN ECONOMIES DOLLAR INDEX AND TWO-YEAR INTEREST RATE DIFFERENTIALS



Sources: Bloomberg L.P.; New York Fed staff calculations.

U.S. DOLLAR APPRECIATES AGAINST JAPANESE YEN AMID WIDENING INTEREST RATE DIFFERENTIALS AND ACCOMODATIVE BANK OF JAPAN POLICY

The dollar appreciated 9.5 percent against the Japanese yen amid a widening of U.S.–Japan interest rate differentials driven by an increase in the market-implied path of Federal Reserve policy and Bank of Japan (BOJ) communications that were viewed by market participants as indicative of a continued accommodative policy stance. On net over the quarter, ten-year U.S.–Japan interest rate differentials widened by about 55 basis points, driven primarily by increases in U.S. Treasury yields.

The BOJ held its policy rate unchanged at both its October and December meetings. While contacts viewed communications at the October meeting as somewhat less accommodative than expected, media reports and official remarks following the meeting were interpreted as suggesting a hold at its next meeting. Following the December meeting, market participants viewed the BOJ's communications as indicative of a continued accomodative policy stance. In particular, contacts focused on BOJ remarks suggesting that there may not be enough information on wage growth trends and the impacts of the incoming U.S. administration's policies on Japan's economy to raise rates at the next BOJ meeting.

U.S DOLLAR APPRECIATES AGAINST EURO AMID COMPARATIVELY WEAKER EURO AREA ECONOMIC DATA, WIDENING INTEREST RATE DIFFERENTIALS, AND U.S. TARIFF POLICY UNCERTAINTY

The dollar appreciated 7.5 percent against the euro over the fourth quarter, which market participants attributed to weaker euro area economic data relative to the U.S., a widening in U.S.–euro area interest rate differentials, and uncertainty over potential shifts in U.S. trade policy.

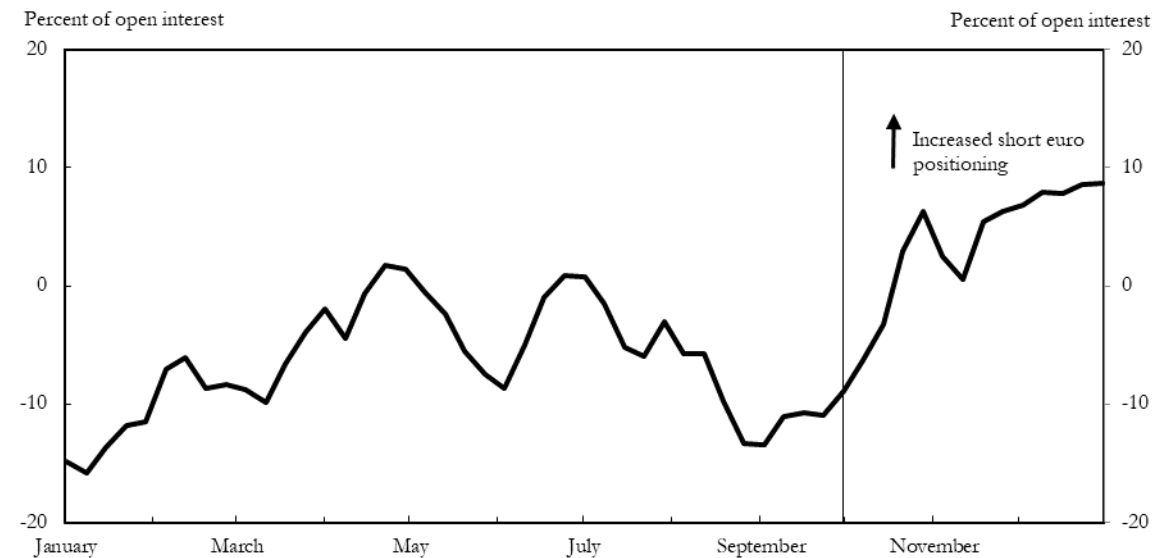
Euro area economic data prints in the fourth quarter were suggestive of disinflation and a weakening growth outlook, leading the market to revise its euro area growth expectations slightly lower. Against this backdrop and as was widely expected, the European Central Bank (ECB) reduced its policy rate by 25 basis points at both its October and December meetings. Market participants broadly viewed President Lagarde's acknowledgment of downside risks to euro area inflation at the October meeting as suggestive of a more accommodative-than-expected policy stance. Following the December meeting, market participants were attentive to slight downward revisions to the ECB's inflation and growth forecasts and to the removal of previous statement language that policy rates would be kept restrictive for as long as necessary. On net over the quarter, two-year U.S.–German interest rate differentials widened by about 59 basis points, driven primarily by increases in U.S. Treasury yields, which further weighed on the euro.

Market participants also noted euro depreciation in the context of the outcome of the U.S. election and uncertainty over potential shifts in U.S. tariff policy. Heightened political uncertainty in France

and Germany following successful no confidence votes in each country's respective parliaments were also in focus, though these events were not cited by contacts as a primary driver of euro depreciation over the quarter. Consistent with market expectations for continued euro weakness over the quarter, Commodity Futures Trading Commission (CFTC) data showed an increase in short euro positioning against the dollar, with speculative short euro futures market positioning ending the quarter at its most extended level since March 2020.

Chart 7

U.S. DOLLAR NET LONG POSITIONING AGAINST EURO



Sources: Commodity Futures Trading Commission; Bloomberg L.P.

U.S. DOLLAR APPRECIATES AGAINST BRITISH POUND AMID COMPARATIVELY WEAKER U.K. DATA

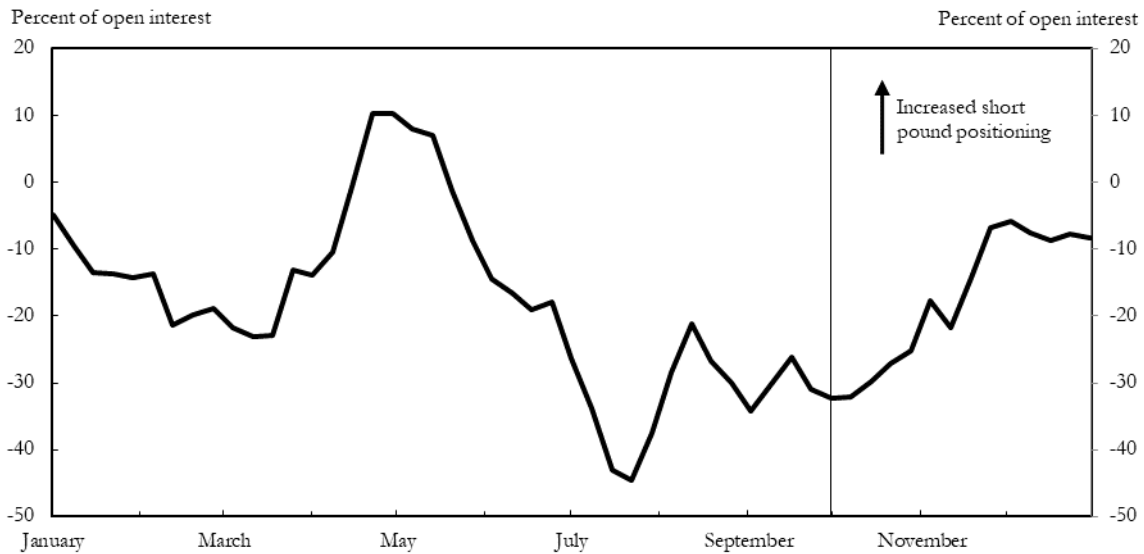
The dollar appreciated 6.9 percent against the British pound over the fourth quarter amid below-expectations economic data. Contacts were attentive to weaker-than-expected economic data over the quarter as indicative of a softening growth outlook and a slower path of disinflation. U.K. growth expectations were revised slightly lower over the quarter, with the absolute growth differential between the U.S. and U.K. widening in favor of the U.S.

The Bank of England lowered its policy rate by 25 basis points at its November meeting and subsequently voted to leave policy rates unchanged at its December meeting. Market participants were attentive to the vote split at the December meeting, with three of the nine committee members voting to cut rates, as well as the statement's language reaffirming a gradual approach to the further removal of policy restraint as indicative of additional rate cuts to come.

Over the quarter, the two-year U.K.–U.S. yield differential narrowed by 20 basis points as the increases in Treasury yields outpaced the rise in gilt yields, further weighing on the pound. Alongside this decline in the U.K.’s relative yield advantage, CFTC positioning data showed an increase in short British pound positioning against the dollar over the quarter.

Chart 8

U.S. DOLLAR NET LONG POSITIONING AGAINST BRITISH POUND



Sources: Commodity Futures Trading Commission; Bloomberg L.P.

U.S. DOLLAR APPRECIATES AGAINST MOST EMERGING MARKET CURRENCIES AMID RISING U.S. TREASURY YIELDS, U.S. TARIFF POLICY UNCERTAINTY, AND IDIOSYNCRATIC POLITICAL RISK

The dollar appreciated 5.5 percent against emerging market currencies during the fourth quarter, as measured by the Federal Reserve’s trade-weighted Emerging Market Economies Dollar Index. Dollar appreciation was driven by widening interest rate differentials in favor of the U.S. as several emerging market central banks further lowered their policy rates, uncertainty over potential shifts in U.S. tariff policy, and idiosyncratic domestic political developments.

The dollar appreciated against most Latin American currencies over the quarter, including by 5.8 percent against the Mexican peso and, most notably, by 13.4 percent against the Brazilian real amid concerns over the nation’s fiscal outlook. In December, market participants were attentive to the Central Bank of Brazil’s several spot foreign exchange interventions to support market stabilization efforts.

In Asia, the dollar appreciated 12 percent against the Korean won amid policy easing from the Bank of Korea, slowing growth in exports, weaker-than-expected GDP and purchasing managers' index data, and domestic political uncertainty following the president's imposition of martial law. Elsewhere in Asia, the dollar appreciated 4 percent against the Chinese renminbi amid widening interest rate differentials in favor of the U.S., uncertainty over potential shifts in U.S. tariff policy, mixed economic data, and ongoing uncertainty around the impact of announced fiscal stimulus measures on China's growth outlook. Contacts were attentive to the official announcement of several stimulus measures in October, though market participants noted uncertainty around the likely impact of these measures on the Chinese growth outlook given that their size was perceived by contacts as underwhelming and not directly aimed at stimulating domestic consumption. Market participants also highlighted that renminbi depreciation in the fourth quarter was limited by the People's Bank of China (PBOC) setting the daily dollar–renminbi fixing¹ at levels at which the renminbi was stronger than market expectations.

Chart 9

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.

OFFSHORE U.S. DOLLAR FUNDING CONDITIONS REMAIN STABLE

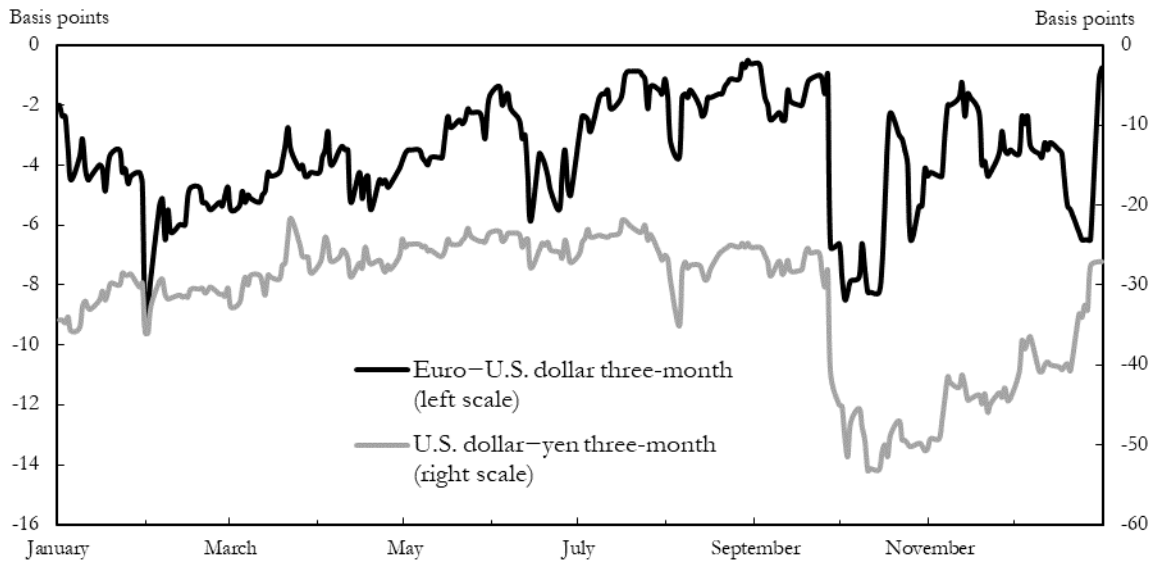
Global offshore dollar funding conditions, particularly in the foreign exchange swap market, were stable during the fourth quarter amid abundant dollar funding liquidity. In the weeks leading up to the

¹ The U.S. dollar–Chinese renminbi fixing is an administered rate set by the PBOC and published daily. It represents the midpoint of the +/- 2 percent daily trading band within which the USD–CNY exchange rate is managed.

year-end turn, short-term foreign exchange swap basis spreads for the euro–U.S. dollar and U.S. dollar–Japanese yen pairs remained at or below levels observed in similar periods in recent years, and spreads narrowed in the days leading up to year-end, reflecting overall minimal dollar borrowing premiums. 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 suggested that sizable pre-funding activity in the weeks leading up to the year-end turn was another factor leading to relatively benign year-end conditions.

Chart 10

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 2024 to \$1.1 billion at the end of the fourth quarter of 2024, 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 \$0.4 billion and \$1.4 billion in 2022 and 2023, respectively. The ECB held all outstanding central bank liquidity swaps at the end of December, while the BoJ, BoE, 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, the value of the Federal Reserve System Open Market Account (SOMA) foreign-currency-denominated assets totaled \$17.5 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 \$17.4 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.²

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, 2024, the U.S. dollar value of euro-denominated deposits and government securities held by the SOMA and the ESF decreased to \$23.0 billion from \$24.8 billion on September 30, 2024, and the U.S. dollar value of yen-denominated deposits and government securities decreased to \$11.9 billion from \$13.1 billion on September 30, 2024. These changes were largely driven by foreign exchange translation effects.

² 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

	Changes in Balances by Source					Carrying Value, December 31, 2024 ^a
	Carrying Value, September 30, 2024 ^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	12,386	0	69	(49)	(882)	11,525
Japanese yen	6,525	0	3	0	(586)	5,942
Total	18,911	0	72	(49)	(1,467)	17,467
U.S. Treasury Exchange Stabilization Fund (ESF)						
Euro	12,367	0	69	(49)	(880)	11,507
Japanese yen	6,525	0	3	0	(586)	5,942
Total	18,892	0	72	(49)	(1,466)	17,449

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

^aCarrying value of the reserve asset position includes interest accrued on foreign currency, which is based on "day of" accrual method.

^bNet purchases and sales include foreign currency purchases related to official activity, repayments, and warehousing.

^cInvestment earnings include accrued interest and amortization on outright holdings.

^dGains and losses on sales are calculated using average cost.

^eReserve 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, 2024

	U.S. Treasury Exchange Stabilization Fund (ESF) ^a	Federal Reserve System Open Market Account (SOMA) ^a
Euro-denominated assets	11,506.8	11,525.0
Cash held on deposit at official institutions	4,973.8	4,992.1
Marketable securities held under repurchase agreements ^b	0.0	0.0
Marketable securities held outright	6,532.9	6,532.9
German government securities	1,352.5	1,352.5
French government securities	4,682.6	4,682.6
Dutch government securities	497.8	497.8
Yen-denominated assets	5,942.5	5,942.4
Cash held on deposit at official institutions	5,940.6	5,940.5
Marketable securities held outright	1.9	1.9

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

^aAs of December 31, the SOMA and the ESF euro portfolios had Macaulay durations of 10.52 and 10.54 months, respectively; both the SOMA and ESF yen portfolios had Macaulay durations of 0.00 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 December 31, 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	1,120
Swiss National Bank	Unlimited	0
Bank of Japan	Unlimited	0
Bank of Canada	Unlimited	0
Bank of England	Unlimited	0
		1,120
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