# Treasury and Federal Reserve Foreign Exchange Operations

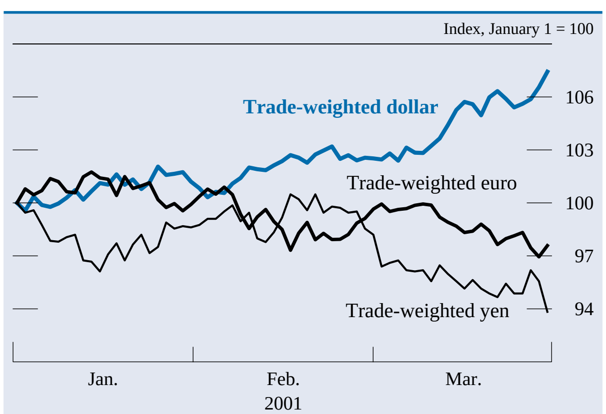
*This report, presented by Dino Kos, Senior Vice President, Federal Reserve Bank of New York, and Manager, System Open Market Account, describes the foreign exchange operations of the U.S. Department of the Treasury and the Federal Reserve System for the period from January through March 2001. Krista Schwarz was primarily responsible for preparing the report.*

During the first quarter of 2001, the dollar appreciated 7.3 percent against the euro and 10.3 percent against the yen in an atmosphere of increased market uncertainty about the extent and duration of global economic slowing. On a trade-weighted basis, the dollar ended the quarter 7.4 percent stronger against an index of major currencies. Despite economic data suggesting a deceleration of activity in the United States, the dollar's gains in value over the quarter primarily reflected global investors' preference for U.S. assets. The U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.

## Federal Open Market Committee Eases U.S. Monetary Policy

During the first quarter, the Federal Open Market Committee (FOMC) lowered its target federal funds rate a total of 150 basis points in three separate moves, bringing the rate from 6.5 percent to 5.0 percent. On January 3, the federal funds rate was cut 50 basis points to 6.0 percent. The FOMC cited weakening sales and production, lower consumer confidence, and tight conditions in some segments of financial markets. Market participants came to expect further monetary easing in response to additional data releases pointing to slower growth. Intraday price volatility in short-dated U.S. Treasury securities was exacerbated amid increased uncertainty as forecasts

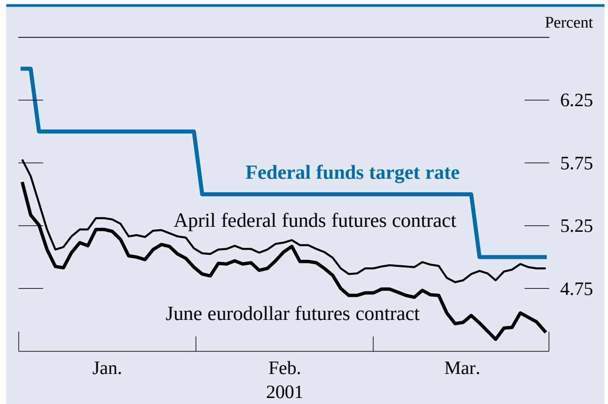
1. Trade-weighted Group of Three currencies, 2001:Q1




Note. In this chart and those that follow, the data are for business days except as noted.

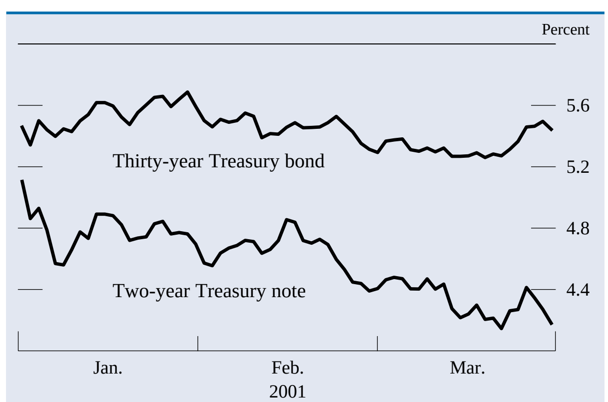
Sources. Board of Governors of the Federal Reserve System, The Federal Reserve Bank of New York, and the Bank of England.

2. Federal funds target rate and yields implied by the April federal funds futures and June eurodollar futures contracts, 2001:Q1




Source. Bloomberg L.P.

3. U.S. Treasury yields, 2001:Q1




Source. Bloomberg L.P.

were rapidly revised. Concerns over the ramifications of the California utility situation for other sectors of the U.S. economy added to market expectations for additional interest rate reductions.

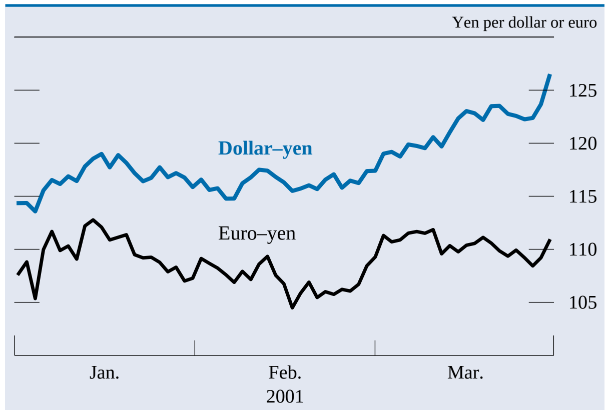
On January 31, the FOMC announced a reduction of 50 basis points in the target federal funds rate to 5.5 percent. In line with market expectations for further easing, the FOMC indicated that the balance of risks remained weighted toward economic weakness. Market participants cited anticipated easing as a factor contributing to improved investor sentiment. Over the quarter, the two-year Treasury yield declined 92 basis points while the yield on the thirty-year bond was nearly unchanged, bringing the spread between the two- and thirty-year Treasury yields to 126 basis points. Rising investor caution stymied a brief rally in global equity markets as weak corporate profit forecasts and disappointing earnings prompted steep declines in major indexes. In early March, the Nasdaq index fell below the 2000 point level for the first time since December 1998, and the S&P 500 and the Nikkei indexes also reached multiyear lows. During the quarter, these three indexes fell 25.5, 12.1, and 5.7 percent respectively.

The FOMC reduced the target federal funds rate an additional 50 basis points at its March 20 meeting, bringing the official rate to 5.0 percent. The central banks of Canada, the United Kingdom, Switzerland, Japan, Australia, and New Zealand also lowered official rates during the quarter in light of economic pressure stemming, in part, from global market developments.

## *Economic and Political Factors Affect Sentiment Toward Japanese Securities*

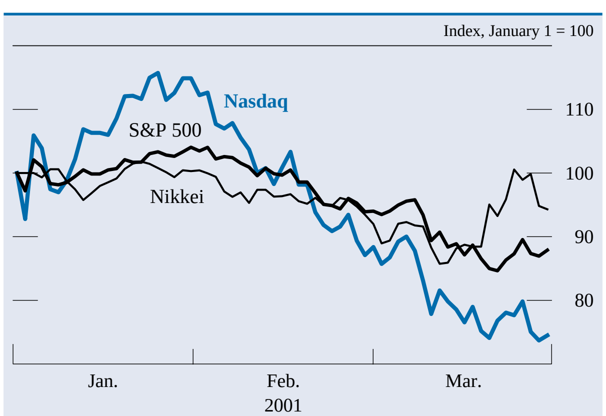
On a trade-weighted basis, the yen declined 6.2 percent, with some of its sharpest losses occurring during the second half of the quarter. The yen's short-lived midquarter strength against other major currencies was widely attributed to fiscal year-end repatriation flows and to decisions by foreign asset managers to purchase Japanese securities to bring their portfolio positions closer to neutral. In the second half of the quarter, however, market sentiment toward Japan turned negative as economic and political prospects became more uncertain. Risk-reversals in dollar–yen and euro–yen options skewed toward a premium for yen puts across maturities, and net speculative short yen positions on the International Monetary Market rose to their highest level since September 1999. Comments by Japanese officials that were interpreted as suggesting tolerance toward yen depreciation contributed to the yen's weakness at the end of the quarter. Protection against exchange rate movements became more expensive, with option-implied volatility in euro–yen and dollar–yen contracts rising 0.6 and 3.1 percent, respectively, over the quarter. In March alone, the yen depreciated

5. The yen against the dollar and the euro, 2001:Q1



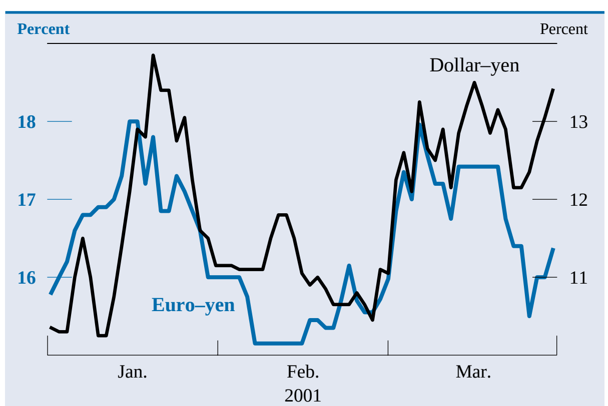

Source. Bloomberg L.P.

4. U.S. and Japanese equity indexes, 2001:Q1



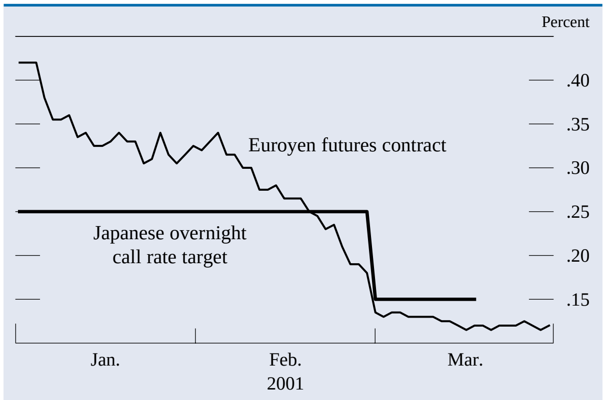

Source. Bloomberg L.P.

6. One-month euro–yen and dollar–yen option implied volatility, 2001:Q1




Source. J.P. Morgan Chase & Co.

7. Bank of Japan overnight call rate target and yield implied by the June euroyen futures contract, 2001:Q1




NOTE. On March 19, the Bank of Japan discontinued targeting the overnight call rate.
SOURCE. Bloomberg L.P.

2.3 percent against the euro and 7.0 percent against the dollar, its weakest level since September 1998.

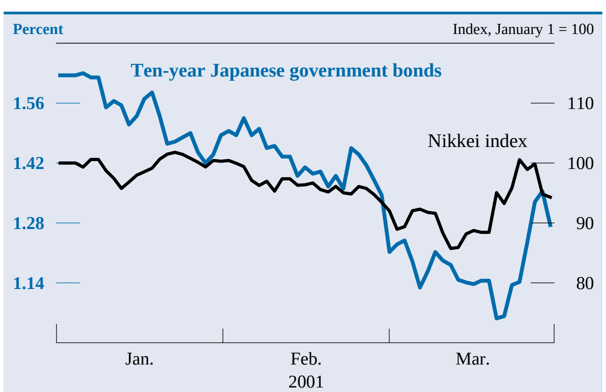
From the outset of the quarter, speculation over the type and timing of the Bank of Japan's action to stimulate the economy contributed to market uncertainty. In January, Bank of Japan officials discouraged expectations of a return to a near-zero interest rate policy. On February 9, the Bank of Japan announced changes aimed at improving money market liquidity, including a reduction of 15 basis points in the discount rate to 35 basis points, the creation of a standby Lombard-style lending facility, active outright Treasury-bill purchases for money market operations, and enhancements to bill purchase operations. On February 28, the Bank of Japan lowered the overnight call rate target and the rate on the standby facility to 15 and 25 basis points, respectively, citing slowing exports and production. On March 19, the Bank of Japan announced a shift in its operational target, effectively returning to the near-zero interest rate policy for call money. The yield implied by the June three-month euroyen futures contract declined 30 basis points on the quarter, reaching 0.12 percent at the quarter-end.

On February 16, the Japanese Cabinet Office downgraded its overall assessment of the economy, citing concern over a slowdown in external demand, and on February 22, Standard & Poor's downgraded Japan's long-term local and foreign currency sovereign credit ratings. Persistent rumors of Prime Minister Mori's impending resignation added to negative market sentiment. Through February and early March, the Topix and Nikkei stock indexes declined to two- and sixteen-year lows, respectively, lending further support to the Japanese government bond (JGB) market. Yields on two- and ten-year JGBs declined to 0.14 and 1.28 percent, respectively, their lowest levels since June 1999. During the remainder of March, ahead of the Japanese fiscal year-end, equities staged a sharp recovery from midmonth lows with the Topix and Nikkei indexes gaining 10.0 and 9.9 percent, respectively, and JGB yields rose slightly.

## *THE EURO WEAKENS AGAINST THE DOLLAR DESPITE NARROWING INTEREST RATE DIFFERENTIALS*

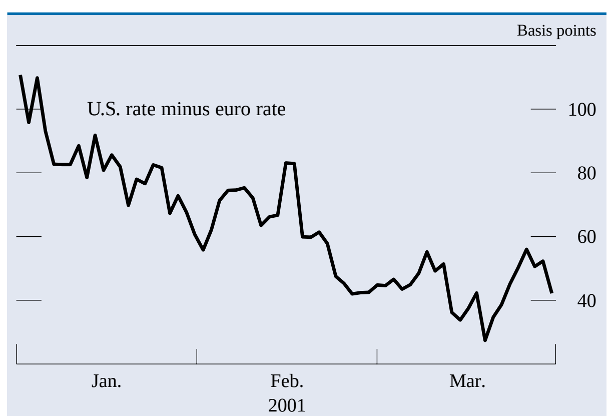
At the outset of the quarter, the euro–dollar exchange rate was near 0.94. Despite a 68-basis-point narrowing of the spread between two-year dollar and euro swaps and aggressive monetary policy easing in the United States, the euro depreciated 6.3 percent over

8. Ten-year Japanese government yield and Nikkei equity index, 2001:Q1



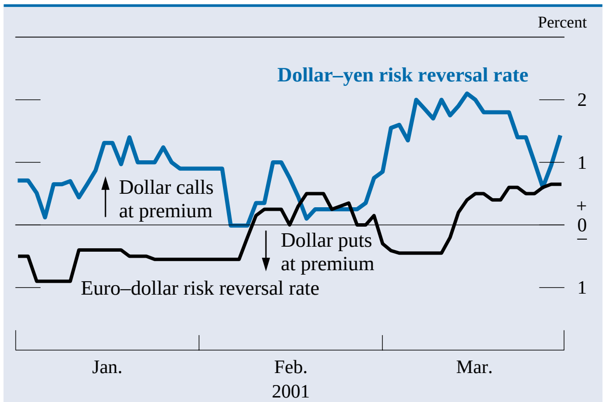

SOURCE. Bloomberg L.P.

9. Two-year U.S.–euro swap differential, 2001:Q1




SOURCE. Bloomberg L.P.

10. One-month dollar–yen and euro–dollar risk reversals, 2001:Q1




SOURCE. J.P. Morgan Chase & Co.

the quarter. On a trade-weighted basis, the euro declined 2.4 percent.

Over the first half of the quarter, prospects for a near-term resumption of U.S. growth continued to shift to a later date, and market participants debated the possibility of a more pronounced economic slowdown. The apparent resilience of growth in the euro area contributed to market expectations that less monetary policy easing would be forthcoming in the euro area relative to the United States. The yield implied by the June euribor futures contract declined only 3 basis points to 4.50 percent, and the two- to ten-year German government yield curve flattened 10 basis points to a spread of 31 basis points. Until midquarter, the euro–dollar exchange rate was little changed.

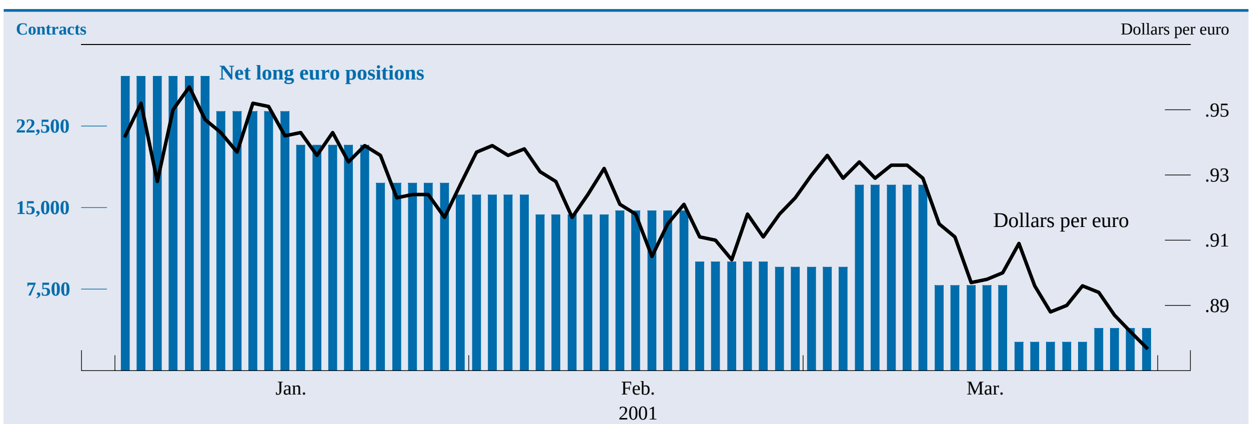
In March, asset prices began to reflect expectations of some monetary easing by the European Central Bank (ECB) against the backdrop of a slowing global growth outlook. The yield implied by the June euribor futures contract declined 15 basis points to 4.27 percent, and the two- to ten-year German sovereign yield curve steepened 19 basis points to a spread of 57 basis points. A sharp decline in German business confidence for February, as measured by the Ifo (Information und Forschung) survey, and steep European equity market losses contributed to expectations of slower growth in the euro area. In addition, economic data revealed stabilizing headline inflation and moderating money supply growth moving toward the ECB's reference value. In this environment, market participants began to view interest rate cuts by the ECB as imminent. Over the month of March, the euro depreciated 4.9 percent against the dollar.

Many investors expressed surprise at the dollar's continued appreciation against the euro, particularly as interest rate differentials continued to narrow. The dollar's gains were supported by perceptions of the relatively greater resilience of the U.S. economy and a preference for U.S. fixed-income assets. Market reports indicated that U.S investors were scaling back foreign holdings and that foreign investors were reallocating into U.S. debt instruments. ECB data indicated that there was a €50 billion net investment outflow from the euro area in January, the highest monthly outflow since January 2000. In addition, International Monetary Market data indicated a reduction in net long euro positions over the quarter.

## *TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE RESERVES*

The U.S. monetary authorities did not undertake any intervention operations this quarter. At the end of the quarter, the current values of the euro and yen reserve

11. Net speculative long euro positions on International Money Market and spot euro–dollar exchange rate, 2001:Q1




SOURCE. Bloomberg L.P.

holdings totaled $14.6 billion for the Federal Reserve System and $14.6 billion for the Treasury's Exchange Stabilization Fund. The U.S. monetary authorities invest all of their foreign currency balances in a variety of instruments that yield market-related rates of return and have a high degree of liquidity and credit quality. To the greatest extent possible, these investments are split evenly between the Federal Reserve System and the Exchange Stabilization Fund.

A significant portion of the balances is invested in government securities held directly or under repurchase agreement. Foreign currency reserves are also invested in deposits at the Bank for International Settlements and in facilities at other official institutions. As of March 31, direct holdings of foreign government securities totaled $12.9 billion, split evenly between the two authorities. Foreign government securities held under repurchase agreement totaled $2.8 billion at the end of the quarter and were also split evenly between the two authorities. □

*Tables appear on page 399.*

## 1. Foreign currency holdings of U.S. monetary authorities based on current exchange rates, 2001:Q1

Millions of dollars

| Item | Balance, Dec. 31, 2000 | Quarterly changes in balances, by source | | | | | Balance, Mar. 31, 2001 |
|---|---|---|---|---|---|---|---|
| | | Net purchases and sales [1] | Effect of sales [2] | Investment income | Currency valuation adjustments [3] | Interest accrual and other [4] | |
| FEDERAL RESERVE SYSTEM OPEN MARKET ACCOUNT (SOMA) | | | | | | | |
| Euro | 7,375.9 | .0 | .0 | 91.4 | −471.6 | . . . | 6,995.7 |
| Japanese yen | 8,244.6 | .0 | .0 | 5.9 | −735.2 | . . . | 7,515.3 |
| Total | 15,620.5 | .0 | .0 | 97.3 | −1,206.8 | . . . | 14,511.0 |
| Interest receivables (net) [5] | 76.5 | . . . | . . . | . . . | . . . | −.6 | 75.9 |
| Other cash flow from investments [4] | .0 | . . . | . . . | . . . | . . . | .0 | .0 |
| **Total** | **15,697.0** | **.0** | **.0** | **97.3** | **−1,206.8** | **−.6** | **14,586.9** |
| U.S. TREASURY EXCHANGE STABILIZATION FUND (ESF) | | | | | | | |
| Euro | 7,373.1 | .0 | .0 | 91.8 | −471.4 | . . . | 6,993.5 |
| Japanese yen | 8,244.7 | .0 | .0 | 5.9 | −735.3 | . . . | 7,515.3 |
| Total | 15,617.8 | .0 | .0 | 97.7 | −1,206.7 | . . . | 14,508.8 |
| Interest receivables [5] | 61.2 | . . . | . . . | . . . | . . . | 11.2 | 72.4 |
| Other cash flow from investments [4] | .0 | . . . | . . . | . . . | . . . | . . . | .0 |
| **Total** | **15,679.0** | **.0** | **.0** | **97.7** | **−1,206.7** | **11.2** | **14,581.2** |

NOTE. Figures may not sum to totals because of rounding.

1. Purchases and sales for the purpose of this table include foreign currency sales and purchases related to official activity, swap drawings and repayments, and warehousing.

2. This figure is calculated using marked-to-market exchange rates; it represents the difference between the sale exchange rate and the most recent revaluation exchange rate. Realized profits and losses on sales of foreign currencies, computed as the difference between the historical cost-of-acquisition exchange rate and the sale exchange rate, are reflected in table 2.

3. Foreign currency balances are marked to market monthly at month-end exchange rates.

4. Values are cash flow differences from payments and collection of funds between quarters.

5. Interest receivables for the ESF are revalued at month-end exchange rates. Interest receivables for the Federal Reserve System are carried at average cost of acquisition and are not marked to market until interest is paid.

. . . Not applicable.

## 2. Net profits or losses (−) on U.S. Treasury and Federal Reserve foreign exchange operations, based on historical cost-of-acquisition exchange rates, 2001:Q1

Millions of dollars

| Period and item | Federal Reserve System Open Market Account | U.S. Treasury Exchange Stabilization Fund |
|---|---|---|
| *Valuation profits and losses on outstanding assets and liabilities, Dec. 31, 2000* | | |
| Euro | −936.6 | −1,153.3 |
| Japanese yen | 1,194.7 | 1,406.9 |
| **Total** | **258.1** | **253.6** |
| *Realized profits and losses from foreign currency sales, Dec. 31, 2000–Mar. 31, 2001* | | |
| Euro | .0 | .0 |
| Japanese yen | .0 | .0 |
| **Total** | **.0** | **.0** |
| *Valuation profits and losses on outstanding assets and liabilities, Mar. 31, 2001* | | |
| Euro | −1,408.1 | −1,624.6 |
| Japanese yen | 459.5 | 671.6 |
| **Total** | **−948.6** | **−953.0** |

## 3. Reciprocal currency arrangements, March 31, 2001

Millions of dollars

| Institution | Amount of facility | Outstanding, Mar. 31, 2001 |
|---|---|---|
| | Reciprocal currency arrangements | |
| Bank of Canada | 2,000 | .0 |
| Bank of Mexico | 3,000 | .0 |
| **Total** | **5,000** | **.0** |
| | Federal Reserve and U.S. Treasury Exchange Stabilization Fund currency arrangements | |
| Bank of Mexico | 3,000 | .0 |
| **Total** | **3,000** | **.0** |