

Treasury and Federal Reserve Foreign Exchange Operations

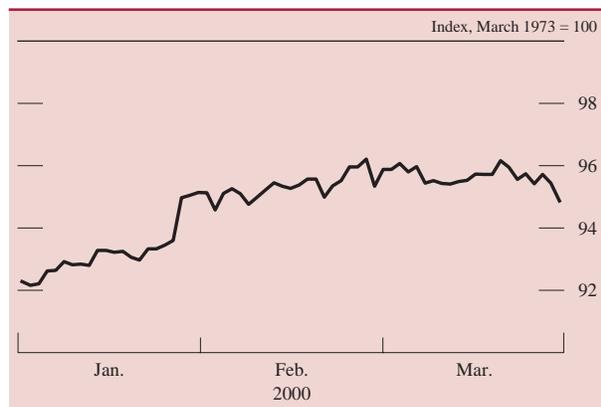
This report, presented by Peter R. Fisher, Executive Vice President, Federal Reserve Bank of New York, and Manager, System Open Market Account, describes the foreign exchange operations of the U.S. Department of the Treasury and the Federal Reserve System for the period from January 2000 through March 2000. Laura Sarlo was primarily responsible for preparation of the report.

During the first quarter of 2000, the dollar appreciated 5.4 percent against the euro and 0.4 percent against the yen. U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.

MODEST APPRECIATION OF THE DOLLAR

On a trade-weighted basis, the dollar appreciated modestly, rising 2.6 percent, with most of this appreciation occurring relative to the European trading partners of the United States. The currency was supported by the ongoing strength in the U.S. economy and the perception that productivity growth was continuing. This view of the economy was solidified by

1. The trade-weighted dollar against major currencies, 2000:Q1

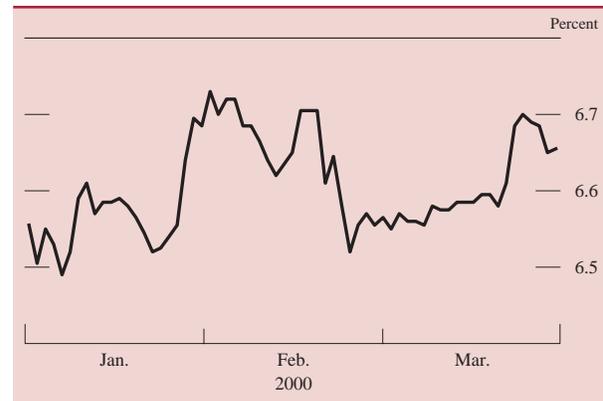


NOTE. In this and the charts that follow, the data are for business days except as noted.

Includes currencies of Australia, Canada, Japan, Sweden, Switzerland, the United Kingdom, and the euro-11 countries.

SOURCE: Federal Reserve Board of Governors.

2. Yield implied by the June eurodollar contract, 2000:Q1



SOURCE: Bloomberg L.P.

the February 25 release of the fourth-quarter growth rate for gross domestic product of 6.9 percent, year-on-year (revised March 30 to 7.3 percent, year-on-year) and the March 7 release of the fourth-quarter growth rate for productivity of 6.4 percent, year-on-year. Meanwhile, the unemployment rate held near the January low of 4.0 percent, year-on-year. The resilience of U.S. asset markets, despite volatility in equities and bonds, also appeared to support the dollar.

Indications of continued strong economic activity supported market expectations for a gradual series of rate increases by the Federal Reserve, and the implied yield of the June eurodollar contract rose 18 basis points, to 6.65 percent. The Federal Open Market Committee (FOMC) raised its target for the federal funds rate 25 basis points on both February 2 and March 21, moving it from 5.50 to 6.00 percent.

WEAKENING OF THE EURO AGAINST THE DOLLAR AND THE YEN

The euro depreciated against the dollar, reaching an intraday low of \$0.9390 on February 28 and lingering below \$1.00 for much of the quarter, despite a brief rally during the third week of February. The euro's depreciation was relatively broad based, falling 5.2,

4.8, and 3.6 percent against the dollar, yen, and British pound, respectively, as investors reportedly continued to diversify portfolios away from the euro area. The euro–yen exchange rate was particularly volatile, as the euro depreciated more than 11 percent against the yen from late February through the end of March, when the exchange rate closed below ¥100 per euro for the first time.

Several factors contributed to the weakness of the euro, including continued expectations that euro-area economic growth would lag that of other parts of the world, continued cross-border investment flows out of the euro area, and market participants' concerns over foreign exchange policy and the pace of euro-area structural reform. These factors seemed to prompt longer-term investors to scale back long-held euro positions during the first quarter of 2000 after a portfolio and direct investment outflow of €168.6 billion in 1999.¹

The persistent growth differential between the U.S. and euro-area economies continued to weigh on the euro, and the March 9 announcement of euro-area GDP growth of 3.1 percent, year-on-year disappointed many market participants. Although the premium for ten-year U.S. Treasury securities over German government securities narrowed 31 basis points during the quarter, the euro failed to benefit. Shorter-term interest rate differentials were relatively steady, as investors continued to anticipate a similar amount of tightening by the European Central Bank (ECB) and the FOMC. The ECB increased its main refinancing rate 50 basis points to 3.50 percent in two quarter-point steps on February 3 and March 16.

In addition, market uncertainty over the course of structural reform may have pressured the euro lower;

while many investors perceived progress on the issue of tax reform, labor market rigidities in several nations continued to concern market participants. More broadly, political tension within the European Union after the formation of a new government in Austria and concerns about the implications of European Union expansion were also seen as negatively affecting the euro.

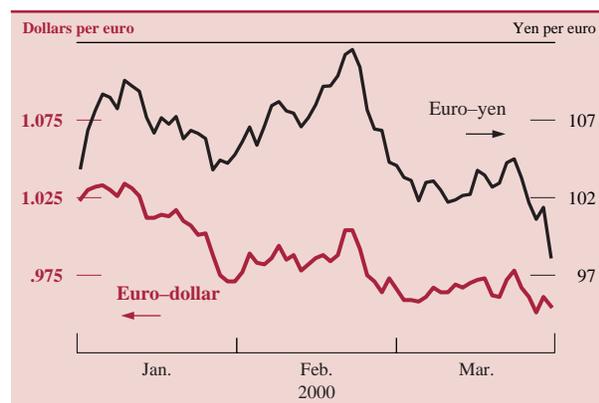
REEMERGENCE OF YEN STRENGTH

The yen depreciated during the first half of the quarter and appreciated during the second half, ending the quarter on net 0.4 percent weaker against the dollar and 5.1 percent stronger against the euro. The Japanese monetary authorities publicly confirmed the official selling of yen on several occasions.

The yen weakened during the first seven weeks of the year, breaching ¥111 and ¥109 against the dollar and the euro respectively. Market participants reportedly sold yen to establish short positions, as comments by Japanese officials contributed to the market's growing perception that fourth-quarter economic data might indicate a second consecutive quarter of negative year-on-year growth. Market concern that the Group of Seven (G-7), at its January meeting, might address the yen's longer-term appreciation trend may also have dampened the currency's appreciation early in the quarter. The G-7 statement also reduced market expectations for any near-term increase in Japanese rates. Postponement of a banking reform measure to institute a cap on deposit insurance and the proposal of a tax on Japanese banks located in Tokyo also reportedly contributed to the yen's depreciation. Some traders noted that a Moody's announcement on February 17 of a review and possible downgrade of Japan's domestic-

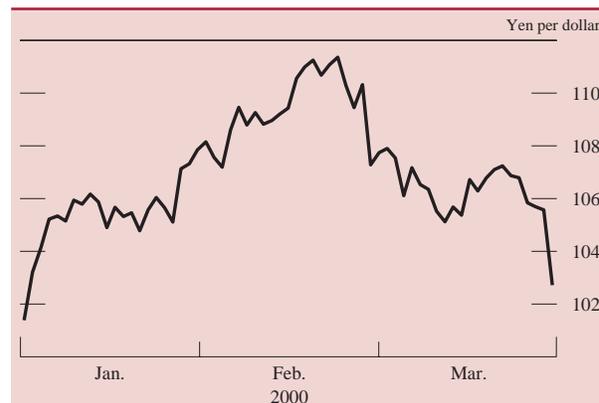
1. SOURCE. European Central Bank.

3. The euro against the dollar and the yen, 2000:Q1



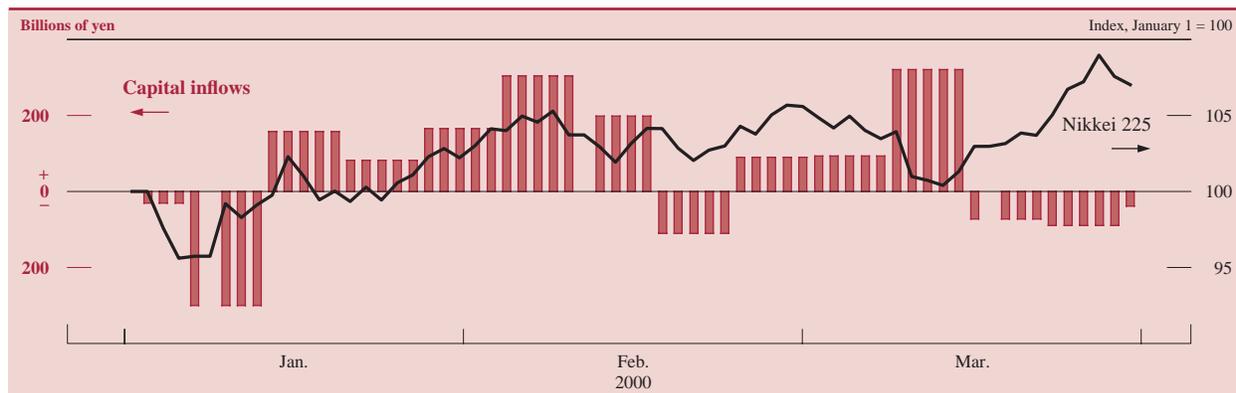
SOURCE. Bloomberg L.P.

4. The dollar against the yen, 2000:Q1



SOURCE. Bloomberg L.P.

5. Foreign inflows into Japanese equities, 2000:Q1



NOTE. Capital inflows are weekly data.

SOURCE. Federal Reserve Board of Governors.

currency credit rating further weighed on sentiment toward the yen.

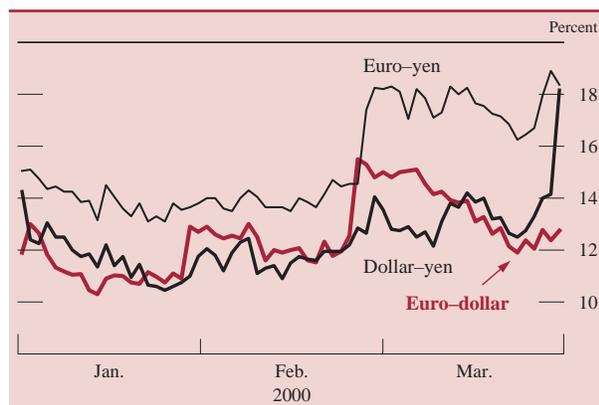
From February 22 through the end of the quarter, however, the yen strengthened by as much as 7.9 and 13.2 percent against the dollar and the euro respectively. Although a release on March 12 indicated that Japanese GDP had declined 1.4 percent year-on-year during the fourth quarter, stronger-than-expected data on capital spending and machinery orders gave rise to some market optimism about the prospects for Japanese economic recovery. Reallocation of portfolio investments in favor of Japanese assets also appeared to support the yen against both the dollar and the euro. According to Japan's Ministry of Finance, foreign investors purchased ¥1.17 trillion in Japanese stocks through the end of February, compared with ¥667 billion during the first two months of 1999. Japanese equity markets continued to attract inflows, helping the Nikkei close above 20,000 on February 9 for the first time since July 1997. Although foreign inflows diminished from mid-March, there were net equity inflows of ¥800.4 billion on the quarter. The

Nikkei and the technology-laden JASDAQ rose 7.4 and 12.0 percent, respectively, during the period.

According to some market sources, the yen's appreciation in mid-to-late February generated losses on the significant short yen positions established in February and prompted investors to rapidly scale back such holdings by purchasing yen. Reported repatriation transactions and expectations for such flows also boosted the yen against other currencies, as Japanese investors reduced foreign holdings ahead of the March 31 Japanese fiscal year-end. Throughout the period, however, many participants remained wary of the possibility of further Japanese intervention. In anticipation of Japanese capital outflows after the fiscal year-end, some market participants established long euro positions against the yen during the final week of the quarter. However, the yen's continued appreciation prompted investors to cut back these positions, contributing to the yen's 3.2 percent strengthening against the euro and the breaking of the ¥100-per-euro level during the final day of the quarter.

Foreign exchange markets were volatile over the period and volatility implied by currency options fluctuated. At the beginning of the quarter, the implied volatility of one-month options declined as trading conditions returned to normal following the uneventful year-end. Later in the period, market participants reported that uncertainty over the near-term direction of the euro and the course of the yen ahead of the Japanese fiscal year-end contributed to elevated volatility levels.

6. Volatility implied by one-month option prices, 2000:Q1



SOURCE. Reuters.

TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

The U.S. monetary authorities did not undertake any intervention operations during the quarter. At the end

of the quarter, the current values of euro and Japanese yen reserve holdings totaled \$15.8 billion for the Federal Reserve System and \$15.8 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 practicable, these investments are split evenly between the Federal Reserve System and the Exchange Stabilization Fund.

A significant portion of the balances is invested in German and Japanese government securities held

directly or under repurchase agreement. Government securities held under repurchase agreement are arranged either through transactions executed directly in the market or through agreements with official institutions. 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 \$8.6 billion, split evenly between the two authorities. Foreign government securities held under repurchase agreement totaled \$13.6 billion at the end of the quarter and were also split evenly between the two authorities. □

1. Foreign currency holdings of U.S. monetary authorities based on current exchange rates, 2000:Q1

Millions of dollars

Item	Balance, Dec. 31, 1999	Quarterly changes in balances, by source				Balance, Mar. 31, 2000
		Net purchases and sales ¹	Effect of sales ²	Investment income	Currency valuation adjustments ³	
FEDERAL RESERVE SYSTEM OPEN MARKET ACCOUNT (SOMA)						
Euro	6,870.6	0.0	0.0	67.8	-341.1	6,597.4
Japanese yen	9,221.5	0.0	0.0	1.0	-51.1	9,171.4
Total	16,092.1	0.0	0.0	68.8	-392.2	15,768.7
Interest receivables ⁴	48.0	...	...	...	...	34.3
Total	16,140.1	...	...	...	...	15,803.0
U.S. TREASURY EXCHANGE STABILIZATION FUND (ESF)						
Euro	6,868.5	0.0	0.0	67.0	-340.9	6,594.5
Japanese yen	9,221.5	0.0	0.0	1.0	-51.1	9,171.4
Total	16,090.0	0.0	0.0	68.0	-392.0	15,765.9
Interest receivables ⁴	78.6	...	...	...	...	59.8
Total	16,168.6	...	...	...	...	15,819.8

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. 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, 2000:Q1

Millions of dollars

Period and item	Federal Reserve System Open Market Account	U.S. Treasury Exchange Stabilization Fund
<i>Valuation profits and losses on outstanding assets and liabilities, Dec. 31, 1999</i>		
Euro	-510.0	-726.9
Japanese yen	2,178.1	2,390.2
Total	1,668.1	1,663.3
<i>Realized profits and losses from foreign currency sales, Dec. 31, 1999-Mar. 31, 2000</i>		
Euro	0.0	0.0
Japanese yen	0.0	0.0
Total	0.0	0.0
<i>Valuation profits and losses on outstanding assets and liabilities, Mar. 31, 2000</i>		
Euro	-851.1	-1,067.8
Japanese yen	2,126.9	2,339.1
Total	1,275.8	1,271.3

3. Federal Reserve reciprocal currency arrangements, March 31, 2000

Millions of dollars

Institution	Amount of facility	Outstanding, Mar. 31, 2000
Federal Reserve reciprocal currency arrangements		
Bank of Canada	2,000	0.0
Bank of Mexico	3,000	0.0
Total	5,000	0.0
U.S. Treasury Exchange Stabilization Fund currency arrangements		
Bank of Mexico	3,000	0.0
Total	3,000	0.0