

Treasury and Federal Reserve Foreign Exchange Operations

August-October 1993

During the August-October period the dollar appreciated 3.7 percent against the Japanese yen, depreciated 3.2 percent against the German mark, and was little changed on a trade-weighted average basis,¹ declining 0.4 percent. On August 19, the U.S. monetary authorities purchased \$165 million against yen in the period's only intervention operation.

The yen appreciates, then reverses against the dollar

During early August, the yen strengthened against the currencies of all major industrialized countries, reaching record highs against the dollar, mark, Swiss franc, the pound sterling, and the Canadian and Australian dollars. On August 11, the release of data indicating a wider than expected 28 percent year-on-year expansion of Japan's merchandise trade surplus to \$11.84 billion triggered sharp yen appreciation, and the yen traded to a new high against the dollar of ¥103.50. Continuing weakness in domestic economic indicators was perceived as evidence that reduction of Japan's current account surplus was unlikely in the near term, and the yen moved to several new daily highs against the dollar, peaking at a postwar high against the dollar of ¥100.40 on August 17.

From August 16 to 18, conditions in the Japanese money

markets were eased. On August 19, the Japanese cabinet met and agreed to try to devise additional measures to stimulate domestic demand. The dollar was trading at ¥102.50 in early New York dealing on August 19, but then declined quickly to ¥101.35 following the release of the worse than expected \$12.1 billion U.S. merchandise trade deficit for June; at the same time, the dollar abruptly declined one pfennig against the mark. The U.S. monetary authorities intervened shortly after the release of the trade data. During the day they purchased a total of \$165 million against the yen, shared equally between the Federal Reserve and the Treasury's Exchange Stabilization Fund. This operation was coordinated with another monetary authority.

Initially, the operations surprised market participants, and the dollar promptly rose. During the morning, Treasury Under Secretary Summers released a statement welcoming the decline in Japanese money market rates and expressing concern that further yen appreciation could retard growth in the Japanese and world economies. Operations continued after Under Secretary Summers' statement but ceased before noon. Market participants subsequently continued to cover short positions throughout the afternoon, and the dollar reached a high of ¥106.75 before closing the day at ¥105.95.

In the month following the operation, the dollar-yen exchange rate largely traded between ¥103.00 and ¥106.00 as market participants increasingly focused on the apparent weakness of the Japanese economy. A series of Japanese data releases showed continued weak business sentiment, deteriorating corporate profits, and a 0.4 percent decline in second-quarter GDP. Consequently, when the Bank of Japan lowered the official discount rate (ODR)

This report presented by Peter R. Fisher, Senior Vice President, Federal Reserve Bank of New York, and Manager for Foreign Operations System Open Market Account, describes the foreign exchange operations of the U.S. Department of Treasury and the Federal Reserve System for the period from August 1993 through October 1993. Frank Keane was primarily responsible for preparation of the report.

¹ The dollar's movements on a trade-weighted basis are measured using an index developed by staff at the Board of Governors of the Federal Reserve System.

on September 21 by a greater than expected 75 basis points to 1.75 percent, the action was perceived as an appropriate supplement to the government's efforts to stimulate the economy, not as a device to avoid further yen appreciation. Favorable reactions by senior U.S. officials to the Bank of Japan's action led to a perception that tensions between the U.S. and Japan on trade issues had given way to greater cooperation, and the yen declined about 1.5 percent, closing on September 21 at ¥106.18.

The dollar firmed gradually over the latter half of the three-month period while expectations of near-term volatility in the dollar-yen exchange rate dwindled substantially. The implied one-month option volatility fell from about 14 percent in mid-September to around 10 percent in late October. The period closed with the dollar-yen exchange rate trading steadily above ¥108.00 in late October.

Mark appreciates against dollar in wake of ERM crisis

The European Community finance ministers and central bank governors agreed, effective Monday, August 2, to per-

mit currencies participating in the Exchange Rate Mechanism (ERM) to fluctuate within 15 percent of their central parities. However, authorities from Germany and the Netherlands agreed to maintain their bilateral exchange rate within 2.25 percent of their central parity. During the uncertainty created by the currency turmoil in Europe, market participants had aggressively accumulated dollar positions in late July. When widely anticipated European interest rate reductions failed to materialize in the first few weeks of August, the mark began to appreciate against the dollar. The negative sentiment toward the dollar during this period was reinforced by market reports of dollar sales by European central banks to adjust reserve positions after July's currency turmoil, and by a widening of interest rate differentials in the mark's favor implied by Eurocurrency futures contracts.

The Bundesbank Council's decision on August 26 to leave official rates unchanged disappointed market expectations of an interest rate cut, and banks were caught short of funds at the end of a reserve period. When the Council

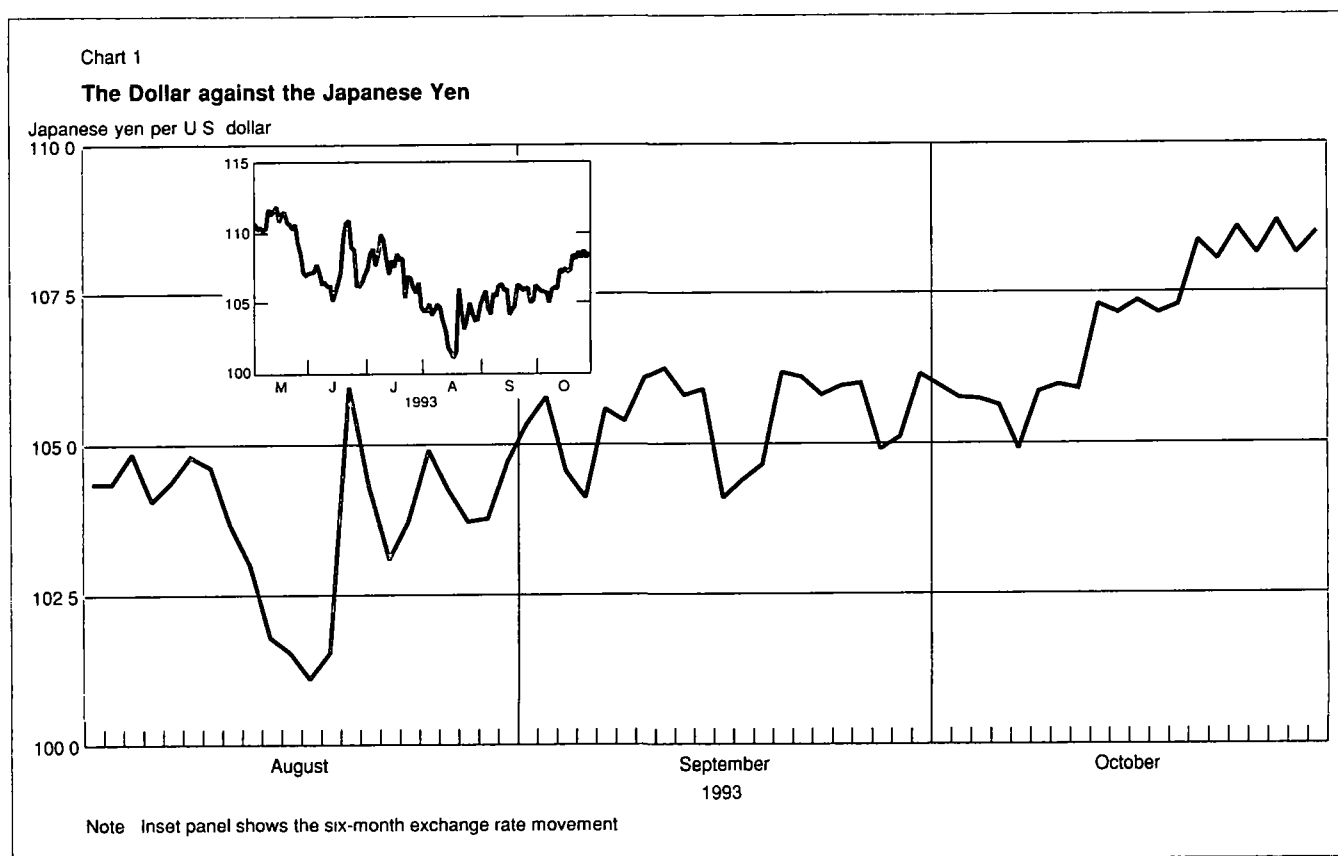
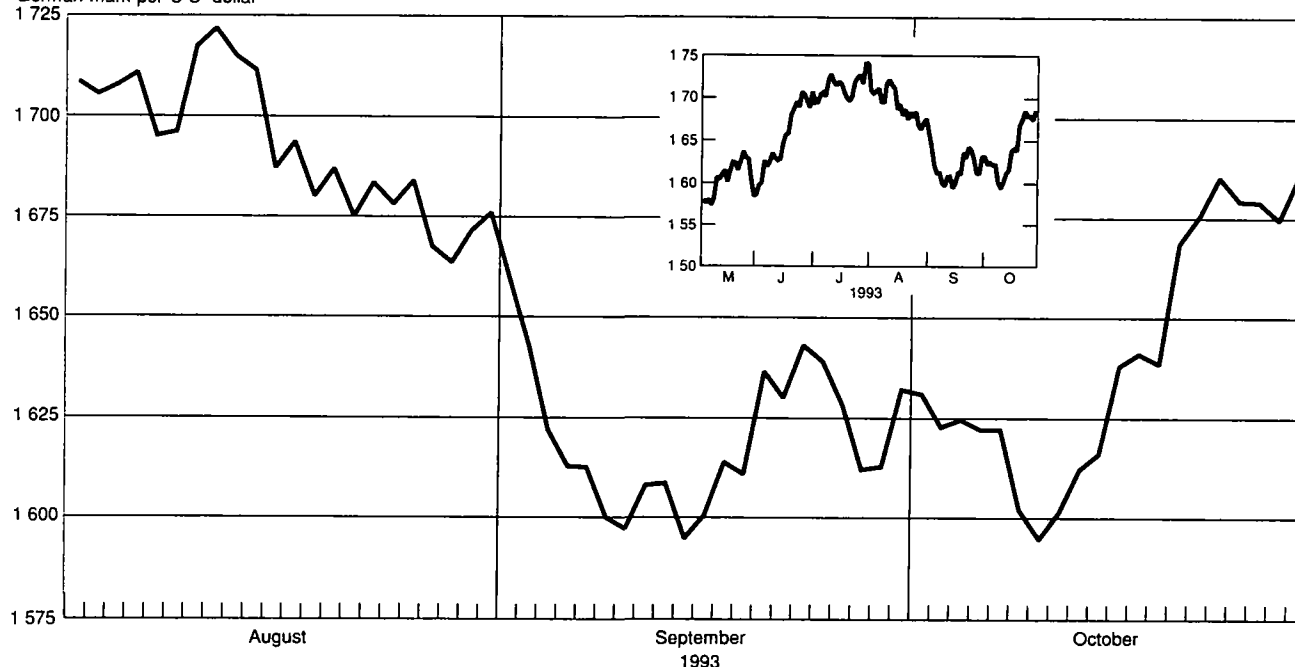


Chart 2

The Dollar against the German Mark

German mark per U S dollar



Note Inset panel shows the six-month exchange rate movement

did lower the discount and Lombard rates by 50 basis points to 6.25 percent and 7.25 percent, respectively, on September 9, the concurrent smaller than expected 10 basis point reduction in the Bundesbank's money market repurchase rate, to 6.70 percent, led to continued tightness in short-term German money markets. These developments resulted in continued mark strength against the dollar. Although the mid-September political unrest in Russia caused the dollar to appreciate briefly against the mark, the dollar again drifted lower against the mark when the crisis was resolved, closing at DM 1.6013 on October 13.

On October 21, the Bundesbank Council surprised exchange markets by again reducing its discount and Lombard rates by 50 basis points to 5.75 percent and 6.75 percent, respectively. The Council also announced that it would conduct the following week's fourteen-day repurchase agreement at a fixed rate of 6.40 percent, a 27 basis point reduction from the prior day's variable rate repurchase agreement. The dollar, which had begun rising gradually against the mark

before the announcement, rose steadily over the remainder of the period, closing at DM 1.6857 on October 29.

Other operations

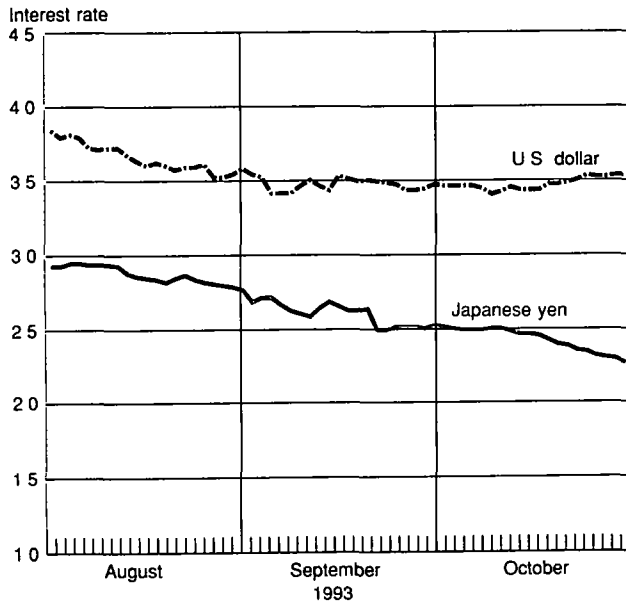
The Federal Reserve and the Treasury's Exchange Stabilization Fund (ESF) each realized profits of \$22.1 million from the sales of Japanese yen in the market. Cumulative valuation gains on outstanding foreign currency balances as of the end of October were \$3,368.5 million for the Federal Reserve and \$2,839.0 million for the ESF.

The Federal Reserve and the ESF regularly invest 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. A portion of the balances is invested in securities issued by foreign governments. As of the end of October, the Federal Reserve and the ESF held either directly or under repurchase agreements \$10,004.3 million and \$10,276.6 million, respectively, in foreign government securities valued at end-of-period exchange rates.

Chart 3

Dollar-Yen Interest Rate Differential

Implied by the Three-Month Eurodeposit Futures (December Contract)



Interest rate differential

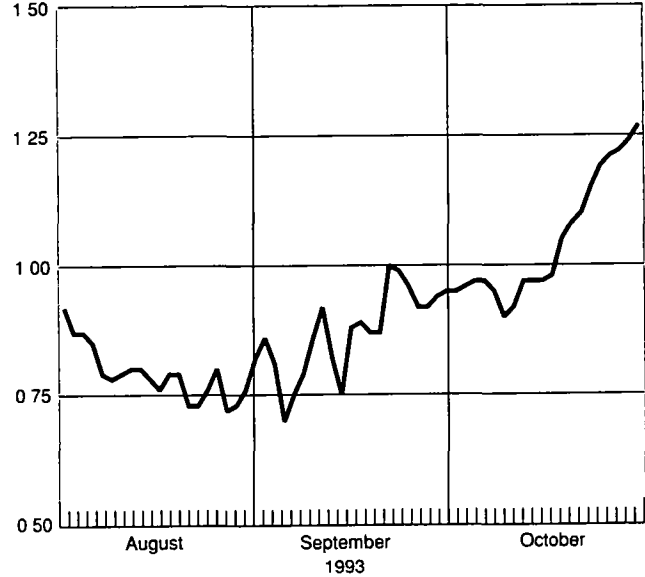
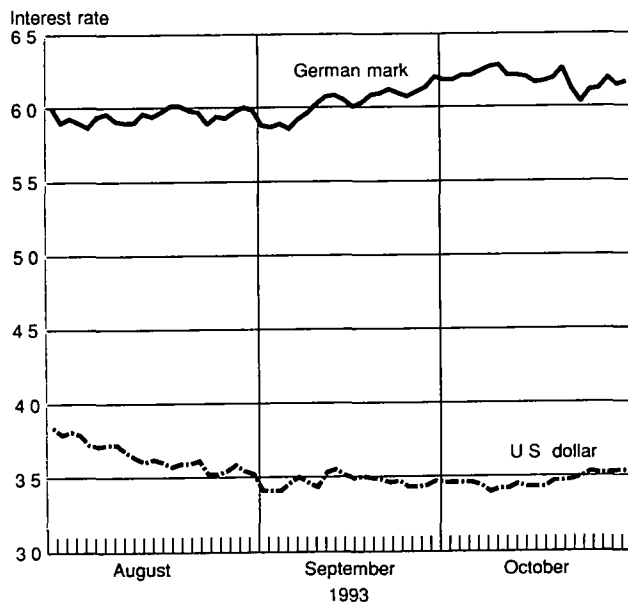


Chart 4

German Mark-Dollar Interest Rate Differential

Implied by the Three-Month Eurodeposit Futures (December Contract)



Interest rate differential

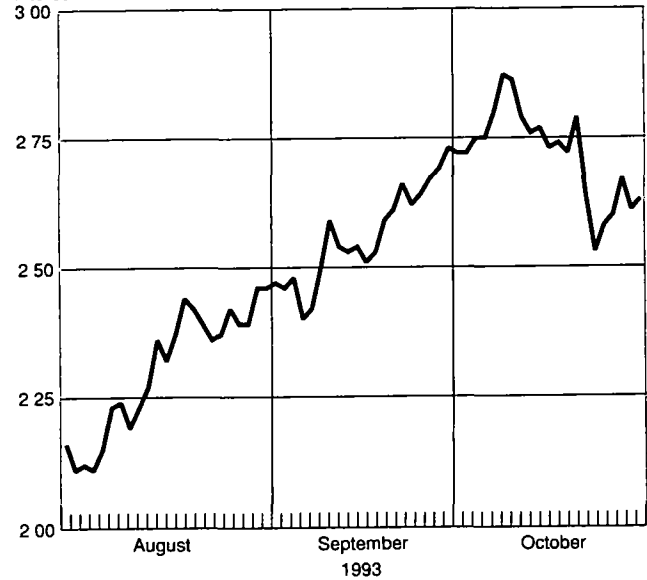


Table 1

**Federal Reserve
Reciprocal Currency Arrangements**
 Millions of Dollars

| Institution | Amount of Facility October 31, 1993 |
|---|--|
| Austrian National Bank | 250 |
| National Bank of Belgium | 1,000 |
| Bank of Canada | 2,000 |
| National Bank of Denmark | 250 |
| Bank of England | 3,000 |
| Bank of France | 2,000 |
| Deutsche Bundesbank | 6,000 |
| Bank of Italy | 3,000 |
| Bank of Japan | 5,000 |
| Bank of Mexico | 700 |
| Netherlands Bank | 500 |
| Bank of Norway | 250 |
| Bank of Sweden | 300 |
| Swiss National Bank | 4,000 |
| Bank for International Settlements | |
| Dollars against Swiss francs | 600 |
| Dollars against other authorized European currencies | 1,250 |
| Total | 30,100 |

Chart 5

Short-Term Interest Rates for Selected Countries

Percent

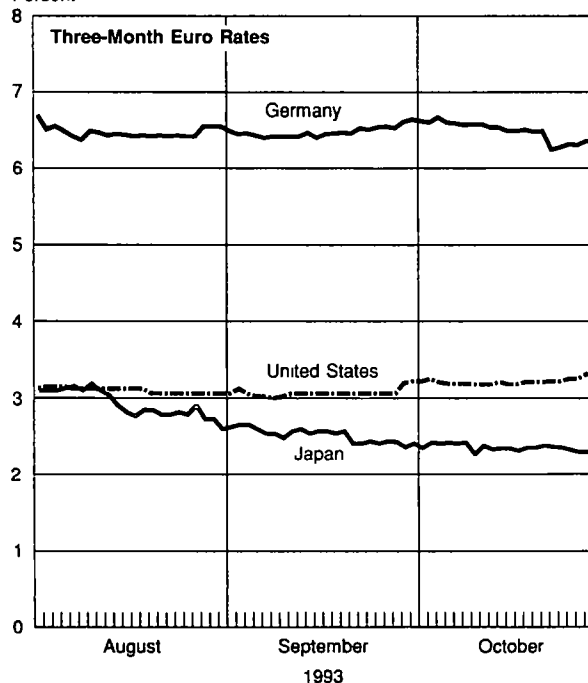


Table 2

**Net Profit (+) or Losses (-) on
United States Treasury and Federal Reserve
Foreign Exchange Operations**
 Millions of Dollars

| | Federal Reserve | U S Treasury Exchange Stabilization Fund |
|--|-----------------|---|
| Valuation profits and losses on outstanding assets and liabilities as of July 31, 1993 | +3,226 6 | +3,005 5 |
| Realized profits and losses August 1–October 31, 1993 | +22 1 | +22 1 |
| Valuation profits and losses on outstanding assets and liabilities as of October 31, 1993 | +3,368 5 | +2,839 0 |

Note: Data are on a value-date basis.