

Foreign Exchange Operations of the Treasury and the Federal Reserve

February–April 1994

During the February-April period, the dollar declined 4.6 percent against the German mark, 6.5 percent against the Japanese yen, and 3.6 percent on a trade-weighted basis.¹ On the last business day of the period, April 29, the Federal Reserve Bank of New York's Foreign Exchange Desk entered the market to purchase \$500 million against the German mark and \$200 million against the yen for the U.S. monetary authorities. Contemporaneously, Treasury Secretary Bentsen issued a statement confirming the intervention. In other operations, the Desk liquidated the non-yen and non-mark reserves of the Federal Reserve System and the U.S. Treasury Department's Exchange Stabilization Fund (ESF). Following the assassination of the leading Mexican presidential candidate, U.S. monetary authorities provided a \$6 billion temporary swap facility to Mexico. This was superseded on April 26, when the monetary authorities of the United States, Canada, and Mexico announced the creation of the North American Financial Group and the establishment of a trilateral foreign exchange swap facility.

The dollar rises briefly in early February

As the period opened, many market participants had positioned themselves for an extended dollar rally. This anticipated appreciation of the dollar rested in part on the expectation that interest rate differentials would start to move

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 February 1994 through April 1994. Ladan Archin was primarily responsible for preparation of this 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.

more rapidly in the dollar's favor. Dealers believed that with the U.S. economy strengthening, the Federal Reserve would eventually tighten monetary conditions in the United States, perhaps by the end of the first quarter. Dealers also expected the Bundesbank to lower short-term German interest rates quickly, allowing rates in other parts of Europe to fall as well. Against this backdrop, market participants entered the period holding substantial long-dollar positions against the mark and the yen, and also holding large positions in European government bonds. On February 4, Chairman Greenspan announced the decision of the Federal Open Market Committee (FOMC) to increase pressure on bank reserves, a move that resulted in an increase in the federal funds rate from 3.0 to 3.25 percent. The dollar spiked higher in the days immediately following the tightening, reaching period highs of DM 1.7675 and ¥109.65 before starting to drift lower (Charts 1 and 2).

The dollar declines first against the yen and then the mark

As the February 11 summit meeting between President Clinton and Japanese Prime Minister Hosokawa approached, market participants increasingly expected the two leaders to announce a compromise resolution of the trade issues under discussion between the two countries in bilateral "framework" talks. Correspondingly, expectations grew that the dollar would start to appreciate once the meeting was over, and market participants began to build up significant long-dollar positions. The dollar closed at ¥108.13 on Thursday, February 10. Reflecting this positive sentiment toward the dollar, the premium on dollar put options over equally out-of-the-money dollar call options diminished a few days before the meeting. Thus, when President Clin-

ton and Prime Minister Hosokawa announced late in the afternoon on Friday, February 11, that they had failed to reach an agreement and were suspending the framework talks, surprised market participants began to unwind their long-dollar positions. The dollar began to decline in late New York trading and continued to move lower through Asian, European, and early New York dealings on Monday, February 14. The dollar's price adjustment against the yen culminated at about midday, when the dollar dropped sharply to an intraday low of ¥101.10. The dollar recovered by the end of the day, however, and traded above ¥103 for the balance of the month.

As the Bundesbank's February 17 council meeting approached, market participants anticipated that the German central bank would act to lower interest rates for the first time since early December 1993. While the Bundesbank did reduce its discount rate by 50 basis points to 5.25 percent, it disappointed these expectations by leaving its key money market rate, the securities repurchase rate, unchanged. The dollar-mark exchange rate began to trade lower in subsequent days, but sharp sell-offs in U.S. and European bond markets generally dominated market attention during late February.

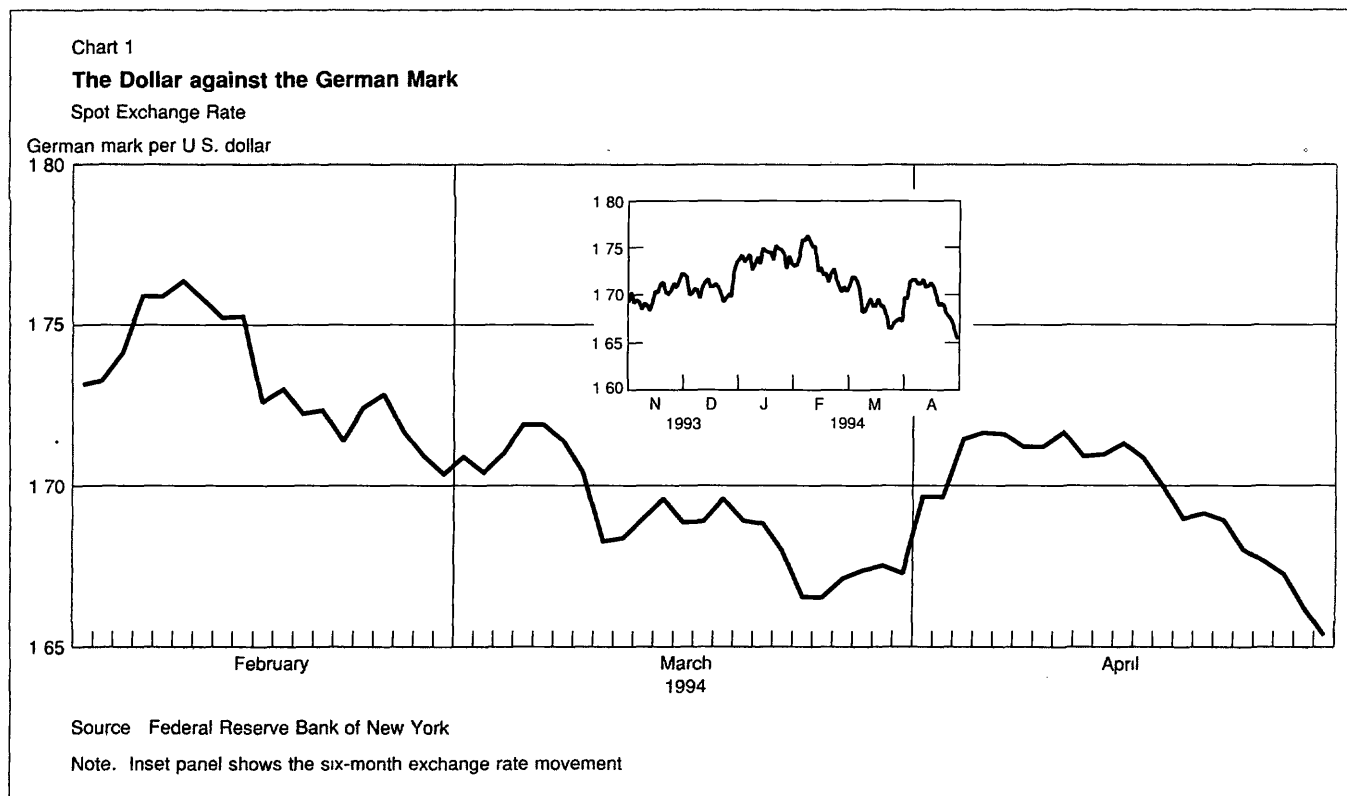
In early March, the dollar traded above the ¥105 level, gaining support from signs that Japan was considering pri-

vate and public initiatives to address its trade surplus. Market participants also appeared to take comfort in the fact that the Clinton Administration's decision to revive "Super 301" trade sanction powers would not result—at least in the short term—in new trade sanctions. However, in mid-March attention increasingly focused on reports that substantial foreign flows of funds into Japanese equity and bond markets were leading to further strength in the yen.

Against the mark, a slower than expected narrowing of short-term interest rate differentials weighed on the dollar during much of March. A surge in German M3 money supply growth, coupled with growing frustration over the Bundesbank's cautious step-by-step reduction of its securities repurchase rate, spurred market participants to reassess their expectation of sharply lower German interest rates (Chart 3). These developments also encouraged the view that further rate reductions by the Bundesbank would be calibrated to the Fed's rate increases to minimize the impact on the dollar-mark exchange rate. In this environment, the second 25 basis point rate increase in the federal funds rate resulting from the FOMC's decision, announced after its March 22 meeting, had little impact on the dollar.

The dollar moves up and then down in April

In early April, the dollar moved higher against the mark and



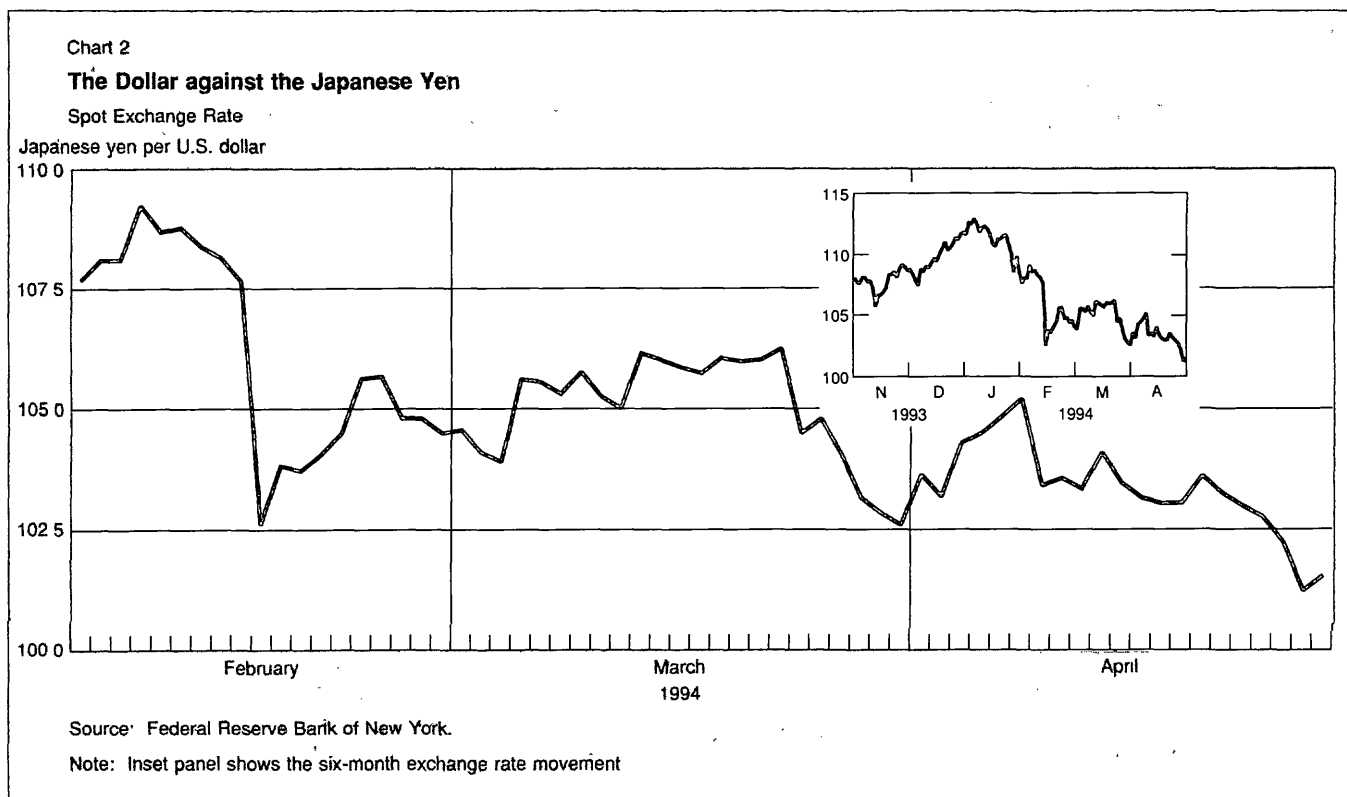
the yen on a much higher than expected increase in March U.S. nonfarm payrolls and on a brief recovery in U.S. securities prices. The dollar soon came under pressure against the yen, however, when the resignation of Prime Minister Hosokawa led to a widespread perception in the foreign exchange market that the bilateral trade talks would encounter further delays. Political uncertainty in Japan lingered, and dealers came to doubt whether Japan would be able to meet its commitment to have a new package of market-opening measures in place before the Group of Seven (G-7) summit in July. The political uncertainty in Japan also created a concern among dealers that the Japanese government would be unable to pass measures to stimulate domestic demand and that the yen would consequently appreciate over the longer term as well.

During April, a change in market perception strengthened the mark against both the dollar and the yen. With the Bundesbank easing cautiously since mid-February, the expected trend in short-term German interest rates, as implied by several series of Euromark futures contracts, backed up sharply over the latter part of the period (Chart 5). The surprise announcement by the Bundesbank on April 14 that it was cutting its discount and Lombard rates by 25 basis points, to 5.0 and 6.5 percent, respectively, appeared to signal to market participants that further significant near-

term easing was unlikely. This change in sentiment can be seen in the flattening of near-term Euromark contracts around the 5 percent level (Chart 5). This was followed by the announcement of a third 25 basis point increase in the federal funds rate on April 18. With market participants perceiving little prospect for a further narrowing in the interest differential in the short run, the mark strengthened against both the dollar and the yen as the short end of the German yield curve looked increasingly attractive.

The mark continued to rise against the dollar through the end of April, even though expected interest rate differentials, as implied by futures contracts on Eurodollar and Euromark deposits, were now moving more clearly in the dollar's favor (Charts 3 and 4). Sentiment toward the dollar became increasingly negative as dealers expressed growing anxiety that the dollar-yen exchange rate might drop swiftly below its historical lows. This risk was reflected in options markets, where dollar put options traded at a substantial premium over equally out-of-the-money dollar call options. With market participants focused on the risk that the dollar might decline against the yen, and the mark receiving solid support against the yen at the ¥60 per mark level, the prospect for the dollar appreciating against the mark appeared remote.

Following the G-7 meetings on the weekend of April



23–24, market participants were somewhat disappointed over the lack of official guidance on exchange rates, and the dollar began to move down against both the mark and the yen. At this time, a perception was growing that dollar weakness had begun to affect the U.S. bond market adversely, and market participants expressed concern that a lower dollar would spark inflationary pressures and thereby diminish the value of dollar-denominated assets. Dealers increasingly focused on the parallel movements in U.S. bond prices and the value of the dollar. On Thursday, April 28, the U.S. bond market recorded sharp losses, and the dollar approached its postwar low of ¥100 40 in thin and nervous trading.

U.S. monetary authorities enter the market to buy dollars against the mark and the yen

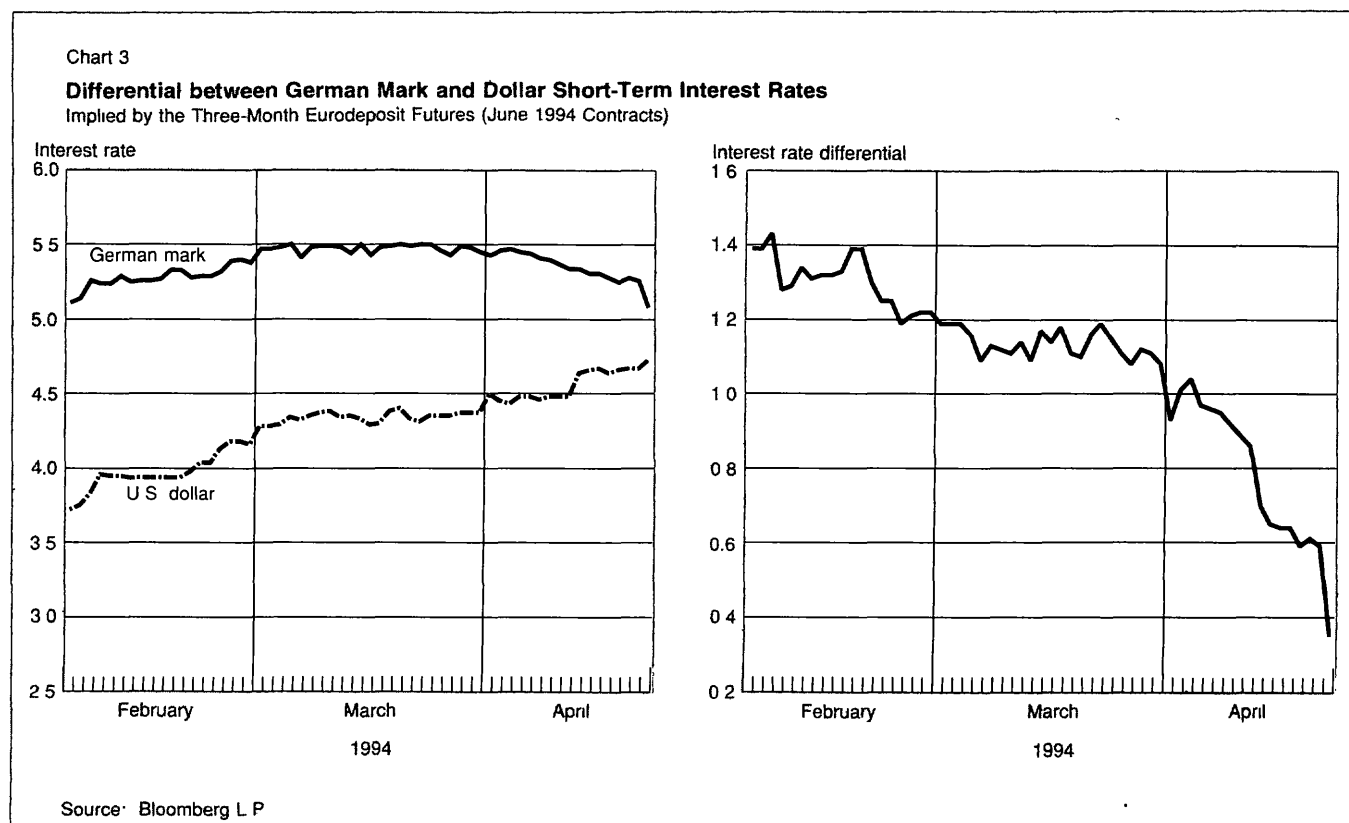
On Friday, April 29, in early New York trading, the dollar started to drop abruptly against the mark, falling nearly two pfennigs in less than an hour before bottoming out at a six-month low of DM 1.6440. At the time, the dollar was trading just below ¥102. Trading became increasingly volatile, with market participants reporting that dealers were not answering phones and that customers were having trouble finding out whether their orders had been filled. Shortly before

10:30 a.m., the Federal Reserve Bank of New York's Foreign Exchange Desk entered the market, purchasing dollars against the mark for the U.S. monetary authorities. Soon thereafter, Treasury Secretary Lloyd Bentsen issued the following statement confirming the intervention:

U.S. monetary authorities intervened today in foreign exchange markets to counter disorderly conditions. This is in line with our previously articulated policy which recognizes that excessive volatility is counterproductive to growth. We stand ready to continue to cooperate in foreign exchange markets.

Shortly before 11:30 a.m., the Desk again entered the market, purchasing dollars against both the mark and the yen. In total, U.S. monetary authorities purchased \$500 million against the mark and \$200 million against the yen; these amounts were equally divided between the Federal Reserve and the ESF.

Following the intervention, the dollar began to gain ground in orderly trading, reaching an intraday high of 1 6635 against the mark and 102.50 against the yen. The dollar drifted lower in the afternoon, however, and closed the period at DM 1.6535 and ¥101 55.



North American swap lines

Following the March 23 assassination of Luis Donaldo Colosio, the presidential candidate of Mexico's Institutional Revolutionary Party (PRI), U.S. monetary authorities established a \$6.0 billion temporary bilateral swap facility for the Bank of Mexico at the request of the Mexican authorities. The facility included reciprocal swap arrangements already in place. The assassination of Colosio had prompted the closing of Mexican markets on March 24 and gave rise to concerns that the reopening of the markets on March 25 would be accompanied by market disorders that could spill over into the U.S. financial markets. No drawings were made on this facility.

On April 26, the monetary authorities of the United States, Canada, and Mexico announced the creation of the North American Financial Group to provide a forum for more regular consultation on economic and financial developments and policies in these countries. These arrangements were unrelated to developments in Mexico; they had been planned several months earlier in recognition of the three nations' increasingly interdependent economic relationships. In connection with the creation of the North American Financial Group, the monetary authorities of the three countries announced the establishment of the trilateral for-

eign exchange swap facility to expand the pool of potential resources available to the monetary authorities of each country to maintain orderly exchange markets. The United States and Mexico put in place swap agreements for up to \$6.0 billion, with the Treasury and the Federal Reserve each participating up to \$3.0 billion. In addition, the Bank of Canada and the Bank of Mexico expanded their existing swap agreement to C\$1.0 billion. Finally, the Federal Reserve and the Bank of Canada reaffirmed their existing swap agreement in the amount of \$2.0 billion. Each party has reciprocal privileges to draw on the other's currency in

Table 1

Foreign Exchange Holdings of U.S. Monetary Authorities at Period End

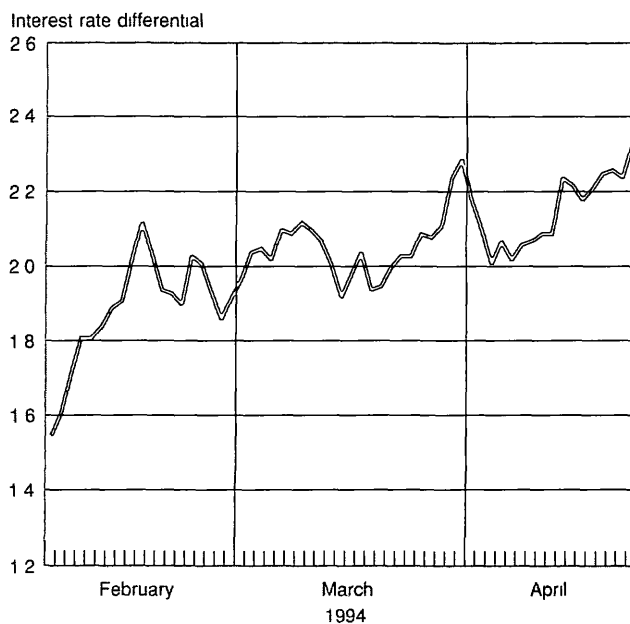
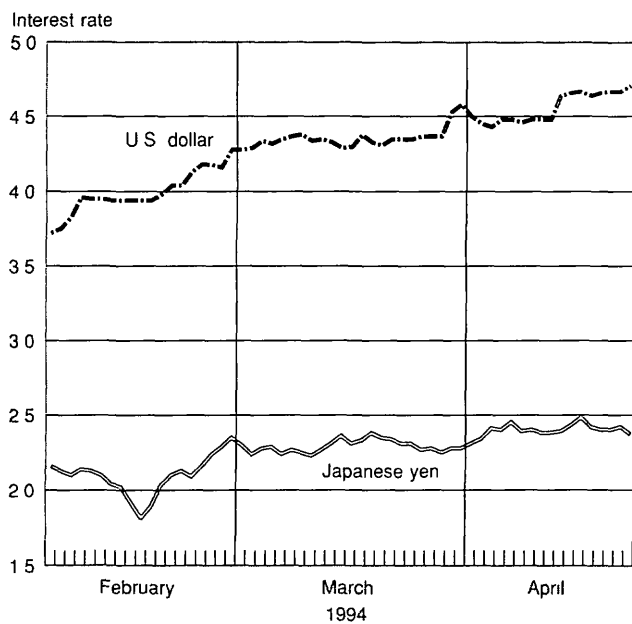
Millions of Dollars

	Federal Reserve	U.S. Treasury Exchange Stabilization Fund
German marks	13,615.8	8,413.7
Japanese yen	9,375.3	12,600.3
	22,991.1	21,014.0

Chart 4

Differential between Dollar and Japanese Yen Short-Term Interest Rates

Implied by the Three-Month Eurodeposit Futures (June 1994 Contracts)



Source: Bloomberg L.P.

amounts equivalent to the amounts indicated

The Mexican peso, which opened the period at 3 1060, traded to a low of 3 3694 per dollar following the assassination but strengthened toward the end of the period to close at 3 2700 pesos per dollar

Other operations

During the period, the Federal Reserve Bank of New York sold in the market all non-mark and non-yen foreign exchange reserve holdings of the Federal Reserve and the Exchange Stabilization Fund (ESF) of the U S Treasury. The Federal Reserve liquidated the equivalent of \$703.8 million, while the ESF liquidated the equivalent of \$64.4 million. Swiss francs represented \$629.0 million of the amount liquidated by the Federal Reserve and \$37.3 million of the amount liquidated by the Treasury. Swiss franc sales took place on the following days: February 15, February 22, March 1, March 8, April 5, April 12, and April 26. The remaining sales for the account of the Federal Reserve were as follows: \$1.0 million of Belgian francs on February 25, \$38.0 million of Dutch guilders on March 29, \$0.3 million of Canadian dollars on March 29, \$26.9 million of British pounds on April 12, and \$8.7 million of French francs on April 12. The remaining sale for the account of the Treasury was a liquidation of \$27.1 million of British pounds on

Table 2

U.S. Treasury and Federal Reserve Foreign Exchange Operations Net Profits (+) or Losses (-), Based on Historical Cost-of-Acquisition Exchange Rates

Millions of Dollars

	Federal Reserve	U.S. Treasury Exchange Stabilization Fund
Valuation profits and losses on outstanding assets and liabilities as of January 31, 1994	2,868.4	2,513.0
Realized January 31-April 29, 1994	81.7 [†]	5.6 [‡]
Valuation profits and losses on outstanding assets and liabilities as of April 29, 1994	4,163.4	3,804.9

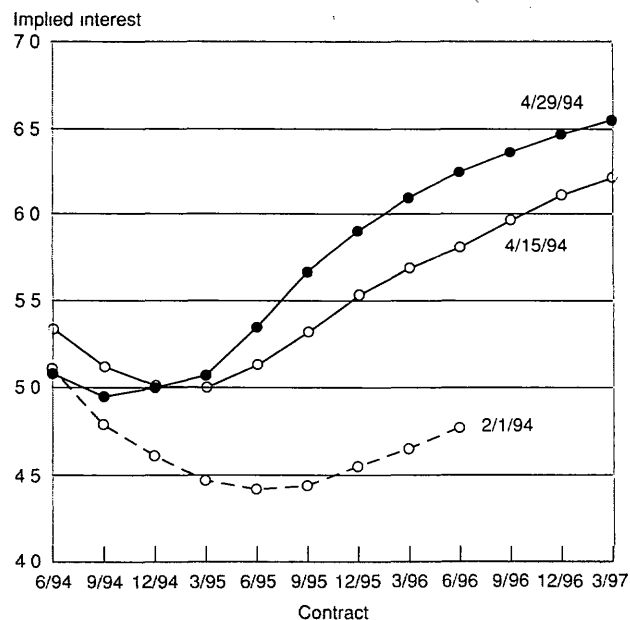
Note: Data are on a value-date basis.

[†] This figure represents net realized profit on market sales of Swiss francs, British sterling, Canadian dollars, French francs, Belgian francs and Dutch guilders. The figure excludes intervention sales transacted on April 29, which settled during the first week of May and are thus not reflected here.

[‡] This figure represents net realized profit on market sales of Swiss francs and British sterling. The figure excludes intervention sales transacted on April 29, which settled during the first week of May and are thus not reflected here.

Chart 5

Interest Implied by Euromark Futures Contracts



Source: Bloomberg L.P.

Table 3

Federal Reserve Reciprocal Currency Arrangements

Millions of Dollars

Institution	Amount of Facility	Drawings During Period
Austrian National Bank	250	0
National Bank of Belgium	1,000	0
Bank of Canada	2,000	0
National Bank of Denmark	250	0
Bank of England	3,000	0
Bank of France	2,000	0
Deutsche Bundesbank	6,000	0
Bank of Italy	3,000	0
Bank of Japan	5,000	0
Bank of Mexico	3,000	0
Netherlands Bank	500	0
Bank of Norway	250	0
Bank of Sweden	300	0
Swiss National Bank	4,000	0
Bank for International Settlements		
Dollars against Swiss francs	600	0
Dollars against other authorized European currencies	1,250	0
Total	32,400	0

April 26. It was decided to eliminate these currency holdings in light of the U.S. monetary authorities' practice in recent years of conducting intervention operations in German marks and Japanese yen. The sales were conducted in accordance with a schedule reflecting the maturity of investments in the individual currencies.

At the end of the period, the current values of the foreign exchange reserve holdings of the Federal Reserve and the

U.S. Treasury were \$23.0 billion and \$21.0 billion, respectively. These holdings are invested in a variety of instruments that yield market-related rates of return and have a high degree of liquidity and credit quality. The Federal Reserve and the U.S. Treasury held, either directly or under repurchase agreements, \$11.7 billion and \$11.3 billion, respectively, in foreign government securities.