

# Treasury and Federal Reserve Foreign Exchange Operations

February-April 1991

After setting new historical lows against the mark in mid-February, the dollar rebounded strongly during the February-April period to close up on balance by more than 15 percent against the mark and nearly 4 percent against the yen. The turnaround in the dollar was initially triggered by official intervention, but then was quickly reinforced both by optimism engendered by the swift conclusion of the Persian Gulf war and accompanying expectations of an early recovery of the U.S. economy from recession. The dollar's rise was particularly pronounced against the mark and certain other European currencies and occurred mainly during late February and March. In April, when the initial euphoria about U.S. economic prospects began to fade, the dollar lost upward momentum while retaining a generally firm tone.

## Early February—continued dollar decline

The period opened with the dollar renewing a decline that had begun in late 1989. During the months just preceding the period, this decline had been temporarily interrupted, with market participants wary of selling dollars aggressively out of concern that war in the Persian Gulf might trigger large "safe-haven" flows into the dollar and push up the exchange rate. By early February, however, this possibility appeared remote. The dollar had not received lasting support from the outbreak of war in mid-January. With aerial bombing by the United States and its allies in Operation Desert Storm well underway, the likelihood that the conflict

would widen to the point of generating new and substantial flows into dollars receded. At the same time, concern that the war might become prolonged and serve as a drag on the U.S. economy intensified. In that environment, the dollar became vulnerable to selling pressure because of the continued movement of interest rate differentials against the dollar and the more attractive investment opportunities available elsewhere. Market participants felt there was little official concern about exchange rate developments and saw little reason to expect the decline to end—even though the dollar appeared increasingly undervalued in terms of purchasing power.

On the last day of January, the Bundesbank had increased its official discount and Lombard rates in a move whose timing surprised many in the market. One day later, on February 1, as the period opened, the Federal Reserve discount rate was reduced 50 basis points to 6 percent and the fed funds rate also moved down 50 basis points. The juxtaposition of the moves in the two countries served to reinforce the prevailing market expectation that the dollar was likely to continue to decline and encouraged those who had dollars to buy to postpone their purchases, and the dollar reached a low of DM 1.4645 against the mark.

Beginning on the next business day, February 4, the U.S. monetary authorities intervened with the aim of reintroducing a sense of two-way risk for the dollar. On that day, the U.S. authorities purchased \$100 million against marks and were joined in concerted intervention by a large number of foreign central banks. This intervention, coming after a considerable absence, initially surprised the market and was taken as a show of

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concern, prompting the dollar to recover somewhat. Over the days that followed, the U.S. monetary authorities continued to operate in the market to dispel the impression that the dollar would continue to decline. In the seven days between February 4 and February 12, the U.S. authorities purchased a total of \$1,389 million against marks, operating generally in concert with other monetary authorities.

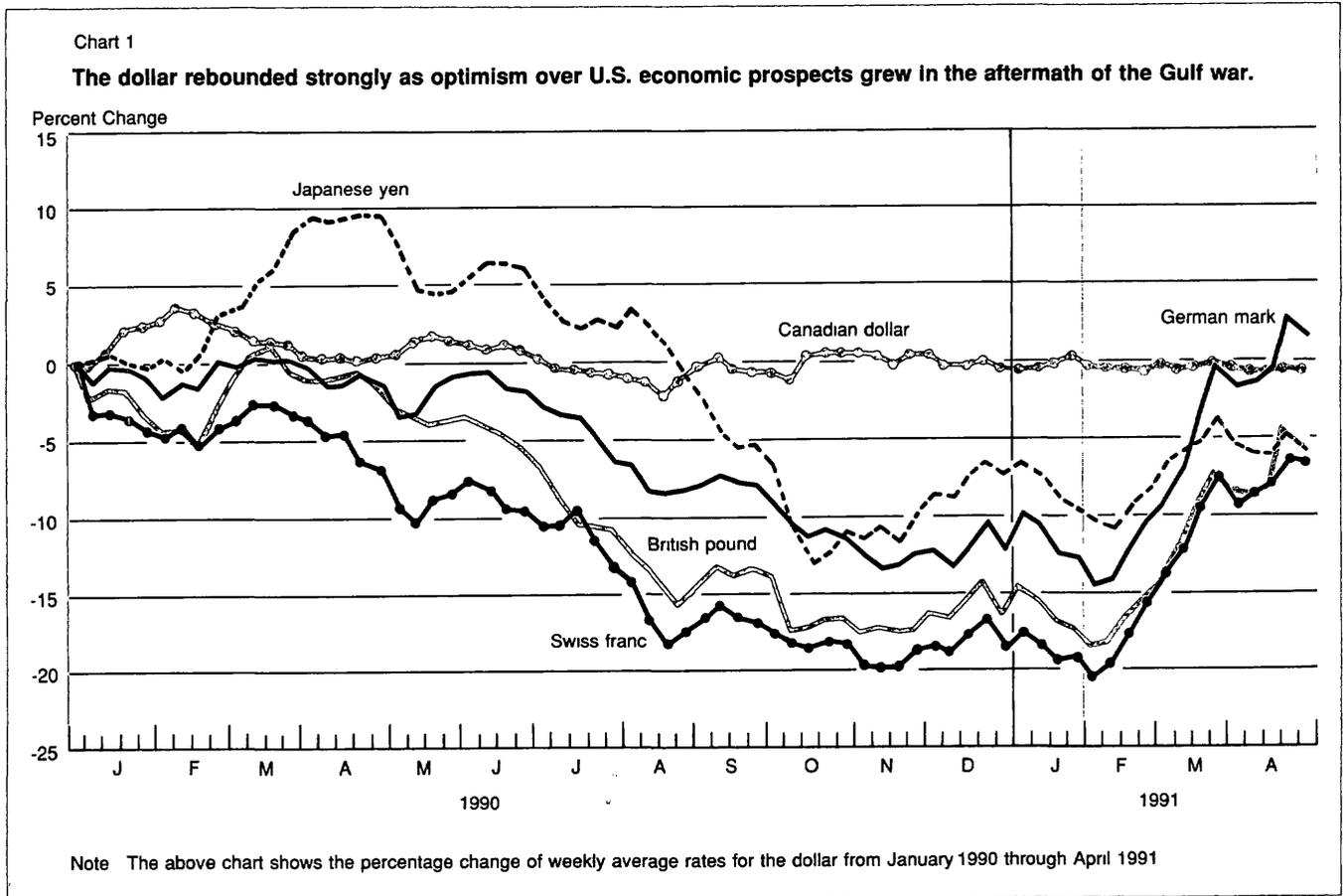
For a time, doubts lingered in the market over official aims and resolve. Official comments suggesting that U.S. economic weakness would be addressed by further interest rate reductions and that other countries might be concerned about the impact of a dollar recovery on their own economies left many market participants believing the authorities were not committed to stopping the dollar's decline. Thus, although the dollar showed somewhat greater stability and at times firmed in response to instances of intervention, sentiment remained generally negative and dollar rates drifted downward on balance. On February 11, the dollar set a new historic low of DM 1 4430 against the mark while

declining to ¥ 127 20 against the yen. At that point the dollar was 2 percent to 3 percent below its level at the end of January and more than 6 percent below its level of January 15, before the commencement of Operation Desert Storm.

Thereafter, the persistence of the central banks and the cumulative impact of their operations, in particular a round of concerted dollar purchases initiated on February 12 by European central banks before U.S. markets opened, finally helped convince market participants of the official commitment to ending the dollar's decline. Market participants paused to reassess exchange rate levels, and a sense of two-way risk returned to the market after a prolonged, albeit not continuous, decline in dollar exchange rates.

#### Mid-February through March: the dollar recovers

As the dollar steadied, a number of other factors combined to engender a sharp recovery. At first, indications that the Gulf war would end quickly on terms favorable to the United States and its allies buoyed the dollar. On



February 15, a radio broadcast from Baghdad suggesting conditions under which Iraq might withdraw its forces from Kuwait represented the first indication that the war might have reached a decisive point. Then, as the start of the allied ground offensive was seen as bringing the war to a quick end, the dollar gained further support. Market participants, recalling Chairman Greenspan's concerns in January about the economic impact of a long war, associated a short war with an early economic recovery. When the ceasefire was declared February 27, market participants became increasingly confident that the dollar and the U.S. economy would benefit.

Meanwhile, the assumption that interest rate differentials would move inexorably against dollar investments no longer appeared realistic. A number of other countries were beginning to feel the effects of slowing demand, and around mid-February, official interest rates were reduced in the United Kingdom, Spain, the Netherlands, and Belgium. Rumors also circulated of a possible easing in Japan. Meanwhile, German market rates had moved up only modestly following the official rate increase of late January. Together, these develop-

ments called into question the view that the United States would remain alone in pursuing an accommodative monetary policy. At the same time, comments by various Federal Reserve officials, including Chairman Greenspan's Congressional testimony of February 20, reminded market participants that there would be limits to the easing of monetary policy in the United States.

Another factor contributing to the dollar's rise during this period was the possibility that large market purchases of dollars to cover cash contributions for Desert Storm expenses and postwar reconstruction costs in the Persian Gulf might be forthcoming. The approval on March 6 by the upper house of the Japanese parliament of a ¥117 trillion contribution to the Desert Storm operation and the prospect that such a large payment might be converted from yen into dollars in the market was a factor affecting the dollar/yen rate during much of the rest of the month of March.

At the same time, concerns began to grow about the implications for the German mark of the problematic economic situation in eastern Germany and of the social and political strife in the Soviet Union. Strikes and demonstrations in eastern Germany idling thousands of workers highlighted the difficulties of the economic restructuring. The decision of the German government late in February to seek a package of tax increases to help finance German unification was taken as an indication that the costs were also likely to be

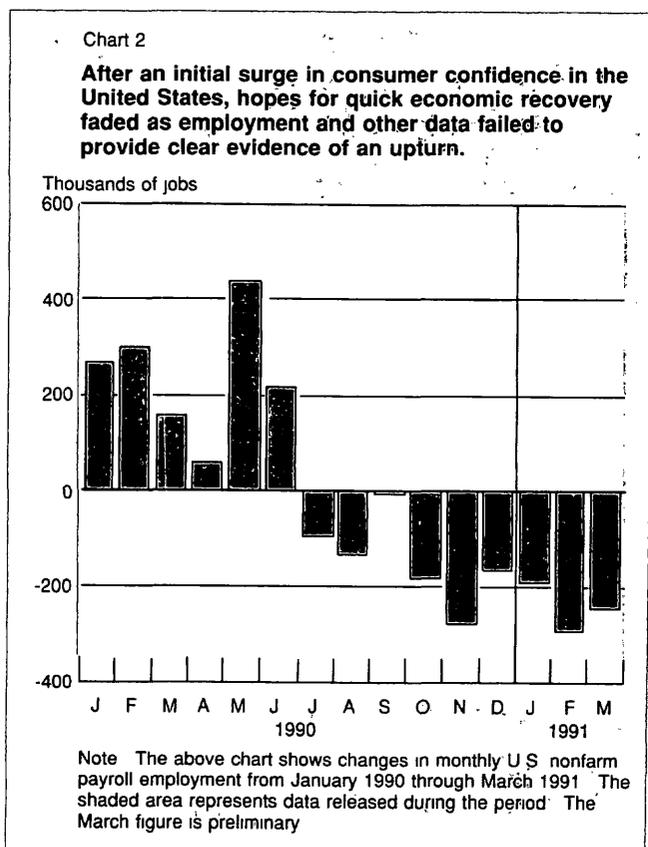


Table 1

**Federal Reserve  
Reciprocal Currency Arrangements**

Millions of Dollars

Institution	Amount of Facility April 30, 1991
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
<b>Total</b>	<b>30,100</b>

greater than previously believed. At about the same time, strains among the republics of the Soviet Union and protests against the leadership of President Gorbachev intensified, leading to a further reassessment of the view that Germany was likely to reap early benefits from liberalization in the Soviet Union and elsewhere in eastern Europe. These and other signs of uncertainty tended to weigh on the mark throughout the period.

For all of these reasons, sentiment towards the dollar had turned quite positive by early March. As the dollar rose, it gathered momentum that neither disappointing economic data nor further easing of U.S. monetary policy appeared to diminish. In early March, the dollar moved up through its January 15 levels. In the days that followed, it was pushed up further as market participants scrambled to cover short positions or to meet previously delayed requirements. The dollar's rise was accelerated at times by actions in the options markets. Writers of foreign currency options that had been purchased when the dollar's direction seemed uncertain hastened to cover their exposure as the likelihood quickly increased that those options would be exercised. The reversal of sentiment also triggered large shifts into dollar investments by portfolio and funds

managers. By the end of March, the dollar had moved above DM 170 and ¥140, 18 percent and 10 percent, respectively, above the lows for the period reached six weeks earlier on February 11.

As the dollar continued its upward move during March, exchange rates became increasingly susceptible to sharp movements. The rapid appreciation in the dollar made market participants wary, uncertain whether the dollar's rise would continue, and traders became more reluctant to maintain positions. On March 11, in one episode, the dollar rose sharply against the mark in Asian trading, and a number of European central banks responded by intervening to sell dollars. The U.S. monetary authorities cooperated by selling a total of \$200 million against marks and \$30 million against yen in New York that same day and later that week to support their efforts in an environment of unsettled market conditions. On March 19 and 22, in another such episode, the U.S. authorities joined other central banks and sold a total of \$170 million against marks. Treasury Under Secretary Mulford stated that the U.S. authorities were concerned about the rapidity of the dollar's rise and would continue to cooperate with other central banks.

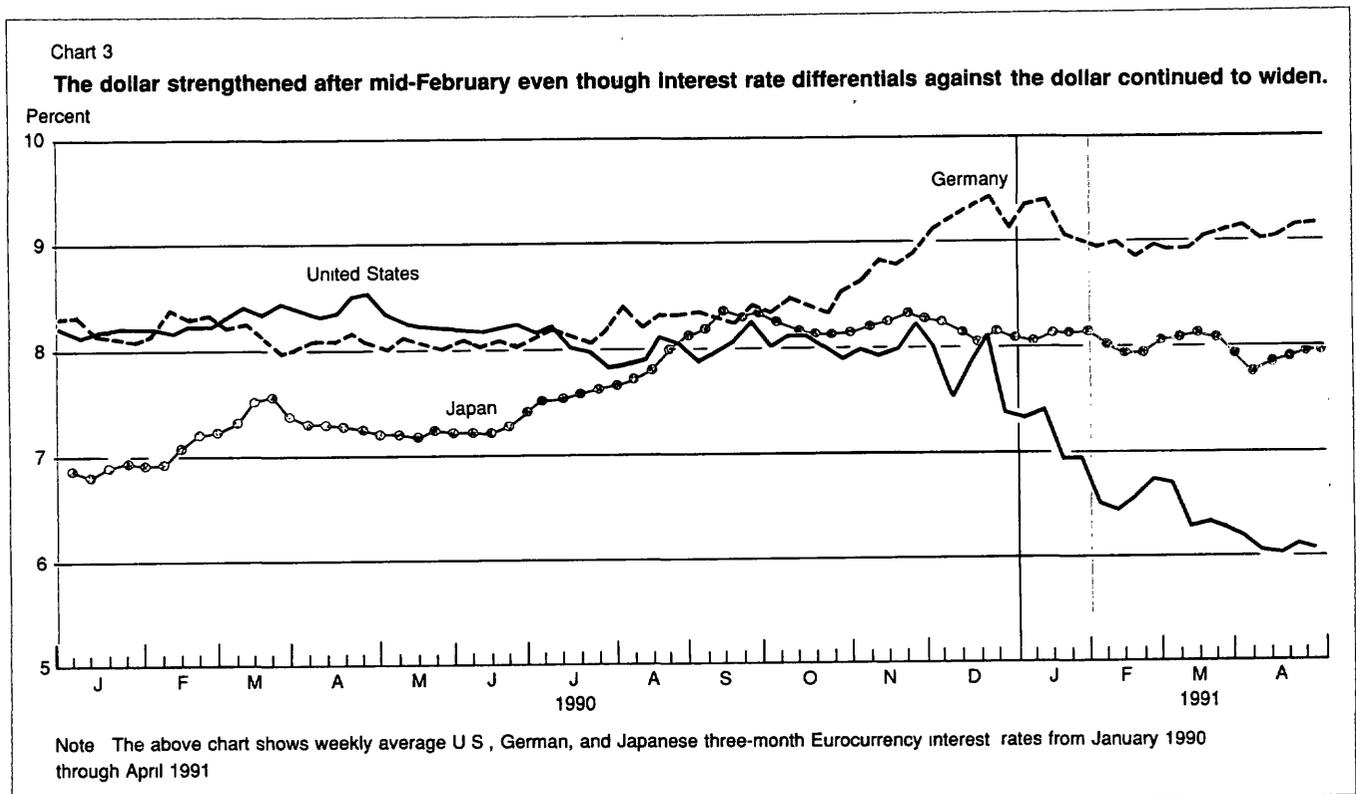


Table 2

### Drawings and Repayments by Foreign Central Banks under Special Swap Arrangements with the U.S. Treasury

Millions of Dollars, Drawings (+) or Repayments (-)

Central Bank Drawing on the U.S. Treasury	Amount of Facility	Outstanding as of January 31, 1991	February	March	April	Outstanding as of April 30, 1991
National Bank of Romania	40 0†	—	—	+ 40 0 - 40 0	—	—

Note: Data are on a value-date basis. Components may not add to totals because of rounding.

†Represents the ESF portion of a \$300 million short-term credit facility with the National Bank of Romania that was established on March 4, 1991, and expired on March 28, 1991.

#### April: the dollar's rise subsides

By early April the initial reaction to the end of the Gulf war had run its course. Market participants then turned their attention to the near-term economic and monetary policy prospects for various countries. With clear trends in these areas difficult to discern, exchange rates fluctuated, sometimes sharply, but with less direction for the balance of the period.

The market's optimism about the near-term U.S. economic outlook was yet to be confirmed by statistical evidence. Employment data released early in April pointed to a continuing drop in jobs after the end of the Gulf war. Also, monetary conditions in the United States continued to ease, and U.S. short-term interest rates were roughly 150 and 300 basis points lower, respectively, than those in Japan and Germany. Yet market participants held to their belief that economic recovery would soon emerge in the United States, and they took note of early April reports suggesting that the Federal Reserve was adopting a more cautious attitude towards easing monetary policy.

In addition, market participants had come to expect that with economic growth slowing or actually turning negative in most of Europe and North America, world interest rates would trend downwards. Canada and the United Kingdom were already embarked on a path of monetary easing in the face of severe recessions. With the exception of Germany, most European countries had already started to lower interest rates, or appeared poised to do so, to the extent that EMS constraints would permit. In Japan, Bank of Japan and government officials continued to express their commitment to a tight monetary policy. Market participants, however, noting the sharp decline in Japanese money supply growth and the apparent stabilization, after steep declines, of asset prices, increasingly came to expect an ease in the weeks ahead, and the yield curve remained steeply inverted.

Only for Germany did the market expect that interest

Table 3

### Net Profits (+) 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 January 31, 1991	+5,688 0	+3,027 2
Realized February 1, 1991–April 30, 1991	+179 4	+146 9
Valuation profits and losses on outstanding assets and liabilities as of April 30, 1991	+2,316 3	+570 6

Note: Data are on a value-date basis. Valuation profits (losses) represent the increase (decrease) in dollar value of outstanding currency assets valued at end-of-period exchange rates, compared with rates prevailing at the time the foreign currencies were acquired.

†Includes valuation of funds warehoused with the Federal Reserve System.

rates might remain high, or increase further. Adding to the uncertainty about the German situation were the continuing concerns about the Soviet Union, Eastern Europe, and the German government's handling of the challenges of unification. In this context, the dollar rose further against the mark, reaching a seventeen-month high of DM 1 7690 on April 22. In the days that followed, a number of foreign central banks entered the market on several occasions to restrain the dollar's rise against the mark.

As the period drew to a close, market participants began to focus on an upcoming meeting of the Group of Seven (G-7) in Washington. Some sought to protect themselves against the possibility that the G-7 might undertake some action to restrain the dollar's rise. In

addition, there was speculation that the meeting might produce some understandings on interest rates in which most countries except Germany would agree to reduce rates in a more or less coordinated fashion.

When markets first opened on April 29 following the weekend G-7 meeting, the dollar was quickly marked higher in the absence of any explicit statement in the G-7 communiqué of official intention to limit the dollar's rise. After briefly reaching DM 1.7835, the dollar then started to fall back as market participants reconsidered the significance of the G-7 meeting and shifted their focus to the apparent absence of agreement on coordinated interest rate reductions. Many thought that the United States might be the only G-7 member to ease monetary policy in the near term. When in fact the Federal Reserve announced a reduction in the discount rate, effective April 30, the dollar declined further. Altogether, in the last two days of the period the dollar fell nearly 8 pfennigs against the mark, or almost 5 percent, before subsequently stabilizing. Nevertheless, the dollar closed up 15½ percent on balance for the three-month period as a whole, at DM 1.7060. The dollar's movements against the yen in the final days of the period were more moderate, with the dollar closing the period at ¥136.10, up on balance 3¾ percent. The dollar rose 12¾ percent on a trade-weighted basis as measured by the staff of the Federal Reserve Board of Governors.

- During the three-month period, the U.S. monetary authorities purchased a total of \$1,389 million, all against German marks, and sold a total of \$400 million, of which \$370 million was against German marks and \$30 million was against Japanese yen. Both the purchases and sales of foreign currencies were shared equally by the Federal Reserve and the Treasury's Exchange Stabilization Fund (ESF).

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In other operations, the Treasury, through the ESF, continued to provide SDRs in exchange for dollars to certain foreign monetary authorities that required SDRs for the payment of IMF charges and for repurchases. The ESF exchanged a total of \$87.4 million worth of SDRs during the period. Since these operations began in July 1990, the Treasury has received a total of \$971.1 million on sales of nearly SDR 700 million.

On March 6, the Treasury, through the ESF, along with the Bank for International Settlements (acting for certain participating member banks) established a \$300 million near-term support facility to assist Romania in its economic adjustment efforts. The ESF share of the facility was \$40 million. Romania drew the full amount on March 7. Romania repaid \$38.7 million to the ESF on March 20 and, on the following day, repaid in full the remaining balance. The facility expired on March 29.

During the period, the Federal Reserve and the ESF realized profits of \$179.4 million and \$146.9 million, respectively, from sales of foreign currencies. As of the end of April, cumulative bookkeeping or valuation gains on outstanding foreign currency balances were \$2,316.3 million for the Federal Reserve and \$570.6 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 that have a high degree of quality and liquidity. A portion of the balances is invested in securities issued by foreign governments. As of the end of April, holdings of such securities by the Federal Reserve amounted to \$7,896.7 million equivalent, and holdings by the Treasury amounted to the equivalent of \$7,726.2 million valued at end-of-period exchange rates.