TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

January–March 1998

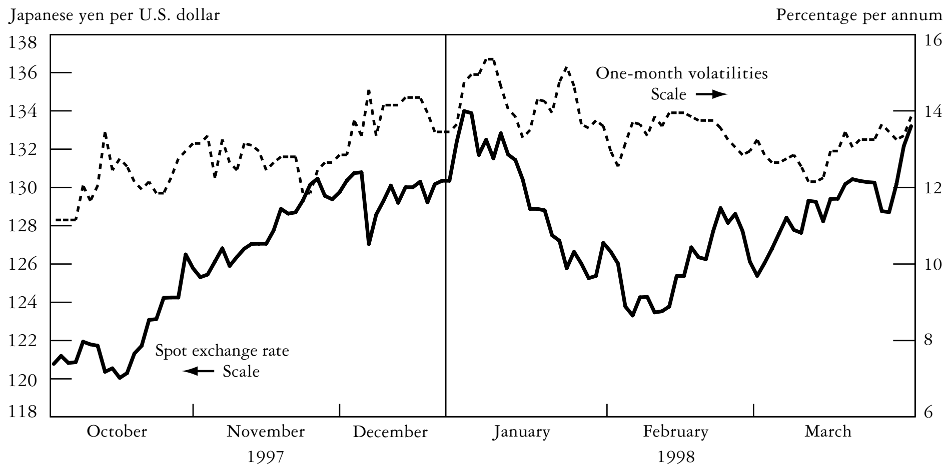
During the first quarter of 1998, the dollar appreciated 2.8 percent against the German mark and 2.2 percent against the Japanese yen. On a trade-weighted basis against G-10 currencies, the dollar appreciated 1.9 percent.[1] Against the mark, the dollar traded in a relatively narrow range through most of the period, reflecting market expectations of stable monetary policy in both the United States and Germany as well as reduced volatility in European currencies as expectations for a smooth progression toward European economic and monetary union (EMU) solidified. Against the yen, the dollar retreated from five-year highs reached early in the period, pressured lower by the possibility of official intervention to support the yen and by comments from Japanese politicians calling for measures to stimulate Japan's economy. The dollar later rebounded as expectations for additional Japanese stimulus waned and as market participants refocused on the diverging economic outlooks in the United States and Japan. While the dollar was little changed over the period on a net basis, other asset prices experienced significant appreciation. Global bond and equity markets reached record highs, and many Asian markets rebounded from earlier weakness. The U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.

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 1998 through March 1998. Daniel B. Osborne was primarily responsible for preparation of the report.

Chart 1

THE DOLLAR AGAINST THE JAPANESE YEN

Spot Exchange Rate and Volatility Implied by Option Prices

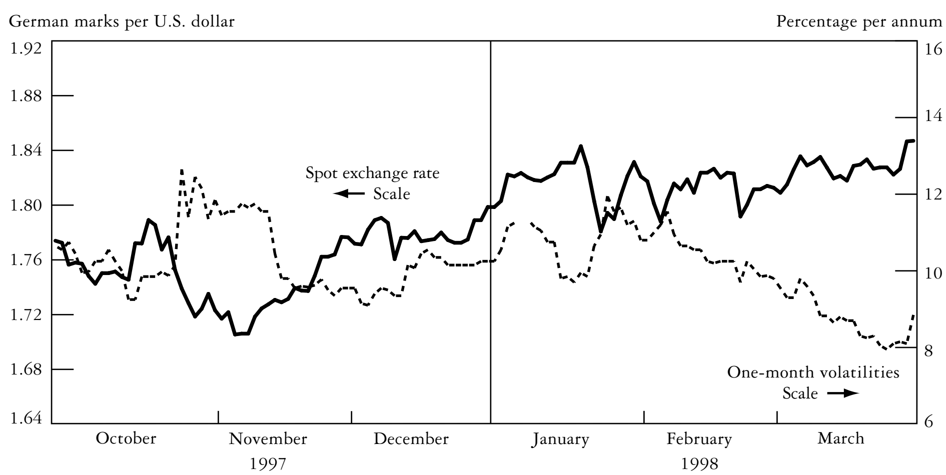


Sources: Federal Reserve Bank of New York; Reuters.

Chart 2

THE DOLLAR AGAINST THE GERMAN MARK

Spot Exchange Rate and Volatility Implied by Option Prices



Sources: Federal Reserve Bank of New York; Reuters.

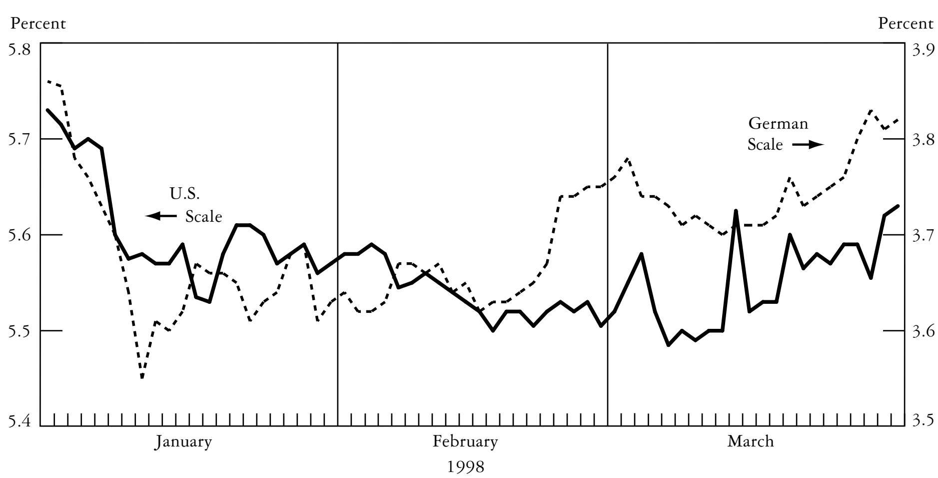
STABLE MONETARY POLICY OUTLOOKS CONTRIBUTE TO STRONG PERFORMANCE OF U.S. AND EUROPEAN STOCKS AND BONDS

Expectations for steady U.S. monetary policy solidified over the course of the period as market participants focused on the countervailing effects of a drag from the slowdown of Asian economies and the continued signs of strong domestic demand in the United States. Comments by Chairman Greenspan and Governor Meyer in early January were interpreted as suggesting concern over the potential deflationary effect of an Asian economic slowdown on the U.S. economy, leading to some speculation that the next move by the Federal Open Market Committee (FOMC) could be an ease. The yield implied by the April 1998 Fed Funds futures contract declined to levels below the 5.50 percent Fed Funds target—reaching a low of 5.31 percent on January 9—and the benchmark thirty-year Treasury bond yield fell to an all-time low of 5.69 percent on January 12.

Expectations for FOMC policy shifted to a more balanced view following Chairman Greenspan's Humphrey-Hawkins testimony to Congress on February 24. Market participants interpreted the testimony as emphasizing a domestic environment of tight labor markets and strong domestic demand, while depicting less concern over the potential impact of the Asian slowdown. Following the testimony, the implied yield on the April Fed Funds futures contract rebounded to levels above 5.50 percent, while the benchmark bond yield reached a high for the quarter of 6.07 percent on March 3. Expectations for steady policy solidified despite subsequent evidence of tight labor markets and strong domestic demand, and the thirty-year benchmark yield fell 13 basis points from its peak to end the period at 5.94 percent, supported by evidence of low inflation and anticipation of diminished issuance of Treasury securities.

Chart 3

U.S. AND GERMAN 3X6 FORWARD RATE AGREEMENTS



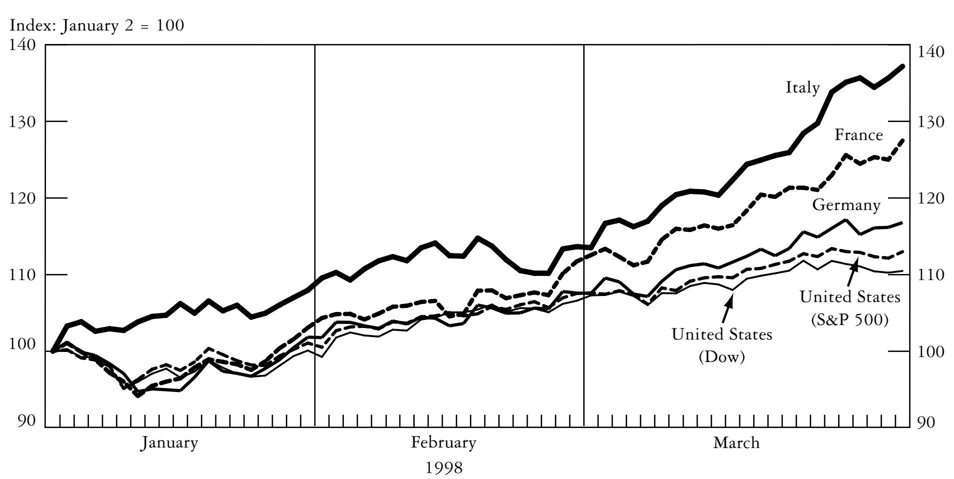
Source: Reuters.

In Germany, expectations for steady monetary policy also solidified amid a benign inflationary outlook, concern over high unemployment levels, and the ongoing belief that official European interest rates would converge to German levels ahead of EMU. Also contributing to the steady policy outlook was continued concern over the potential deflationary effect of an Asian economic slowdown on German growth. The yield implied by three-month German mark forward rate agreements three months hence fell 10 basis points to 3.73 percent, while the yield on ten-year government bonds declined 51 basis points to close at an all-time low of 4.86 percent on March 24. Expectations that continued fiscal consolidation in Europe would further diminish bond issuance also underpinned the rally.

Against this background of stable monetary policy, reduced volatility, low inflation, and falling yields, investor risk appetites appeared to be on the rise. Equity markets in the United States and Europe reached record highs, with the Dow Jones Industrial Average rising 11.3 percent during the quarter and German and French benchmark indices rising 20.7 and 29.2 percent, respectively. Southern European stock markets performed even better, as prospects for lower interest rates ahead of EMU, and cross-border corporate consolidation fueled gains of more than 40 percent in Portugal, Italy, and Spain.

Chart 4

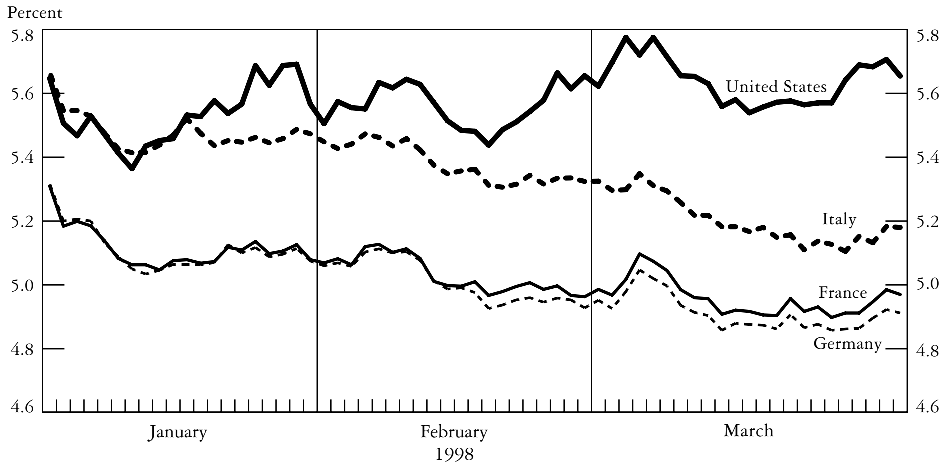
U.S. AND EUROPEAN EQUITY MARKETS



Source: Bloomberg L.P.

Chart 5

U.S. AND EUROPEAN TEN-YEAR BOND YIELDS



Source: Bloomberg L.P.

THE DOLLAR TRADES IN A RELATIVELY NARROW RANGE AGAINST THE MARK

The dollar traded in a DM 1.78-1.85 range against the mark throughout most of the period. Implied volatility on one-month dollar-mark options declined 4 percentage points to reach an eight-month low of 7.95 percent on March 25, while longer dated risk reversals remained largely neutral, apparently reflecting expectations that the dollar would continue to trade within a narrow range. In addition, the relatively steady policy outlooks in both countries, the concurrent rallies in both U.S. and European equity markets, and perceptions of a smooth progression toward EMU all contributed to the limited volatility of the dollar-mark exchange rate. Late in the period, the dollar traded to highs near DM 1.85, as sales of the mark against the British pound and the steady widening of U.S.-German interest rate differentials weighed on the German currency. The spread of U.S. ten-year bonds over comparable German instruments increased by 57 basis points to close the period at 82 basis points.

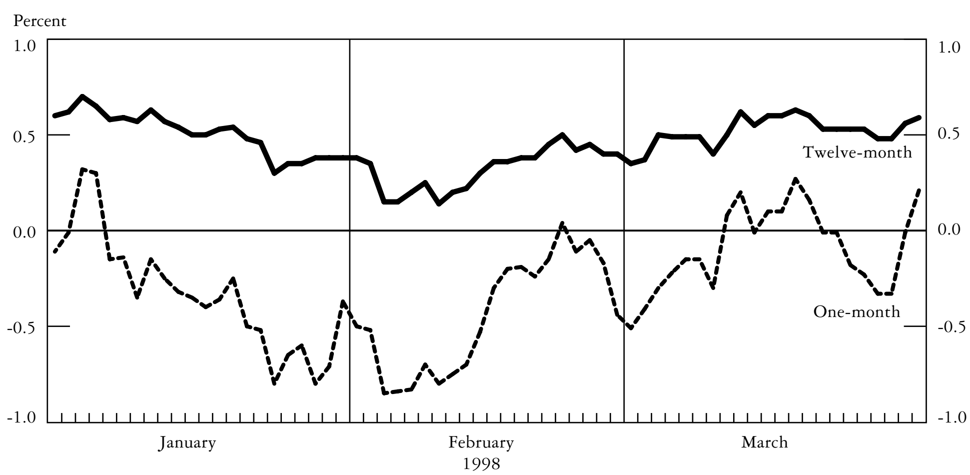
THE DOLLAR REBOUNDS FROM PERIOD LOWS AGAINST THE YEN AMID INCREASING UNCERTAINTY REGARDING THE JAPANESE ECONOMIC OUTLOOK

After reaching five-year highs against the yen early in the period, the dollar declined more than 8 percent by mid-February, then rebounded to end the period slightly stronger than at the end of 1997. The dollar traded to a five-year high of ¥134.30 on January 6 as market participants continued to focus on the diverging economic outlooks in the United States and Japan, but reversed its upward trend in subsequent weeks. Early in the quarter, signs of stabilization in other Asian markets diminished the dollar's perceived "safe-haven" status. Moreover, market uncertainty regarding potential intervention by the Japanese monetary authorities in support of the yen also contributed to the dollar's weakness, with Japanese Vice Finance Minister Sakakibara warning on numerous occasions that excessive yen weakness was not desirable. Various comments from Japanese politicians suggesting that significant economic stimulus measures would be forthcoming also contributed to uncertainty regarding the direction of the dollar-yen exchange rate. In an address to the Japanese parliament on January 12, Prime Minister Hashimoto spoke of the need for a ¥30 trillion plan to support the banking sector, focusing attention on potential banking reform measures. The yen was further supported by gains in the Nikkei index, triggered by a government proposal to change land valuation accounting methods and alter Japanese bank capital requirements. These factors contributed to an unwinding of long dollar positions by market participants, and the dollar reached a low of ¥123.17 on February 10.

In subsequent weeks, the dollar began to reverse its downward trend as market participants increasingly adopted the view that the proposed stimulus measures would not provide a significant boost to the Japanese

Chart 6

DOLLAR-YEN ONE-MONTH AND TWELVE-MONTH RISK REVERSALS



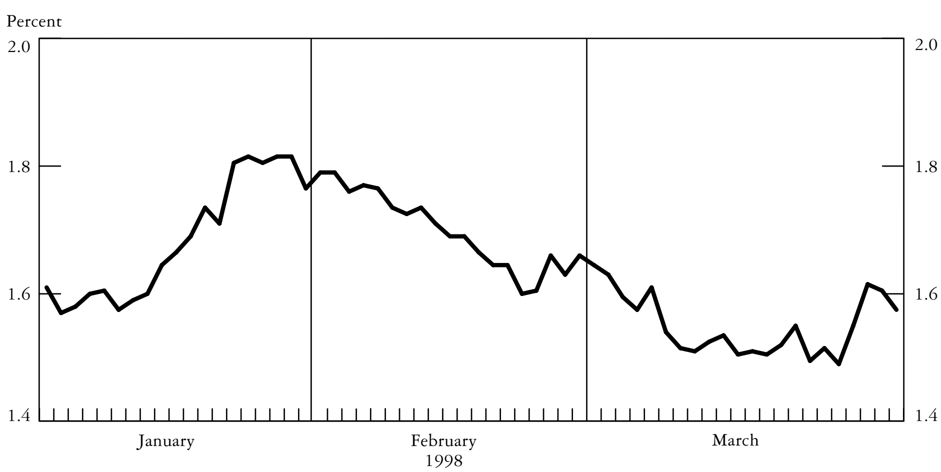
Source: J.P. Morgan.

economy. Market participants' outlooks for the Japanese economy deteriorated amid continued signs of domestic weakness, as evidenced by record unemployment, weak private consumption data, and high inventory levels. The release of the February 20 package did little to alter market sentiment toward Japan's economic prospects, and the dollar continued to strengthen, rising nearly two yen on the day of the release to close at ¥127.82. Treasury Secretary Rubin's reiteration that a strong dollar was in the United States' best interest also contributed to yen weakness. Reports of widening scandals involving Japanese monetary officials helped lift the dollar above ¥130 by mid-March. However, further gains were restrained by expectations that both the yen and Japanese assets might be supported through fiscal year-end. Despite the uncertain outlook for the dollar against the yen in the near term, the options market suggested more positive dollar sentiment in the longer term. Twelve-month risk reversals remained skewed toward dollar calls, reflecting a higher cost of protection against a sharp appreciation of the dollar against the yen. Further reflecting market uncertainty over the Japanese economic outlook, the benchmark Japanese bond yield declined from a high of 1.82 percent on January 29 to a new low of 1.49 percent on March 25.

THE DOLLAR'S RELATIVELY MUTED PERFORMANCE OCCURS AMID A REBOUND IN ASIAN MARKETS AND A DECLINE IN VOLATILITY

Against the backdrop of steady G-3 monetary policies, strengthening bond and equity markets in the United States and Europe, and declining volatility in key asset prices, several emerging markets recovered some of the losses posted in previous months. Efforts by international organizations to stabilize the region

Chart 7
JAPANESE BENCHMARK BOND YIELD



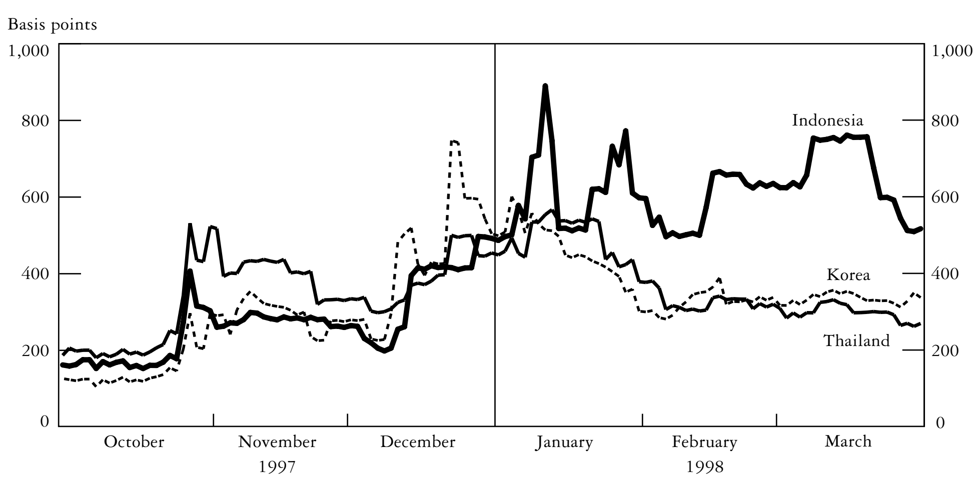
Source: Bloomberg L.P.

also lent support to these markets. The steps taken by the governments of Korea and Thailand to adhere to measures agreed upon with the International Monetary Fund (IMF) and the arrangements by international creditors to restructure Korean short-term external debt payments also encouraged a reallocation of investor funds back into these markets. As local demand for dollars to repay dollar-denominated debt subsided, and as international investor inflows resumed, the currencies of many Asian countries rebounded, led by a 17.6 percent appreciation of the Thai baht against the U.S. dollar. Asian equities responded positively to the return of capital inflows, with the Korean KOSPI index rising nearly 53 percent by early March, before retracing to post a gain on the quarter of 27.8 percent. The improved sentiment in Asia helped Latin American and Eastern European equity markets rebound as well, with Brazilian stocks posting a 17.2 percent gain during the period. As global equity markets rebounded, emerging market bond yields fell, with yield spreads of dollar-denominated Korean and Thai debt issues over U.S. Treasuries declining nearly 200 basis points. Similarly, a decline in risk premia in Asia contributed to declines in yield spreads of Latin American and Eastern European Brady bonds over U.S. Treasuries.

While sentiment toward most emerging markets improved, sentiment toward Indonesia remained cautious given the government's perceived unwillingness to move ahead with reforms that had previously been agreed upon with the IMF. Yield spreads of dollar-denominated Indonesian debt issues over U.S. Treasuries widened by 25 basis points over the period. However, uncertainty in Indonesia had a limited impact on regional markets, as investors appeared increasingly willing to differentiate between countries.

Chart 8

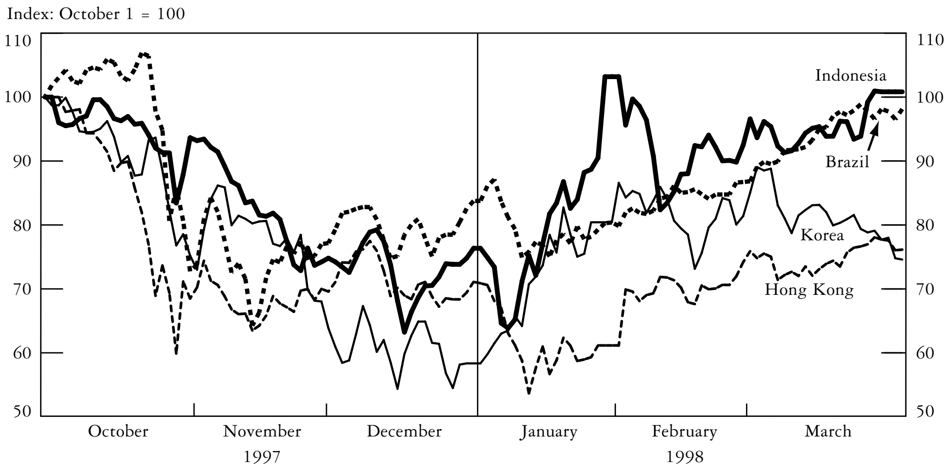
BENCHMARK ASIAN BOND YIELD SPREADS OVER U.S. TREASURIES



Sources: Bloomberg L.P.; HSBC Markets, Inc.

Chart 9

ASIAN AND LATIN AMERICAN EQUITY MARKETS



Source: Bloomberg L.P.

TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE RESERVES

The U.S. monetary authorities did not undertake any intervention operations during this quarter. At the end of the quarter, the current values of the German mark and Japanese yen reserve holdings totaled $16.6 billion for the Federal Reserve System and $13.6 billion for the 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. A significant portion of these balances is invested in German and Japanese government securities held directly or under repurchase agreement. As of March 31, outright holdings of government securities by U.S. monetary authorities totaled $7.0 billion.

Japanese and German government securities held under repurchase agreement are arranged either through transactions executed directly in the market or through agreements with official institutions. Government securities held under repurchase agreement by the U.S. monetary authorities totaled $10.7 billion at the end of the quarter. Foreign currency reserves also are invested in deposits at the Bank for International Settlements and in facilities at other official institutions.

ENDNOTE

1. The dollar’s movements on a trade-weighted basis against ten major currencies are measured using an index developed by staff of the Board of Governors of the Federal Reserve System.

Table 1

FOREIGN CURRENCY HOLDINGS OF U.S. MONETARY AUTHORITIES, BASED ON CURRENT EXCHANGE RATES

Millions of Dollars

		Quarterly Change in Balance by Source					
	Balance as of December 31, 1997	Net Purchases and Sales[a]	Impact of Sales[b]	Investment Income	Currency Valuation Adjustments[c]	Interest Accrual (Net) and Other	Balance as of March 31, 1998
Federal Reserve							
Deutsche marks	11,486.7	0.0	0.0	96.9	(317.7)	0.0	11,265.9
Japanese yen	5,473.4	0.0	0.0	1.8	(113.8)	0.0	5,361.4
Subtotal	16,960.1	0.0	0.0	98.7	(431.5)	0.0	16,627.3
Interest receivables[d]	82.9					(9.9)	73.0
Other cash flow from investments[e]	3.2					7.5	10.7
Total	17,046.2			98.7	(431.5)	(2.4)	16,711.0
U.S. Treasury Exchange Stabilization Fund (ESF)							
Deutsche marks	5,815.6	0.0	0.0	48.3	(160.8)	0.0	5,703.1
Japanese yen	8,024.6	0.0	0.0	1.5	(165.7)	0.0	7,860.4
Subtotal	13,840.2	0.0	0.0	49.8	(326.5)	0.0	13,563.5
Interest receivables[d]	38.5					(1.8)	36.7
Other cash flow from investments[e]	5.9					12.3	18.2
Total	13,884.6			49.8	(326.5)	10.5	13,618.4

[a] 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.

[b] 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 historic cost-of-acquisition exchange rate and the sale exchange rate, are reflected in Table 2.

[c] Foreign currency balances are marked-to-market monthly at month-end exchange rates.

[d] 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.

[e] Values are cash flow differences from payment and collection of funds between quarters.

Table 2

NET PROFITS (+) OR LOSSES (-) ON U.S. TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS, BASED ON HISTORIC 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 December 31, 1997		
Deutsche marks	66.3	(375.3)
Japanese yen	291.5	434.6
Total	357.8	59.3
Realized profits and losses from foreign currency sales December 31, 1997 – March 31, 1998		
Deutsche marks	0.0	0.0
Japanese yen	0.0	0.0
Total	0.0	0.0
Valuation profits and losses on outstanding assets and liabilities as of March 31, 1998		
Deutsche marks	(251.4)	(536.1)
Japanese yen	174.5	263.1
Total	(76.9)	(273.0)

Table 3

FEDERAL RESERVE RECIPROCAL CURRENCY ARRANGEMENTS

Millions of Dollars

Institution	Amount of Facility	Outstanding as of March 31, 1998
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

U.S. TREASURY EXCHANGE STABILIZATION FUND CURRENCY ARRANGEMENTS

Millions of Dollars

Institution	Amount of Facility	Outstanding as of March 31, 1998
Deutsche Bundesbank	1,000	0
Bank of Mexico	3,000	0