### TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

### April-June 1998

Throughout the second quarter of 1998, the Japanese yen weakened consistently, depreciating 4.1 percent against the U.S. dollar and 6.2 percent against the German mark. Continued pessimism about the outlook for the Japanese economy pressured the yen to eight-year lows against the dollar. This contrasted with the relatively positive outlooks for the United States and Europe, with the dollar benefiting from continued low inflation and a strong domestic economy while the mark benefited from optimism toward European monetary union. During the first two weeks of June, the yen's decline accelerated, putting downward pressure on other regional currencies as market participants increasingly doubted that effective reforms of the Japanese banking system and stimulus of the economy would be forth-coming.

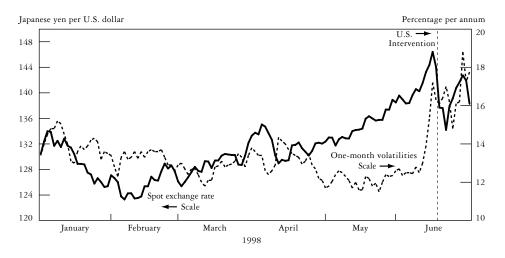
On June 17, the U.S. monetary authorities intervened in the foreign exchange markets, selling a total of \$833 million against the Japanese yen. The operation, which was divided evenly between the U.S. Treasury Department's Exchange Stabilization Fund and the Federal Reserve System, was conducted in cooperation with the Japanese monetary authorities.

### U.S. ASSETS ARE SUPPORTED BY SIGNS OF MODERATION IN THE DOMESTIC ECONOMY AND EXPECTATIONS OF STEADY MONETARY POLICY

U.S. economic data during the period indicated continued strong economic activity and low inflation, though increasing signs of slower growth appeared as the period progressed. This environment sup-

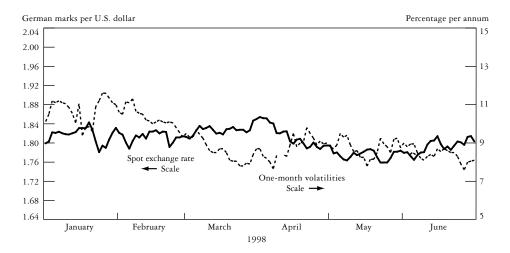
This report, presented by Peter R. Fisher, Executive Vice President, Federal Reserve Bank of New York, and Manager, System Open Market Account, describes the foreign exchange operations of the U.S. Department of the Treasury and the Federal Reserve System for the period from April 1998 through June 1998. Daniel B. Osborne was primarily responsible for preparation of the report.

### Chart 1 THE DOLLAR AGAINST THE JAPANESE YEN Spot Exchange Rate and Option-Implied Volatility



Sources: Federal Reserve Bank of New York; Reuters.

### Chart 2 THE DOLLAR AGAINST THE GERMAN MARK Spot Exchange Rate and Option-Implied Volatility

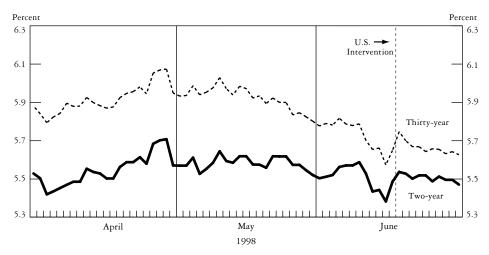


Sources: Federal Reserve Bank of New York; Reuters.

ported expectations of a steady near-term interest rate policy, though at times this sentiment fluctuated. In April, U.S. Treasuries traded in a volatile manner, with the benchmark thirty-year bond yield rising above 6.00 percent following the April 27 publication of a press article reporting that the Federal Open Market Committee (FOMC) had shifted to a tightening bias at its March meeting. The benchmark bond yield subsequently traded back below 6.00 percent after the April 30 release of the employment cost index, which was interpreted as suggesting lower-than-expected labor cost growth for the first quarter.

This outlook of low inflation and moderating growth appeared to be supported by Federal Reserve Chairman Greenspan's June 10 testimony on the state of the economy to the Joint Economic Committee of Congress. In his testimony, the Chairman noted, "the current economic performance, with its combination of strong growth and low inflation, is as impressive as any I have witnessed in my half-century of daily observation of the American economy." Further reflecting on inflation, the Chairman stated that although "consumer price inflation has moved up in the second quarter...the rate of rise remains quite moderate overall."

Chairman Greenspan's testimony reinforced perceptions of a favorable U.S. economic outlook amidst volatility in emerging countries' financial markets and the resultant decline in risk appetite. Strong demand for Treasuries pushed the nominal benchmark thirty-year Treasury yield to record lows, while two-year through ten-year Treasury yields declined below the 5.50 percent federal funds target rate.



### Chart 3 U.S. TREASURY YIELDS

Source: Bloomberg L.P.

### THE YEN WEAKENS IN RESPONSE TO A DETERIORATING ECONOMIC OUTLOOK IN ASIA

Throughout the quarter, the yen was pressured by anticipation of renewed capital flows out of Japan following the March 31 conclusion of the Japanese fiscal year, the beginning of Japan's liberalization of its foreign exchange laws, and continued weakness in the Japanese economy and financial system. Anticipation of falling demand for yen assets from Japanese investors overshadowed concerns over potential foreign exchange intervention and possible reaction to Japan's growing current account surplus. The April 2 release of the weaker-than-expected Tankan survey of business sentiment and Moody's revision of Japan's sovereign debt outlook from stable to negative on April 3 contributed to perceptions of a worsening Japanese economy. Within the first three trading sessions of April, the Nikkei stock index declined 6.1 percent, to 15,518, and the yen depreciated from ¥133.18 to levels above ¥135. The yen subsequently regained all of its losses, appreciating to ¥131.22 on April 8, following comments by Japanese politicians indicating forthcoming economic stimulus measures.

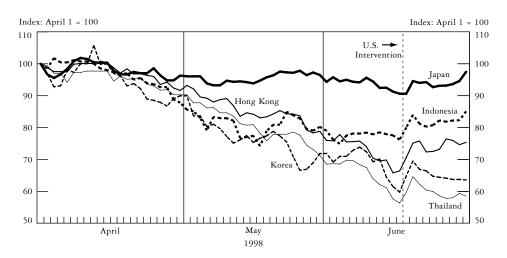
On April 9, the Japanese government announced details of its fiscal stimulus package, including ¥4 trillion in temporary tax cuts. The yen declined to ¥133.64, as market participants concluded that the planned stimulus measures would not adequately revive the Japanese economy. Later, during the early New York session, the yen rose against the dollar on reports that the Japanese monetary authorities had intervened in the market, buying yen and selling dollars. Japanese Finance Minister Matsunaga confirmed the intervention, announcing that Japan had taken "decisive action" in the foreign exchange market. U.S. Treasury Secretary Rubin stated, "We welcome Prime Minister Hashimoto's announcement of steps to stimulate the Japanese economy," and noted that "what is crucial is that Japan move quickly to put in place a strong program." He also said that "we share the concern expressed by the Japanese Prime Minister about recent weakness in the yen, and in that context we welcome the action undertaken by the Japanese authorities in the exchange market to support the value of the yen." On April 10, the yen appreciated to ¥127.38 amid reports that the Japanese monetary authorities were intervening heavily in Asian foreign exchange markets.

Despite the yen's gains, sentiment toward the yen continued to remain negative, with twelve-month risk reversals continuing to be skewed toward yen puts, reflecting a higher cost of protection against a sharp depreciation of the yen against the dollar. Subsequently, the G-7 finance ministers and central bank governors met on April 15 and issued a statement emphasizing the importance of avoiding excessive yen depreciation and encouraging steps to stimulate Japanese domestic demand and reduce external imbalances.

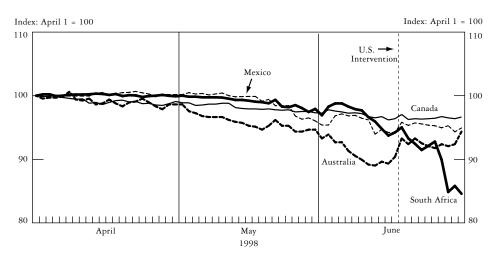
Meanwhile, pressure on other Asian currency and capital markets reemerged, as social unrest in Indonesia and potential military tensions in the Indian subcontinent led to diminishing investor risk appetite. In Indonesia, the Jakarta JCI stock index fell 17.6 percent during the quarter and the rupiah declined to record lows above IDR 16,500 per dollar. Korean markets weakened, with the KOSPI stock index declining 38.1 percent during the quarter, on continued signs of economic contraction and heightened labor unrest. In Hong Kong, warnings of the possibility of recession from Hong Kong officials and data indicating that first-quarter GDP contracted 2 percent led to a 25.8 percent decline in the Hang Seng stock index during the quarter. Hong Kong one-month interbank rates climbed as high as 20.5 percent and implied yields on Hong Kong dollar three-month forward contracts rose to quarter-highs near 15 percent in mid-June.

Declines in Asian markets and evidence of economic contraction in several Asian countries helped focus investor attention on the weaknesses in other markets. The Russian Moscow Times stock index declined 53.5 percent during the quarter and yields on Russian debt instruments rose above 80 percent on concerns over the government's inability to correct its fiscal imbalance and show progress on structural reforms, as well as concerns over the impact of declines in commodity prices, particularly oil, on Russian exports. Commodity price declines also pressured the currencies of Canada, Mexico, Australia, and South Africa, with a number of these currencies reaching new record lows. The Canadian dollar depreciated nearly 3.5 percent during the quarter, reaching CAD 1.4735 per U.S. dollar on June 15, on con-





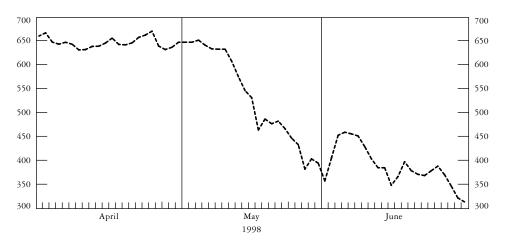
Source: Bloomberg L.P.



### Chart 5 SELECTED CURRENCY VALUES AGAINST THE U.S. DOLLAR

Source: Bloomberg L.P.

Chart 6 MOSCOW TIMES STOCK INDEX



Source: Bloomberg L.P.

cerns over the effect of diminishing exports to Asia on the Canadian economy as well as higher nominal U.S. interest rates.

In Japan, economic data releases continued to reinforce negative market sentiment. Japan's unemployment rate reached 4.1 percent in April, its highest level since World War II. The yen depreciated beyond the ¥136 level after the Burmingham G-8 summit meeting in mid-May. This meeting, and the G-7 finance ministers' meeting of the prior week, were viewed by many market participants as evidence that the G-7 had moved toward a tolerance of yen depreciation that had not been present at the April 15 G-7 finance ministers' and central bank governors' meeting. In late May, the yen declined to a seven-year low of ¥139.25 and the Japanese benchmark bond yield established record lows. Subsequent commentary from numerous Asian and European monetary officials stating concern over the weak yen's effect on global stability underscored market pessimism. Further yen declines stalled ahead of the June 10 G-7 deputy finance ministers' meeting, but resumed upon news that the meeting did not discuss ways to address the yen's decline.

The yen's depreciation accelerated after early June. Concern about a rapid move beyond the ¥140 level became a focal point for further declines in other markets, starting in Asia and extending through other markets. Market nervousness about the risks of a further round of currency depreciation in Asia increased after certain Chinese officials voiced dissatisfaction with the impact of yen depreciation on Chinese trade and economic conditions. Also, market participants initially viewed Secretary Rubin's



### Chart 7 JAPANESE BENCHMARK BOND YIELD

Source: Bloomberg L.P.

June 11 remarks in a Congressional hearing on economic conditions in Japan as stressing the negative effects of Japanese economic fundamentals and downplaying prospects for coordinated intervention in the foreign exchange market. The yen rapidly declined to an eight-year low of ¥146.67 on June 15, and one-month implied volatility on dollar-yen options reached multi-year highs. Comments from senior Japanese officials that the dollar-yen exchange rate did not reflect economic fundamentals and repeated warnings of "decisive action" from Japanese authorities did little to stem the yen's slide.

### THE U.S. MONETARY AUTHORITIES PURCHASE YEN IN THE MARKET

The June 16 Tokyo trading session was notably volatile, with the yen initially declining to a new low of \$146.78, then abruptly retracing its decline as a Japanese wire service indicated that U.S. officials were considering a trip to Tokyo to discuss Japan's economic situation. As market participants reacted to the possibility that measures to address yen weakness were under consideration, the yen continued to strengthen during the June 17 Tokyo trading session, gaining over one yen from Tuesday's New York close of \$143.30.

During the June 17 New York morning session, the foreign exchange desk intervened on behalf of the U.S. monetary authorities, selling dollars and buying yen. The operation began at 7:55 a.m., with the dollar trading at ¥142.21, and the desk operated intermittently until about 9:20 a.m. As the operation began, Japanese Prime Minister Hashimoto issued a statement in which he pledged to "make every effort to restore [the Japanese] banking system to health [and] to achieve domestic demand-led growth...." Japanese Finance Minister Matsunaga further elaborated on the Prime Minister's statement, promising to dispose of banks' bad assets more aggressively, accelerate the restructuring of financial institutions, improve the transparency of Japanese banks, and enhance bank supervision standards.

Later, Treasury Secretary Rubin issued the following statement:

"This morning, the Prime Minister of Japan outlined his Government's plans to restore the health of the Japanese financial system and to strengthen domestic demand. We look forward to implementation of a comprehensive action program that will create the conditions that are essential for a healthy and prosperous economy. Japan has the financial resources and the capacity to deal with the challenges it faces. Asia and the international community as a whole have a large stake in Japan's success.

In the context of Japan's plans to strengthen its economy, the U.S. monetary authorities operated in the exchange market this morning in cooperation with the monetary authorities of Japan. We are prepared to continue to cooperate in exchange markets, as appropriate."

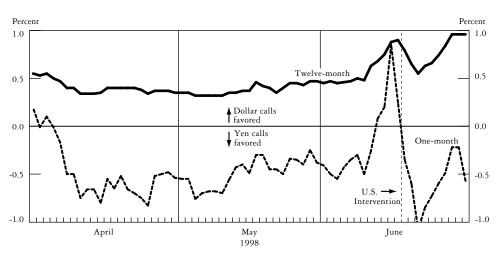


Chart 8 DOLLAR-YEN ONE-MONTH AND TWELVE-MONTH RISK REVERSALS

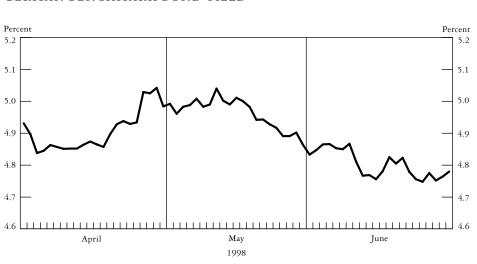
Over the course of the morning, the U.S. monetary authorities sold \$833 million against the yen. The amount was evenly split between the U.S. Treasury Department's Exchange Stabilization Fund and the Federal Reserve System. The intervention was coordinated with the operations of the Japanese monetary authorities. The yen continued to appreciate throughout the remainder of the New York session, climbing over five yen to intraday highs near ¥136 before closing at ¥136.51.

Following the intervention, the yen initially extended its gains, largely on market expectations of further economic and financial policy developments in Japan in the near term. However, in market participants' view, such expectations diminished when the June 20 meeting of the Deputies of the Manila Framework Group and the G-7 Deputies in Tokyo concluded with no new public commitments from Japanese officials. The dollar ended the quarter at ¥138.88.

## THE MARK STRENGTHENS AGAINST BOTH THE DOLLAR AND THE YEN, ON CONFIDENCE IN EMU AND SIGNS OF GROWTH IN CORE EUROPE

The mark strengthened against both the dollar and the yen during the second quarter. Against the dollar, the mark traded within a DM 1.76-1.86 range through most of the period, climbing over 10 pfennigs from early quarter lows, but partially retracing these gains toward the latter half of the quarter. The mark's initial appreciation resulted from a removal of residual uncertainty regarding

Source: J.P. Morgan.



### GERMAN BENCHMARK BOND YIELD

Source: Bloomberg L.P.

Chart 9

EMU following formal selection of eleven first-round members at the May 1-3 EU summit. Confidence in the single currency was not significantly diminished by the protracted debate over the selection of Wim Duisenburg as the European Central Bank's (ECB) first president, nor by the debate over the length of his term, which some viewed as potentially compromising the central bank's future credibility. European asset markets benefited from the positive EMU outlook as well as from shifts of portfolio preferences from riskier asset markets. Equities in Germany and France continued to rise, with the German DAX and the French CAC-40 stock indices up 14.6 percent and 8.5 percent on the quarter and 38.3 and 40.2 percent on the year, respectively. European credit markets rallied, with the yield on the German ten-year benchmark bond reaching record lows.

In early May, expectations for tighter monetary policy in Germany contributed to further mark strength. Following the selection of founding members of EMU, Bundesbank officials alluded to taking EMU considerations more into account when conducting monetary policy. These comments heightened expectations for a German rate increase, as market participants speculated that the Bundesbank might seek to quell inflationary pressures in certain EMU member countries.

Toward the latter half of the quarter, the mark gave back nearly half of its gains against the dollar as expectations for tighter monetary policy in Germany diminished given the benign inflation environment in core European countries, renewed weakness in emerging markets, and concerns over developments in Russia. Reflecting these developments, the implied yield on the December 1998 Euromark contract declined 22 basis points from peak levels in mid-April. The dollar ended the quarter at DM 1.8080, declining 2.2 percent.

### TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE RESERVES

At the end of the quarter, the current values of the German mark and Japanese yen reserve holdings totaled \$17.3 billion for the Federal Reserve System and \$13.9 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 June 30, outright holdings of government securities by U.S. monetary authorities totaled \$7.1 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 \$11.3 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.

#### 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 March 31, 1998	Net Purchases and Sales <sup>a</sup>	Impact of Sales <sup>b</sup>	Investment Income	Currency Valuation Adjustments <sup>c</sup>	Interest Accrual (Net) and Other	Balance as of June 30, 1998
Federal Reserve							
Deutsche marks	11,265.9	0.0	0.0	94.8	291.3	0.0	11,652.0
Japanese yen	5,361.4	416.7	0.0	4.3	(192.6)	0.0	5,589.8
Subtotal	16,627.3	416.7	0.0	99.1	98.7	0.0	17,241.8
Interest receivables <sup>d</sup>	73.0					7.5	80.5
Other cash flow from							
investments <sup>e</sup>	10.7					(0.2)	10.5
Total	16,711.0	416.7		99.1	98.7	7.3	17,332.8
U.S. Treasury Exchan	ge						
Stabilization Fund (	ESF)						
Deutsche marks	5,703.1	0.0	0.0	47.6	147.5	0.0	5,898.2
Japanese yen	7,860.4	416.7	0.0	5.9	(282.9)	0.0	8,000.1
Subtotal	13,563.5	416.7	0.0	53.5	(135.4)	0.0	13,898.3
Interest receivables <sup>d</sup>	36.7					5.3	42.0
Other cash flow from							
investments <sup>e</sup>	18.2					(0.3)	17.9
Total	13,618.4	416.7		53.5	(135.4)	5.0	13,958.2

<sup>a</sup> 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.

<sup>b</sup> 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.

<sup>c</sup> Foreign currency balances are marked-to-market monthly at month-end exchange rates.

<sup>d</sup> 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.

<sup>e</sup> 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 March 31, 1998		
Deutsche marks	(251.4)	(536.1)
Japanese yen	174.5	263.1
Total	(76.9)	(273.0)
Realized profits and losses from foreign		
currency sales		
March 31, 1998 – June 30, 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 June 30, 1998		
Deutsche marks	39.9	(388.6)
Japanese yen	(18.2)	(20.2)
Total	21.7	(408.8)

### Table 3

### FEDERAL RESERVE RECIPROCAL CURRENCY ARRANGEMENTS Millions of Dollars

Institution	Amount of Facility	Outstanding as of June 30, 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 Dollars against other	600	0
authorized European currencies	1,250	0

### U.S. TREASURY EXCHANGE STABILIZATION FUND CURRENCY ARRANGEMENTS Millions of Dollars

Institution	Amount of Facility	Outstanding as of June 30, 1998
Deutsche Bundesbank	1,000	0
Bank of Mexico	3,000	0