EMBARGOED:
FOR RELEASE AT 4:00 PM, EST, THURSDAY, JANUARY 29, 1998

TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

October–December 1997

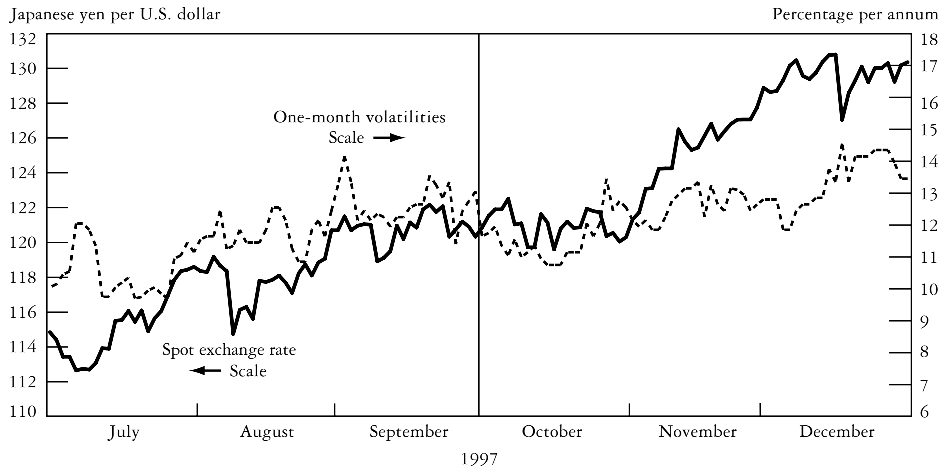
In a period marked by dramatic developments in Asia, the dollar appreciated 8.3 percent against the Japanese yen and 2.2 percent against the German mark. On a trade-weighted basis against G-10 currencies, the dollar appreciated 2.7 percent.[1] The dollar rose to its highest levels since 1992 against the yen as market participants reacted to an increasingly pessimistic economic outlook in Japan, concern over the health of the Japanese financial sector, and spreading volatility in Asian financial markets. Against the mark, the dollar initially weakened, pressured by the impact of Asian volatility on markets in North and South America. However, the dollar later recovered amid a growing perception that European economies were more exposed to events in Asia than previously thought, and as market participants scaled back expectations of further monetary tightening in Germany. 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 October 1997 through December 1997. Andrew Jewell 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

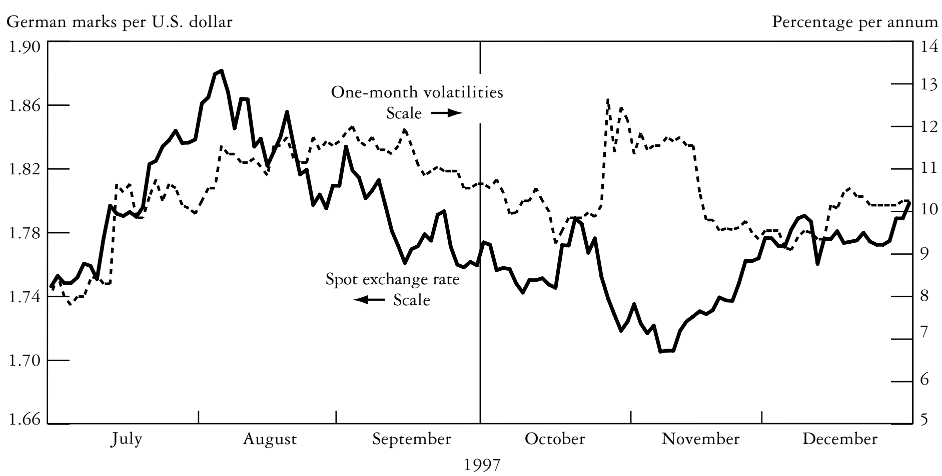


Sources: Federal Reserve Bank of New York; Reuters.

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.

THE DOLLAR'S AVERAGE INTRADAY TRADING RANGE FALLS FROM THIRD QUARTER LEVELS; IMPLIED VOLATILITY RISES

The dollar's average intraday trading range against the yen fell to 1.0 percent in the period from 1.1 percent in the third quarter of 1997, and compared with 0.7 percent in the fourth quarter of 1996. The dollar's average intraday trading range against the mark fell to 0.9 percent in the fourth quarter from 1.1 percent in the previous quarter, and compared with 0.7 percent in the fourth quarter of 1996. The combined average intraday trading range against both the yen and the mark fell to 0.9 percent from 1.1 percent in the previous quarter, marking the first decline since the third quarter of 1996.

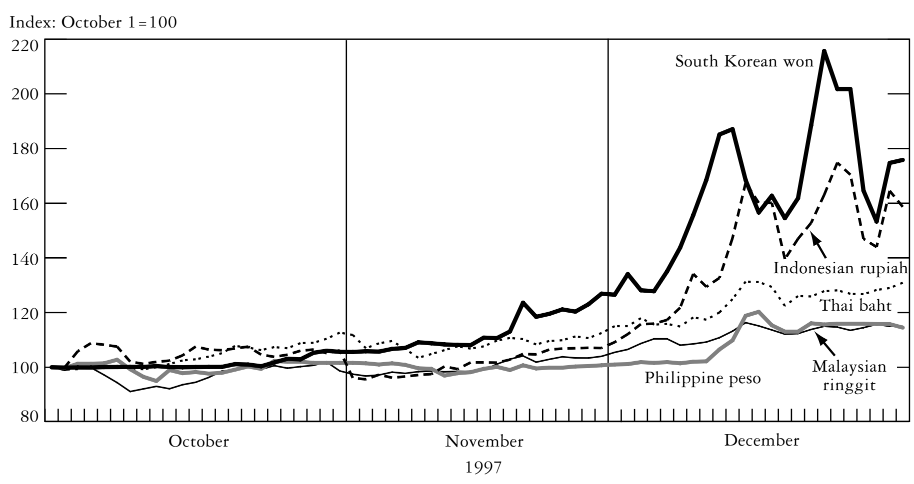
Implied volatility moved higher, reflecting expectations for potentially large dollar moves. One-month dollar-yen implied volatility peaked at over 14 percent in December, approaching highs for the year, as the dollar appreciated to its strongest levels in over five years against the yen. One-month dollar-mark implied volatility rose to over 12 percent in late October following sharp losses in the dollar's value against the mark, but later returned to levels under 10 percent as the dollar recovered.

DEVELOPMENTS IN ASIA DOMINATE THE PERIOD

Movements in the U.S. dollar were influenced throughout the period by disruptions in Asian markets. Currency market turmoil in Southeast Asia continued, with the Thai baht, the Indonesian rupiah, the Philippine peso, the Malaysian ringgit, and the Singapore dollar reaching historic lows against the U.S. dollar. In late October, focus shifted northward to the sustainability of the Hong Kong dollar peg following the decision of monetary authorities in Taiwan to allow the new Taiwan dollar to depreciate. In

Chart 3

THE DOLLAR AGAINST SELECTED ASIAN CURRENCIES



Source: Bloomberg L.P.

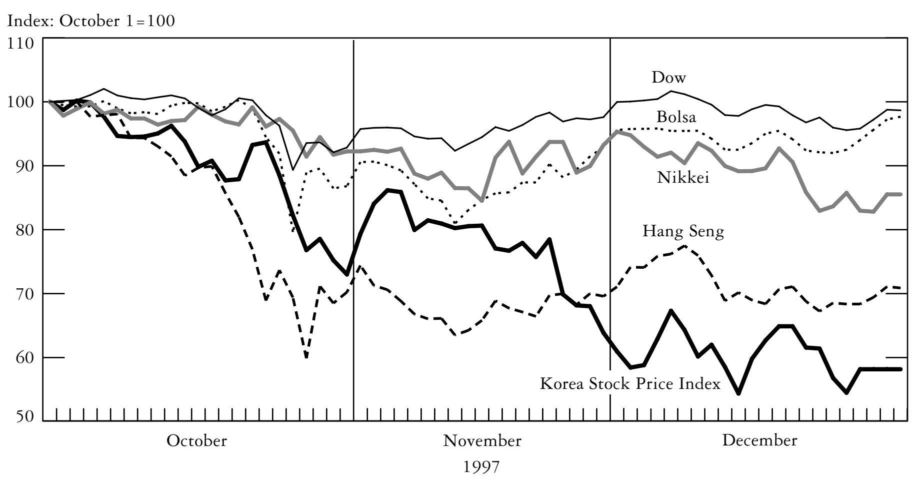
response to mounting pressure on the Hong Kong dollar, the Hong Kong Monetary Authority (HKMA) pushed interest rates higher. With overnight rates trading as high as 150 percent and the one-month Hong Kong interbank offered rate rising to 47.5 percent on October 23, the Hong Kong dollar strengthened from HKD 7.75 to HKD 7.71 against the U.S. dollar, then stabilized in later weeks around the HKD 7.73 level. Higher interest rates, however, pressured stock prices and property values lower. On October 23, the benchmark Hang Seng index fell 10.4 percent, followed by a 13.7 percent decline on October 28.

Sharp losses in Hong Kong's stock market triggered abrupt reversals in equity markets across Asia, Europe, and the Americas. Benchmark stock indices in Japan, Germany, Mexico, and the United States fell 8.0, 9.7, 12.7, and 6.3 percent, respectively, in October, including a 7.2 percent drop in the Dow Jones Industrial Average on October 27. Stock markets in the United States, Mexico, and Europe later recovered to end the quarter little changed, while stocks in much of Asia remained under pressure.

As global equity markets declined, credit spreads in fixed-income markets widened to reflect increased risk premia. Yield spreads of dollar-denominated Asian debt issues over U.S. Treasuries reached record highs, with spreads of Thai and Indonesian sovereign debt widening by over 300 basis points and the spread of the benchmark Korean Development Bank issue widening by over 700 basis points. Similarly, heightened focus on risk premia in emerging markets contributed to a substantial widening of yield spreads of Latin American and Eastern European Brady bonds over Treasuries. In the United States, strong demand for U.S. Treasuries pushed down interest rates, with the yield on the benchmark thirty-year bond falling 48 basis points to end the year at 5.92 percent.

Chart 4

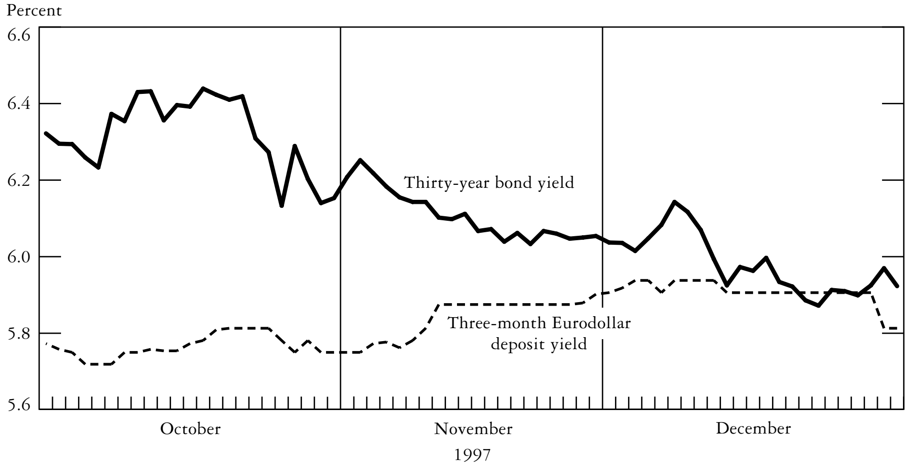
GLOBAL BENCHMARK STOCK INDICES



Source: Bloomberg L.P.

Chart 5

U.S. INTEREST RATES



Source: Bloomberg L.P.

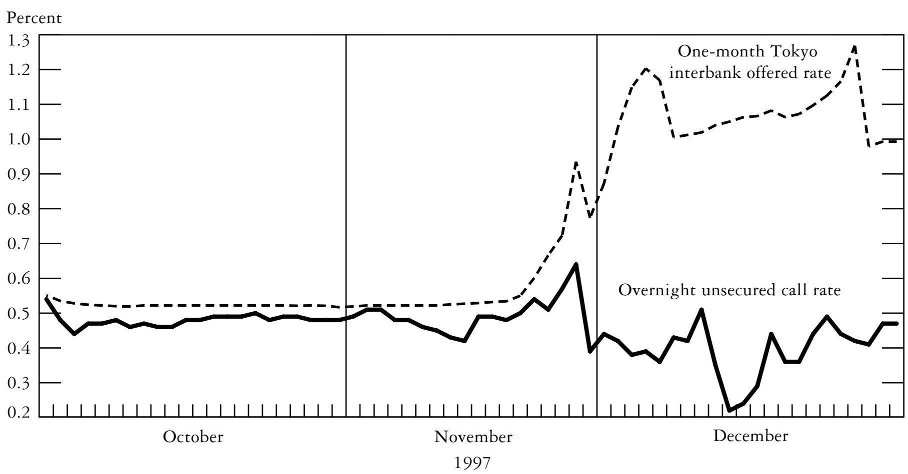
As the period progressed, the focus in Asia shifted to deteriorating economic and financial conditions in Korea. The Korean won weakened over 5 percent against the dollar in October, reaching record lows, while stocks fell 27.2 percent. On November 17, the Bank of Korea announced it would stop intervening to support the won, a decision thought to be prompted by declining foreign currency reserve levels. Faced with a growing number of corporate failures, continued declines in its equity and currency markets, and an increasing risk that Korean banks and corporations would not be able to meet maturing foreign currency obligations, the Korean government announced on November 22 that it was seeking funds from the International Monetary Fund (IMF). Despite agreement on an IMF-led loan package on December 3, pressure on Korean markets continued into year-end as estimates of the country's short-term external debt increased. By late December, the won had depreciated over 53 percent from its levels at the start of the quarter, prompting an acceleration of aid disbursement and leading to meetings among international creditors to discuss rolling over Korean short-term debt obligations. Korean stocks ended the quarter down 41.8 percent.

THE DOLLAR RESPONDS TO DEEPENING PESSIMISM IN JAPAN

During October, the dollar traded in a relatively narrow ¥120-122 range against the yen despite continued signs of weakness in the Japanese economy and volatility in Southeast Asia. The September Tankan survey of business sentiment, released on October 1, recorded the first erosion in sentiment among large manufacturers since August 1996. Gains in the dollar, however, were restrained by discussion of possible fiscal stimulus measures to encourage economic growth in Japan, and by market participants' concerns that a higher dollar would lead to U.S.-Japan trade frictions. Subsequent measures proposed by the Japanese government did little to alter increasingly negative market sentiment toward Japan's economic outlook. Japanese bond yields resumed their decline, reaching new record lows in late October. On November 14, the Nikkei broke below 15,000 for the first time in over two years, and the dollar rose to ¥125.40.

Problems in Japan's financial sector further undermined sentiment. The closings of Sanyo Securities, Hokkaido Takushoku Bank, and Yamaichi Securities in November prompted concerns about the health of other Japanese financial institutions burdened with bad loans and possible unreported losses. Such concerns led to a widening of the premium paid by Japanese banks over non-Japanese institutions for dollar funding. In early December, some Japanese banks were required to pay a premium of over 100 basis points to borrow one-month funds, compared with a premium of about 30 basis points in the fourth quarter of 1996. Although funding pressures eased later in the month, the premium paid by Japanese banks remained above levels paid in previous years, reflecting continued credit concerns. In addition, short-term money market rates in Japan rose rapidly, suggesting yen funding pressures. Late in the period, the bankruptcy of a large Japanese food trading company was viewed as an indication that reduced access to credit had extended beyond the financial sector. In these circumstances, the Bank of Japan adopted a more accommodative stance in its monetary policy operations and reinstated its collateralized lending facility, while discussion grew within the Japanese government regarding the use of public funds to support the financial system and protect depositors.

Chart 6
JAPANESE MONEY MARKET RATES



Source: Bloomberg L.P.

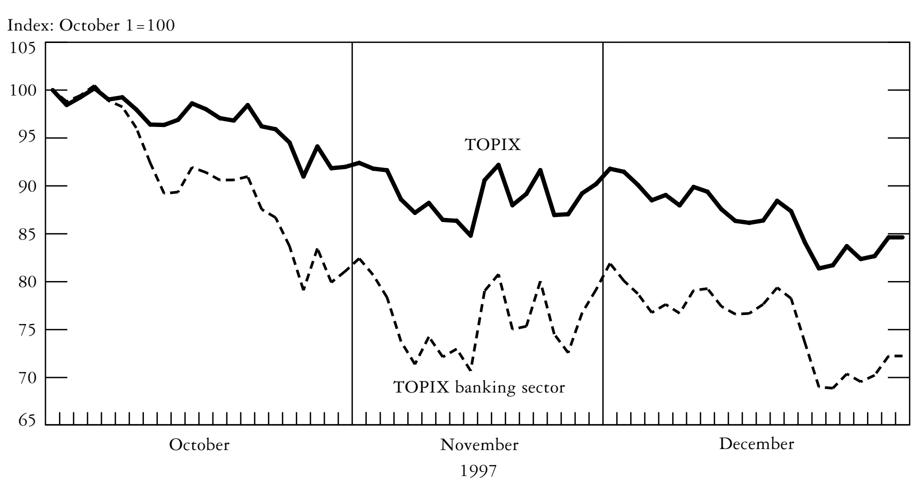
Meanwhile, the deteriorating situation in Korea, coupled with continued weakness in Southeast Asian markets, cast further doubts on Japan's prospects for near-term recovery. The December Tankan survey indicated that business sentiment had deteriorated beyond consensus expectations, and the following week the Bank of Japan, in its monthly economic review, acknowledged that Japan's economic growth had stalled. In this environment, the dollar continued its steady appreciation, reaching as high as ¥131.25 on December 15—its strongest level against the yen in over five years. Following the announcement of a one-time ¥2 trillion personal income tax cut and other stimulus measures on December 17, the dollar fell back below ¥126 as Japanese Finance Minister Mitsuzuka confirmed reports of Japanese intervention to buy yen. However, the yen's strength was short-lived, and the dollar closed the year at ¥130.35.

THE DOLLAR RECOVERS FROM INITIAL WEAKNESS AGAINST THE MARK

Against the mark, the dollar traded in a broad DM 1.70-1.80 range, posting declines early in the period but appreciating throughout most of November and December to end the quarter modestly higher. Expectations of rising German interest rates contributed to the dollar's downward bias against the mark in October, with the Bundesbank's decision to raise interest rates by 30 basis points on October 9 widely viewed as the first in a series of rate hikes in Germany and other core European countries ahead of European Economic and Monetary Union. The dollar's steepest declines against the mark occurred later in the month and in early November following sharp losses in U.S. equities, as market participants considered the spillover effects of Asia on markets in the United States and Latin America. Initially,

Chart 7

TOKYO STOCK PRICE INDEX (TOPIX)



Source: Bloomberg L.P.

Germany and other European countries were perceived to be better insulated from Asia than the United States—a factor that lent further support to the mark.

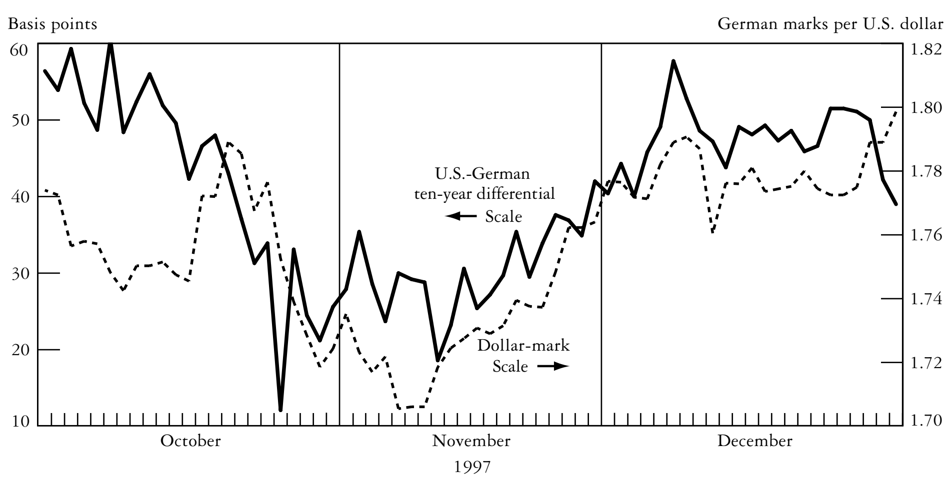
The dollar's appreciation later in the period followed a return to relative stability in U.S. and Latin American markets and an unwinding of expectations for an accelerated timetable of interest rate hikes in Europe. On November 14, Bundesbank President Tietmeyer, in comments echoed by other European officials, noted that European central bank leaders had come to an understanding that interest rates among the core nations would be oriented towards the lowest rates and not the average of all European monetary union participants. Such statements, combined with benign German inflationary data and a growing perception that European economies were also vulnerable to weakness in Asia, led market participants to scale back expectations of higher German interest rates into 1998. The implied yield on June 1998 Euromark futures contracts, which rose to a high of 4.55 percent on October 22, ended the period at 3.93 percent. The spread between ten-year U.S. and German government bond yields widened in the dollar's favor to a high of 58 basis points from an intraperiod low of 12 basis points on October 27.

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 markand Japanese yen reserve holdings totaled $17.0 billion for the Federal Reserve System and $13.8 billion for the Exchange Stabilization Fund.

Chart 8

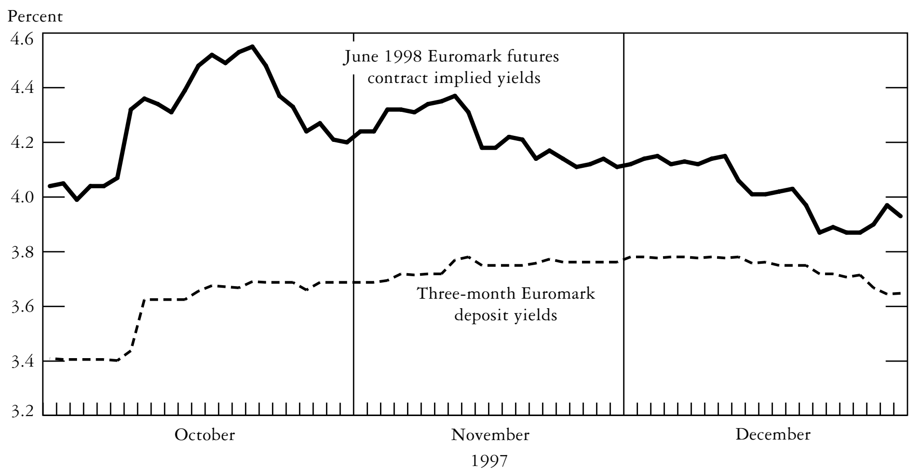
U.S.-GERMAN TEN-YEAR BOND YIELD DIFFERENTIAL



Source: Bloomberg L.P.

Chart 9

GERMAN INTEREST RATES



Source: Bloomberg L.P.

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 December 31, outright holdings of government securities by U.S. monetary authorities totaled $6.8 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 agreements by the U.S. monetary authorities totaled $10.9 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 September 30, 1997	Net Purchases and Sales[a]	Impact of Sales[b]	Investment Income	Currency Valuation Adjustments[c]	Interest Accrual (Net) and Other	Balance as of December 31, 1997
Federal Reserve							
Deutsche marks	11,609.5	0.0	0.0	85.7	(208.5)	0.0	11,486.7
Japanese yen	5,908.9	0.0	0.0	5.8	(441.3)	0.0	5,473.4
Subtotal	17,518.4	0.0	0.0	91.5	(649.8)	0.0	16,960.1
Interest receivables[d]	73.5					9.4	82.9
Other cash flow from investments[e]	0.2					3.0	3.2
Total	17,592.1			91.5	(649.8)	12.4	17,046.2
U.S. Treasury Exchange Stabilization Fund (ESF)							
Deutsche marks	5,877.3	0.0	0.0	43.8	(105.5)	0.0	5,815.6
Japanese yen	8,662.5	0.0	0.0	8.8	(646.7)	0.0	8,024.6
Subtotal	14,539.8	0.0	0.0	52.6	(752.2)	0.0	13,840.2
Interest receivables[d]	37.6					0.9	38.5
Other cash flow from investments[e]	0.5					5.4	5.9
Total	14,577.9			52.6	(752.2)	6.3	13,884.6

[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 September 30, 1997		
Deutsche marks	274.8	(269.8)
Japanese yen	732.9	1,081.8
Total	1,007.7	812.0
Realized profits and losses from foreign currency sales September 30, 1997 – December 31, 1997		
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 December 31, 1997		
Deutsche marks	66.3	(375.3)
Japanese yen	291.5	434.6
Total	357.8	59.3

Table 3

FEDERAL RESERVE RECIPROCAL CURRENCY ARRANGEMENTS

Millions of Dollars

Institution	Amount of Facility	Outstanding as of December 31, 1997
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 December 31, 1997
Deutsche Bundesbank	1,000	0
Bank of Mexico	3,000	0