## TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

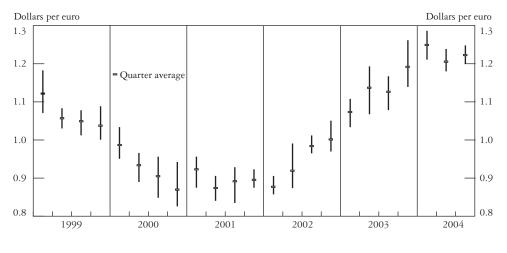
### July–September 2004

During the third quarter of 2004, the dollar's trade-weighted exchange value declined 2.0 percent as measured by the Federal Reserve Board's major currencies index. The dollar depreciated 2.3 percent against the euro while appreciating 1.5 percent against the yen. Major currency pairs traded within relatively narrow ranges as neither the economic data releases, nor various statements from the Federal Open Market Committee (FOMC), seemed to offer market participants greater clarity regarding the outlook for the U.S. economy. Although the FOMC raised the fed funds target rate by 50 basis points during the third quarter, some moderation in market participants' longerterm expectations for further monetary policy tightening contributed to the dollar's broad weakness. The Canadian dollar, in particular, appreciated 5.7 percent against the dollar as expectations for monetary policy tightening by the Bank of Canada increased at the same time that expectations for higher rates in the United States declined. The U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.

#### THE DOLLAR REMAINS RANGE-BOUND

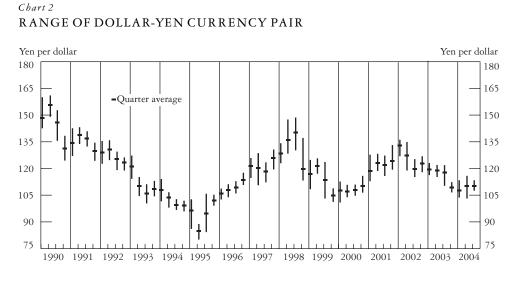
The dollar traded in relatively narrow ranges against both the euro and the yen, underscoring the lack of conviction among market participants regarding the longer-term outlook for the dollar. The euro-dollar currency pair closed between 1.2452 and 1.2011 dollars per euro during the third quarter, while the dollar-yen currency pair closed between 108.19 and 111.99 yen per dollar. The

This report, presented by Dino Kos, 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 July through September, 2004. Susan Stiehm was primarily responsible for preparation of the report. euro-dollar currency pair's range was the tightest since the fourth quarter of 2001 and the second lowest since the euro's inception. At the same time the ¥3 range for the dollar-yen currency pair was the narrowest on record going as far back as 1990. Although many market participants continued to forecast dollar depreciation in the longer term, reflecting concerns about the large U.S. current account deficit, few seemed willing to take large positions to express this view. The release on August 13 of a larger-than-expected June U.S. trade deficit amplified concerns regarding the size and sustainability of the U.S. current account deficit. However, the dollar's losses following the data release were limited as analysts continued to balance this longer-term view against expectations for higher U.S. policy rates in the near term. The low level of option-implied volatility in the major currency pairs was consistent with expectations for range-bound trading, as market participants' willingness to pay for insurance against sharp moves declined.



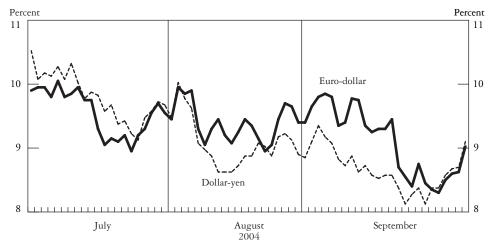
#### *Chart 1* RANGE OF EURO-DOLLAR CURRENCY PAIR

Source: Bloomberg L.P.



Source: Bloomberg L.P.

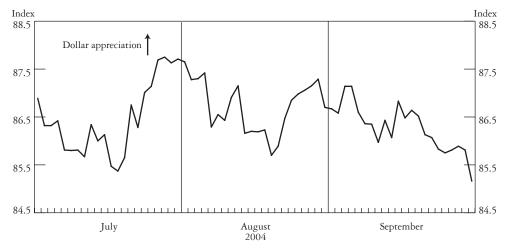
Chart 3 ONE-MONTH OPTION-IMPLIED VOLATILITY



Source: Bloomberg L.P.

Although the dollar failed to break out of recent trading ranges against the euro, a moderation of market participants' expectations for monetary policy tightening by the FOMC in the longer term contributed to the dollar's depreciation over the period. Following the release of higher-thanexpected rises in the core consumer price index (CPI) during the first and second quarter, consistently lower-than-expected increases during the third quarter indicated that inflationary pressures were easing. The two statements that announced the FOMC's decision to tighten monetary policy during the period were interpreted as recognizing these easing price pressures, although the statements were generally viewed as optimistic toward the U.S. economic outlook. As concerns regarding potential inflationary pressures receded, market participants moderated their expectations regarding the pace of monetary tightening by the FOMC. This view was further supported by Chairman Greenspan's Congressional testimony on September 8, in which he noted "inflation and inflation expectations have eased in recent months." Additionally, June and July nonfarm payroll data were weaker than expected, underscoring expectations for consumer demand to increase only gradually. Although the August nonfarm payroll figure was generally in line with expectations, the limited price action suggested that the data did not significantly alter market participants' outlook for the dollar.

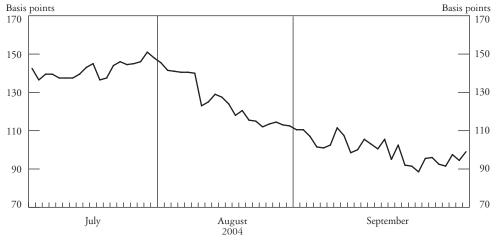
#### Chart 4 TRADE-WEIGHTED DOLLAR



Source: Board of Governors of the Federal Reserve System.

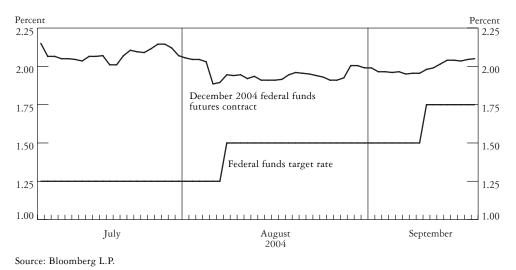
Consistent with the slight revision in expectations, the implied rates on the 2004 December eurodollar and the December fed funds futures contracts declined 15 basis points and 10 basis points during the quarter, respectively. The revision to longer-term interest rate expectations was more dramatic, however, with the calendar spread between the December 2004 and December 2005 eurodollar futures contracts declining 48 basis points. In addition, the ten-year Treasury yield declined 39 basis points over the period, despite 50 basis points of tightening by the FOMC this quarter.





Source: Bloomberg L.P.

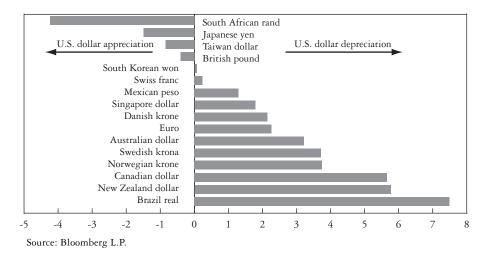




Increased expectations for other central banks to raise policy rates also weighed on the dollar. The trade-weighted dollar's decline was largely due to its sharp depreciation against the Canadian dollar, which has the second-largest weight in the major currencies index at 29.9 percent.<sup>1</sup> In contrast to the moderation of interest rate expectations in the United States, improving fundamentals in Canada bolstered expectations for higher rates. On September 8, the Bank of Canada met these expectations by raising the target for the overnight rate by 25 basis points to 2.25 percent, the first increase since April 2002. This shift in monetary policy contributed to the Canadian dollar's gains, which appreciated 5.7 percent against the U.S. dollar during the period. Even as the FOMC tightened monetary policy, expectations for global interest rate differentials to remain wide led investors to reconsider carry trades in higher-yielding currencies. Apart from the Canadian dollar, the Australian dollar appreciated significantly during this period. In addition, two higher-yielding currencies with central banks that tightened during the period—the New Zealand dollar and Brazilian real—outperformed other currencies against the dollar, appreciating 5.8 percent and 7.5 percent, respectively.

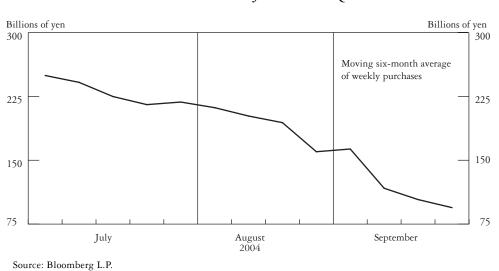
<sup>&</sup>lt;sup>1</sup>As of December 2003.

#### *Chart 7* PERCENTAGE CHANGE OF WORLD CURRENCIES, THIRD QUARTER, 2004



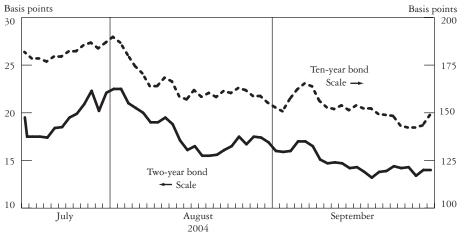
#### DOLLAR STRENGTHENS AGAINST YEN

The dollar appreciated against the yen as weaker-than-expected Japanese economic data weighed on the Japanese currency. After recording an annualized 6.4 percent growth rate in the first quarter, second-quarter Japanese GDP increased by only 1.3 percent. Japanese industrial production for July was unchanged compared with June and below consensus expectations for an increase of 1.0 percent. Analysts suggested that net outflows from Japanese equities and bonds had a more significant impact on the yen this quarter as speculative demand for the currency diminished. Waning interest among foreign investors in Japanese equity markets contributed to the trend, driven by concern regarding the technology sector outlook and rising oil prices. The front-month crude oil contract rose to as high as \$49.90 during the period. The elevated price in oil was also cited as a factor weighing on the currency, and the correlation between oil prices and the exchange value of the yen was negative for much of the quarter. Japanese two- and ten-year bond yields returned to levels last seen in May, prior to the emergence of heightened expectations regarding the pace of the economic recovery and a potential shift away from the current quantitative easing policy.



#### *Chart 8* AVERAGE FOREIGN PURCHASES OF JAPANESE EQUITIES

Chart 9 JAPANESE GOVERNMENT BOND YIELDS



Source: Bloomberg L.P.

#### TREASURY AND FEDERAL FOREIGN EXCHANGE RESERVES

The U.S. monetary authorities did not undertake any intervention operations during the quarter. At the end of the quarter, the current values of euro and yen reserve holdings totaled \$19.7 billion for the Federal Reserve's System Open Market Account and \$19.6 billion for the Treasury's Exchange Stabilization Fund. The U.S. monetary authorities invest 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. To the greatest extent practicable, the investments are split evenly between the System Open Market Account and the Exchange Stabilization Fund.

A significant portion of the U.S. monetary authorities' foreign exchange reserves is invested in European and Japanese government securities. On an outright basis, the U.S. monetary authorities hold German, French, and Japanese government securities. Under euro-denominated repurchase agreements, the U.S. monetary authorities accept sovereign debt backed by the full faith and credit of the following governments: Belgium, France, Germany, Italy, the Netherlands, and Spain. Foreign currency reserves are also invested at the Bank for International Settlements and in facilities at other official institutions. As of September 30, direct holdings of foreign government securities totaled \$21.5 billion, split evenly between the Federal Reserve and the Treasury. Foreign government securities held under repurchase agreements totaled \$3.9 billion at the end of the quarter and also were split evenly between the two authorities.

#### Table 1

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

Millions of Dollars

		Changes in Balances by Source				
	Carrying Value June 30, 2004 <sup>a</sup>	Net Purchases and Sales <sup>b</sup>	Investment Earnings <sup>c</sup>	Realized Profit/Loss on Sale <sup>d</sup>	Unrealized Profit/ Loss on Foreign Currency Revaluation <sup>e</sup>	Carrying Value September 30, 2004 <sup>a</sup>
Federal Reserve System						
Open Market Account (SOMA)						
Euro	10,812.4	0	66.9	0	212.4	11,091.8
Yen	8,631.2	0	0.3	0	(60.3)	8,571.1
Total	19,443.6	0	67.2		152.1	19,662.9
U.S. Treasury Exchange						
Stabilization Fund (ESF)						
Euro	10,797.6	0	66.5	0	212.1	11,076.2
Yen	8,631.2	0	0.2	0	(60.3)	8,571.1
Total	19,428.8	0	66.7	0	151.8	19,647.3

<sup>a</sup> Carrying value of the reserve asset position includes interest accrued on foreign currency, which is based on "day of" accrual method.

<sup>b</sup> Net purchases and sales include daily foreign currency purchases from cash collected on maturities and coupons. In case of intervention or other official activity, amounts would be reflected and details footnoted.

<sup>c</sup> Investment earnings include accrued interest and amortization.

 $^{\rm d}$  Gains and losses on sales are calculated using average cost.

<sup>e</sup> Reserve asset balances are revalued daily at the noon buying rates.

#### Table 2

#### BREAKDOWN OF FOREIGN RESERVE ASSETS HELD

Carrying Value in Millions of Dollars, as of September 30, 2004

	U.S. Treasury Exchange Stabilization Fund (ESF)	Federal Reserve System Open Market Account (SOMA)
Euro-denominated assets:	\$11,076.8	\$11,091.8
Cash held on deposits at official institutions	\$5,528.0	\$5,546.7
Marketable securities held under repurchase agreements <sup>a</sup>	\$1,940.0	\$1,940.0
Marketable securities held outright <sup>b</sup>	\$3,608.2	\$3,605.1
German government securities	\$1,764.2	\$1,761.1
French government securities	\$1,844.0	\$1,844.0
Yen-denominated assets:	\$8,571.1	\$8,571.1
Cash held on deposit at official institutions	\$1,434.4	\$1,434.4
Marketable securities held outright <sup>b</sup>	\$7,136.7	\$7,136.7

<sup>a</sup> Sovereign debt obligations of Belgium, France, Germany, Italy, the Netherlands, and Spain are presently eligible collateral for reverse repo transactions.

<sup>b</sup> As of September 30, euro and yen securities holdings had Macaulay durations of 28.4088 months and 3.3633 months, respectively.

#### Table 3 RECIPROCAL CURRENCY ARRANGEMENTS Millions of Dollars

Institution	Amount of Facility	Outstanding as of September 30, 2004			
	Federal Reserve System Open Market Account				
Bank of Canada	2,000	0			
Bank of Mexico	3,000	0			
Total	5,000	0			
	U.S. Treasury Excha	nge Stabilization Fund			
Bank of Mexico	3,000	0			
Total	3,000	0			