TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

January–March 2006

During the first quarter of 2006, the dollar's trade-weighted exchange value decreased 1.0 percent as measured by the Federal Reserve Board's major currencies index. The dollar depreciated 2.3 percent against the euro, but it was virtually unchanged in value against the yen. The U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.



Chart 1 TRADE-WEIGHTED U.S. DOLLAR

This report, presented by Dino Kos, Executive Vice President, Federal Reserve Bank of New York, and Manager of the 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 through March 2006. Brian Jackson was primarily responsible for preparation of the report.

POLICY EXPECTATIONS DRIVE MOVEMENTS IN THE EURO-DOLLAR EXCHANGE RATE

Movements in the euro-dollar currency pair during the first quarter of 2006 largely reflected shifts in relative interest rate differentials between the euro area and the United States. The dollar traded within a range of about \$1.1820 to \$1.2310 per euro, remaining near levels seen since June 2005. Reflecting the relatively narrow trading range of the euro-dollar exchange rate, both actual and implied volatility declined over the quarter.

The dollar depreciated sharply against the euro in the first few trading sessions of 2006, with market participants attributing much of this price action to the establishment of new positions for the start of the year. Thereafter, movements in the euro-dollar exchange rate broadly tracked changes in the spread between policy rate expectations in the United States and the euro area. This spread narrowed in mid-January following comments from European Central Bank (ECB) officials that suggested that tighter policy in the euro area could be required in coming months. Coinciding with these developments, the euro appreciated steadily against the dollar, reaching in late January its highest level since September 2005.



Chart 2 ONE-MONTH OPTION-IMPLIED VOLATILITY

Source: Bloomberg L.P.



Chart 3 EURO-DOLLAR AND IMPLIED RATES ON FUTURES CONTRACTS

Price action in the euro-dollar currency pair was generally range-bound for the rest of the quarter, with market attention remaining primarily focused on interest rate differentials. Implied rates on euribor contracts in early February suggested some downward revision to market participants' expectations for the pace and extent of future increases in policy rates by the ECB. This trend was subsequently reversed during the rest of the quarter, reflecting upward revision to ECB staff inflation projections and positive economic data, including German retail sales and business confidence data. Meanwhile, market participants' expectations for U.S. policy rates also trended higher throughout February in response to stronger data, particularly those relating to the labor market. These expectations, however, were somewhat variable over March, with market participants reporting uncertainty about the timing of an end to the Federal Open Market Committee (FOMC)'s series of rate increases. The currency pair's exchange rate generally tracked movements in the spread between rates implied by comparable eurodollar and euribor contracts, with the dollar ending the quarter slightly more than 2 percent weaker against the euro.

Source: Bloomberg L.P.

THE DOLLAR REMAINS STABLE AGAINST THE YEN

The dollar was virtually unchanged on net against the yen over the first quarter of 2006, with relatively subdued intraperiod movements. The currency pair traded in a range of around ¥114.1 per dollar to ¥119.1 per dollar, ending the quarter just below ¥117.8 per dollar. Implied volatility in the yen-dollar currency pair also remained close to historic lows over the quarter.

Speculation about the timing of changes to Japanese monetary policy was the main focus of Japanese markets over the first quarter. Incoming data, including higher-than-expected GDP growth during the fourth quarter of 2005, provided further evidence of a strengthening economic recovery and signs of an end to deflation. Shortly after the release of consumer price index (CPI) data showing that core inflation (excluding fresh food) had been positive for three consecutive months, the Bank of Japan (BOJ) announced on March 9 that it would end its policy of quantitative easing and begin to target the call rate. Although the call rate has been maintained at zero percent and is currently expected to remain at that level for a number of months, policymakers have indicated that economic conditions are likely to require higher short-term rates in the medium term. Reflecting this assessment, Japanese bond yields and implied rates on euroyen futures contracts maturing in late 2006 and thereafter rose considerably over the first quarter.



Chart 4 DOLLAR-YEN AND IMPLIED RATES ON FUTURES CONTRACTS

Source: Bloomberg L.P.

As with the euro-dollar currency pair, price action in the dollar-yen currency pair over the first quarter of 2006 also broadly reflected intraperiod movements in interest rate differentials. The paring back of U.S. policy rate expectations at the start of the year was accompanied by an appreciation of the yen from around ¥118 per dollar to nearly ¥114 per dollar. This move was more than reversed in late January and February, with increases in implied rates on eurodollar contracts outpacing those on euroyen contracts. Interest rate differentials, however, narrowed following the BOJ's decision on March 9 to end its quantitative easing policy, providing renewed support to the yen. These intraperiod movements in the yen-dollar currency pair largely offset each other, with the exchange rate ending the quarter little changed from its starting level.

Although the BOJ's decision to end its policy of quantitative easing shifted up policy rate expectations, market participants noted that Japanese interest rates would likely remain very low for some time. As a result, many suggested that the yen would likely remain the preferred funding currency for carry trade investments, which involve borrowing funds in a low-yielding currency and then acquiring assets denominated in higher-yielding currencies.

The prospect of higher policy and short-term market interest rates across the Group of Three (G3) economies reportedly prompted investors to re-assess the attractiveness of some high-yielding currencies over the quarter, prompting significant price action in some cases. Market participants



Chart 5 PERCENTAGE CHANGE IN WORLD CURRENCIES FIRST QUARTER, 2006

Source: Bloomberg L.P.

in particular reported a renewed focus on structural factors, with the currencies of a number of countries with large current account deficits, including New Zealand and Iceland, recording among the largest declines against the U.S. dollar over the period. Sentiment toward other high-yielding currencies remained positive. For example, reflecting Brazil's improved fiscal position, the Brazilian real gained almost 8 percent against the dollar in the first quarter.

TREASURY AND FEDERAL RESERVE 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 \$19.3 billion for the Federal Reserve System Open Market Account and \$19.3 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 March 31, direct holdings of foreign government securities totaled \$18.2 billion, split evenly between the Federal Reserve and the Treasury. Foreign government securities held under repurchase agreements totaled \$4.0 billion at the end of the quarter and were also split evenly between the two authorities.

Table 1

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

Millions of Dollars

		Change in Balance by Source				
	Carrying Value December 31, 2005 ^a	Net Purchases and Sales ^b	Investment Earnings ^c	Realized Profit/Loss on Sale ^d	Unrealized Profit/ Loss on Foreign Currency Revaluation ^e	Carrying Value March 31, 2006 ^a
Federal Reserve System						
Open Market Account (SOM	A)					
Euro	10,912.9	0	73.6	0	274.0	11,260.5
Yen	8,014.6		2.2	0	27.3	8,044.1
Total	18,927.5	0	75.8	0	301.3	19,304.6
U.S. Treasury Exchange						
Stabilization Fund (ESF)						
Euro	10,895.9	0	73.3	0	273.6	11,242.8
Yen	8,014.6	0	2.2	0	27.4	8,044.2
Total	18,910.5	0	75.5	0	301.0	19,287.0

Note: Figures may not sum to totals because of rounding.

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

^b 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.

^c Investment earnings include accrued interest and amortization.

^d Gains and losses on sales are calculated using average cost.

^e 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 March 31, 2006

U.S. Treasury Exchange Stabilization Fund (ESF)	Federal Reserve System Open Market Account (SOMA)
11,242.8	11,260.5
5,572.9	5,591.6
1,988.8	1,988.8
3,681.1	3,680.1
1,667.7	1,666.7
2,013.4	2,013.4
8,044.2	8,044.1
2,626.6	2,626.5
5,417.6	5,417.6
	Stabilization Fund (ESF) 11,242.8 5,572.9 1,988.8 3,681.1 1,667.7 2,013.4 8,044.2 2,626.6

Note: Figures may not sum to totals because of rounding.

^a Sovereign debt obligations of Belgium, France, Germany, Italy, the Netherlands, and Spain are currently eligible collateral for reverse repo transactions.

^b As of March 31, euro and yen portfolios had Macaulay durations of 10.1 months and 11.6 months, respectively.

Table 3 RECIPROCAL CURRENCY ARRANGEMENTS Millions of Dollars

Institution	Amount of Facility	Outstanding as of March 31, 2006			
	Federal Reserve System Open Market Account (SOMA)				
Bank of Canada	2,000	0			
Bank of Mexico	3,000	0			
Total	5,000				
	U.S. Treasury Exchange	Stabilization Fund (ESF)			
Bank of Mexico	3,000	0			
Total	3,000	0			

Note: Figures may not sum to totals because of rounding.