
TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE OPERATIONS

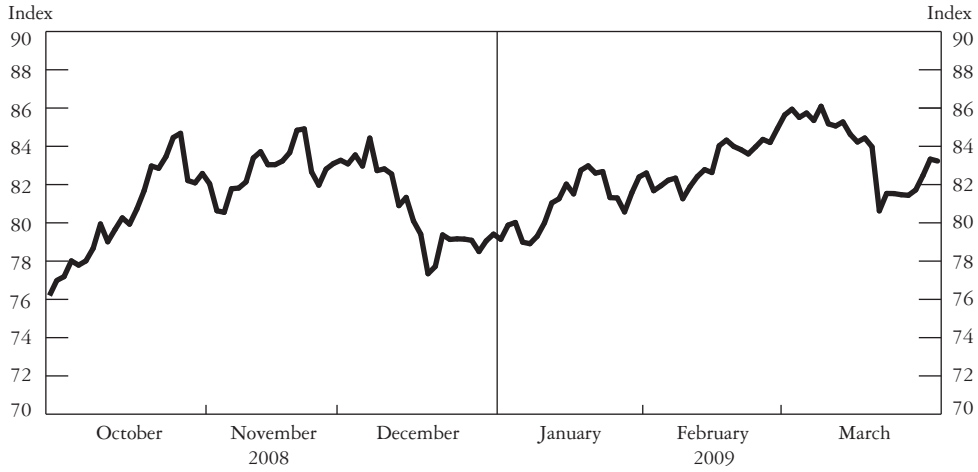
January–March 2009

During the first quarter of 2009, the dollar's trade-weighted exchange value appreciated 4.8 percent, as measured by the Federal Reserve Board's major currencies index. The dollar appreciated 5.2 percent against the euro and 9.2 percent against the yen. These exchange rate movements occurred amid the backdrop of an historically low level of investor risk appetite, attributable to deteriorating global growth prospects and ongoing weakness in international equity markets. Exchange rate volatility broadly moderated as the quarter progressed, and liquidity conditions in foreign exchange markets improved somewhat compared with the two previous quarters. The U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.

During the first two months of the quarter, the dollar's exchange value generally appreciated as a result of portfolio flows into dollar-denominated assets, reflecting heightened investor risk aversion. Sentiment toward the euro, in particular, waned in response to concerns over the region's growth prospects and European banks' exposures to eastern Europe. Toward the beginning of March, risk appetite across global financial markets gradually improved, attributable in part to a number of initiatives by global policymakers to address the economic downturn and financial sector tensions. This improvement in investor sentiment generally benefited the euro against the dollar. In contrast, the yen's depreciation accelerated as investors increasingly focused on the impact on the Japanese economy of slowing global growth and trade. Also contributing to the yen's depreciation was the improved risk appetite of Japanese investors, many of whom sought to increase their holdings of foreign investments as the quarter ended.

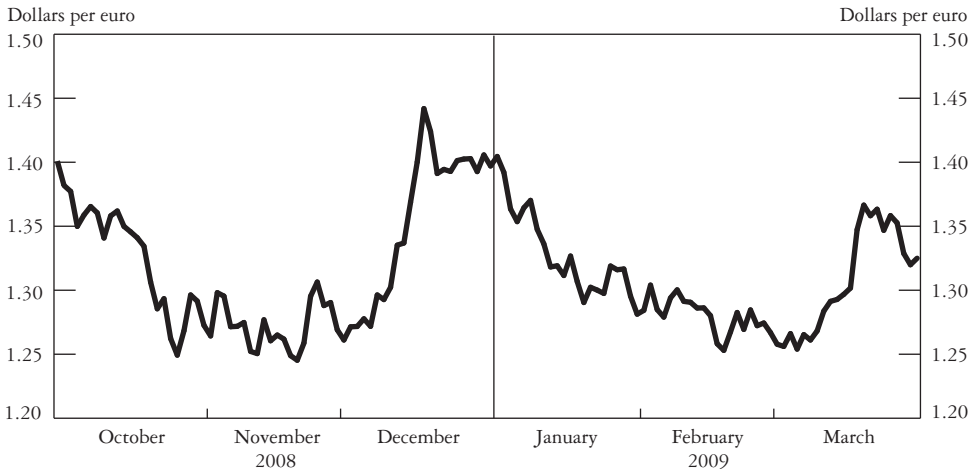
This report, presented by Patricia Mosser, Senior Vice President, Federal Reserve Bank of New York, and Acting Manager of the System Open Market Account, describes the foreign exchange operations of the U.S. Department of the Treasury and the Federal Reserve System for the period from January through March 2009. Kenneth Forgit and Niall Coffey were primarily responsible for preparation of the report.

Chart 1
TRADE-WEIGHTED U.S. DOLLAR



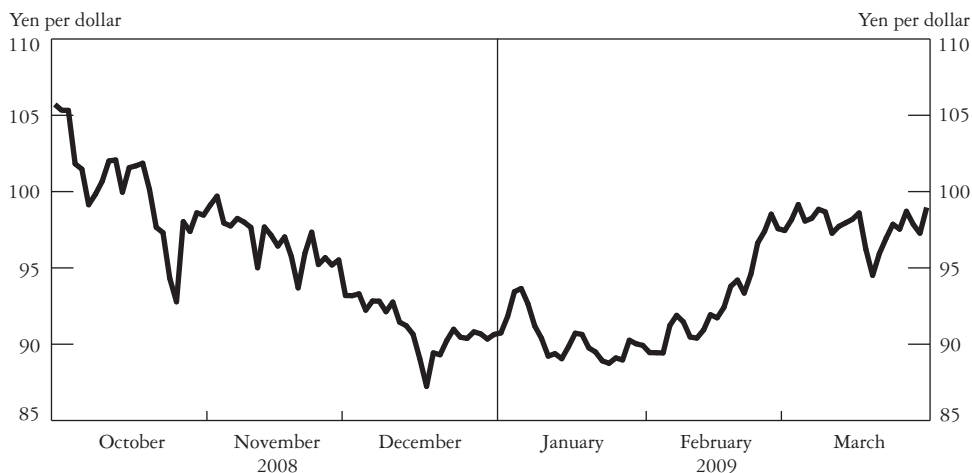
Sources: Board of Governors of the Federal Reserve System; Bloomberg L.P.

Chart 2
EURO-U.S. DOLLAR EXCHANGE RATE



Source: Bloomberg L.P.

Chart 3
U.S. DOLLAR–YEN EXCHANGE RATE



Source: Bloomberg L.P.

U.S. DOLLAR RISES AMID CONTINUED RISK AVERSION IN GLOBAL MARKETS

In January and February, the U.S. dollar outperformed most major currencies, including the euro and the yen. During this time, the dollar appreciated about 9.3 percent against the euro and about 7.6 percent against the yen. These exchange rate movements were influenced by an historically low level of investor risk appetite due to deteriorating global growth prospects, strained financial sector conditions, and continued declines in international equity markets. In addition, sentiment toward the euro waned as investors increasingly expressed concern over the worsening outlook for economic growth in the region as well as the extent of euro-area banking exposures to deteriorating credit environments, particularly in eastern Europe.

During the quarter, data continued to indicate that the U.S. economy was contracting at a significant pace. Employment reports showing an extraordinarily sharp pace of job losses as well as unprecedented low levels of business and consumer confidence led most analysts to forecast a sustained period of contracting U.S. economic activity. Global financial market conditions remained strained—a key factor that continued to weigh on sentiment toward both U.S. and overseas growth prospects.

In this environment, investors remained highly focused on initiatives by U.S. and foreign policymakers aimed at supporting their respective financial sectors and growth prospects. On January 5, the Federal Reserve implemented its previously announced mortgage-backed-security (MBS) purchase program to help ease credit conditions in the housing sector. On January 16, the U.S. Treasury Department, the Federal Reserve, and the Federal Deposit Insurance Corporation (FDIC) announced an agreement to provide guarantees, liquidity access, and additional Troubled Asset Relief Program (TARP) capital to support Bank of America. On January 28, the Federal Open Market Committee (FOMC) left its federal funds target rate unchanged in a range of 0 to 0.25 percent, but indicated that it was prepared to purchase longer term Treasury securities to support improvements in private credit markets. On February 10, U.S. Treasury Secretary Timothy Geithner unveiled the government's Financial Stability Plan to address the economic and financial crisis. However, some market participants expressed disappointment over the lack of details presented about the plan as well as the uncertainty over the timeframe for the plan's implementation. On February 17, the Administration's \$787 billion fiscal stimulus package was signed into law by President Obama. Despite these policy initiatives, global equity markets generally declined throughout the period, as sentiment toward the financial sector remained decidedly negative. By the end of February, the S&P 500 Index had declined about 18.6 percent since the start of the year.

The dollar generally appreciated against the currencies of most other industrialized countries during the first two months of the quarter. The dollar's gains were largely driven by similar factors as those observed since the global credit crisis sharply intensified during the fall of 2008. First, the dollar gained support as international investors revised downward their forecasts for growth in other industrialized and emerging market economies at a relatively faster pace than the growth outlook for the United States. In particular, dealers noted increased demand for dollars by U.S. institutional investors—many of whom had reportedly established sizable positions in foreign equities over recent years—as they scaled back their foreign investments and repatriated capital. Second, the deep liquidity and historically strong performance of U.S. Treasury securities during times of global stress also continued to attract “safe-haven” investor capital to the United States. Third, many analysts suggested that asset write-downs of U.S. credit and mortgage-related products by foreign investors continued to contribute to the dollar's appreciation. In recent years, many foreign investors had accumulated sizable holdings of U.S.-dollar-denominated credit- and mortgage-related investments. The declining value of some of these assets led many foreign investors to modify the amount of their outstanding foreign exchange hedges on these investments to reflect the reduced dollar amount they expected to exchange for their domestic currencies upon maturity. In practice, this led foreign investors, particularly European investors, to sell their

domestic currencies (typically for forward maturity) in favor of the dollar. Finally, some analysts suggested that the dollar was supported by the relatively quick response of U.S. policymakers—compared with their counterparts in other countries—in lowering policy rates and implementing programs to support the financial sector and the economy.

During this period, market participants suggested that sentiment toward the euro was dampened by investor concerns about the timeliness and extent of responses by euro-area policymakers to the economic downturn and ongoing financial sector tensions. The euro began the quarter trading around the \$1.40 per euro level before steadily depreciating about 9 percent to approximately the \$1.25 per euro level toward the end of February. During this time, economic data continued to indicate a sharp deceleration in euro-area activity, characterized by historically low business and consumer confidence data, rising unemployment, and falling production. Against this backdrop, on January 15 the Governing Council of the European Central Bank (ECB) lowered its policy rate 50 basis points to 2.00 percent. The rate decrease was widely anticipated, although some market participants had expected a larger cut in policy rates. Consistently, many market participants continued to anticipate further cuts in the ECB policy rate to support economic activity and address tight financial conditions within the euro area. Still, on February 5, the ECB decided to leave its policy rate unchanged at 2.00 percent.

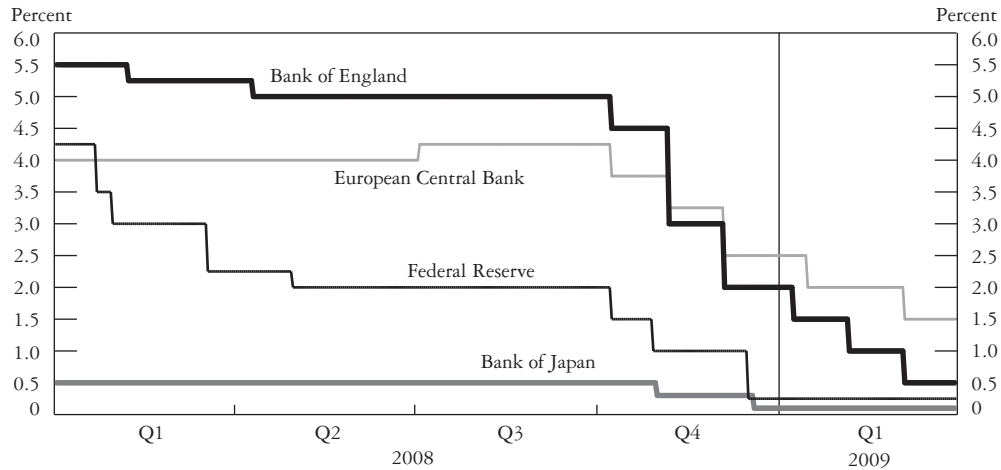
More broadly, many investors increasingly questioned the capacity of euro-area governments to address all the potential negative consequences of the global credit crisis in a synchronized and timely manner. While investors had similar concerns about many developed economies, the sharp deterioration in public finances in smaller peripheral and Mediterranean economies drew particular attention to western Europe. Many of these economies—including Ireland, Spain, Greece, Portugal, and Italy—experienced mounting fiscal pressures owing to weakening economic conditions and obligations arising from initiatives to support their domestic banking sectors. In early January, Standard & Poor's downgraded the sovereign credit ratings of Greece, Spain, and Portugal, citing a loss of competitiveness and a deceleration in domestic demand due to the global economic and financial turmoil. Many investors noted the possibility that the fiscal position of many euro-area countries could deteriorate further should the countries have to provide further support to their respective financial sectors. Specifically, some market participants highlighted the potential for further financial sector losses due to euro-area banking exposures to deteriorating credit environments, especially in eastern Europe.

Consequently, market participants focused on euro-area policymakers' potential responses to these tensions. Many speculated that some peripheral euro-area countries might seek fiscal support from larger economies, such as Germany and France, to help address financial strains. However,

throughout January and early February, euro-area officials were seen as reluctant to support significant fiscal expansion, as some market participants pointed to comments by officials arguing for fiscal restraint. Nonetheless, investors anticipated a significant increase in the amount of sovereign debt issuance by individual euro-area finance ministries throughout 2009 and 2010. As a result, yield spreads between the benchmark sovereign debt of most euro-area economies widened relative to German yields throughout most of January and February. Sentiment toward the euro waned as a result of these economic and financial sector developments and uncertainty over the likely policy response. The euro depreciated to around the \$1.25 per euro level by the end of February, its lowest level of the quarter. However, subsequent comments by euro-area officials affirming the responsibility of large euro-area economies to help their neighbors, as well as media reports that euro-area finance members may consider a joint bond issuance program, provided some support to the euro thereafter.

Movements in the U.S. dollar–Japanese yen exchange rate were relatively more contained during the first two months of the quarter. In fact, the dollar–yen currency pair generally traded in a range of approximately ¥87 to ¥94 per dollar for most of January and February. However, during the last week of February, the dollar began to appreciate beyond this range, as many market observers noted the extent to which the global financial crisis had begun to weigh on Japanese economic activity. In particular, Japanese exports decreased substantially in response to the contraction in global demand, while rising unemployment and falling corporate profitability dampened domestic demand. On January 22, the Bank of Japan (BoJ) held its policy rate steady at 0.1 percent, while it announced other policy measures to address tight financial conditions—including the establishment of a commercial paper facility and the announcement of the details of its plan to purchase Japanese government bonds. Nonetheless, currency dealers continued to cite interest among Japanese retail and institutional investors in repatriating their foreign investment holdings as a factor providing support to the yen. By the third week of January, the yen rose to its strongest level of the quarter, around the ¥87 per dollar level. Yet some investors began to speculate that the factors that broadly drove yen appreciation since the onset of the global credit crisis could soon be dampened by mounting concerns over slowing global growth and trade on the export-oriented Japanese economy. In particular, some analysts suggested that the capacity of Japanese policymakers to provide fresh stimulus to their economy could be constrained by the high level of government indebtedness in Japan relative to other major economies. In addition, they noted that the low level of Japanese policy rates restricted further conventional monetary policy measures. Indeed, as the quarter progressed, many macro-oriented investors increasingly took positions against the yen, as economic data showed a particularly sharp pace of contraction.

Chart 4
CENTRAL BANK POLICY RATES



Source: Bloomberg L.P.

SENTIMENT TOWARD EURO AREA IMPROVES, WHILE CONCERNS ABOUT JAPANESE GROWTH AND TRADE INCREASE

During March, the dollar depreciated about 4 percent against the euro, while appreciating about 1.5 percent against the yen. At the beginning of March, risk aversion across global financial markets remained at an exceptionally high level as concerns about the global financial sector remained widespread. However, as the quarter progressed, investor risk appetite slowly improved, due, in part, to a number of historic policy measures adopted by global policymakers to address the crisis. The improvement in sentiment generally benefited the euro against the dollar. In contrast, this increase in investor risk appetite led to greater demand for foreign investments among Japanese investors, which, combined with rising investor pessimism about the Japanese economy, contributed to the yen's depreciation.

In the United States, sentiment toward the economic and financial sector outlook remained decidedly negative from late February to early March. Relatedly, U.S. policymakers continued to implement measures to address the tensions in the financial sector and mitigate their impact on the real economy. In late February, the U.S. Treasury agreed to convert a portion of its preferred stock in Citigroup into common equity to bolster the firm's capital structure. On March 2, the U.S.

Treasury and the Federal Reserve announced the restructuring of their assistance to American International Group to enhance the company's capital and liquidity with the goal of facilitating the orderly completion of the company's global divestiture program. On March 3, the Federal Reserve announced the implementation of its Term Asset-Backed Securities Loan Facility program. Despite these actions, data showed U.S. economic activity continuing to contract at a sharp pace. Consequently, most investors continued to express significant pessimism about the U.S. economic and investment outlook. Consistent with this sentiment, the S&P 500 Index declined to 666, its lowest level since 1996. In contrast to the first half of the quarter, the euro traded in a relatively narrow range of \$1.25 to \$1.29 per euro from late February through early March.

During March, sentiment toward the euro and other European currencies gradually improved as investors interpreted policy actions, official commentary, and media reports as indicating a more proactive approach among European policymakers to addressing the ongoing credit crisis. On March 5, the ECB cut its policy rate 50 basis points to 1.50 percent, and ECB President Jean-Claude Trichet indicated an increased willingness to consider unconventional monetary policy measures to address strained financial conditions within the euro area. Most analysts interpreted this action as a positive development for the euro, suggesting that it helped alleviate their concerns that tight financial conditions in the euro area could prove restrictive to future economic growth prospects.

Also on March 5, the Bank of England (BoE) cut its policy rate 50 basis points to 0.5 percent. However, attention was focused on the BoE's announcement of a "quantitative easing" program through which it would purchase as much as £75 billion of medium- to longer-dated U.K. gilt securities (gilts) and credit-related assets on an unsterilized basis. The objective of the program was to increase monetary supply to counter disinflationary pressures and to support the BoE's stated 2.00 percent medium-term inflation target. In its statement, the BoE's Monetary Policy Committee said that it anticipated that inflation would likely fall below its target by the second half of 2009. Gilt yields fell immediately in response to the BoE's announcement, with yields declining by as much as 61 basis points across the two-year to ten-year curve through the week following the announcement.

On March 12, the Swiss National Bank (SNB) lowered its policy rate 25 basis points to 0.25 percent and surprised market participants by announcing the introduction of a variety of "quantitative easing" policy measures. For example, the SNB announced that it would purchase private sector

Swiss bonds and foreign currencies. The SNB stated that the measures were aimed at countering “the risk of deflation and of a dramatic deterioration in the economy.” Immediately following the announcement, the SNB intervened to weaken the Swiss franc against the euro, pushing the euro–franc exchange rate about 3.4 percent higher to around the 1.53 Swiss francs per euro level. However, in subsequent days, the Swiss franc recovered and steadily appreciated to around the 1.51 Swiss francs per euro level by the end of the quarter.

In the immediate aftermath of these policy actions, both the British pound and Swiss franc largely underperformed other major currencies. At the same time, many analysts suggested that these actions led to a gradual improvement in sentiment toward medium-term growth prospects in many European economies as well as their respective financial sectors. In particular, the currencies of many emerging eastern European economies appreciated directly following the SNB’s action. Many investors interpreted the SNB’s decision to increase monetary supply and counter any depreciation of the euro–Swiss franc exchange rate as a positive development for emerging European banks, as many banks in these countries reportedly had sizable funding liabilities denominated in Swiss francs.

Sentiment toward both the euro and emerging eastern European currencies was also bolstered by media reports suggesting an increased willingness among euro-area policymakers to pursue initiatives to assist struggling peripheral euro-area countries as well as emerging European countries. In addition, the Group of Twenty finance ministers’ March 13-15 meeting elicited a unified commitment to substantially increase financial support to the International Monetary Fund, alleviating concerns over a lack of financing available to eastern European countries.

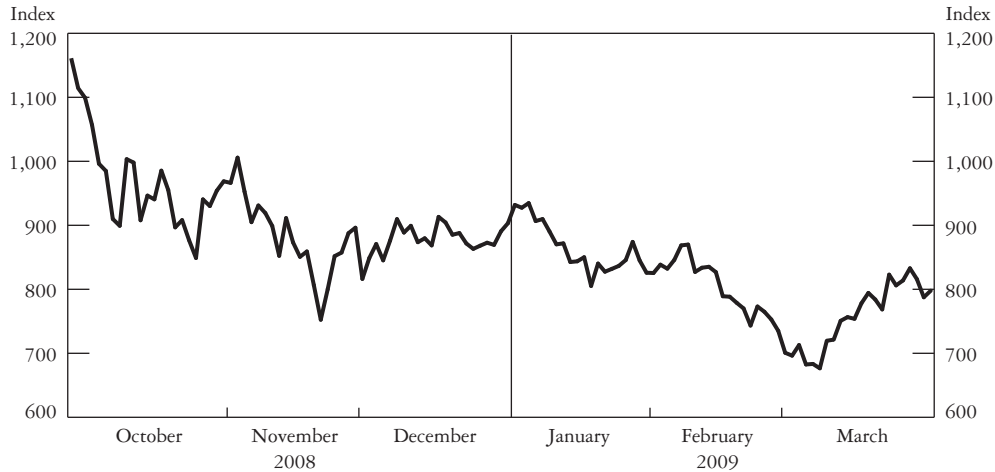
On March 18, the FOMC surprised most market participants when it announced that it would purchase \$300 billion in Treasury securities as well as expand the size of its agency MBS purchase program to \$1.25 trillion from \$500 billion. The dollar depreciated immediately following the announcement, as it prompted a variety of portfolio and speculative positioning adjustments. The dollar depreciated about 4 percent against both the euro and the yen in the two days following the announcement. Dealers suggested that the price action was driven by the scaling back of long dollar positions by macro-orientated investors as well as profit-taking by foreign institutional investors following the sharp rally in Treasury securities. Indeed, many domestic and international investors reportedly unwound some of their previously established “safe-haven” positions in dollar-denominated assets, particularly Treasuries.

Generally, most analysts suggested that the expansion of the Federal Reserve balance sheet would help alleviate strains in the U.S. financial sector as well as support medium-term real growth prospects. This positive outlook led to improved sentiment toward the global economic growth outlook, a factor that also contributed to the dollar's depreciation against many emerging market currencies as global investors' risk appetite improved. However, a minority of analysts suggested that the expansion of the Federal Reserve's balance sheet could spark concerns over medium-term inflation risks, a development that could weigh on sentiment toward the dollar over time. Nonetheless, the majority of market participants significantly downplayed the inflationary risks associated with the announcement. Instead, they argued that the prospect of a sustained decrease in U.S. consumption, rising unemployment, sharply reduced output capacity, and historic strains in U.S. credit and funding markets created significant ongoing disinflationary pressures. They further argued that the process of "de-leveraging" bank balance sheets would continue to dampen credit creation and the money-multiplier effect in the economy, factors that also created ongoing disinflationary risks.

Political considerations were also a factor in the dollar's depreciation at this time. In March, media and market observers increasingly discussed the possibility that the U.S. Congress could enact restrictions on certain financial sector firms to limit compensation, increase taxes, and restrict foreign workers' access to the United States. On March 19, the House of Representatives surprised many investors by passing a bill that would place a 90 percent retroactive tax on the incomes of certain employees of financial firms that received federal support under the TARP program. Many investors suggested that such policy risks could complicate ongoing efforts to stabilize the U.S. financial sector, particularly by discouraging private investor participation in key TARP-related programs. However, these concerns lessened somewhat over the remainder of the quarter, and market sentiment toward financial sector prospects improved. Furthermore, the March 23 announcement by the U.S. Treasury, in conjunction with the FDIC and the Federal Reserve, of the Public-Private Investment Program bolstered confidence in the U.S. financial sector and economic outlook. The program involved pairing public and private capital to restart markets for troubled assets and to facilitate through an auction process the removal of certain legacy assets from bank balance sheets. Immediately following the announcement, the S&P 500 Index rose almost 7 percent. In response, the dollar gained against the euro and the yen, reversing its losses during the third week of March.

During March, the dollar further appreciated about 1.4 percent against the yen as investors continued to express mounting concerns over the impact of slowing global growth and trade on the Japanese economy. During this time, a series of key economic indicators highlighted the historic

Chart 5
S&P 500 INDEX



Sources: Bloomberg L.P.; Standard & Poor's.

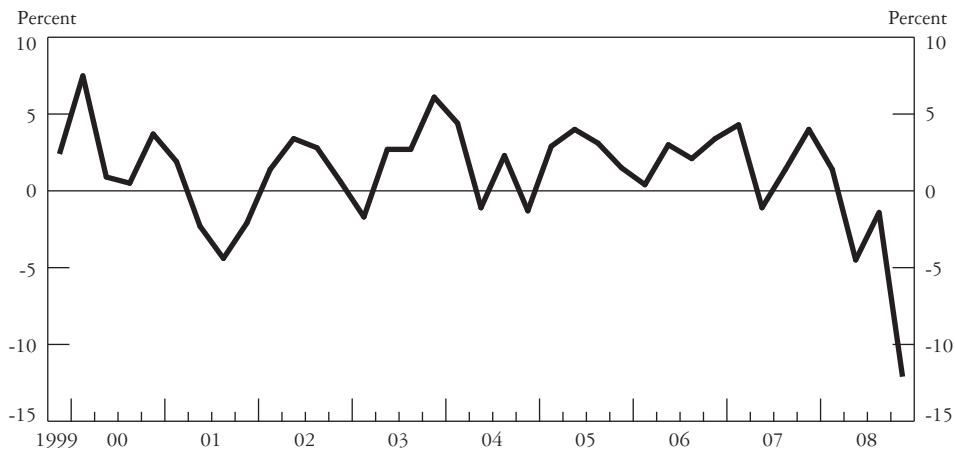
pace at which economic activity in the Japanese economy was contracting. Market participants noted the sharp 12.7 percent annualized decline in fourth-quarter GDP, as well as deteriorating business and consumer confidence and exceptionally weak industrial production data. In addition, many observers highlighted the sharp contraction in Japan's exports, which fell 47 percent from the levels of a year ago and resulted in a reversal in Japan's trade balance from a surplus toward a deficit. These developments led to a notable deterioration in investor sentiment toward the yen.

Market participants continued to debate the capacity of Japanese policymakers to provide fresh stimulus to the country's export-oriented economy in an environment of slowing global growth and trade. At its policy meeting on March 17-18, the BoJ left its policy rate unchanged at 0.1 percent, but also announced that it would purchase newly issued subordinated debt of large banks to ease financial sector tensions. Analysts interpreted the announcement as underscoring the BoJ's increasing willingness to adopt unconventional measures to support the economy.

At this time, analysts also noted a shift in portfolio allocations by both Japanese and foreign investors. Dealers reported interest from U.S. and other foreign investors to decrease their holdings of Japanese equities. Furthermore, demand for foreign stocks by Japanese investors, especially pension funds, reportedly rose, further contributing to the yen's depreciation. Analysts cited this demand for foreign stocks as a sign of improving risk appetite among Japanese investors as concerns

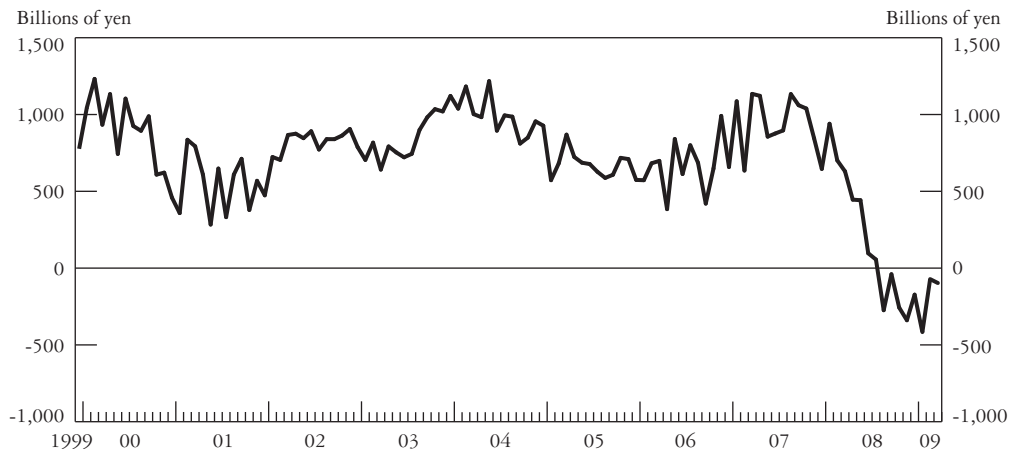
over strains in the global financial system moderated. Consistently through the end of March, weekly data from Japan's Ministry of Finance showed a tenth consecutive week of net portfolio outflows. Overall, the yen ended the first quarter about 9.2 percent weaker, at approximately ¥99 per dollar.

Chart 6
JAPAN ANNUALIZED GDP GROWTH, QUARTER OVER QUARTER



Sources: Bloomberg L.P.; Ministry of Finance of Japan.

Chart 7
JAPAN MONTHLY TRADE BALANCE



Sources: Bloomberg L.P.; Ministry of Finance of Japan.

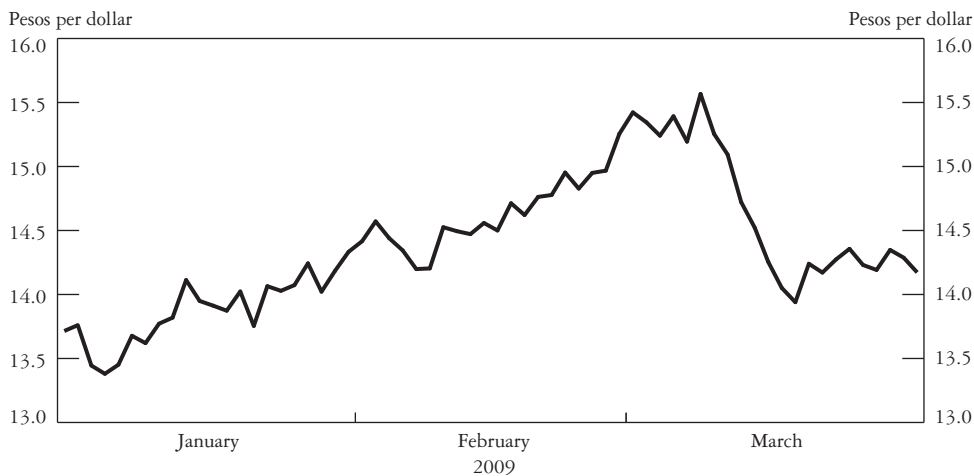
EMERGING MARKET CURRENCIES CONTINUE TO DEPRECIATE THROUGH MOST OF QUARTER

Sentiment toward most emerging market currencies waned as a result of the continued deterioration in global growth prospects, heightened investor risk aversion, and ongoing strains on global financial sector balance sheets. In particular, emerging economies considered relatively more sensitive to global growth and trade as well as those reliant on external financing experienced relatively greater depreciation pressures on their currencies. These developments led many investors in the United States and other countries to scale back their investments in emerging economies and repatriate capital.

Consequently, many central banks in emerging markets tried to support their domestic currencies through foreign exchange interventions. These actions resulted in many of these central banks reporting draw-downs on their foreign exchange reserves, a development that contrasted with the general trend of reserve accumulation by emerging market central banks observed over recent years. In particular, market participants cited the Banco de México and the Bank of Korea as two prominent emerging market central banks that began to conduct foreign exchange interventions to support their currencies during the quarter.

Sentiment toward emerging markets improved as the quarter drew to a close, particularly as pessimism toward global growth and trade prospects modulated and risk appetite among global investors improved.

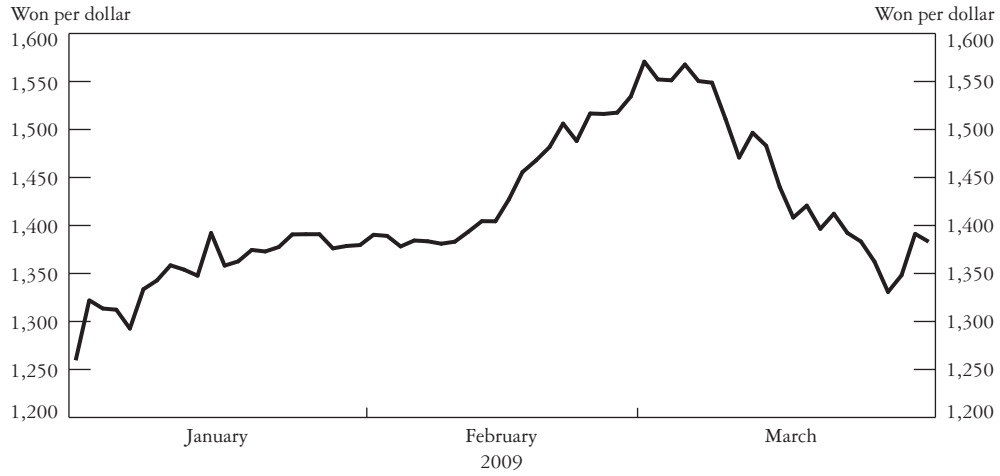
Chart 8
U.S. DOLLAR–MEXICAN PESO EXCHANGE RATE



Source: Bloomberg L.P.

Chart 9

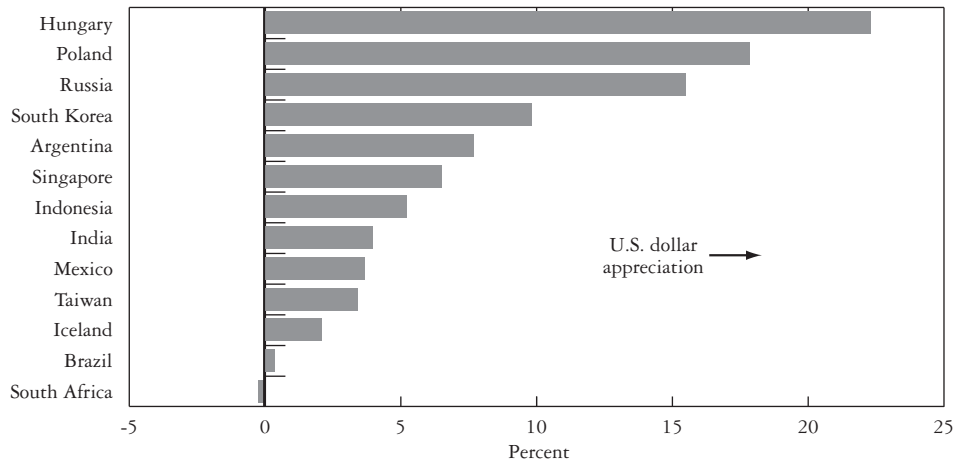
U.S. DOLLAR–SOUTH KOREAN WON EXCHANGE RATE



Source: Bloomberg L.P.

Chart 10

U.S. DOLLAR AGAINST SELECT EMERGING MARKET CURRENCIES DURING FIRST QUARTER



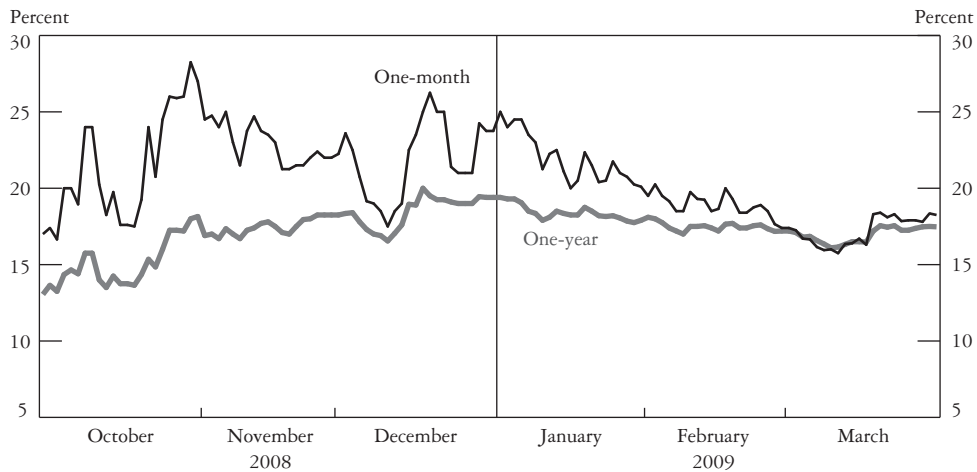
Source: Bloomberg L.P.

LIQUIDITY IN FOREIGN EXCHANGE MARKETS IMPROVES MODERATELY

During the first half of the quarter, foreign exchange markets continued to exhibit a relatively high level of volatility, consistent with the heightened uncertainty many investors expressed over the macroeconomic, financial sector, and monetary policy outlook. However, liquidity conditions in foreign exchange markets improved as the quarter progressed, consistent with the moderation of volatility across asset markets and the improvement in investor risk appetite toward the end of the quarter. Nonetheless, the levels of both realized and option-implied volatility remained high by historical measures, and liquidity conditions remained worse than those that prevailed before the onset of the global credit crisis.

Dealers frequently reported relatively wide bid-ask spreads, particularly in emerging market currencies. In addition, trading volumes in both major and emerging market currencies remained low compared with levels that prevailed a year ago, reflecting reduced speculative activity across several types of investor classes.

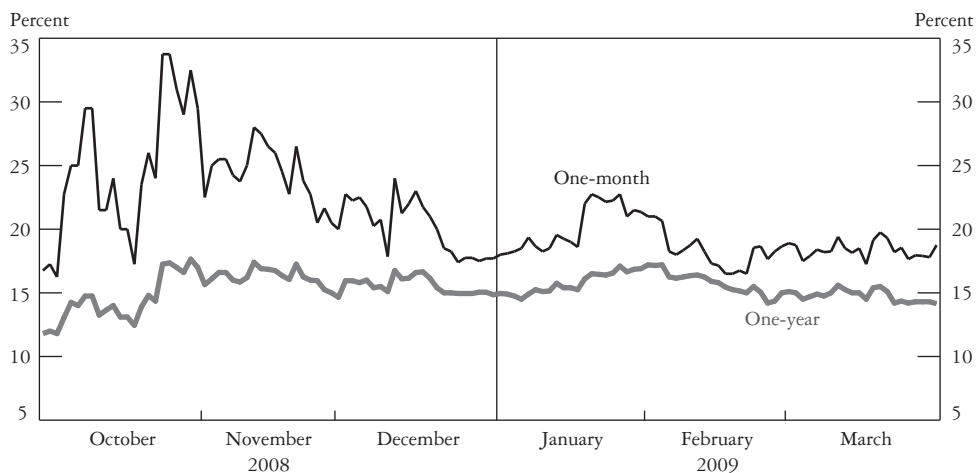
Chart 11
ONE-MONTH AND ONE-YEAR EURO–U.S. DOLLAR IMPLIED VOLATILITY



Source: Bloomberg L.P.

Chart 12

ONE-MONTH AND ONE-YEAR U.S. DOLLAR–YEN IMPLIED VOLATILITY



Source: Bloomberg L.P.

LIQUIDITY CONDITIONS IN DOLLAR FUNDING MARKETS SHOW SIGNS OF IMPROVEMENT

During the quarter, liquidity conditions in dollar funding markets showed some signs of improvement. In particular, some signs emerged that the premiums charged by banks to provide dollar lending to other financial institutions had compressed during this period. For example, spreads between the U.S. dollar London Interbank Offered Rate (LIBOR) and Overnight Index Swaps (OIS), at the three-month tenor, declined by approximately 24 basis points to 97 basis points. However, lending activity remained concentrated primarily at maturity tenors of up to one month, where the LIBOR–OIS spread in the one-month tenor was actually modestly wider by 6 basis points to 31 basis points.

Conditions in the foreign exchange swap market were more stable over the quarter. The spread of the implied cost of U.S. dollar funding through the foreign exchange swap market compared with the U.S. dollar LIBOR remained, on net, little changed from year-end 2008 to March 31, 2009. However, variability in the cost of borrowing dollars through foreign exchange swaps moderated notably during the quarter. Furthermore, some signs of moderating demand for dollar funding through foreign exchange swaps appeared as the quarter drew to a close. Several factors have been

attributed to this decline. First, demand for dollar funding moderated as foreign banks scaled back, or wrote down the market value of, some of their U.S.-dollar-denominated credit-related assets. In addition, global risk appetite remained subdued, resulting in a decline in cross-border investment flows and the need to fund foreign-currency-denominated investment positions.

On the whole, many market participants noted that liquidity conditions in dollar funding markets showed signs of improvement despite ongoing concerns over strains on the balance sheets of global financial institutions. Market participants attributed the improvement in dollar funding markets in part to the numerous liquidity facilities that the Federal Reserve and other major central banks had established and expanded during the third and fourth quarters of 2008.

TREASURY AND FEDERAL RESERVE FOREIGN EXCHANGE RESERVES

The U.S. monetary authorities did not undertake any intervention operations during the quarter. The current value of the U.S. Treasury's Exchange Stabilization Fund totaled \$23.3 billion, comprised of euro and yen holdings. The Federal Reserve's System Open Market Account holdings totaled \$332.3 billion—consisting of \$23.3 billion of foreign exchange reserve portfolio investments and \$309 billion carrying value of outstanding swaps with the ECB, the SNB, the BoE, the BoJ, the Reserve Bank of Australia (RBA), Danmarks Nationalbank, Norges Bank, Sveriges Riksbank, and the Bank of Korea.

To facilitate the functioning of financial markets and provide liquidity in U.S. dollars abroad, on December 12, 2007, the FOMC authorized temporary reciprocal currency arrangements with the ECB and the SNB. Subsequently, the FOMC extended new swap lines to various central banks. On October 29, 2008, the authorized swap line amounts were \$30 billion for the Bank of Canada (BoC), the RBA, Sveriges Riksbank, Banco Central do Brasil, Banco de México, the Bank of Korea, and the Monetary Authority of Singapore; and \$15 billion for Norges Bank, Danmarks Nationalbank, and the Reserve Bank of New Zealand (RBNZ). The ECB, SNB, BoE, and BoJ had unlimited swap line amounts.

*Table 1***TEMPORARY RECIPROCAL CURRENCY ARRANGEMENTS**Billions of U.S. Dollars, as of March 31, 2009

Central Bank	Authorized Swap Line
European Central Bank	Unlimited
Swiss National Bank	Unlimited
Bank of England	Unlimited
Bank of Japan	Unlimited
Bank of Canada	30
Reserve Bank of Australia	30
Sveriges Riksbank	30
Norges Bank	15
Danmarks Nationalbank	15
Reserve Bank of New Zealand	15
Banco Central do Brasil	30
Banco de México	30
Bank of Korea	30
Monetary Authority of Singapore	30

As of February 3, all reciprocal currency arrangements have been authorized through October 30, 2009. As of March 31, the ECB had drawn down \$165.7 billion, the SNB had drawn down \$7.3 billion, the BoE had drawn down \$15 billion, the BoJ had drawn down \$61 billion, the RBA had drawn down \$9.6 billion, Sveriges Riksbank had drawn down \$23 billion, Norges Bank had drawn down \$7.1 billion, Danmarks Nationalbank had drawn down \$5.3 billion, and the Bank of Korea had drawn down \$16 billion. The BoC, the RBNZ, Banco Central do Brasil, Banco de México, and the Monetary Authority of Singapore had not drawn down on their swap lines.

The U.S. monetary authorities invest their foreign currency reserves 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, 2009, direct holdings of foreign government securities totaled \$21.9 billion, split evenly between the Federal Reserve System Open Market Account and the U.S. Treasury Exchange Stabilization Fund. Foreign government securities held under repurchase agreements totaled \$7.8 billion at the end of the quarter and were also split evenly between the two authorities.

Table 2

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

Millions of U.S. Dollars

	Change in Balances by Source					Carrying Value, March 31, 2009 ^a
	Carrying Value, December 31, 2008 ^a	Net Purchases and Sales ^b	Investment Earnings ^c	Realized Gains/Losses on Sale ^d	Unrealized Gains/ Losses on Foreign Currency Revaluation ^e	
Federal Reserve System						
Open Market Account (SOMA)						
Euro	14,248	0	73	0	(672) ^f	13,649
Yen	10,555	0	14	0	(891) ^f	9,679
Total	<u>24,804</u>	<u>0</u>	<u>87</u>	<u>0</u>	<u>(1,562)</u>	<u>23,328</u>
	Carrying Value, December 31, 2008 ^a	Change in Swaps Outstanding	Change in Accrued Interest Receivable	Change in Exchange Translation Liability on Foreign Exchange Swaps	Carrying Value, March 31, 2009 ^a	
Reciprocal currency arrangements						
Euro	306,180	(125,636)	(252)	(14,730) ^{f,g}	165,562	
Swiss franc	27,612	(17,857)	(51)	(2,150) ^{f,g}	7,553	
Yen	130,316	(61,691)	(264)	(10,523) ^{f,g}	57,838	
British pound	31,690	(18,117)	(27)	1,338 ^{f,g}	14,885	
Danish krone	16,332	(9,730)	(28)	(1,076) ^{f,g}	5,498	
Australian dollar	24,006	(13,255)	(94)	(528) ^{f,g}	10,129	
Swedish krone	24,104	(2,000)	(57)	1,459 ^{f,g}	23,506	
Norwegian krone	8,013	(1,175)	(3)	196 ^{f,g}	7,031	
Korean won	11,505	5,650	(9)	(189) ^{f,g}	16,957	
Total	<u>579,757</u>	<u>(243,811)</u>	<u>(784)</u>	<u>(26,203)</u>	<u>308,959</u>	
	Carrying Value, December 31, 2008 ^a	Net Purchases and Sales ^b	Investment Earnings ^c	Realized Gains/Losses on Sale ^d	Unrealized Gains/ Losses on Foreign Currency Revaluation ^e	Carrying Value, March 31, 2009 ^a
U.S. Treasury Exchange						
Stabilization Fund (ESF)						
Euro	14,225	0	73	0	(670)	13,627
Yen	10,555	0	14	0	(891)	9,679
Total	<u>24,780</u>	<u>0</u>	<u>87</u>	<u>0</u>	<u>(1,561)</u>	<u>23,306</u>

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 foreign currency purchases related to official activity, swap drawings and repayments, and warehousing.^c Investment earnings include accrued interest and amortization on outright and swap-related holdings.^d Gains and losses on sales are calculated using average cost.^e Reserve asset balances are revalued daily at the noon buying rates.^f Valuation adjustments on swap-related holdings do not affect profit and loss because the impact is offset by the unwinding of the forward contract at the repayment date.^g Figures represent the exchange translation liability on reciprocal currency arrangements.

Table 3

BREAKDOWN OF FOREIGN RESERVE ASSETS HELD

Carrying Value in Millions of U.S. Dollars, as of March 31, 2009

	U.S. Treasury Exchange Stabilization Fund (ESF) ^a	Federal Reserve System Open Market Account (SOMA) ^a
Euro-denominated assets:	13,626.9	13,649.4
Cash held on deposit at official institutions	5,283.1	5,305.7
Marketable securities held under repurchase agreements ^b	3,896.1	3,896.1
Marketable securities held outright	4,447.6	4,447.6
German government securities	1,866.6	1,866.6
French government securities	2,581.0	2,581.0
Yen-denominated assets:	9,678.9	9,678.9
Cash held on deposit at official institutions	3,190.0	3,190.0
Marketable securities held outright	6,488.9	6,488.9
Reciprocal currency arrangements:		
Euro-denominated assets		165,561.9
Other assets ^c		165,561.9
Yen-denominated assets		57,838.1
Other assets ^c		57,838.1
Swiss-franc-denominated assets		7,552.8
Other assets ^c		7,552.8
Canadian-dollar-denominated assets		0.0
Other assets ^c		0.0
British-pound-denominated assets		14,884.9
Other assets ^c		14,884.9
Danish-krone-denominated assets		5,497.6
Other assets ^c		5,497.6
Australian-dollar-denominated assets		10,128.8
Other assets ^c		10,128.8
Swedish-krone-denominated assets		23,506.4
Other assets ^c		23,506.4
Norwegian-krone-denominated assets		7,031.0
Other assets ^c		7,031.0
Korean-won-denominated assets		16,957.3
Other assets ^c		16,957.3

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

^a As of March 31, the euro and yen portfolios had Macaulay durations of 9.1 months and 11.7 months, respectively, for both the ESF and SOMA portfolios.^b Sovereign debt obligations of Belgium, France, Germany, Italy, the Netherlands, and Spain are currently eligible collateral for reverse repo transactions.^c Carrying value of outstanding reciprocal currency swaps with the European Central Bank, the Swiss National Bank, the Bank of Japan, the Bank of Canada, the Bank of England, Danmarks Nationalbank, the Reserve Bank of Australia, Sveriges Riksbank, Norges Bank, the Reserve Bank of New Zealand, the Bank of Korea, Banco Central do Brasil, Banco de México, and the Monetary Authority of Singapore.

Table 4

RECIPROCAL CURRENCY ARRANGEMENTS

Millions of U.S. Dollars

Institution	Amount of Facility	Outstanding as of March 31, 2009
<u>Federal Reserve System Open Market Account (SOMA)</u>		
Bank of Canada	2,000	0
Banco de México	3,000	0
European Central Bank ^a	Unlimited	165,717
Swiss National Bank ^a	Unlimited	7,318
Bank of Japan ^a	Unlimited	61,025
Bank of Canada ^a	30,000	0
Bank of England ^a	Unlimited	14,963
Danmarks Nationalbank ^a	15,000	5,270
Reserve Bank of Australia ^a	30,000	9,575
Sveriges Riksbank ^a	30,000	23,000
Norges Bank ^a	15,000	7,050
Reserve Bank of New Zealand ^a	15,000	0
Bank of Korea ^a	30,000	16,000
Banco Central do Brasil ^a	30,000	0
Banco de México ^a	30,000	0
Monetary Authority of Singapore ^a	30,000	0
Total	<u>Unlimited</u>	<u>309,917</u>
<u>U.S. Treasury Exchange Stabilization Fund (ESF)</u>		
Banco de México	<u>3,000</u>	<u>0</u>
Total	<u>3,000</u>	<u>0</u>

^aTemporary swap arrangement.