The Federal Reserve in the International Sphere

The U.S. economy and the world economy are linked in many ways. Economic developments in this country have a major influence on production, employment, and prices beyond our borders; at the same time, developments abroad significantly affect our economy. The U.S. dollar, which is the currency most used in international transactions, constitutes more than half of other countries' official foreign exchange reserves. U.S. banks abroad and foreign banks in the United States are important actors in international financial markets.

The activities of the Federal Reserve and the international economy influence each other. Therefore, when deciding on the appropriate monetary policy for achieving basic economic goals, the Board of Governors and the FOMC consider the record of U.S. international transactions, movements in foreign exchange rates, and other international economic developments. And in the area of bank supervision and regulation, innovations in international banking require continual assessments of, and occasional modifications in, the Federal Reserve's procedures and regulations.

The Federal Reserve formulates policies that shape, and are shaped by, international developments. It also participates directly in international affairs. For example, the Federal Reserve occasionally undertakes foreign exchange transactions aimed at influencing the value of the dollar in relation to foreign currencies, primarily with the goal of stabilizing disorderly market conditions. These transactions are undertaken in close and continuous consultation and cooperation with the U.S. Treasury. The Federal Reserve also works with the Treasury and other government agencies on various aspects of international financial policy. It participates in a number of international organizations and forums and is in almost continuous contact with other central banks on subjects of mutual concern.

International Linkages

The Federal Reserve's actions to adjust U.S. monetary policy are designed to attain basic objectives for the U.S. economy. But any policy move also influences, and is influenced by, international developments. For example,

U.S. monetary policy actions influence exchange rates. The dollar's exchange value in terms of other currencies is therefore one of the channels through which U.S. monetary policy affects the U.S. economy. If Federal Reserve actions raised U.S. interest rates, for instance, the foreign exchange value of the dollar generally would rise. An increase in the foreign exchange value of the dollar, in turn, would raise the price in foreign currency of U.S. goods traded on world markets and lower the dollar price of goods imported into the United States. By restraining exports and boosting imports, these developments could lower output and price levels in the U.S. economy. In contrast, an increase in interest rates in a foreign country could raise worldwide demand for assets denominated in that country's currency and thereby reduce the dollar's value in terms of that currency. Other things being equal, U.S. output and price levels would tend to increase—just the opposite of what happens when U.S. interest rates rise.

Economic developments in the United States, including U.S. monetary policy actions, have significant effects on growth and inflation in foreign economies.

Therefore, when formulating monetary policy, the Board of Governors and the FOMC draw upon information about and analysis of international as well as U.S. domestic influences. Changes in public policies or in economic conditions abroad and movements in international variables that affect the U.S. economy, such as exchange rates, must be factored into the determination of U.S. monetary policy.

Conversely, economic developments in the United States, including U.S. monetary policy actions, have significant effects on growth and inflation in foreign economies. Although the Federal Reserve's policy objectives are limited to economic outcomes in the United States, it is mutually beneficial for macroeconomic and financial policy makers in the United States and other countries to maintain a continuous dialogue. This dialogue enables the Federal Reserve to better understand and anticipate influences on the U.S. economy that emanate from abroad.

The increasing complexity of global financial markets—combined with ever-increasing linkages between national markets through trade, finance, and direct investment—have led to a proliferation of forums in which policy makers from different countries can meet and discuss topics of mutual interest. One important forum is provided by the Bank for International Settlements (BIS) in Basel, Switzerland. Through the BIS, the Federal Reserve works with representatives of the central banks of other countries on mutual concerns regarding monetary policy, international financial markets, banking supervision and regulation, and payments systems. (The Chairman of the Board of Governors and the president of the Federal Reserve Board of New York represent the U.S. central bank on the board of directors of the BIS.) Representatives of the Federal Reserve also participate in the activities of the International Monetary Fund (IMF) and discuss macroeconomic, financial market, and structural issues with representatives of other industrial countries at the Organisation for Economic

Co-operation and Development (OECD). Following the Asian Financial Crises of 1997 and 1998, the Financial Stability Forum (FSF) was established to enable central banks, finance ministries, and financial regulatory authorities in systemically important economies to work together to address issues related to financial stability. The Federal Reserve also sends delegates to international meetings such as those of the Asia Pacific Economic Cooperation (APEC) Finance Ministers' Process, the G-7 Finance Ministers and Central Bank Governors, the G-20, and the Governors of Central Banks of the American Continent.

Foreign Currency Operations

The Federal Reserve conducts foreign currency operations—the buying and selling of dollars in exchange for foreign currency—under the direction of the FOMC, acting in close and continuous consultation and cooperation with the U.S. Treasury, which has overall responsibility for U.S. international financial policy. The manager of the System Open Market Account at the Federal Reserve Bank of New York acts as the agent for both the FOMC and the Treasury in carrying out foreign currency operations. Since the late 1970s, the U.S. Treasury and the Federal Reserve have conducted almost all foreign currency operations jointly and equally.

The purpose of Federal Reserve foreign currency operations has evolved in response to changes in the international monetary system. The most important of these changes was the transition in the 1970s from a system of fixed exchange rates—established in 1944 at an international monetary conference held in Bretton Woods, New Hampshire—to a system of flexible (or floating) exchange rates for the dollar in terms of other countries' currencies. Under the Bretton Woods Agreements, which created the IMF and the International Bank for Reconstruction and Development (known informally as the World Bank), foreign authorities were responsible for intervening in exchange markets to maintain their countries' exchange rates within 1 percent of their currencies' parities with the U.S. dollar; direct exchange market intervention by U.S. authorities was extremely limited. Instead, U.S. authorities were obliged to buy and sell dollars against gold to maintain the dollar price of gold near \$35 per ounce. After the United States suspended the gold convertibility of the dollar in 1971, a regime of flexible exchange rates emerged; in 1973, under that regime, the United States began to intervene in exchange markets on a more significant scale. In 1978, the regime of flexible exchange rates was codified in an amendment to the IMF's Articles of Agreement.

Under flexible exchange rates, the main aim of Federal Reserve foreign currency operations has been to counter disorderly conditions in exchange markets through the purchase or sale of foreign currencies (called foreign



exchange intervention operations), primarily in the New York market. During some episodes of downward pressure on the foreign exchange value of the dollar, the Federal Reserve has purchased dollars (sold foreign currency) and has thereby absorbed some of the selling pressure on the dollar. Similarly, the Federal Reserve may sell dollars (purchase foreign currency) to counter upward pressure on the dollar's foreign exchange value. The Federal Reserve Bank of New York also executes transactions in the U.S. foreign exchange market for foreign monetary authorities, using their funds.

Under flexible exchange rates, the main aim of Federal Reserve foreign currency operations has been to counter disorderly conditions in exchange markets.

In the early 1980s, the United States curtailed its official exchange market operations, although it remained ready to enter the market when necessary to counter disorderly conditions. In 1985, particularly after September, when representatives of the five major industrial countries reached the so-called Plaza Agreement on exchange rates, the United States began to use exchange market intervention as a policy instrument more frequently. Between 1985 and 1995, the Federal Reserve—sometimes in coordination with other central banks—intervened to counter dollar movements that were perceived as excessive. Based on an assessment of past experience with official intervention and a reluctance to let exchange rate issues be seen as a major focus of monetary policy, U.S. authorities have intervened only rarely since 1995.

Sterilization

Intervention operations involving dollars affect the supply of Federal Reserve balances to U.S. depository institutions, unless the Federal Reserve offsets the effect. A purchase of foreign currency by the Federal Reserve increases the supply of balances when the Federal Reserve credits the account of the seller's depository institution at the Federal Reserve. Conversely, a sale of foreign currency by the Federal Reserve decreases the supply of balances. The Federal Reserve offsets, or "sterilizes," the effects of intervention on Federal Reserve balances through open market operations; otherwise, the intervention could cause the federal funds rate to move away from the target set by the FOMC.

For example, assume that the Federal Reserve, perhaps in conjunction with Japanese authorities, wants to counter downward pressure on the dollar's foreign exchange value in relation to the Japanese yen. The Federal Reserve would sell some of its yen-denominated securities for yen on the open market and then trade the yen for dollars in the foreign exchange market, thus reducing the supply of dollar balances at the Federal Reserve. In order to sterilize the effect of intervention on the supply of Federal Reserve balances, the Open Market Desk would then purchase an equal amount of U.S. Treasury securities in the open market (or arrange a repurchase agreement), thereby raising the supply of balances back to

its former level. The net effect of such an intervention is a reduction in dollar-denominated securities in the hands of the public and an increase in yen-denominated securities. The operations have no net effect on the level of yen balances at the Bank of Japan or on the level of dollar balances at the Federal Reserve.

A dollar intervention initiated by a foreign central bank also leaves the supply of balances at the Federal Reserve unaffected, unless the central bank changes the amount it has on deposit at the Federal Reserve. If, for example, the foreign central bank purchases dollars in the foreign exchange market and places them in its account at the Federal Reserve Bank of New York, then the supply of Federal Reserve balances available to U.S. depository institutions decreases because the dollars are transferred from the bank of the seller of dollars to the foreign central bank's account with the Federal Reserve. However, the Open Market Desk would offset this drain by buying a Treasury security or arranging a repurchase agreement to increase the supply of Federal Reserve balances to U.S. depository institutions. Most dollar purchases by foreign central banks are used to purchase dollar securities directly, and thus they do not need to be countered by U.S. open market operations to leave the supply of dollar balances at the Federal Reserve unchanged.

U.S. Foreign Currency Resources

The main source of foreign currencies used in U.S. intervention operations currently is U.S. holdings of foreign exchange reserves. At the end of June 2004, the United States held foreign currency reserves valued at \$40 billion. Of this amount, the Federal Reserve held foreign currency assets of \$20 billion, and the Exchange Stabilization Fund of the Treasury held the rest.

The U.S. monetary authorities have also arranged swap facilities with foreign monetary authorities to support foreign currency operations. These facilities, which are also known as reciprocal currency arrangements, provide short-term access to foreign currencies. A swap transaction involves both a spot (immediate delivery) transaction, in which the Federal Reserve transfers dollars to another central bank in exchange for foreign currency, and a simultaneous forward (future delivery) transaction, in which the two central banks agree to reverse the spot transaction, typically no later than three months in the future. The repurchase price incorporates a market rate of return in each currency of the transaction. The original purpose of swap arrangements was to facilitate a central bank's support of its own currency in case of undesired downward pressure in foreign exchange markets. Drawings on swap arrangements were common in the 1960s but over time declined in frequency as policy authorities came to rely more on foreign exchange reserve balances to finance currency operations.

In years past, the Federal Reserve had standing commitments to swap currencies with the central banks of more than a dozen countries. In the middle of the 1990s, these arrangements totaled more than \$30 billion, but they were almost never drawn upon. At the end of 1998, these facilities were allowed to lapse by mutual agreement among the central banks involved, with the exception of arrangements with the central banks of Canada and Mexico (see table 4.1).

Reciprocal currency arrangements can be an important policy tool in times of unusual market disruptions. For example, immediately after the terrorist attacks of September 11, 2001, the Federal Reserve established temporary swap arrangements with the European Central Bank and the Bank of England, as well as a temporary augmentation of the existing arrangement with the Bank of Canada (see table 4.1). The purpose of these arrangements was to enable the foreign central banks to lend dollars to local financial institutions to facilitate the settlement of their dollar obligations and to guard against possible disruptions to the global payments system. The European Central Bank drew \$23.5 billion of its swap line; the balance was repaid after three days. The other central banks did not draw on their lines. The temporary arrangements lapsed after thirty days.

Table 4.1

Federal Reserve standing reciprocal currency arrangements,
June 30, 2004

Millions of U.S. dollars

Institution	Amount of facility	Amount drawn
Bank of Canada	2,000	0
Bank of Mexico	3,000	0
Temporary reciprocal currency arrangements of September 2001		
European Central Bank	50,000	23,500*
Bank of England	30,000	0
Bank of Canada	10,000†	0

^{*} Total drawings on September 12, 13, and 14, 2001. Balance repaid as of September 15, 2001.

[†] Includes 2,000 from existing arrangement (see upper panel).

International Banking

The Federal Reserve is interested in the international activities of banks, not only because it functions as a bank supervisor but also because such activities are often close substitutes for domestic banking activities and need to be monitored carefully to help interpret U.S. monetary and credit conditions. Moreover, international banking institutions are important vehicles for capital flows into and out of the United States.

Where international banking activities are conducted depends on such factors as the business needs of customers, the scope of operations permitted by a country's legal and regulatory framework, and tax considerations. The international activities of U.S.-chartered banks include lending to and accepting deposits from foreign customers at the banks' U.S. offices and engaging in other financial transactions with foreign counterparts. However, the bulk of the international business of U.S.-chartered banks takes place at their branch offices located abroad and at their foreign-incorporated subsidiaries, usually wholly owned. Much of the activity of foreign branches and subsidiaries of U.S. banks has been Eurocurrency¹ business—that is, taking deposits and lending in currencies other than that of the country in which the banking office is located. Increasingly, U.S. banks are also offering a range of sophisticated financial products to residents of other countries and to U.S. firms abroad.

The international role of U.S. banks has a counterpart in foreign bank operations in the United States. U.S. offices of foreign banks actively participate as both borrowers and investors in U.S. domestic money markets and are active in the market for loans to U.S. businesses. (See chapter 5 for a discussion of the Federal Reserve's supervision and regulation of the international activities of U.S. banks and the U.S. activities of foreign banks.)

International banking by both U.S.-based and foreign banks facilitates the holding of Eurodollar deposits—dollar deposits in banking offices outside the United States—by nonbank U.S. entities. Similarly, Eurodollar loans—dollar loans from banking offices outside the United States—can be an important source of credit for U.S. companies (banks and nonbanks). Because they are close substitutes for deposits at domestic banks, Eurodollar deposits of nonbank U.S. entities at foreign branches of U.S. banks are included in the U.S. monetary aggregate M3; Eurodollar deposits of nonbank U.S. entities at all other banking offices in the United Kingdom and Canada are also included in M3. (See page 21 for a discussion of U.S. monetary aggregates.)



^{1.} The term *Eurocurrency* should not be confused with *euro*, the common currency of several European Union countries.