

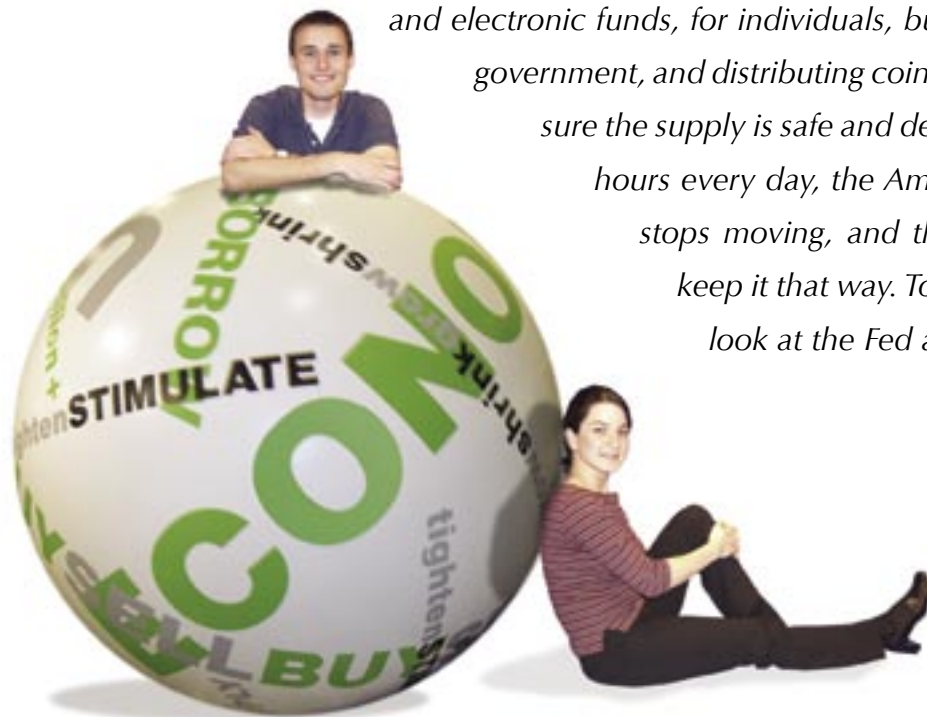
THE FED AT WORK

central bank: Principal monetary authority of a nation, which performs several key functions, including issuing currency and regulating the supply of money and credit in the economy.¹

You are part of the nation's \$11.7 trillion U.S. economy.² Every time you buy a pair of shoes, invest in mutual funds, save for your child's education, or borrow to buy a house or to start a business, you are making an economic decision. And so are billions of other Americans, foreigners, firms, and governments.

And while all of these people, firms, and institutions are making economic decisions, the people at the Federal Reserve, called "the Fed" for short, are working to help everyone make these decisions in a stable, predictable economic environment. This means setting monetary policy to keep inflation low and to promote maximum sustainable employment and output. It means supervising and regulating the banking system, which plays a critical role allocating resources, pooling capital, and funding and fostering economic growth. And, it means providing vital financial services, including processing checks

and electronic funds, for individuals, businesses, and the U.S. government, and distributing coins and currency, making sure the supply is safe and dependable. Twenty-four hours every day, the American economy never stops moving, and the Fed's job is to help keep it that way. To see how, take a closer look at the Fed at work.



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INDEPENDENT YET ACCOUNTABLE

Our Nation's Central Bank

As our nation's central bank, the Fed manages the supply of money and credit in the economy and is responsible for keeping the financial system safe and the banking system sound. The Federal Reserve was established by an act of Congress in 1913 and consists of the Board of Governors in Washington, D.C., and twelve District Banks. San Francisco is headquarters for the Twelfth Federal Reserve District. Branches are located in Los Angeles, Portland, Salt Lake City, and Seattle, with a cash facility in Arizona.

Before the creation of the Fed, the country experienced uneven economic growth and frequent depressions and financial panics. A severe banking crisis in 1907 convinced the Congress of the need for a central bank to manage the nation's money supply and to watch over the banking system.

The Congress structured the Fed to be independent within the government—that is, the Fed is accountable to the Congress and its goals for economic performance are set by law. It reports to the Congress on its finances and is subject to government audit and review. Fed officials report regularly to the Congress on monetary policy, regulatory policy, and a variety of other issues, and they meet with senior Administration officials to discuss Federal Reserve and federal government economic programs.

However, the Fed's policy actions are insulated from day-to-day political pressures. This reflects the conviction that the people who control the country's money supply should be independent of the people who frame the government's spending decisions.

What features make the Fed “independent within government”? To provide for some separation from congressional spending decisions, the Fed covers its own operating expenses, primarily from interest earnings on its portfolio of securities. The U.S. President appoints the seven members of the Board

of Governors to 14-year terms, with confirmation by the Senate. These appointments are staggered to reduce the chance of a U.S. President “loading” the Board with appointees. To separate Board members' terms from the political election cycle, their terms are longer than those of elected officials.

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The appointment process for Reserve Bank presidents is another factor that contributes to the Fed's independence. District directors, who appoint Reserve Bank presidents for their regions, are not chosen by politicians but are selected to represent a cross-section of interests within the region including those of depository institutions and nonfinancial businesses, labor, and the public.

LOW INFLATION, HIGH EMPLOYMENT, STRONG ECONOMY

Monetary Policy

U.S. monetary policy affects all kinds of economic and financial decisions made in this country—whether to buy a house or a new car, whether to expand a business or invest in a start-up, and whether to put savings in a bank, in bonds, or the stock market, for example. And, because the U.S. is the largest economy in the world, its monetary policy also has significant economic and financial effects on other countries.

Monetary policy involves influencing short-term interest rates and the supply of money and credit to promote basic goals established by the Congress: “stable” prices and “maximum” sustainable economic output and employment. “Price stability” is often



CENTER FOR PACIFIC BASIN STUDIES

Standing (left to right):

REUVEN GLICK

MARK SPIEGEL

SANDRA NAYLOR

Seated (left to right):

MICHELE CAVALLO

DIEGO VALDERRAMA

taken to mean that inflation is low enough that it does not play a significant role in economic decisionmaking. “Maximum” sustainable economic output and employment mean economic output and employment grow at a pace consistent with the economy’s maximum long-run ability to expand while maintaining price stability.

The FOMC

The Federal Open Market Committee (FOMC) directs the Fed’s monetary policy. The Committee, which typically meets eight times per year in Washington, D.C., to vote on a policy direction, has twelve voting members: the seven members of the Board of Governors, the president of the Federal Reserve Bank of New York, and four of the other Reserve Bank presidents, who serve on a rotating basis. Regardless of their

voting status, all Reserve Bank presidents contribute to FOMC discussions.

When making monetary policy, the FOMC can’t control inflation or influence economic output and employment directly. Instead, it affects them indirectly, mainly by raising or lowering a short-term interest rate called the federal funds rate, or simply, the “funds rate.” A change to the funds rate affects many other kinds of interest rates and financial conditions throughout the country—for example, it influences the overall “cost,” or interest rate, for borrowing money for everyone: individuals, businesses, and the government, alike.

At FOMC meetings, the Committee votes on an explicit target for the funds rate. Before voting, the Committee examines a wide variety of economic data.

To get a sense of economic conditions and how a change in monetary policy will affect the economy, the Committee examines data on consumer, business, and government spending, as well as international trade, labor markets, and financial market conditions. The Committee also evaluates forecasts of likely future economic performance. Reserve Bank presidents discuss conditions shaping their regions, as well.

Primary Monetary Policy Tool

Most often, the FOMC influences the funds rate through its primary monetary policy tool—conducting open market operations in the market for bank reserves known as the federal funds market. This is the market where banks lend money to one another, usually overnight, to cover temporary shortfalls. By law, banks are required to hold a percentage of deposits as reserves; excess reserves above the requirement can be lent to other banks. With millions of daily transactions, some banks need to borrow money temporarily to acquire needed transactions' balances, while others find themselves with excess money they wish to lend. The funds rate is the interest rate banks charge each other for overnight borrowing.

Open market operations, which involve the buying or selling of government securities for the Fed's portfolio, are used to affect the supply of reserves in the banking system. The New York Reserve Bank's Trading Desk carries out this complex task for the FOMC. The Desk conducts open market operations frequently, even daily, to hit the funds rate target set by the FOMC. To carry out a particular operation, the Desk contacts dealers trading in U.S. Treasury and federal agency securities. When the Desk buys securities, it credits the reserve account of the dealer's bank. This increases the bank's reserves and the supply of reserves in the entire banking system. With a greater supply of reserves available for lending, the funds rate falls. When the Desk sells securities, it debits the reserve account of the dealer's bank, which has

the opposite effect. A lower supply of reserves in the banking system pushes up the funds rate.

The Federal Reserve also sets the discount rate—the interest rate charged to banks that borrow reserves directly from Reserve Banks at what is called the “discount window.”

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Reserve Banks' board of directors set the discount rate for each District, subject to “review and determination” by the Board of Governors. Since January 2003, the discount rate has been set 1 percent higher than the fed funds rate target. Setting the discount rate higher than the funds rate helps to keep banks from turning to this source before they have exhausted other less expensive alternatives. With the discount rate set in response to FOMC decisions on the funds rate, the discount rate does not directly affect the stance of monetary policy.

SAFE AND SOUND

Banking Supervision and Regulation

As a bank supervisor and regulator, the Fed works with other financial authorities to promote a safe, sound, and competitive banking system and to make sure consumers are treated fairly in their financial dealings. In its supervisory role, the Fed monitors and examines banks and other types of financial institutions to assess their financial conditions and their compliance with relevant laws and regulations.³ Banks the Fed monitors include state-chartered banks that are members of the Fed, bank holding companies (organizations that own one or more banks), and various international banking operations. As a regulator, the Fed writes and issues regulations and guidelines governing the structure and conduct of banks.



JOSE ALONSO
MARY HAMMOND

BANKING SUPERVISION AND REGULATION

Managing Risk

Banks assume certain financial risks when providing loans and services to their customers. Evaluating a bank’s ability to manage these risks appropriately is a cornerstone of the examination process. Fed examiners evaluate a bank’s risk levels related to six factors, together called a “CAMELS” rating: capital, assets, management, earnings, liquidity, and sensitivity to interest rate fluctuations.

When evaluating a bank, Fed examiners particularly focus on the effectiveness of the bank’s own internal processes for identifying, measuring, monitoring, and controlling the risk of financial loss. Examiners also check for compliance with banking laws and regulations and coordinate their exams with other supervisory agencies. As part of ongoing monitoring, banks

submit periodic reports to the Fed. This helps examiners identify deteriorating financial profiles early on and monitor developing trends in the banking industry.

Protecting and Educating Consumers

The Congress has given the Fed the authority to write, interpret, and implement consumer-protection laws. These laws cover not only banks, but also other businesses, including finance companies, mortgage brokers, retailers, and automobile dealers. They ensure consumers receive comprehensive information and fair treatment in their financial transactions. The Fed also examines banks for compliance with these laws and operates a program consumers can turn to with complaints about financial misdealings involving banks the Fed regulates. Because informed consumers

contribute to the Fed's policy goals and a sound economy, Reserve Banks around the country educate consumers about personal finance and economic literacy through workshops, publications, and the web.

Transforming Communities

Like individual consumers, communities depend on fair access to credit and a full range of financial services to thrive. Reserve Banks offer educational and technical assistance to banks, government agencies, and community groups in their regions to encourage collaboration for community development through

such programs as affordable housing projects and first-time savings accounts to help low-income populations meet financial goals.

Under the Community Reinvestment Act (CRA) of 1977, banks receive a special rating as part of the bank examination process for meeting the needs of low-to-moderate income geographical regions and people. The Fed also considers a bank's CRA performance when ruling on a bank merger or acquisition application or a request to form a bank holding company. This helps ensure federally insured financial institutions provide fair and equal access to credit in all of the

SCOTT TURNER

COMMUNITY AFFAIRS



markets they serve. Consumers and community groups have opportunities to give feedback on a bank's community reinvestment record during CRA examinations and the application process.

THE FLOW OF MONEY

Financial Services

Financial services keep money moving—from buyers to sellers, from employers to staff, and from lenders to borrowers, in the forms of electronic funds, checks, and cash. As our nation's money manager, the Fed is positioned at the center of the financial system to assess and control risk and keep these vital payments systems running smoothly.

One way the Fed keeps the nation's financial wheels rolling is by serving as the banker's bank. Reserve Banks process electronic payments and checks for banks and store their excess cash. Reserve Banks also distribute new coins and currency through banks and destroy currency that is no longer fit for circulation. As the U.S. government's bank, the Fed maintains the U.S. Treasury's bank account and processes government checks, postal money orders, U.S. savings bonds, government securities, and federal tax deposits.

Electronic Funds

In 2004, transactions averaging more than \$1.8 trillion per day passed over the Fed's electronic funds transfer system, called Fedwire.⁴ This represents more than 494,000 daily funds transfers, averaging \$3.8 million each. Banks and other financial institutions with accounts at the Fed use the Fedwire network to handle large-dollar, time-critical payments such as securities and fed funds transfers between banks and real estate transactions on behalf of their customers. These electronic funds transfers are real-time, irrevocable transactions. The Treasury and other federal agencies also use Fedwire to collect and disburse funds.

The Fed's automated clearinghouse (ACH) is used to process routine, lower-dollar electronic payments such as direct deposits of paychecks, automatic bill payments, and government payments, such as Social Security checks and tax refunds. In 2004, the Fed's ACH processed 7.4 billion payments, worth \$15.5 trillion.⁵ This represents an average payment of \$2,500.

Checks

Although you may be one of the many consumers who leaves the checkbook at home, millions of Americans continue to write checks every day. The Fed handles one-third of them, with Reserve Banks using high-speed processing machines that sort up to 100,000 paper checks per hour, operating nearly twenty-four hours per day, seven days per week.



BILL KIMBEL

THERESE WILLIAMS

ELMER STOKES
ALEX TORRES

CASH SERVICES



More and more these days, the check you write may be converted to some type of electronic transaction during processing. In fact, the number of electronic payment transactions in the United States now exceeds check payments according to a Fed survey published in 2004.⁶ Electronic payments consist of such payment methods as debit cards, credit cards, and ACH transactions. This means, for example, your monthly mortgage check may be converted to an ACH transaction, replacing the need to clear the paper check. Or the cashier at your local department store may scan your check to create an ACH transaction, voiding the check at the store.

Coins and Currency

Add up all of the coins and currency dropped into vending machines and cash registers, and that's a lot

of money changing hands every day. Reserve Banks play an important role making sure enough coins and currency are in circulation to meet the public's demand in their districts. Demand varies depending on the time of year and the level of economic activity. For example, the demand for cash increases during the holidays at the end of the year. On a larger scale, the Fed makes sure enough coins and currency are on hand to prepare for unforeseen events that could disrupt the flow of money in the banking system.

Reserve Banks work with the U.S. Mint and the U.S. Bureau of Engraving and Printing to determine how many coins and how much currency are produced and distributed around the country. The U.S. Mint decides how many coins to make each year in part through the use of sophisticated forecasting models at the Fed and the Mint. From its production facilities

in Philadelphia and Denver, the Mint sends coins to Reserve Banks and more than 180 coin terminals it has contracted with nationwide. Reserve Banks order new paper bills from the U.S. Bureau of Engraving and Printing, in Washington, D.C., and Fort Worth, Texas.

Exactly how does new cash get into circulation? Reserve Banks put new money into circulation through commercial banks. Banks store excess coins and currency in local Fed vaults and maintain cash balances in reserve accounts. Reserve Banks verify amounts received, weighing coins and using high-speed machines to process currency. Sorting over 70,000 notes per hour, the machines verify amounts and denominations, remove counterfeits, and shred worn currency. In 2004, Reserve Banks shredded almost \$91 billion worth of currency.⁷ Reserve Banks send counterfeit bills to the U.S. Secret Service for investigation. Money that is in good shape is stored. When banks request money, Reserve Banks ship this “fit” money, along with new coins and currency, to meet demand. On an average day in 2004, Federal Reserve Banks delivered \$2.7 billion worth of bills and \$25.3 million worth of coins to America’s banks.⁸

MAINTAINING STABILITY

When a crisis or an economic shock threatens to disrupt the financial system, the Fed needs to respond quickly and decisively to restore stability. Through its discount window, the Fed makes temporary loans to banks to ensure that a shortage of funds at one institution does not disrupt the flow of money and credit, or “liquidity,” throughout the banking system.

Typically, the Fed provides credit at the discount window to banks to help them adjust to temporary changes in their deposits or loan portfolios and to cover seasonal or emergency credit needs. When a more severe shock hits, such as the events of September 11, 2001 (or 9/11), borrowing at the discount window is one of a number of important

tools the Fed uses to inject liquidity into the economy. On September 12, 2001, the day after the attacks, the Fed lent a record \$46 billion at its discount window, compared to a daily average of \$54 million on a normal business day in 2001.⁹

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During severe shocks, the Fed also can provide liquidity in the check-clearing process to offset imbalances in the flow of payments between banks. “Float” is the term used to describe the amount of money Reserve Banks credit to depositing banks that hasn’t been debited from the accounts of check writers. When 9/11 hit, the Fed continued to clear checks under normal schedules, despite being unable to collect from paying banks around the country. As a result, the Fed incurred close to \$23 billion in float on September 12—about 30 times the historical daily average.¹⁰

When a shock hits, U.S. banks aren’t the only concern. The Fed needs to make sure that foreign financial institutions have sufficient dollars on hand to enable individuals, businesses, and foreign governments to meet financial obligations. “Swap lines” allow foreign central banks to exchange their currencies for U.S. dollars. This is another tool the Fed used following 9/11 when it entered into swap agreements with the European Central Bank and the Bank of England and augmented an existing agreement with the Bank of Canada.

The stock market crash of 1987 and the Continental Illinois National Bank failure in 1984 are two different types of shocks from the past that illustrate the Fed’s role in maintaining the stability of the financial

system. When the stock market plunged more than 20 percent on what came to be called “Black Monday,” October 19, 1987, the Fed rapidly provided liquidity to help stabilize the financial markets. To calm the public and prevent panic selling that might have worsened the crisis, the Fed quickly announced its readiness to provide credit, just as it did during the 9/11 crisis.

When one of the country’s biggest banks, Continental Illinois National Bank, failed, the shock could have rippled through the financial system, jeopardizing many smaller banks with deposits at the large institution. To stop the spread of instability and protect consumers and the banking system, the Fed temporarily loaned \$5 billion to Continental Illinois, giving the Fed and the bank time to work together and with other regulators to resolve the situation.¹¹

That’s the Fed at work. Since its creation in 1913, the Fed has promoted the public interest by providing a stable, safe U.S. monetary and financial system. To learn more about the Fed at work, read the publications listed below, which, along with the new exhibits in the San Francisco headquarters and Los Angeles Branch, were used in the writing of this report. Find these and other educational and technical resources about the Fed and the economy at www.frbsf.org.

- ***The Federal Reserve: In Brief***
- ***The Federal Reserve System: Purposes and Functions***
- ***U.S. Monetary Policy: An Introduction***



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Endnotes

¹ *U.S. Monetary Policy: An Introduction*, Federal Reserve Bank of San Francisco (January 2004), www.frbsf.org/publications/federalreserve/monetary/index.html.

² As of fourth quarter 2004; Source: Bureau of Economic Analysis, www.bea.gov.

³ For convenience, this report refers to all banks and other types of financial institutions the Federal Reserve and other financial agencies supervise as “banks.”

⁴ Source: Federal Reserve Board, Fedwire Funds Service, Annual Data, www.federalreserve.gov/paymentsystems/fedwire/fedwirefundstrfann.htm.

⁵ Source: Federal Reserve Board, Automated Clearinghouse Operations, Annual Data, www.federalreserve.gov/paymentsystems/fedach/achyearly.htm.

⁶ “Federal Reserve Studies Confirm Electronic Payments Exceed Check Payments for the First Time,” Financial Services Policy Committee Press Release (December 6, 2004), www.frbservices.org/Retail/pdf/PR2004PaymentResearch.pdf.

⁷ Federal Reserve System, Cash Product Office.

⁸ Federal Reserve System, Cash Product Office.

⁹ Sources: Federal Reserve Bank of New York 2001 Annual Report (p. 8); Federal Reserve Bank of San Francisco.

¹⁰ Source: Christopher J. Neely. “The Federal Reserve’s Response to the September 11 Attacks,” *The Regional Economist*, Federal Reserve Bank of St. Louis (January 2002).

¹¹ Source: Federal Reserve Bank of San Francisco.