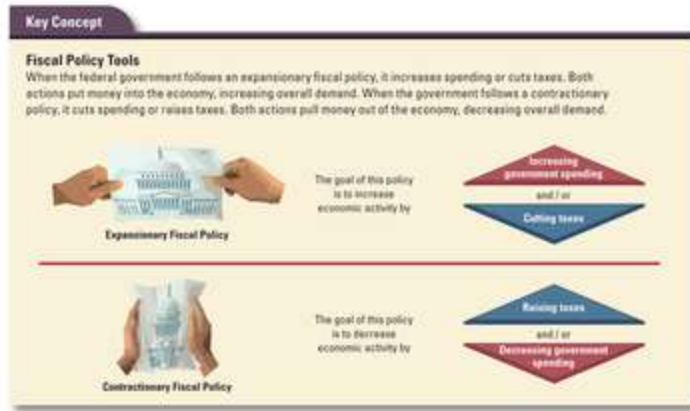


3. What Tools Does Fiscal Policy Use to Stabilize the Economy?



Fiscal policy consists of decisions made by the government regarding how much money to spend and how much to collect in taxes. At the national level, Congress makes these decisions based on recommendations from the president. Fiscal policy is used to pursue a number of economic goals. These goals include low unemployment, stable prices, and economic growth. The tools that fiscal policymakers use to achieve those goals are aimed at expanding or contracting economic activity.

How Taxes and Spending Expand or Contract the Economy

Early in 2008, Congress enacted an economic stimulus bill in response to worries that the economy was sliding into a recession. More than 130 million households received stimulus checks that year. Payments in the form of a tax rebate—a return of tax money to taxpayers—began at \$300 for a single person and rose from there, depending on the size of each family. President George W. Bush described the stimulus as “a booster shot for our economy.”

Stimulus checks are just one tool the government can use as part of an [expansionary fiscal policy](#). The goal of this policy is to promote economic activity by increasing government spending, cutting taxes, or both. These tools can be used to help businesses grow—for example, by increasing government spending on goods and services. Or they can be aimed at boosting consumer spending, which was the purpose of sending Americans stimulus checks.

In contrast, the goal of a [contractionary fiscal policy](#) is to cool an overheated economy. When buyers demand more goods and services than the economy can produce, overall prices tend to rise. When this happens, Congress can use the same tools to dampen excessive demand. That is, Congress can cut government spending, increase taxes, or both. As demand drops, prices tend to stabilize.

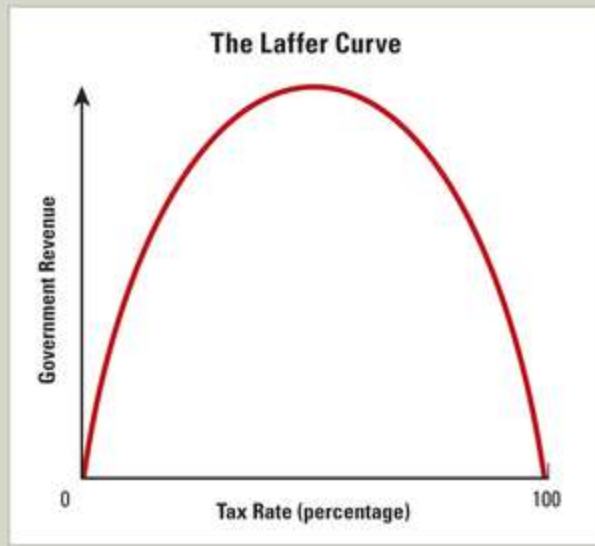
Using Tax Cuts to Stimulate Growth

In the early 1980s, a debate arose over how tax cuts might best be used to encourage economic growth. On one side of the debate were supporters of Keynesian economics. This school of thought is also known as [demand-side economics](#). Demand-siders believe that the best way to deal with a sluggish economy is to stimulate overall demand by cutting individual income taxes. As consumers spend their tax savings on goods and services, business will pick up and the economy will begin to grow.

Figure 14.3A

Analyzing the Laffer Curve

The Laffer curve illustrates a theoretical relationship between marginal income tax rates and tax revenues collected by the government. As tax rates rise from a low of 0 percent, government revenues rise as well. But at some point, revenues start to fall as tax rates discourage people from working harder to earn more income. The curve does not tell us, however, just where that turning point is.



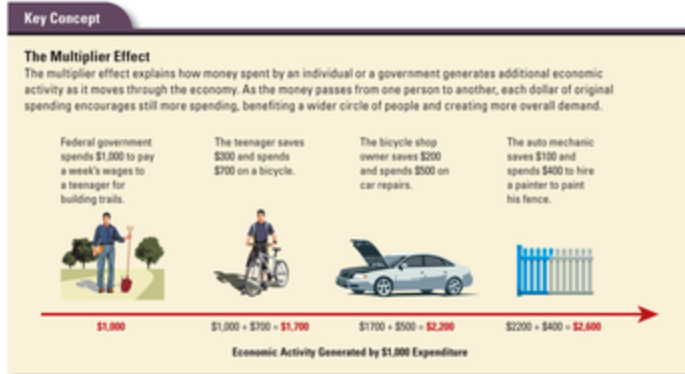
On the other side of the debate were advocates of a theory called [supply-side economics](#). Supply-siders hold that the best way to deal with an economic slowdown is to stimulate overall supply. This can be done by cutting taxes on businesses and high-income taxpayers. As businesses and investors use their tax savings to expand production, the supply of goods and services will increase, spurring economic growth.

Inspired by supply-side theories, President Ronald Reagan pushed for major tax cuts in 1981. In response, Congress lowered the corporate income tax rate at the highest bracket from 48 to 34 percent. It also slashed the top marginal income tax rate from 70 to 28 percent over the next seven years.

Critics of the Reagan tax cuts argued that the cuts would starve the government of needed revenue. In response, supply-siders claimed that the tax cuts would actually increase, not reduce, tax revenues. They supported their claim with a U-shaped graph, known as the [Laffer curve](#). Popularized by economist Arthur Laffer, the graph shows a theoretical relationship between tax rates and tax revenues. As shown in Figure 14.3A, the Laffer curve suggests that increasing taxes beyond a certain point may lower revenue. Likewise, cutting taxes at that point may increase revenues.

The results of the Reagan tax cuts were mixed. Over the next few years, the economy grew, just as supply-siders had predicted. Tax revenues also increased, though less rapidly than had been hoped. As a result, budget deficits grew and the federal debt ballooned, just as supply-side critics had feared. Today, economists generally accept that both demand-side and supply-side approaches should be considered when developing fiscal policy.

How the Multiplier Effect Expands the Impact of Government Spending



When the government spends money on goods and services, the impact on the economy is generally greater than the amount of money spent would suggest. The reason is that each dollar spent encourages still more spending, sending a ripple of economic activity through the economy. Economists call this rippling action the [multiplier effect](#).

To see how the multiplier effect works, we will look at what happens when a government decides to hire teenagers to build trails in a local park. Suppose one of those teenagers is paid \$1,000 for a week's work. He decides to put 30 percent, or \$300, in the bank. He spends the remaining \$700 on a bicycle. That \$700 now becomes the bike shop owner's income. Now suppose the bike shop owner spends \$500 of that income on car repairs. That \$500 becomes income to the auto mechanic. The mechanic saves \$100 and uses the other \$400 to hire someone to paint his fence. And so it goes, with the original \$1,000 spent by the government rippling through the economy from one person to the next. Each time the money changes hands, some of it is spent again, creating more overall demand.

The multiplier effect works two ways. It can help the economy grow when the government increases spending. Or it can slow economic growth when the government cuts spending. Consider, for example, the impact of a cut in government spending on highways. Construction firms that depended on highway projects would lay off workers. The laid-off workers would cut back on spending. Local businesses would see their sales drop. In this way, a reduction in government spending sends ripples through the economy, reducing demand by some amount along the way.

How Automatic Stabilizers Smooth Out the Business Cycle

Congress increases or cuts highway spending as part of its discretionary spending budget. But discretionary spending accounts for only about one-third of the federal budget. The other two-thirds is devoted to mandatory spending. Mandatory spending includes transfer payments, such as Social Security benefits. These transfer payments, along with taxes, can act as automatic stabilizers. An [automatic stabilizer](#) helps counter the ups and downs of the business cycle without requiring policymakers to take any action.

Automatic stabilizers work by increasing or decreasing overall demand. Suppose, for example, the economy enters a slowdown. As people spend less, demand for goods and services drops. Businesses respond by laying off workers or reducing their wages. As workers' earnings decline, many of them slip into lower federal income tax brackets. In the lower brackets, their tax bills go down at a faster rate than their incomes. This "tax cut" softens the impact of their reduced wages. Workers spend the money they save in taxes on goods and services, keeping the slumping economy from getting even worse.

Figure 14.3B

Analyzing the Effect of Automatic Stabilizers on the Business Cycle

Taxes and government transfer payments rise and fall with the business cycle. Since the end of World War II, these automatic stabilizers, combined with discretionary fiscal actions, have worked to limit the ups and downs of the economy. You can see their effect in this graph, which shows the growth of the gross domestic product since 1900.



Transfer payments also help boost demand during a downturn. As workers are laid off, many become eligible for unemployment benefits. Applications for food stamps and welfare payments also increase. By putting money in people's pockets, these payments encourage spending and keep demand from dropping as rapidly as it otherwise would. Just the opposite happens during upswings in the economy. As earnings rise, wage earners move into higher tax brackets. With more of each additional dollar earned going to taxes, spending cannot rise as fast as wages. This slowing of consumer spending helps stabilize demand. In addition, as employment picks up, the number of people needing transfer payments drops. Government spending declines, just as it would have had Congress deliberately adopted a contractionary fiscal policy.

By themselves, these automatic stabilizers do not have the power to end economic expansions and contractions. But as Figure 14.3B suggests, they may help smooth out the highs and lows of the business cycle.

. What Tools Does Monetary Policy Use to Stabilize the Economy?

Monetary policy consists of decisions made by a central bank about the amount of money in circulation and interest rates. In the United States, the Federal Reserve makes such decisions. Earlier you read about the Federal Reserve's role in overseeing the nation's banking system. The Fed also uses its control of monetary policy to help the economy grow steadily with full employment and stable prices. However, unlike Congress, which controls fiscal policy, the Fed is not an elected body. It has the power to make decisions on its own without the approval of either Congress or the president.

The Structure of the Federal Reserve System

In creating a central bank, Congress gave the Federal Reserve enough power to act independently in monetary policy. At the same time, the Fed's structure ensures that its decisions take into account the needs and interests of all parts of the country.

Figure 14.4A

Mapping the Federal Reserve System

The Federal Reserve System serves as this nation's central bank. It is structured in a manner that ensures representation from different parts of the country on its Board of Governors and on the Federal Open Market Committee. Note the concentration of Federal Reserve districts and banks in the eastern half of the country. This pattern reflects the distribution of the population in 1913, the year the system was established.



A seven-member Board of Governors based in Washington, D.C., heads the Federal Reserve System. The rest of the country is divided into 12 Federal Reserve districts. One Federal Reserve Bank operates in each district. These regional Federal Reserve Banks oversee the activities of national and state-chartered banks in their districts. Figure 14.4A shows the 12 districts and their Federal Reserve Banks.

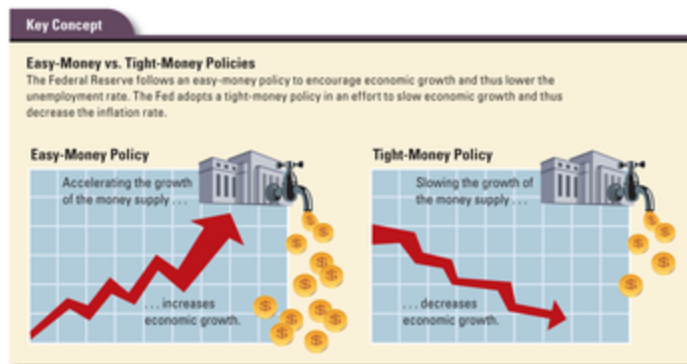
Members of the Board of Governors are appointed by the president and confirmed by the Senate to 14-year terms of office. Once confirmed, a member is limited to one term. In making appointments, the president is directed by law to select a “fair representation of the financial, agricultural, industrial, and commercial interests . . . of the country.” To ensure geographic representation, only one member may come from any one of the 12 Federal Reserve districts.

The president also selects one board member to chair the board for a four-year term. Ben Bernanke, who joined the Board of Governors in 2002, became its chairperson in 2006. The chairperson serves as the primary spokesperson for the Fed, both with Congress and with the public.

The Board of Governors is responsible for the overall direction of monetary policy and for supervising the banking system. The board also publishes a wealth of statistics about the U.S. economy.

In addition, all board members serve on the powerful Federal Open Market Committee. The FOMC includes 5 of the 12 Federal Reserve Bank presidents as well. The president of the New York Federal Reserve Bank is always on the FOMC, in recognition of New York City’s status as the country’s financial center. The other Federal Reserve Bank presidents rotate to fill the four remaining slots.

The FOMC holds eight regularly scheduled meetings each year to assess the state of the economy. At these meetings, the committee examines a wide range of economic indicators. From this information, it determines what changes, if any, the Fed should make in its monetary policy. As with fiscal policy, the decisions of the Fed may be expansionary or contractionary in their effects.



Fighting Recession and Inflation with Monetary Policy

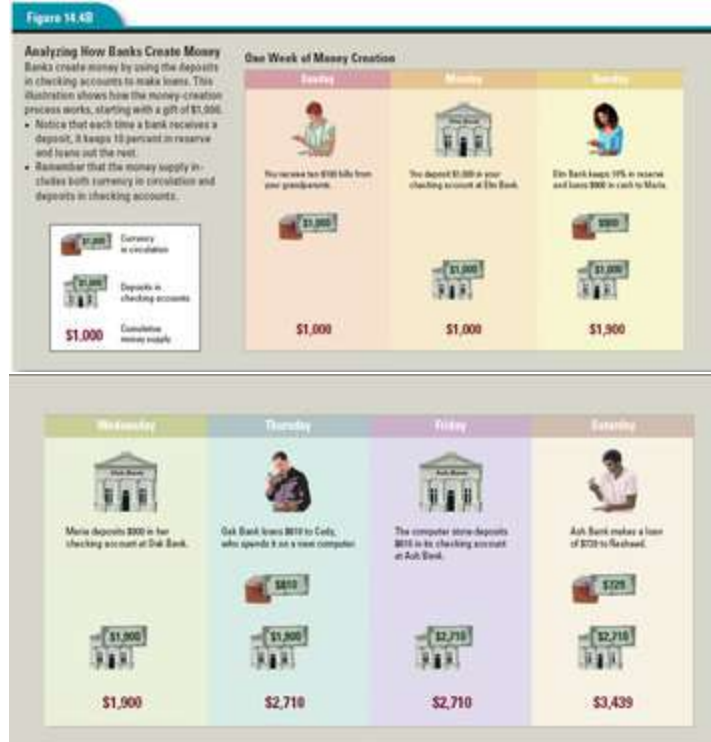
The Fed adopts an expansionary monetary policy when it believes the economy is in danger of sliding into a recession. Also known as an **easy-money policy**, an expansionary monetary policy is intended to speed the growth of the money supply. As the amount of money flowing into the economy increases, interest rates drop and borrowing becomes cheaper and easier. With loans easier to get, households and firms spend more on goods and services. Demand increases, leading to more production, stronger economic growth, and a drop in the jobless rate.

On the other hand, the Fed pursues a contractionary monetary policy when rising prices threaten to trigger an inflationary wage-price spiral. Also known as a **tight-money policy**, a contractionary policy is intended to slow the growth of the money supply. With less money flowing into the economy, interest rates rise and loans become costlier and harder to get. Households and firms cut back on borrowing as well as spending. Demand shrinks, leading to less production, weaker economic growth, and a drop in the inflation rate.

How Banks Create and Destroy Money

To understand how the Fed regulates the money supply, we need to look at how banks create or destroy money. Banks are in the business of taking in money from depositors and using it to make loans. They make their profit from the interest they charge on those loans. However, because of the **reserve requirement**—the regulation that banks must keep a certain percentage of deposits on hand to repay depositors—banks cannot loan out all the money they take in. They must hold some cash in their vaults or on deposit in a Federal Reserve Bank as a reserve fund.

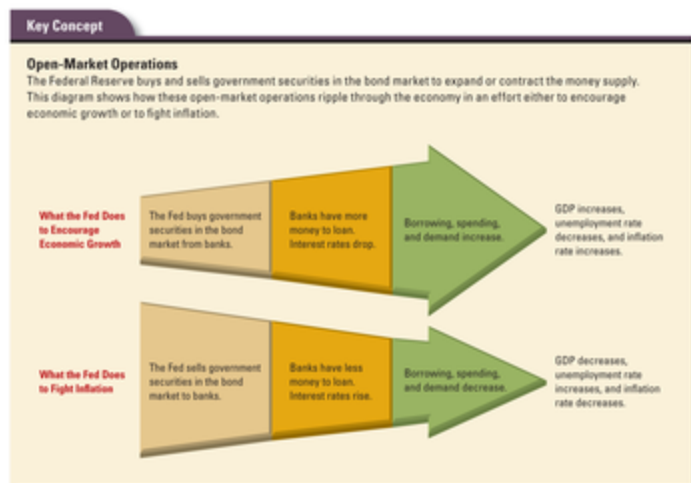
Because it is not readily available for use, money held in reserve by banks is not considered part of the M1 money supply. M1 is the most common measure of the amount of money circulating in an economy. It includes all bills and coins in use, as well as traveler's checks and money in bank checking accounts.



When you deposit money in a bank account, it goes into the bank's reserves along with everyone else's deposits. Your account is credited with the amount of your deposit, which becomes part of the money supply. The bank can then loan the portion of your deposit that is not required to remain in reserve to someone else. The money loaned may be used to buy goods or services. Or it may end up in the borrower's checking account. Either way, that money is now also part of the M1 money supply. In this sense, the bank has "created" money by making a loan.

The reverse happens when a borrower repays a bank loan. The money used to pay off the loan leaves the borrower's checking account and goes back into the bank's reserves. As the borrower's checking account shrinks, the money supply also shrinks. In this sense, paying off a bank loan "destroys" money—at least until the bank loans that money out again. The Federal Reserve can speed or slow money creation by making it easier or harder for banks to make loans. Whether its goal is to increase or decrease the money supply, the Fed uses the same three tools: open-market operations, the reserve requirement, and the discount rate. Of these, open-market operations are the most important.

The Fed's Most-Used Tool: Open-Market Operations



The Federal Reserve can inject money into the economy or pull it out using open-market operations. An open market is a market that is open to all buyers and sellers. The Fed's [open-market operations](#) involve the buying and selling of government securities in the bond market. The securities can be Treasury bonds, notes, bills, or other government bonds. The decision to expand or contract the money supply in this way is made by the FOMC. When the FOMC adopts an easy-money policy, it instructs the Fed's bond traders to buy government securities. Every dollar the Fed pays for bonds increases the money supply.

When the FOMC adopts a tight-money policy, its bond traders sell securities in the bond market. The public pays for these bonds with cash or money taken out of banks. As this money goes out of circulation, the money supply shrinks. Moreover, because banks end up with smaller deposits, they have less money to lend, which also slows the growth of the money supply.

Open-market operations are relatively easy to carry out. They allow the Fed to make small adjustments in the money supply without new laws or banking regulations. For these reasons, the sale and purchase of securities is the monetary tool the Fed uses most to stabilize the economy.

The Fed's Least-Used Tool: The Reserve Requirement

The Fed's least-used monetary tool is its power to set the reserve requirement for banks. The Fed's Board of Governors could expand or contract the money supply by adjusting the [required reserve ratio](#). This ratio is the minimum percentage of deposits that banks must keep in reserves at all times. Lowering the ratio would allow banks to make more loans and create more money. Raising the reserve ratio would force banks to keep more cash in reserve and out of the money supply. This, in turn, would leave banks with less money to lend, slowing money creation.

In practice, changes in the required reserve ratio are infrequent—and for good reason. Think about what a change in the requirement might mean for banks. A lower percentage might not be a problem. Banks would be happy to have more money to lend. To meet a higher ratio, however, a bank would have to scramble for extra cash. It could borrow the needed money, but it would have to pay interest on the loans. Or the bank could refuse to renew loans as they come due. To avoid these negative impacts, the Fed seldom uses reserve requirements as a tool of monetary policy. For many years, the reserve requirement ratio has been 3 or 10 percent, depending on the amount of a bank's deposits.

The Fed's Third Tool: The Discount Rate

Even when the reserve requirement remains stable, banks sometimes need to borrow money to keep their reserves at the proper level. This might happen because a bank has made too many loans. Or it could be a result of unexpectedly large withdrawals. Whatever the reason, banks can borrow money from a Federal Reserve Bank to shore up their reserves. The interest rate on such loans, known as the [discount rate](#), is the last tool in the Fed's toolbox.

The Federal Reserve Board of Governors controls the discount rate. A low rate makes it less costly for banks to borrow from the Fed. Banks can then use that money to make loans to customers, thereby expanding the money supply. Raising

the discount rate has the opposite effect by discouraging banks from borrowing from the Fed. With money tight, banks make fewer loans, keeping the money supply in check.

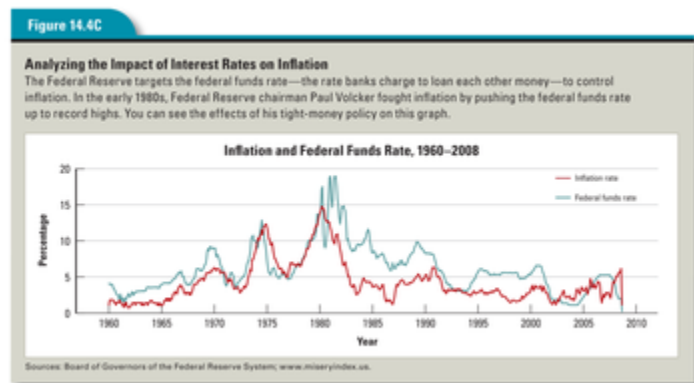
Unlike the reserve requirement, the discount rate changes frequently over time. Between 1990 and mid-2008, it ranged from a high of 7.0 percent to a low of 0.75 percent. Whatever the rate, banks usually view the Federal Reserve as a lender of last resort. Borrowing from the Fed, they worry, may send a signal that the bank is in trouble.

Instead, banks generally borrow the funds they need from other banks. Knowing this, the Fed does not use the discount rate as its principal tool for managing interest rates. Instead, it targets the rate that banks charge one another for loans.

Targeting the Federal Funds Rate

When the Fed makes news, the story is almost never about changes in the money supply or the discount rate. Instead, the report is usually about a change in the [federal funds rate](#). This is the rate that banks charge one another for very short—as short as over-night—loans. Such lending is common between banks with excess reserves and banks that need a quick loan to maintain their required reserves.

Unlike the discount rate, the federal funds rate is not a monetary policy tool. Banks, not the Fed, decide what they charge one another for loans. Still, the Fed has an interest in making sure that the rate banks are charging one another is in line with its general monetary policy. Therefore, the FOMC sets a target for the federal funds rate based on its view of the economy. It then uses open-market operations to nudge the federal funds rate toward that target.



The FOMC focuses on the federal funds rate for two main reasons. First, it is the easiest bank rate for the Fed to change using open-market operations. Second, interest rates on everything from saving accounts and bonds to mortgages and credit cards are affected by the federal funds rate. Thus, a small change in the federal funds rate can have a powerful effect across the entire economy.

As with all of its activities, the Fed has two goals in mind when targeting the federal funds rate. One is to control inflation, as you can see in Figure 14.4C. The other is to maintain healthy economic growth. Getting the rate right to do both is a challenging task, especially because it can take months for a change to work its way through the economy.

5. What Factors Limit the Effectiveness of Fiscal and Monetary Policy?

Despite the best efforts of policymakers, booms and busts still happen. One reason may be that the business cycle is simply a fact of life in a market-based economy. But other factors may also keep fiscal and monetary policy from being as effective as economists would like.

Time Lags Can Complicate Policymaking

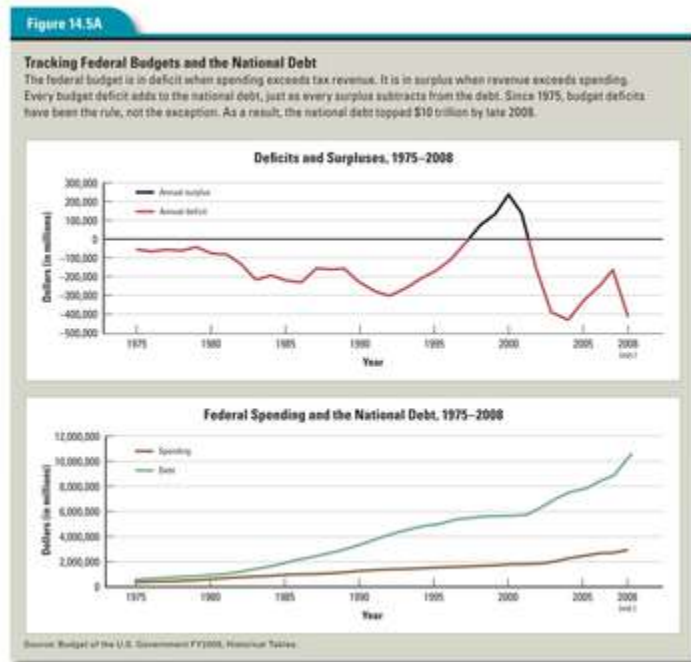
At least two types of time lags plague economic policymaking. One lag comes from the time it takes to compile accurate economic data. Early estimates of GDP growth, for example, are often too high or too low. As a result, economists may miss the start of a recession. Only when the indicator is corrected months later does the actual state of the economy become clear. By then, corrective action may be too late to do much good.

Another time lag comes from the time it takes for actions begun today to work their way through the economy. The multiplier effect of federal spending can take months to stimulate or dampen overall demand. After studying efforts to use fiscal policy to combat recessions since World War II, historian Bruce Bartlett concluded,

The history of anti-recession efforts is that they are almost always initiated too late to do any good . . . The enactment of stimulus plans is a fairly accurate indicator that we have hit the bottom of the business cycle, meaning the economy will improve even if the government does nothing.

—Bruce Bartlett, “Maybe Too Little, Always Too Late,” *New York Times*, Jan. 2008

In general, monetary policy can be enacted more quickly than fiscal policy. Even so, a change in interest rates may take six months or more to have an effect on economic output or the inflation rate.



Economic Forecasts Can Mislead Policymakers

To implement economic policy successfully, policy-makers must be able to forecast how the economy will behave months or even years into the future. To make such forecasts, economists monitor several economic indicators. They also use economic models and computer programs to make sense of these data. Based on their models, they make educated guesses about the future. Policymakers use these forecasts to decide what actions to take to head off recessions or fight inflation.

Predicting the future is never easy, and sometimes forecasters guess wrong. An example of a prediction that did not come true occurred in 2001. As the first graph in Figure 14.5A shows, the federal government began that year with a budget surplus. The Congressional Budget Office responded with a report forecasting continued surpluses through 2011. The CBO also predicted that by 2009, the accumulated surplus would be large enough to pay off the national debt. The second graph in Figure 14.5A shows just how wrong these forecasts turned out to be.

Concerns About the National Debt May Limit Government Spending

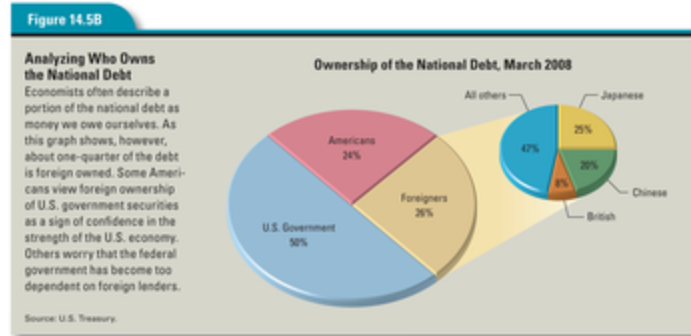
Worries about the size of the national debt may also complicate policymaking. When Keynes urged President Roosevelt to increase deficit spending, he did not mean that the federal government should run deficits forever. The result, Keynes realized, would be an ever-increasing national debt. Such a debt would not be in the long-term interests of the economy. Instead, most economists advise that deficit spending be limited to times of national emergencies. Such emergencies include wars, natural disasters, and recessions. During good economic times, they say, Congress could run surpluses. These surpluses could then be used to pay down the national debt, balancing the federal budget over time.

That is the theory. Since the 1970s, however, the federal government has generally spent more than it receives in revenue in both good times and bad. The inability of Congress to keep spending under control has led some politicians to call for a constitutional amendment requiring a balanced budget. The Senate approved an early version of such an amendment in 1982. The House approved a later version in 1997.

Meanwhile, deficit spending continues. By December 2008, the national debt had climbed to about \$10.6 trillion. Each individual's share of that debt amounted to around \$35,000. The size of the national debt has many Americans deeply worried. Listed below are some of their concerns.

Fear of government bankruptcy. Some people worry the national debt will eventually bankrupt the federal government. Most economists, however, doubt that will happen. As long as the government can increase taxes or refinance the debt, it will not go into bankruptcy. To refinance the debt, the government sells new bonds and then uses that money to repay bondholders whose bonds have matured.

Concern about the burden on future generations.



Many people are concerned about the burden that a large nation debt will place on the next generation—namely, you and your friends. Once again, however, many economists believe this worry is overblown. As shown in Figure 14.5B, about three-quarters of the national debt is owned by American individuals or institutions. Economists look at this portion of the debt as money we owe ourselves.

Taxpayers do bear the burden of paying interest on that debt. But much of that money goes right back to Americans who own government securities. Many retired people, for example, depend on the interest from government bonds to support themselves. They have no wish to ask any generation, including yours, to “pay off” the national debt.

Unease about foreign-owned debt.

Citizens, government agencies, and financial institutions in foreign countries own about one-quarter of the national debt. This is not debt that we owe to ourselves. Foreign ownership of so much of the national debt concerns Americans for two reasons. First, they do not like seeing all of the interest owed to foreign bondholders flowing out of the U.S. economy. Second, they worry that Congress is becoming too dependent on foreign lenders to support its deficit-spending habits. What will happen, they ask, if foreigners suddenly decide they no longer want to buy U.S. government securities? Many economists share these concerns to some degree. However, they point out that payments to foreign bondholders enable those bondholders to buy U.S. goods and services. Economists also note that many Americans invest in bonds issued by foreign governments. The interest these bondholders receive helps offset U.S. payments to foreigners. Finally, as long as our economy is strong, foreigners are unlikely to stop buying U.S. government securities.

Worries about the crowding-out effect. A widespread concern about the growth of the national debt is that federal government is crowding private borrowers out of the lending market. This **crowding-out effect** is said to happen when government borrowing drives interest rates up so high that people are no longer willing to borrow money to invest in businesses. This could trigger an economic downturn.

Economists agree that crowding out is a potential problem. However, they note that the negative effect of the government's borrowing on long-term growth depends on how the money is spent. Government spending on highways and airports benefits private enterprise. So does spending on education and research, which improves this country's human capital.

Do all of these limitations and concerns mean the economy would be better off if policymakers did nothing to stabilize it? Some critics of fiscal and monetary policy would answer yes. But mainstream economists see an important role for both fiscal and monetary policy in keeping the economy healthy.

In your lifetime, you are likely to live through both recessions and periods of high inflation. Either situation can create hardships that you would rather not face. Still, knowing that the government has tools to help the economy recover from such ills may help you face them with confidence. For having learned how these tools work, you now know that the bad times will not last forever.