

# Chapter 15 Fiscal Policy

**S**pending more money than you earn is usually a bad idea. But what if you face an unexpected need for more cash than you have? How do you decide whether you should borrow money or not spend the money at all?

The federal government deals with this dilemma every year when it prepares its budget. Sometimes borrowing money is the best choice for the economy. Other times, borrowing money causes more problems than it solves.

## Economics Journal

List five items in your city or town—buildings, infrastructure, or services—that are built, run, or funded by government.



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# Section 1

# Understanding Fiscal Policy

## Preview

### Objectives

After studying this section you will be able to:

1. **Describe** how the government uses fiscal policy as a tool for achieving its economic goals.
2. **Explain** how the government creates the federal budget.
3. **Analyze** the impact of fiscal policy decisions on the economy.
4. **Identify** the limits of fiscal policy.

### Section Focus

The federal government takes in money for the budget through taxation and borrowing. The decisions the government makes about taxing and spending can have a powerful impact on the overall economy.

### Key Terms

**fiscal policy**  
**federal budget**  
**fiscal year**  
**Office of Management and Budget (OMB)**  
**Congressional Budget Office (CBO)**  
**appropriations bill**  
**expansionary policies**  
**contractionary policies**

The word *fiscal* comes from the Latin word *fisc*, which means “basket” or “bag.” Over time, the word came to be linked with a bag of money. Specifically, it meant the “bag,” or pool, of money held by the government. In Chapter 14, you read about how the government collects money, primarily through taxes, and how the government spends its money on a wide variety of programs. In this section you will read about fiscal policy. **Fiscal policy** is the use of government spending and revenue collection to influence the economy.

federal government makes. These decisions are made each year during the creation of the federal budget.

**fiscal policy** *the use of government spending and revenue collection to influence the economy*

## The Federal Budget

The **federal budget** is a written document indicating the amount of money the government expects to receive for a certain year and authorizing the amount the

**federal budget** *a plan for the federal government's revenues and spending for the coming year*

## Fiscal Policy as a Tool

As you learned in Chapter 14, the federal government takes in and spends huge amounts of money. The federal government spends about \$250 million every hour, \$6 billion every day, and about \$2.3 trillion a year. The tremendous flow of cash into and out of the economy has a large impact on aggregate demand and supply in the economy.

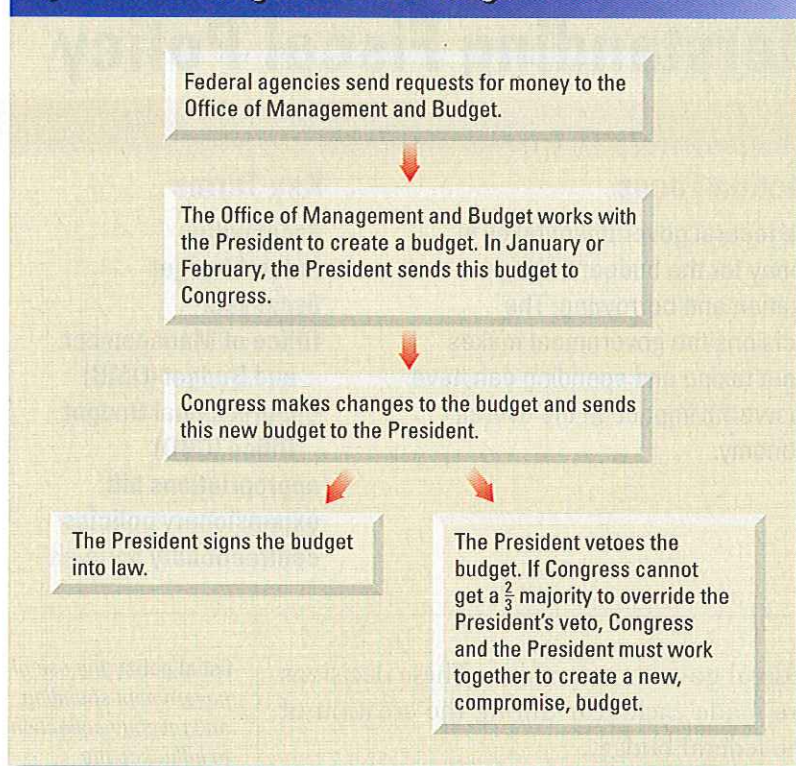
Fiscal policies are used to achieve economic growth, full employment, and price stability. Fiscal policy decisions—how much to spend and how much to tax—are among the most important decisions the



▲ Federal budget costs include Transportation Security Administration workers who screen airline passengers and luggage for security threats.



**Figure 15.1 Creating the Federal Budget**



Congress and the White House work together over the course of the year to put together a federal budget. **Government** Who takes the first step in the budget process?

government can spend that year. The federal budget is just a plan to pay for the federal government's expenditures. Much like a family's budget, it lists expected income and shows exactly how the money will be spent.

The federal government prepares a new budget for each fiscal year. A **fiscal year** is a twelve-month period that is not necessarily the same as the January-to-December calendar year. The federal government uses a fiscal year that runs from October 1 through September 30.

The federal budget takes about 18 months to prepare. During this time, citizens, Congress, and the President debate the government's spending priorities. There are four basic steps in the federal budget process.

### Spending Proposals

The federal budget must fund many offices and agencies in the federal government,

and Congress cannot decide all of their needs. Before the budget can be put together, each federal agency writes a detailed estimate of how much it expects to spend in the coming fiscal year.

These spending proposals are sent to a special unit of the executive branch, the **Office of Management and Budget (OMB)**. The OMB is part of the Executive Office of the President. As its name suggests, the OMB is responsible for managing the federal government's budget. Its most important job is to prepare the federal budget.

### In the Executive Branch

The OMB holds several meetings to review the Federal agencies' spending proposals. Representatives from the agencies must explain their spending proposals to the OMB and convince the OMB to give them as much money as they have asked for. Usually, OMB gives each agency less than they say they need.

The OMB then works with the President's staff to combine all of the individual agency budgets into a single budget document. This document gives the President's overall spending plan for the coming fiscal year. The President presents the budget to Congress in January or February.

### In Congress

The President's budget is only a starting point, and the number of changes Congress makes depends on the relationship between the President and Congress. Congress carefully considers, debates, and modifies the President's proposed budget. For help, members of Congress rely on the assistance of the **Congressional Budget Office (CBO)**. Created in 1974, the CBO gives Congress independent economic data to help with its decisions.

Much of the work done by Congress—the House of Representatives and the Senate—is done by small committees. Working at the same time in different houses of Congress, committees in the House and Senate analyze the budget and hold hearings at which agency officials and others can speak out about the budget. The

**fiscal year** a twelve-month period that can begin on any date

**Office of Management and Budget (OMB)** government office that manages the federal budget

**Congressional Budget Office (CBO)** government agency that provides economic data to Congress



House Budget Committee and Senate Budget Committee combine their work to propose one initial budget resolution, which must be adopted by May 15 of the year. This resolution is not intended to be final, but gives initial estimates for revenue and spending to guide the legislators as they continue working on the budget.

Then, in early September, the Budget Committees for each house of Congress propose a second budget resolution that sets binding spending limits. Congress must pass this resolution by September 15, after which Congress cannot pass any new bills that would spend more money than the budget resolution allows.

Finally, the Appropriations Committees for each house submit bills to authorize specific spending. By this time, the new fiscal year is about to start and Congress faces pressure to get these **appropriations bills** adopted and submitted to the President quickly before the previous year's funding ends on September 30. If Congress cannot finish in time, it must pass short-term emergency spending legislation known as "stop-gap funding" to keep the government running. If Congress and the President cannot even agree on temporary funding, the government "shuts down" and all but the most essential federal offices will close.

### In the White House

Congress sends the appropriations bills to the President, who can sign them into law. If he vetoes any of these bills, Congress must either come up with enough votes to override the veto—usually, this is impossible—or work with the President to write an appropriations bill on which both sides can agree. Once that is completed, the President signs the new budget into law.

## Fiscal Policy and the Economy

Government officials who take part in the budget process debate how much should be spent on specific programs such as defense, education, and scientific research.

They also consider how much should be spent in total. The total level of government spending can be changed to help increase or decrease the output of the economy. Similarly, taxes can be raised or lowered to help increase or decrease the output of the economy.

Fiscal policies that try to increase output are known as **expansionary policies**. Fiscal policies intended to decrease output are called **contractionary policies**. By carefully choosing to follow expansionary or contractionary fiscal policies, the federal government tries to make the economy run as smoothly as possible.

## Expansionary Fiscal Policies

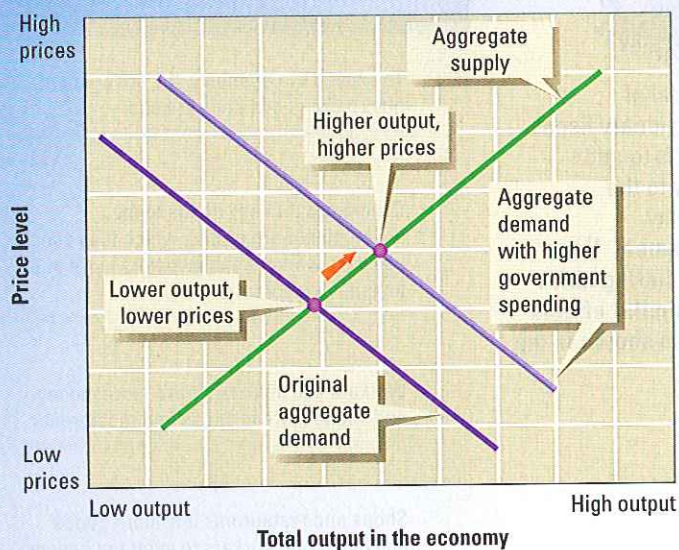
Governments use expansionary fiscal policies to raise the level of output in the economy. That is, they use expansionary policies to encourage growth, either when the economy is in a recession or to try to prevent a recession. Recall from Chapter 12 that a recession is the part of the business

**appropriations bill** a bill that sets money aside for specific spending

**expansionary policies** fiscal policies, like higher spending and tax cuts, that encourage economic growth

**contractionary policies** fiscal policies, like lower spending and higher taxes, that reduce economic growth

Figure 15.2 Effects of Expansionary Fiscal Policy



Expansionary fiscal policy helps the economy by increasing aggregate demand and output.

**Supply and Demand** How do increases in government spending affect aggregate supply?



cycle that occurs when output declines for two quarters, or three-month periods, in a row. Expansionary fiscal policies fall into either or both of two categories: increasing government spending and cutting taxes.

### Increasing Government Spending

If the federal government increases its spending or buys more goods and services, it triggers a chain of events that raises output and creates jobs. Government spending increases aggregate demand, which causes prices to rise. (See Figure 15.2.) According to the law of supply, higher prices encourage suppliers of goods and services to produce more. To do this, firms will hire more workers. In short, an increase in demand will lead to lower unemployment and to an increase in output, as shown in Figure 15.3. The economy will be encouraged to expand.

### Cutting Taxes

Tax cuts work much like higher government spending to encourage the economy to expand. If the federal government cuts taxes, individuals have more money to

spend, and businesses keep more of their profits. Consumers will have more money to spend on goods and services, and firms will have more money to spend on land, labor, and capital. These actions will increase demand, prices, and output.

## Contractionary Fiscal Policies

At some stages in the business cycle, the government may choose contractionary fiscal policies. Contractionary fiscal policies try to decrease aggregate demand, and by decreasing demand, reduce the growth of economic output. If contractionary fiscal policies are strong enough, they may slow the growth of output to zero, or even lead to a fall in GDP.

The government sometimes tries to slow down the economy because fast-growing demand can exceed supply. When demand exceeds supply, producers must choose between raising output and raising prices. If producers cannot expand production enough, they will raise their prices, which leads to high inflation. As you read in Chapter 12, inflation is an increase in prices over time. Inflation cuts into consumers' purchasing power and discourages economic growth and stability. Fiscal policies aimed at slowing the growth of total output generally fall into either or both of two categories: decreasing government spending and raising taxes.

### Decreasing Government Spending

If the federal government spends less, or buys fewer goods and services, it triggers a chain of events that may lead to slower GDP growth. A decrease in government spending leads to a decrease in aggregate demand because the government is buying less than before. Decreased demand tends to cause lower prices. According to the law of supply, lower prices encourage suppliers to cut their production and possibly fire workers. Lower production lowers the growth rate of the economy and may even reduce GDP.



The goal of expansionary fiscal policy is to add money to the economy.

**Government** How might cutting taxes have similar effects to those shown in the chart?

**Figure 15.3** Flowchart of Effects of Expansionary Fiscal Policy

To expand the economy, the government buys more goods and services.

Companies that sell goods to the government earn profits, which they use to pay their workers and investors more and to hire new workers.

Workers and investors have more money and spend more in shops and restaurants.

Shops and restaurants buy more goods and hire more workers to meet their needs.

In the short term, government spending leads to more jobs and more output.



This chain of events is the exact opposite of what happens when the government increases spending. The government uses the same tools to try to influence the economy in both cases, but in different ways, and with very different goals.

### Increasing Taxes

When the federal government raises taxes, individuals have less money to spend on goods and services or to save for the future. Firms keep less of their profits and decrease their spending on land, labor, and capital. As a result of these decreases in demand, prices tend to fall. Producers of goods and suppliers of services tend to cut production. This slows the growth of GDP.

### Limits of Fiscal Policy

On paper, fiscal policies look like powerful tools that can keep the economy in perfect balance. In reality, fiscal policies can be clumsy and difficult to put into practice.

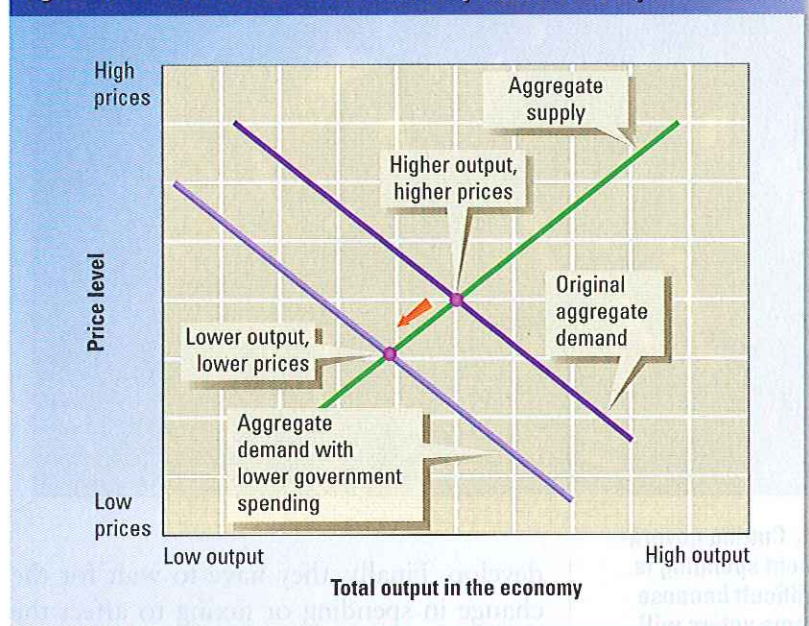
### Difficulty of Changing Spending Levels

Increasing or decreasing the amount of federal spending is not an easy task. As you read in Chapter 14, many of the spending categories in the federal budget are entitlements that are fixed by law. Nearly 60 percent of the federal budget is set aside for programs such as Medicaid, Social Security, and veterans' benefits before Congress even begins the budget process. The government cannot change spending for entitlements under current law. As a result, significant changes in federal spending generally must come from the small part of the federal budget that includes discretionary spending. This gives the government less leeway for increasing or lowering spending.

### Predicting the Future

Governments use fiscal policies to prevent big changes in the level of GDP. Despite the statistics, however, it is difficult to know the current state of the economy. As you read in Chapter 12, no one can predict how quickly the business cycle will move from

Figure 15.4 Effects of Contractionary Fiscal Policy



By cutting spending, the government can slow economic growth.

**Supply and Demand** How does lower government spending affect equilibrium?

one stage to the next, nor can anyone identify exactly where the economy is at any specific point in the cycle. Economists often disagree about the meaning of statistics, whether they show the economy is in good condition or ready for a recession.

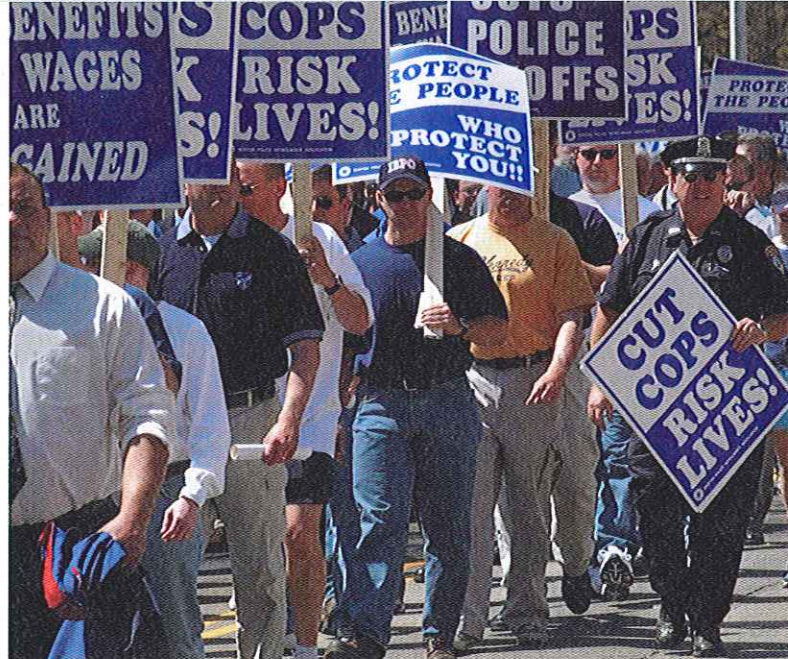
Predicting future economic performance is even more difficult. As a result, lawmakers may put off making changes in fiscal policy until they know more about how the economy is performing. By then, it may be too late to act.

In addition, when lawmakers put fiscal policies in place, they base their decisions partly on the past behaviors of individuals. It is risky to assume that people will, for example, respond the same way to a tax cut in the future as they have in the past.

### Delayed Results

Although changes in fiscal policy affect the economy, changes take time. Once government officials decide when and how to change fiscal policy, they have to put these changes into effect within the federal budget, which itself takes over a year to





▲ Cutting government spending is difficult because some voters will object to cuts that impact their interests.

develop. Finally, they have to wait for the change in spending or taxing to affect the economy.

By the time the policy takes effect, the economy might be moving in the opposite direction. The government could propose massive public spending on highways in the middle of a recession, only to have the economy recover before construction begins. In these cases, fiscal policy would only add to the new trend, instead of correcting the original problem. If the government continued to spend lots of money on highways in the middle of a recovery, it could lead to high inflation and a labor shortage.



## Global Connections

**Experimenting in Japan** Japan used expansionary fiscal policies in the 1990s to try to end an economic slump. When real estate prices and stock prices decreased sharply in Japan in the early 1990s, investors, businesses, and banks lost much of their wealth. Consumers and businesses spent less, and banks could not afford to lend money for new investment, so the economy suffered. The Japanese government tried to increase demand by spending money on new roads, government-sponsored loans, and tax cuts. Between 1992 and 1999, the government passed nine major bills spending a total of \$1.1 trillion, or nearly \$90,000 for every man, woman, and child in Japan. The plan failed to revive the economy and burdened the government with enormous debts. By 2004, government debt had reached 173% of GDP but the economy was still struggling.

## Political Pressures

The President and members of Congress, who develop the federal budget and the federal government's fiscal policies, are elected officials. If they wish to be reelected, they must make decisions that benefit the people who elect them, not necessarily decisions that are good for the overall economy.

For example, government officials have an incentive to practice expansionary fiscal policies by increasing government spending and lowering taxes. These actions are usually popular with voters, although in Section 3 you will read about why some people disapprove of government spending. Government spending benefits the firms that receive government contracts and the individuals who receive direct payments from the government. Lower taxes leave more disposable income in people's pockets.

On the other hand, contractionary fiscal policies that decrease government spending or raise taxes are often unpopular. Firms and individuals that expect income from the government are not happy when the income is reduced or cut off. No one likes to pay higher taxes, unless the tax revenue is spent on a specific, highly valued good or service.

## Coordinating Fiscal Policy

For fiscal policies to be effective, various branches and levels of government must plan and work together. This is very difficult to do. For example, if the federal government is pursuing contractionary policies, ideally state and local governments should pursue consistent fiscal policies. Yet, state and local governments may be pursuing different goals for fiscal policy than the federal government.

For example, after the federal government cut income taxes in 2001 and 2003, many state and local governments raised income and property taxes to close budget deficits and avoid deep spending cuts. The federal government was willing to cut taxes and run a deficit in poor economic times, but most state and local governments were legally forbidden to do so.

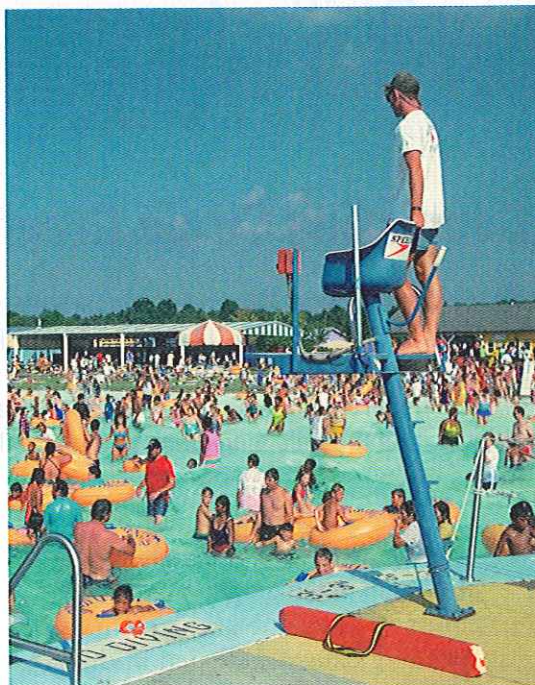


Businesspeople, politicians, and economists often disagree about how well the economy is performing, and what the goals of the fiscal policy should be. Also, different regions of the economy can experience very different conditions. California and Hawaii may have high unemployment while Nebraska and Massachusetts face rising prices and a labor shortage.

In addition, in order for the federal government's fiscal policy to be effective, it must also be coordinated with the monetary policies of the Federal Reserve. You'll read more about monetary policy in the next chapter.

Even when all of these obstacles are overcome, fiscal policy faces still another limitation. The short-term effects of fiscal policy can be different from the long-term effects. A tax cut or increased government spending will give a temporary boost to economic production and to employment. However, as the economy returns to full employment, high levels of government spending combined with market spending will lead to increased inflation as the economy overheats.

Similarly, an increase in taxes or a decrease in government spending may "cool" the economy and lead to a recession.



◀ New community-built pools, like this one in California, have an economic impact on the local level by providing jobs.

However, in the long run, reduced government spending will allow other types of spending to increase without risking higher inflation. If there is more private investment spending, this could lead to higher economic growth in the long run. In this way, slow growth or even recession in the short term can lead to prosperity and more jobs in the future.

## Section 1 Assessment

### Key Terms and Main Ideas

1. Explain **fiscal policy** and how it relates to the **federal budget**.
2. When does the federal government's **fiscal year** begin?
3. What role does the **Office of Management and Budget (OMB)** play in creating the federal budget?
4. What are two types of **expansionary policies**?

### Applying Economic Concepts

5. **Critical Thinking** Explain how a tax cut can lead to a higher GDP in the short run.
6. **Try This** Which fiscal policy strategy do you think policymakers would use in each of these scenarios? Explain your answers. (a) Inflation is rising, and real GDP is up by 4 percent. (b) GDP is down, and the unemployment rate has increased to 10 percent.

### Progress Monitoring Online

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7. **Using the Databank** The Consumer Confidence Index measures how optimistic American consumers are that the economy will do well. The graph on page 539 of the Databank measures consumer confidence in recent years. If you had been a policymaker in 2004, would you have recommended expansionary or contractionary fiscal policies? Explain your answer.

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# Skills for LIFE

## Comparing Circle Graphs

A circle graph enables you to compare parts with a whole. Together, the sections of the circle add up to 100 percent. The circle graphs below show how the federal government spent its money in 1995 and 2004. The different sizes of the circles reflect the increase in spending before taking inflation into account. Use the following steps to analyze the circle graphs below.

- 1. Identify the kind of information presented in the graph.** Match the colors in the circle graph to the spending categories listed in the key.  
(a) What percentage of the budget was spent on defense in 1995? (b) In 2004? (c) What program used the largest percentage of the federal budget in 2004?
- 2. Look for relationships among the data.**  
(a) Which programs increased their percentages of the budget between 1995 and 2004? (b) Which three programs used the largest percentages of the budget in 1995? (c) In 2004?

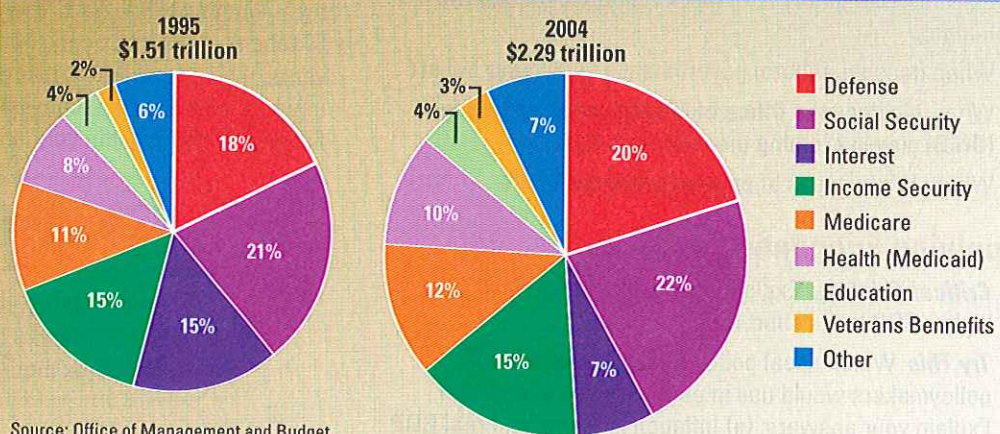
### 3. Use the graphs to draw conclusions.

Social Security benefits grew by 23 percent between 1995 and 2004. Based on this figure, some people might argue that government is providing more benefits to each recipient. What is another way to interpret this statistic?

### Additional Practice

Locate federal budget data for any year between 1941 and 1945. Draw a circle graph showing all the programs that accounted for at least 3 percent of the budget. How does this budget differ from the 2004 budget?

### Federal Spending, 1995 and 2004





## Section 2

# Fiscal Policy Options

### Preview

#### Objectives

After studying this section you will be able to:

1. Compare and contrast classical economics and Keynesian economics.
2. Explain the basic principles of supply-side economics.
3. Understand the role that fiscal policy has played in American history.

#### Section Focus

Fiscal policy is the use of government spending and taxes to work toward low unemployment, low inflation, and steady economic growth. Keynesian economic theories and supply-side economic theories suggest two very different ways for government to encourage growth.

#### Key Terms

classical economics  
productive capacity  
demand-side economics  
Keynesian economics  
multiplier effect  
automatic stabilizer  
supply-side economics  
Council of Economic Advisers (CEA)

For thousands of years, governments have collected taxes and spent money. Until the 1930s, however, most economists believed that a government should keep its role in the economy small. These economists belonged to a school of thought called classical economics.

### Classical Economics

Throughout this book, you have read about the workings of a free market economy. In a free market, people act in their own self-interest, causing prices to rise or fall so that supply and demand will always return to equilibrium. This idea that free markets regulate themselves is at the heart of a school of thought known as **classical economics**. Adam Smith, David Ricardo, and Thomas Malthus are all considered classical economists. For more than a century, classical economics dominated economic theory and government policies.

The Great Depression that began in 1929 challenged this thinking. Prices fell over several years, so demand should have increased enough to stimulate production as consumers took advantage of low prices. Instead, demand also fell as people lost their jobs and bank failures wiped out their savings. According to classical economics,

the market should have reached equilibrium, with full employment. But it didn't, and millions suffered from unemployment and other hardships. Many people were too poor to buy enough food for their families, while farmers lost their farms because corn was selling for seven cents a bushel, beef for two and a half cents a pound, and apples were five for a penny.

classical economics  
*the idea that free markets can regulate themselves*

▼ The economic hardships brought about by the Great Depression challenged the ideas of classical economics.





**productive capacity** the maximum output that an economy can produce without big increases in inflation

**demand-side economics** the idea that government spending and tax cuts help an economy by raising demand

**Keynesian economics** a form of demand-side economics that encourages government action to increase or decrease demand and output

The Great Depression highlighted a problem with classical economics: it did not address *how long* it would take for the market to return to equilibrium. Classical economists recognized it could take some time, and looked to the “long run” for equilibrium to reestablish itself. One economist, who was not satisfied with the idea of simply waiting for the economy to recover on its own, commented: “In the long run we are all dead.” That man was John Maynard Keynes (pronounced CANES).

## Keynesian Economics

British economist John Maynard Keynes developed a new theory of economics to explain the Depression. Keynes presented his ideas in 1936 in a book called *The General Theory of Employment, Interest, and Money*. He wanted to develop a comprehensive explanation of economic forces. Such an explanation should, he argued, tell economists and politicians how to get out of economic crises like the Great Depression. It should also tell them how to avoid crises in the first place. In sharp contrast to classical economics, Keynes wanted to give government a tool it could use now, in the short run.

## A Broader View

A key to Keynes’s ideas was a broader view of a country’s economy. Classical economists had always looked at the equilibrium of supply and demand for *individual products*. In contrast, Keynes focused instead on the economy *as a whole*.

Keynes looked at the productive capacity of the entire economy. **Productive capacity**, often called full-employment output, is the maximum output that an economy can sustain over a period of time without increasing inflation. Keynes attempted to answer the difficult question posed by the Great Depression: why does the actual production in an economy sometimes fall far short of its productive capacity?

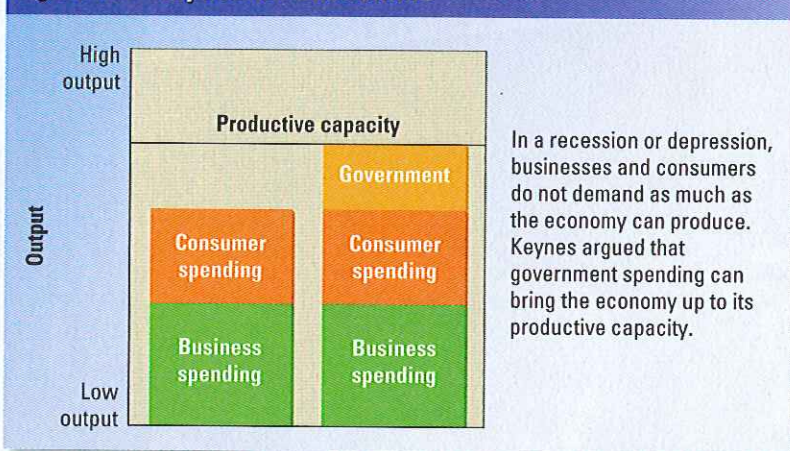
Keynes argued that the Great Depression was continuing because neither consumers nor businesses had an incentive to spend enough to cause an increase in production. After all, why would a company spend money to increase production when no one had enough money to buy its products? How could unemployed consumers spend money they didn’t have? The only way to end the Depression would be if someone, somewhere, started spending.

## A New Role for Government

Keynes thought that the spender should be the government. In the early 1930s, only the government still had the resources to spend enough to affect the whole economy. In effect, the government could make up for the drop in private spending by buying goods and services on its own. This, Keynes argued, would encourage production and increase employment. Then, as people went back to work, they would spend their wages on more goods and services, leading to even higher levels of production. This ever-expanding cycle would carry the economy out of the depression, and the government could then step back and reduce its spending. This is known as **demand-side economics** because it involves changing demand to help the economy.

These ideas form the basis of Keynesian economics. **Keynesian economics** is basically the idea that the economy is composed of

Figure 15.5 Keynesian Economics



Keynes added government spending to the classical model of demand.

**Government** What role did Keynes envision for government in the economy?



three sectors—individuals, business, and government—and that government actions can make up for changes in the other two. Keynesian economics proposes that by using fiscal policy the government can, and should, help the economy.

### Avoiding Recessions and Depressions

Keynes argued that fiscal policy can be used to fight the two fundamental macroeconomic problems. These two opposing problems are periods of recession/depression and periods of inflation.

The federal government, Keynes argued, should keep track of the total level of spending by consumers, businesses, and government in the economy. If total spending begins to fall far below the level required to keep the economy running at full capacity, the government should watch out for the possibility of an upcoming recession or depression.

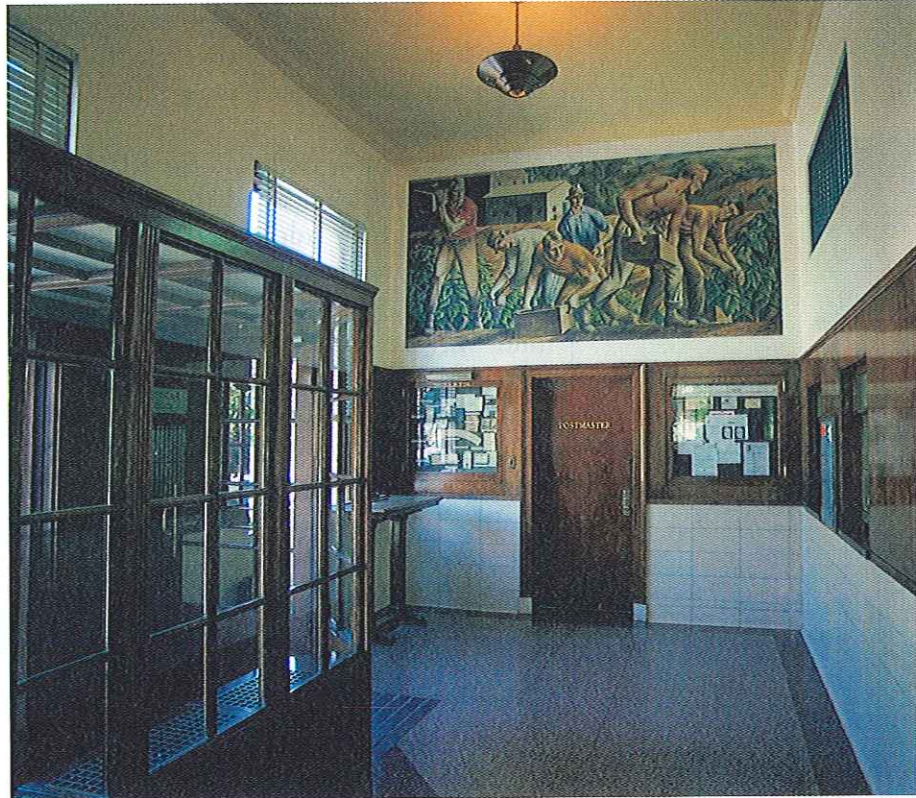
The government can respond by increasing its own spending until spending by the private sector returns to a higher level. Or, it can cut taxes, so that spending and investment by consumers and businesses increases. As you read in the previous section, raising government spending and cutting taxes are expansionary fiscal policies.

President Franklin D. Roosevelt carried out expansionary fiscal policies after his election in 1932. His New Deal put people to work building dams, planting forests, and constructing schools across the country, all paid for by the government.

Many people argue that instead of creating new jobs, such public works projects only shift employment from the private to the public sector. The taxes required to pay for them reduce demand in the private sector as much as they increase it in the public sector. In addition, work relief jobs are less productive than private sector jobs because their goal is employment, not efficient production.

### Controlling Inflation

Keynes also argued that the government could use a contractionary fiscal policy to prevent inflation or reduce its severity. The



government can reduce inflation either by increasing taxes or by reducing its own spending. Both of these actions decrease overall demand.

### The Multiplier Effect

Fiscal policy, although difficult to control, is an extremely powerful tool. The key to its power is the **multiplier effect**. The multiplier effect in fiscal policy is the idea that every one dollar change in fiscal policy—whether it be an increase in spending or a decrease in taxes—creates a *greater than* one dollar change in the national income. In other words, the effects of changes in fiscal policy are multiplied.

Suppose the federal government finds that business investment is dropping. It fears a recession. To prevent a recession, in the next budget, the government decides to spend an extra \$10 billion to stimulate the economy. How will this affect the economy?

With this government spending, demand, income, and GDP will increase by \$10 billion. After all, if the government buys an extra \$10 billion of goods and services, then

▲ During the Depression, the government's Works Progress Administration (WPA) hired artists to paint murals in public places like this California post office.

**multiplier effect** the idea that every one dollar of government spending creates more than one dollar in economic activity



an extra \$10 billion of goods and services have been produced. However, the GDP will increase by more than \$10 billion. Here's why:

The businesses that sold the \$10 billion in goods and services to the government have earned an additional \$10 billion. These businesses will spend their additional earnings on wages, raw materials, and investment, sending money to workers, other suppliers, and stockholders. What will the recipients do with this money? They will spend part of it, perhaps 80 percent, or \$8 billion. The businesses that benefit from this second round of spending will then pass it back to households, who will again spend 80 percent of it, or \$6.4 billion. The next round will add an additional \$5.1 billion to the economy, and so on. When all of these rounds of spending are added up, the initial government spending of \$10 billion leads to an increase of \$50 billion in GDP. The multiplier effect gives fiscal policy initiatives a much bigger kick than the initial amount spent.

## Automatic Stabilizers

Fiscal policy is used to achieve many economic goals. One of the most important things that fiscal policy can achieve is a more stable economy. A stable economy is one in which there are no rapid changes in the economic indicators you read about in Chapter 12. What's more, set up properly, fiscal policy can come close to stabilizing the economy *automatically*.

Figure 15.6 shows how real GDP in the United States changed each year from 1924 to 2002. Prior to World War II, there were much larger changes in GDP from year to year than after World War II. Although GDP still fluctuates, these fluctuations have not been as large as they were before World War II. Economic growth has been much more stable in the United States in the last 50 years.

Why did this happen? After the war, federal taxes and spending on transfer payments—two key tools of fiscal policy—increased sharply. Taxes and transfer payments, or transfers of cash from the government to consumers, stabilize economic growth. When national income is high, the government collects more in taxes and pays out less in transfer payments. Both of these actions take money away from consumers, and therefore reduce spending. This decrease in spending balances out the increase in spending that results from rising income in a healthy economy.

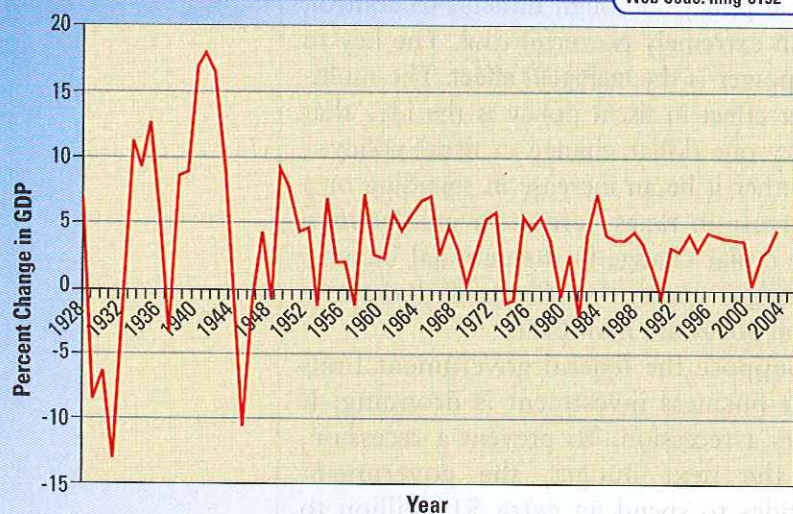
The opposite is also true. When income in the country is low, the government collects less in taxes and pays out more in transfer payments. Both actions increase the amount of money held by consumers, and thus increase spending. This increase in spending balances against the decrease in spending that results from falling income.

As the graph shows, taxes and transfer payments do not eliminate changes in the rate of growth of GDP, but they do make these changes smaller. They are known as stabilizers because they work to stabilize economic growth. It is important to note that policymakers do not have to make changes in taxes and transfer payments for them to have their stabilizing effect. Taxes

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Figure 15.6 Annual Change in GDP, 1928–2004



Sources: Bureau of Economic Analysis, *Historical Statistics of United States: Colonial Times to 1970*



The United States experienced strong economic swings before World War II.

**Government** How do the years after the war show the effect of automatic stabilizers on the economy?



and most transfer payments are tied to the GDP and to personal income, so they change automatically. Thus, taxes and transfer payments are known as **automatic stabilizers**.

Some stabilizers are no longer automatic. The former Aid to Families with Dependent Children, often called “welfare,” lost its entitlement status in 1996 and was renamed Temporary Assistance for Needy Families (TANF). Now, the federal government gives the states a set amount of money each year to spend as they wish. However, the stabilizer effect was not completely lost. When the economy boomed in the late 1990s, state spending on TANF fell.

## Supply-Side Economics

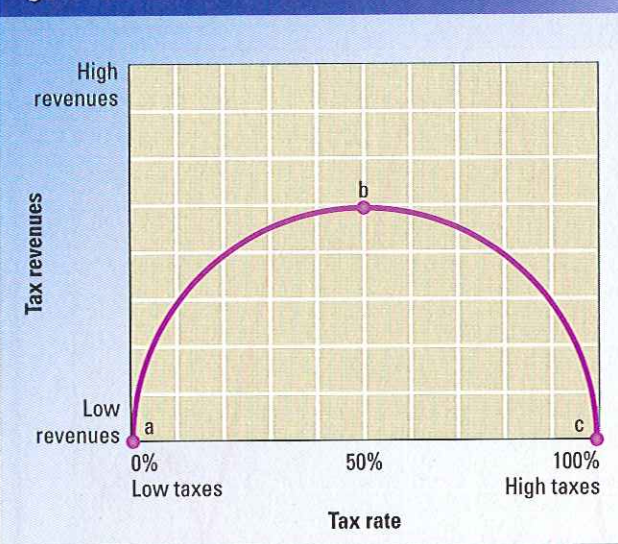
Another school of economic thought, supply-side economics, promotes a different direction for fiscal policy. **Supply-side economics** stresses the influence of taxation on the economy. Supply-siders believe that taxes have strong negative influences on economic output. While Keynesian economics uses government to change aggregate demand, supply-side economics tries to increase economic growth by increasing aggregate supply.

### The Laffer Curve

Supply-side economists often use the Laffer curve, named after the economist Arthur Laffer, to illustrate the effects of taxes. The Laffer curve shows the relationship between the tax rate set by the government and the total tax revenue that the government collects. The total revenue depends on both the tax rate and the health of the economy. The Laffer curve illustrates that high tax rates may not bring in much revenue if these high tax rates cause economic activity to decrease.

Figure 15.7 depicts the Laffer curve. Suppose the government imposes a tax on the wages of workers. If the tax rate is zero, as at point a on the graph, the government will collect no revenue, although the economy will prosper from the lack of taxes. As the government raises the tax

Figure 15.7 Laffer Curve



According to the Laffer curve, both a high and a low tax rate can produce the same revenues. **Incentives** Why do higher tax rates sometimes cause revenues to fall?

rate, it starts to collect some revenue. Follow this change in Figure 15.7 by tracing the curve from no taxes at point a to x percent taxation at point b.

To the left of point b on the curve, higher tax rates will discourage some people from working as many hours and prevent companies from investing and increasing production. The net effect of a higher tax rate and a slightly lower tax base is an increase in revenue.

To the right of point b, the decrease in workers’ effort is so large that the higher tax rate *decreases* total tax revenue. In other words, high rates of taxation will eventually discourage so many people from working that tax revenues will fall sharply. In the extreme case of a 100 percent tax rate, no one would want to work! In this case, shown at point c on the curve, the government would collect no revenue.

### Taxes and Output

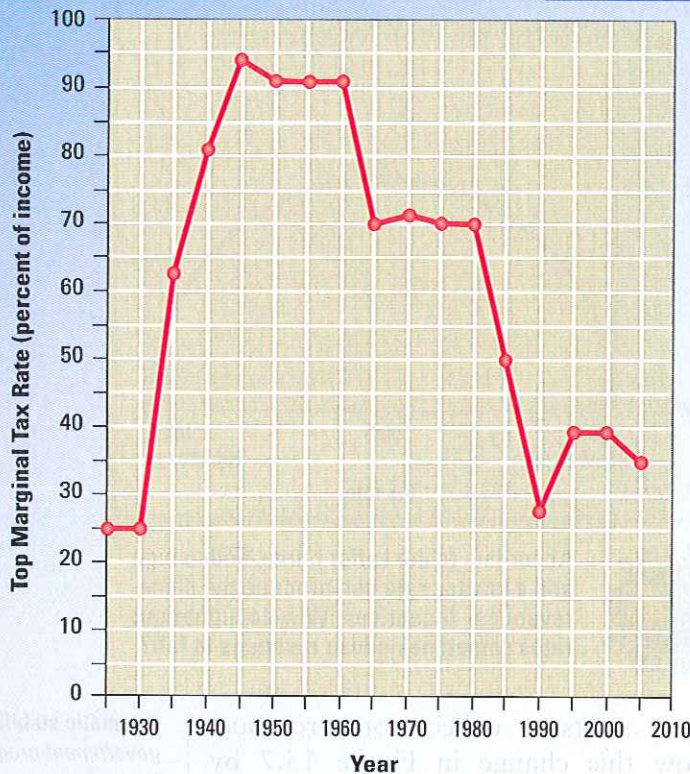
The heart of the supply-side argument is that a tax cut increases total employment so much that the government actually collects more in taxes at the new, lower tax rate. Suppose the initial tax on labor is \$3 an hour, and the typical worker works 30

*automatic stabilizer a government program that changes automatically depending on GDP and a person’s income*

*supply-side economics a school of economics that believes tax cuts can help an economy by raising supply*



Figure 15.8 Top Marginal Tax Rate, 1925–2005



Note: The top marginal tax rate is applied to individual income above a certain level, which varied from about \$30,000 in the late 1980s to \$5,000,000 from 1936 to 1941. The top tax rate of 35% in 2005 applied to income above approximately \$326,450, close to the historic average. Source: National Taxpayers Union



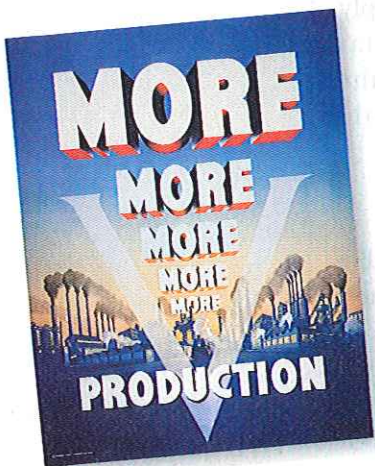
Tax rates varied widely throughout the last century.  
**Government** When were top marginal income tax rates at their highest?

**Council of Economic Advisers (CEA)** a group of three respected economists that advise the President on economic policy

hours per week, paying a total of \$90 in taxes each week. If the government cuts the tax on labor to \$2 an hour, and the worker responds by working 50 hours per week, the worker will pay \$100 in taxes a week, an increase of \$10. If all workers respond to the tax cut by working this much harder, the tax cut will increase total revenue.

Actual experience has proven that while a tax cut encourages some workers to work more hours, the end result is a relatively small increase in the number of hours

◀ Increasing production during World War II finally ended the high unemployment of the 1930s.



worked. In the example above, if the tax cut increased the hours worked from 30 hours to 35 hours, the worker would pay only \$70 in taxes (\$2 per hour times 35 hours), down from \$90 (\$3 per hour times 30 hours). In general, taxpayers do not react strongly enough to tax cuts to increase tax revenue.

## Fiscal Policy in American History

As you recall, Keynes presented his ideas at the same time that the world economy was still engulfed in the Great Depression. President Herbert Hoover, influenced by classical economics, thought that the economy was basically sound and would return to equilibrium on its own. His popular successor, President Franklin D. Roosevelt, was much more willing to increase government spending to help lift the economy out of depression. After the Democratic party won landslide victories in the 1932 and 1934 federal elections, Roosevelt started several programs to pump money into the economy.

### World War II

Keynes's theory was fully tested in the United States during World War II. As the country geared up for war, government spending increased dramatically. The government spent large sums of money to feed soldiers and equip them with everything from warplanes to rifles to medical supplies. This money was given to the private sector in exchange for goods. Just as Keynesian economics predicted, the additional demand for goods and services moved the country sharply out of the Great Depression and toward full productive capacity. After the war, Congress created the **Council of Economic Advisers (CEA)**, a group of three respected economists that could advise the President on economic policy.



## The Kennedy Administration

Between 1945 and 1960, the U.S. economy was healthy and growing, despite a few minor recessions. The last recession continued into the term of President John F. Kennedy, with unemployment at 6.7 percent.

Kennedy's chief financial policy advisor was Walter Heller, a Keynesian who thought that the economy was below its productive capacity. Heller believed that unemployment would fall to 4 percent if the economy were at full capacity. He convinced Kennedy that tax cuts would stimulate demand and bring the economy closer to full productive capacity.

As Figure 15.8 shows, tax rates were extremely high in the early 1960s. The highest individual income tax rate was about 90 percent, compared to about 40 percent today. The top business rate was 52 percent, compared with 35 percent in recent years. So Kennedy proposed tax cuts, both because he agreed with Heller, and because tax cuts are popular.

A modified version of Kennedy's tax cuts was enacted in 1964, after Kennedy's assassination. At the same time, the Vietnam War raised government spending. Over the next two years, the economy grew rapidly. Consumption and the GDP increased by more than 4 percent a year. While there is no way to prove that the tax cut caused this increase, the result is what Keynesian economics had predicted.

## Supply-Side Policies in the 1980s

Keynesian economics was used on many other occasions in the 1960s and 1970s to try to adjust the national economy. During the late 1970s, however, unemployment and inflation rates soared. Ronald Reagan became President in 1981 and instituted new policies based on supply-side economics. In 1981, Reagan proposed a tax cut that was put in place and reduced taxes by 25 percent over three years. Unlike Keynes, Reagan did not believe that government spending should be used to bring the economy out of a recession. After a brief but harsh recession in 1982, caused partly by the Fed's tightening of the money supply to reduce inflation, the economy recovered and flourished.

For many reasons, however, government spending continued to rise each year while Reagan was in office. During the Reagan and George H.W. Bush presidencies and the first years of Bill Clinton's first term, the federal government spent much more money than it took in. This gap caused increasing concern among economists and policymakers. In the next section, you'll read about these concerns in detail.

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*In the News* Read more about tax policy in "Deficit Dilemma," an article in The Wall Street Journal Classroom Edition.

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## Section 2 Assessment

### Key Terms and Main Ideas

1. What is the central idea of **classical economics**?
2. Why is full-employment output another way to describe **productive capacity**?
3. Compare and contrast **Keynesian economics** and **supply-side economics**.
4. Explain the **multiplier effect**.

### Applying Economic Concepts

5. **Critical Thinking** Why can low tax rates encourage investment and increase employment and wages?

6. **Try This** Keynes suggested that building pyramids was good for the Egyptian economy. Why would Keynes have suggested this, and can you think of an analogy in our society for the building of the pyramids? Explain your answer.

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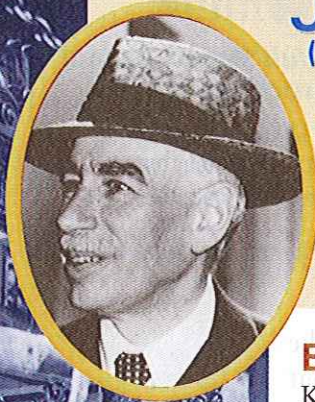


# Profile

## John Maynard Keynes

(1883–1946)

*A government official, teacher, and writer, John Maynard Keynes is one of a handful of economists who have substantially affected the course of history. His revolutionary theories on supply, demand, and unemployment led to the first use of government programs to help manage the nation's economy.*



### Early Career and Accomplishments

Keynes graduated from the University of Cambridge with a degree in mathematics in 1905. Rising through government service, he served as Britain's economic advisor at the Versailles Conference, where the peace treaty to end World War I was drafted.

Upset over the harsh treaty, Keynes resigned from government and returned to Cambridge to teach. In 1919, he wrote *The Economic Consequences of the Peace*, which correctly predicted that the treaty's economic penalties on Germany would lead to future problems in Europe.

### Keynes and the Great Depression

At the height of the Great Depression in 1936, Keynes completed his most famous book, *The General Theory of Employment, Interest and Money*. In analyzing the causes and effects of the Depression, he revolutionized thinking about government's role in a nation's economy.

Before Keynes, most economists believed that government should leave the economy alone as it passed through the low points of the business cycle. In this view, the laws of supply and demand—as they applied to

employment and wages, consumption and production, and prices—would lead to economic recovery.

### Keynesian Economics

Keynes claimed that in a depression, a natural recovery is impossible because the private sector cannot consume all it can produce. He argued that government should lower interest rates and taxes to encourage investment and increase spending on public projects to stimulate demand for goods and create jobs. Keynes recognized that raising spending while cutting taxes would lead to budget deficits, but he accepted that liability if it boosted employment and led to economic recovery.

Keynes's theories were controversial at the time, and remain so today, even though other economists have greatly revised and expanded upon his ideas. In the United States, politicians have followed his program of government intervention in good economic times as well as bad. This has led some critics to blame Keynesian economics for the huge federal budget deficits that the United States built up from the 1960s to the mid-1990s.

### CHECK FOR UNDERSTANDING

**1. Source Reading** Explain the following Keynes statement: "Formerly there was no expenditure out of the proceeds of borrowing that it was thought proper for the State to incur except for war. . . . Therefore, we have not infrequently had to wait for a war to terminate a major depression."

**2. Critical Thinking** How would government spending programs stimulate employment, consumption, and production in the private sector of the economy?

**3. Learn More** Find out what involvement Keynes had with international economic institutions after World War II, and explain how these institutions now reflect Keynes's economic theories.



## Section 3

# Budget Deficits and the National Debt

### Preview

#### Objectives

After studying this section you will be able to:

1. **Explain** the importance of balancing the budget.
2. **Analyze** how budget deficits add to the national debt.
3. **Summarize** the problems caused by the national debt.
4. **Identify** how a government can reduce budget deficits and the national debt.

#### Section Focus

Fiscal policy decisions can lead the federal government to spend more money than it brings in, causing budget deficits and a national debt. Economists, lawmakers, and citizens debate whether the benefits of government spending outweigh the costs of debt.

#### Key Terms

**balanced budget**  
**budget surplus**  
**budget deficit**  
**hyperinflation**  
**Treasury bill**  
**Treasury note**  
**Treasury bond**  
**national debt**  
**crowding-out effect**

As you have learned, the federal government uses fiscal policy—taxing and spending—to make changes in the economy. Fiscal policy is a powerful tool. It can be used to help stimulate demand, increase production, create jobs, increase GDP, avoid recessions, control inflation, and stabilize economic growth. As you'll read in this section, raising government spending can lead to yearly budget deficits that add up to an enormous debt. The costs of this debt must be measured against the benefits of higher government spending.

### Balancing the Budget

The basic tool of fiscal policy is the federal budget. It is made up of two fundamental parts: revenue (taxes) and expenditures (spending programs). When the federal government's revenues equal its expenditures in any particular year, the federal government has a **balanced budget**. There is the same amount of money going into and coming out of the Treasury.

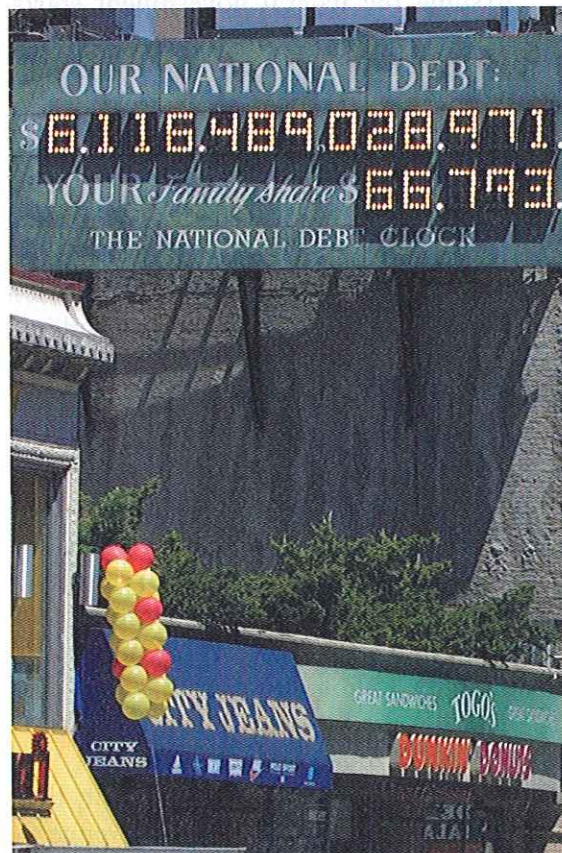
In reality, the federal budget is almost never balanced. Usually, it is either running a *surplus* or a *deficit*. A **budget surplus** occurs in any year when revenues exceed expenditures. In other words, there is more

money going into the Treasury than coming out of it. A **budget deficit** occurs in any year when expenditures exceed revenues. In other words, there is more money coming out of the Treasury than going into it.

**balanced budget** a budget in which revenues are equal to spending

**budget surplus** a situation in which the government takes in more than it spends

**budget deficit** a situation in which the government spends more than it takes in



◀ In the early 2000s, the national debt, the sum of all the money owed by the federal government, seemed to be spiraling out of control.



Figure 15.9 Budget Surpluses and Deficits, 1940–2004



Budget deficits swelled in the early 2000s due to recession, tax cuts, and defense spending. **Government** What was the dominant trend in deficits in the late 1990s?

Assume the federal government starts with a balanced budget. If the government decreases expenditures without changing anything else, it will run a budget surplus. Similarly, if it increases taxes—revenues—without changing anything else, it will run a surplus.

The same sort of analysis describes budget deficits. If the government increases expenditures without changing anything else, it will run a deficit. Similarly, if it decreases taxes without changing anything else, it will run a deficit. The deficit can grow or shrink because of forces beyond the government's control. During a recession, fewer people are working, and tax revenues fall as spending on antipoverty programs rises. Surpluses and deficits can be very large figures. The largest deficit was about \$400 billion, in 2004.

### Responding to Budget Deficits

When the government runs a deficit, that means it did not take in enough revenue to cover its expenses for the year. When this

happens, the government must find a way to pay for the extra expenditures. There are two basic actions the government can take to do so.

### Creating Money

The government could create new money to pay salaries for its workers and benefits for citizens. Traditionally, governments simply printed the bills they needed. Today, the government can create money electronically by depositing money in people's bank accounts. The effect is the same. This approach works for relatively small deficits, but can cause severe problems when there are large deficits. Why?

When the government creates more money, it increases the amount of money in circulation. This increases the demand for goods and services and can increase output. But once the economy reaches full employment, output cannot increase. The increase in money will mean that there are more dollars, but the same amount of goods and services. Prices in the economy rise so that a greater amount of money will be needed to purchase the same amount of goods and services. In other words, prices go up, and the result is inflation. As you read in Chapter 13, high levels of inflation are a serious economic problem.

Covering very large deficits by printing more money can cause very high inflation, called **hyperinflation**. This happened in Germany and Russia after World War I, Brazil and Argentina in the 1980s, and Ukraine in the 1990s. If the United States experienced hyperinflation, a shirt that cost \$30 in June might cost \$50 in July, \$80 in August, and \$400 in December!

### Borrowing Money

As an alternative to creating money to cover a budget deficit, the federal government can borrow money. The government commonly borrows money by selling bonds. As you read in Chapter 11, a bond is a type of loan: a promise to repay money in the future, with interest. Consumers and businesses buy bonds from the government. The government thus has the money

hyperinflation very high inflation



to cover its budget deficit. In return, the purchasers of the bonds earn interest on their investment over time.

United States Savings Bonds allow millions of Americans to lend small amounts of money to the federal government for a period as brief as three months or as long as 30 years. In return, they earn interest on the bonds. Other common forms of government borrowing are **Treasury bills**, **Treasury notes**, and **Treasury bonds**. Treasury bills are short-term bonds that must be repaid within a year or less. Treasury notes cover periods from two to ten years. Treasury bonds may be issued for as long as 30 years.

Federal borrowing lets the government undertake more projects than it could otherwise afford. These include projects such as building airports, highways, and national parks. Wise borrowing allows the government to create more public goods and services. Federal borrowing, however, also has serious disadvantages.

## The National Debt

One problem with the government borrowing money is that it creates a national debt. The **national debt** is the total amount of money the federal government owes to bondholders. Every year that there is a budget deficit, and the federal government borrows money to cover it, the national debt will grow.

The national debt is owed to investors who hold Treasury bonds, bills, and notes. If you have a federal savings bond, that bond represents money you have loaned the government.

Bonds issued by the United States federal government are considered to be one of the safest investments in the world. The national debt is owned by investors in the United States and around the world who have put their money and their trust in the federal government. In this way, a modest national debt is good because it offers a safe investment for individuals and businesses.

Because the United States federal government is widely viewed as stable and trust-



◀ By purchasing a U.S. Savings Bond, you are lending money to the federal government. A savings bond represents a small piece of the national debt.

worthy, the federal government can borrow money at a lower rate of interest than private citizens or corporations can. Lower interest rates benefit taxpayers by reducing the cost of government borrowing.

## The Difference Between Deficit and Debt

Many people are confused about the difference between the deficit and the debt. The deficit is the amount of money the government borrows for one budget, representing one fiscal year. The debt, on the other hand, is a sum of all the government borrowing up to that time, minus the borrowings that have been repaid. The debt is the total of all deficits and surpluses.

## Measuring the National Debt

In dollar terms, the size of the national debt is extremely large. In 2004, it exceeded \$7 trillion! Such large numbers can be confusing. A more useful way to evaluate the size of the debt is to look at it as a percentage of GDP.

Historically, debt as a percentage of GDP rises during wartime, when government spending increases faster than taxation, and falls during peacetime. This can be seen in the graph in Figure 15.10.

**Treasury bill** a government bond that is repaid within three months to a year

**Treasury note** a government bond that is repaid within two to ten years

**Treasury bond** a government bond that can be issued for as long as 30 years

**national debt** all the money the federal government owes to bondholders



Notice how the pattern changed in the 1980s, when the United States began to run a large debt, even though the country wasn't at war. The debt was in part a result of increases in spending during President Ronald Reagan's terms. As you read in the previous section, the Reagan administration also lowered tax rates to pull the economy out of a recession. The combined effect of higher spending and lower tax rates was several years of increased budget deficits. The government borrowed billions of dollars to cover these deficits, adding to the national debt. Meanwhile, an economic downturn in 1981–1982 reduced GDP. As a result, the ratio of debt to GDP grew very large for peacetime.

### Is the Debt a Problem?

The growth of the national debt during the Reagan administration led many to focus on the problems caused by a national debt. In general, two problems can arise from a national debt.

**crowding-out effect**  
the loss of funds for private investment due to government borrowing

### Problems of a National Debt

The first problem with a national debt is that it reduces the funds available for businesses to invest. This is because in order to sell its bonds, the government must offer a high interest rate to attract buyers. Individuals and businesses, attracted by the high interest rates and the security of investing in the government, use their savings or profits to buy government bonds.

However, every dollar spent on a government bond is one fewer dollar that can be invested in private business. Less money is available for companies to expand their factories, conduct research, and develop new products, and interest rates rise. Economists call this the **crowding-out effect**, because federal borrowing “crowds out” private borrowing by making it harder for private businesses to borrow. A national debt, then, can hurt investment and slow economic growth over the long run. On the other hand, more investment in the private sector can lead to lower prices, more jobs, and overall higher standards of living.

The second problem with a high national debt is that the government must pay interest to bondholders. The more the government borrows, the more interest it has to pay. Paying the interest on the debt is sometimes called *servicing the debt*. Over time, the interest payments have become very large. At the beginning of the twenty-first century, the federal government spent about \$250 billion a year servicing the debt. Moreover, there is an opportunity cost—dollars spent servicing the debt cannot be spent on something else, like defense, health care, or infrastructure.

### Other Views of a National Debt

Not everyone agrees that the national debt is such a large problem. Traditional Keynesian economists believe that fiscal policy is an important tool that can be used to help achieve full productive capacity. To these analysts, the benefits of a productive economy outweigh the costs of interest on national debt.

However, a budget deficit can only be an effective tool if it is temporary. If the

**Figure 15.10 National Debt as a Percentage of GDP**



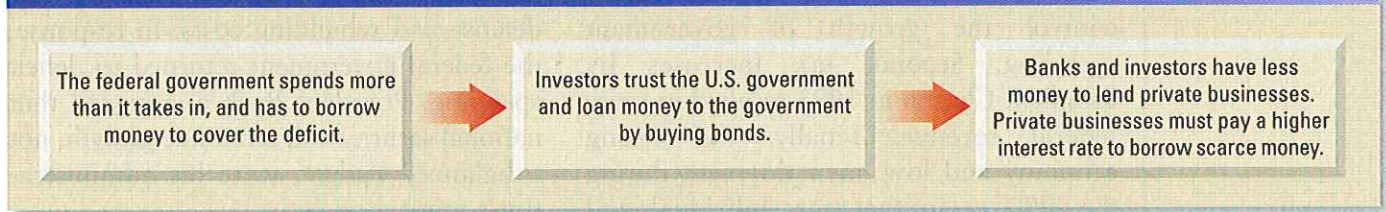
Sources: *Economic Report of the President, Historical Statistics of the United States, and Estimated Annual Variations in Gross Domestic Product, 1789–1909* by Thomas Senior Berry



War puts special strains on government spending, and governments borrow money to pay the high costs.  
**Government** What must governments do when the war ends?



**Figure 15.11 Effects of the Budget Deficit**



Government borrowing “crowds out” private investment by taking away some funds that could have been invested in private business.

**Incentives** Why do lenders put their money in government bonds?

government runs large budget deficits each year, the costs of the growing debt will eventually outweigh the benefits.

## Deficits, Surpluses, and the National Debt

During the 1980s and into the 1990s, annual budget deficits added substantially to the national debt. Several factors frustrated lawmakers in their attempts to control the deficits. As we have seen, much of the budget consists of entitlement spending that is politically difficult to change. Another large part of the budget consists of interest that must be paid to bondholders. Finally, specific budget cuts are often opposed by groups affected.

### Efforts to Reduce Deficits

Concerns about the budget deficits of the mid-1980s caused Congress to pass the Gramm-Rudman-Hollings Act, which created automatic across-the-board cuts in federal expenditures if the deficit exceeded a certain amount. This saved lawmakers from having to make difficult decisions about individual funding cuts. The Act exempted significant portions of the budget (such as interest payments and many entitlement programs) from the cuts.

When the Supreme Court found that significant portions of the Act were unconstitutional, Congress attempted to correct the flaws. In 1990, however, lawmakers realized that the deficit was going to be much larger than expected. Because

Congress had exempted so many programs from automatic cuts, funding for non-exempt programs would be dramatically reduced.

To resolve the crisis, President George H.W. Bush and congressional leaders negotiated a new budget system that replaced Gramm-Rudman-Hollings. The 1990 Budget Enforcement Act created a “pay-as-you-go” system that requires Congress to raise enough revenue to cover increases in direct spending, so that the budget deficit cannot grow larger.

In addition, at various times citizens and politicians have suggested amending the Constitution to require a balanced budget. In 1995, a balanced budget amendment passed in the House and failed by only a single vote in the Senate. Supporters argued that the amendment would force the federal government to be more disciplined about its spending. Opponents objected that a constitutional amendment would not be flexible enough to deal with rapid changes in the economy.

### End-of-Century Surpluses

The late 1990s brought a welcome reversal of fortune. For the first time in thirty years, the President and the Office of Management and Budget (OMB) were able to announce that the government was running a surplus. How did this happen? First, the new budget procedures begun

#### FAST FACT

*Unlike the federal government, most states already require a balanced budget. However, what works well at the state level may not work for the federal government. State requirements range from strict to very weak. At least ten states can carry over budget deficits into the next year or borrow money to cover the deficit. Also, many states have a “rainy day” fund, where surplus money is stored to pay for future deficits. Neither would be allowed under a federal balanced budget amendment.*



under President Bush and extended under President Clinton did help Congress control the growth of government spending. Second, tax increases by President Clinton in 1993 resulted in more federal revenue. Finally, the strong economy and low unemployment during the 1990s meant that more individuals and corporations were earning more money—and thus paying more in taxes.

### Return to Deficits

The changeover from deficits to surplus brought with it a different set of political concerns. Investors who had come to rely heavily upon Treasury bonds as the basic “safe” investment worried that the federal government would remove all bonds from the market as it repaid its debt. As a 2000 presidential candidate, George W. Bush pledged to use the surplus to guarantee Social Security into the new century, provide additional medical benefits to seniors, and reduce income taxes.

However, the surplus was short-lived. The end of the stock market boom, an economic slowdown, and a new federal income tax cut reduced federal revenues. The terrorist attacks of September 11, 2001

dealt a double blow to the federal budget by disrupting the economy and imposing new defense and rebuilding costs. In response, the federal government returned to deficit spending. President Bush announced that national security and economic growth, not a balanced budget, were his administration’s primary goals.

In 2003, President Bush signed a second tax bill that further lowered taxes on regular income, dividends, and capital gains. The president promised the bill would energize the American economy and create jobs for unemployed workers. However, the 2004 federal budget included an approximately \$400 billion deficit with even more borrowing projected for future years.

In the short term, deficit spending may help create jobs and encourage economic growth. The long-term outlook for the federal budget is uncertain. Federal spending on Social Security and Medicare is projected to rise sharply in the next thirty years as large numbers of Baby Boomers leave the job market and retire. With new retirees outnumbering new workers, balancing the budget is expected to become ever more difficult.

## Section 3 Assessment

### Progress Monitoring Online

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### Key Terms and Main Ideas

1. What is a **balanced budget**?
2. How might a **budget deficit** be related to the **national debt**?
3. How does a **Treasury note** differ from a **Treasury bill**?

### Applying Economic Concepts

4. **Try This** You’re a lawmaker, and you get to decide what to do with this year’s budget surplus. Write a brief proposal explaining whether the surplus should be used for new spending, tax cuts, or to buy back bonds and cut interest payments. Include explanations for your proposals.
5. **Math Practice** Use the data in Figure 15.9 to determine the approximate size of the largest budget deficits in each of the following decades: (a) 1940s (b) 1970s (c) 1990s (d) 2000s.

6. **Using the Databank** Study the Federal Debt and Federal Deficit graphs on page 542 of the Databank. Summarize the trends shown in the data for the period from 1980 to 1990 and the period from 1990 to 2004.
7. **Critical Thinking** Create a flowchart showing how the creation of money by the government to pay for a budget deficit can lead to inflation.



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## Will Social Security Survive?

Until the 1930s, paying for retirement was almost entirely up to the individual. During the 1930s, however, the Great Depression left nearly half of all senior citizens unable to support themselves. To help them, the federal government created the Social Security program in 1935.

**Social Security System** Here's how the program works. Workers pay a Social Security tax, which is matched by their employers. After they retire, workers receive Social Security payments for the rest of their lives.

Social Security is a "pay as you go" system. Most of the Social Security taxes paid by today's workers are used to pay benefits to today's retirees. Any surplus is put into trust funds to earn interest. In 2001, there were 3.4 workers paying taxes for every retiree receiving benefits.

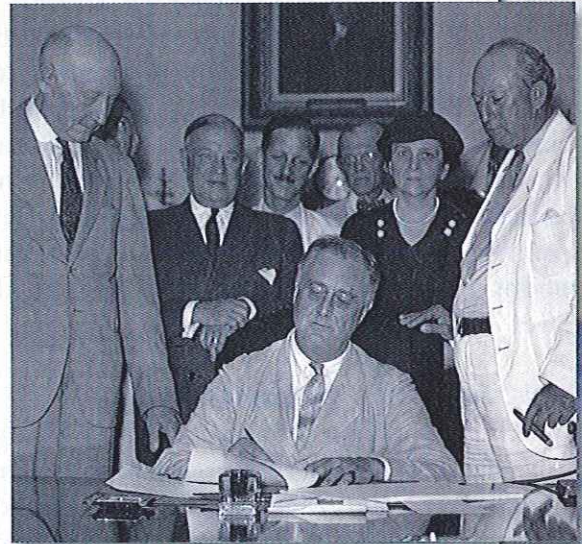
**Trouble Ahead** Many economists are concerned about what will happen to Social Security in the future. If the system continues unchanged, experts warn that Social Security payments will exceed revenues in the year 2018. By 2042, the Social Security trust fund will be exhausted.

Why will this system be broke by the 2040s? The reason is the "baby boom," the period between 1945 and 1964 when there was a large increase in the number of babies born. As baby boomers retire, there will only be two workers for every retiree receiving benefits. Also, life expectancies are rising, which means that Americans will collect benefits longer.

**Possible Solutions** In the early 2000s, the President and Congress began to focus their attention on saving Social Security. But how should it be done? Some people believe that the age of retirement should be further increased. Others believe that the government should invest Social Security reserves in the stock market. However, all agree that depriving Americans of Social Security would be disastrous.

### Applying Economic Ideas

1. Do you think that paying Social Security taxes should be mandatory? Explain.
2. How do baby boomers present a challenge to the future of Social Security?



▲ President Franklin D. Roosevelt signed the Social Security Act into law in 1935.

### Projected Population, 2000–2050 (in thousands)

Year	Americans aged 25-64	Americans aged 65 and over
2000	142,883	34,709
2010	155,660	39,408
2020	161,999	53,220
2030	162,252	69,379
2040	171,360	75,233
2050	182,621	78,859

Source: U.S. Census Bureau



# Chapter 15 Assessment

## Chapter Summary

A summary of major ideas in Chapter 15 appears below. See also the **Guide to the Essentials of Economics**, which provides additional review and test practice of key concepts in Chapter 15.

### Section 1 Understanding Fiscal Policy (pp. 387–393)

The government can try to stabilize the economy through **fiscal policy**, or changing how much it taxes and spends. The tool it uses is the **federal budget**, which lists how much money the government expects to take in and how it will spend that money. **Expansionary policies** include lowering taxes and spending more to increase output. **Contractionary policies** include raising taxes and cutting spending to lower economic growth.

### Section 2 Fiscal Policy Options (pp. 395–401)

The Great Depression of the 1930s seemed to disprove the idea that free markets always return to equilibrium. John Maynard Keynes argued that government spending can raise demand and help an economy recover. **Keynesian economics** drove American policy from the 1930s to the 1970s. In the 1980s, Ronald Reagan tried to increase output by putting **supply-side economics** into practice. He cut taxes to encourage people and businesses to work harder.

### Section 3 Budget Deficits and the National Debt (pp. 403–408)

When the government spends more than it takes in, it runs a **budget deficit** and must create new money or borrow money to cover the difference. The government borrows money by issuing bonds. The **national debt** is all of the money the government owes to bondholders. The United States debt grew tremendously during the 1980s and early 1990s, causing problems for private businesses and leading to a public backlash against deficit spending. After a brief period of budget surpluses in the late 1990s, recession, tax cuts, and war caused massive new deficits in the early 2000s.

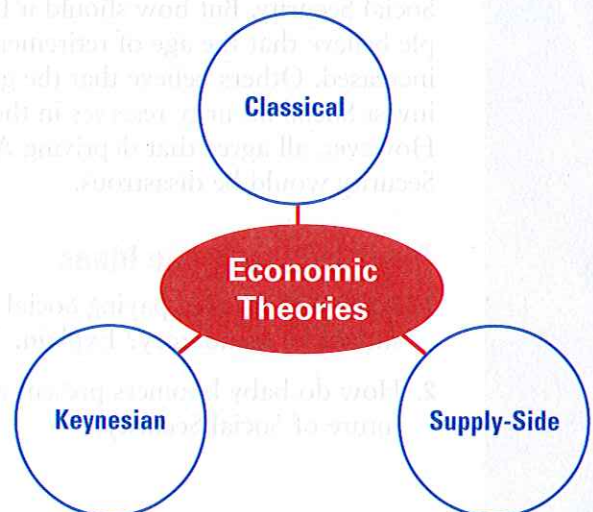
## Key Terms

Choose the italicized word in parentheses that best completes each sentence.

1. (*Contractionary policies*/*Expansionary policies*) are used to increase overall demand and GDP.
2. The theory that states that the economy regulates itself best is known as (*classical economics*/*Keynesian economics*).
3. A (*Treasury note*/*Treasury bond*) is a long-term bond, issued sometimes for as long as 30 years.
4. (*Budget surpluses*/*Budget deficits*) occur when the government has money left over after paying all of its expenses for the year.
5. The maximum sustainable economic output of a society is known as its (*productive capacity*/*automatic stabilizer*).
6. A government's (*fiscal year*/*fiscal policy*) is the use of taxing and spending to affect the overall economy.
7. The (*national debt*/*balanced budget*) is the total amount of money the federal government owes.

## Using Graphic Organizers

8. Copy the web map below on a separate sheet of paper. Complete the diagram by filling in the primary characteristics of classical, Keynesian, and supply-side economics.





## Reviewing Main Ideas

- Describe three problems that limit fiscal policy.
- Describe the multiplier effect in your own words.
- Summarize the ways in which fiscal policy has affected our country since World War II.
- How is the national debt measured?
- What is the difference between the national debt and the budget deficit?
- What options does the government have to respond to an annual budget deficit?

## Critical Thinking

- Making Comparisons** What fundamental differences exist between classical economics and Keynesian economics? What events led to the popularization of Keynesian economics?
- Drawing Inferences** Make a list of ways in which fiscal policy affects your daily life. Which aspects of fiscal policy have the greatest effect on you?
- Recognizing Cause and Effect** How do automatic stabilizers affect our economy? What would our economy be like without them?
- Analyzing Information** Use your own words to describe the crowding-out effect. Explain why it can influence economic growth over the long run.
- Drawing Conclusions** What would be the benefits and drawbacks of a balanced budget amendment? Would you support such an amendment?

## Problem-Solving Activity

- Recommend your own proposal for debt reduction. Consider the examples in Section 3 when creating your proposal.

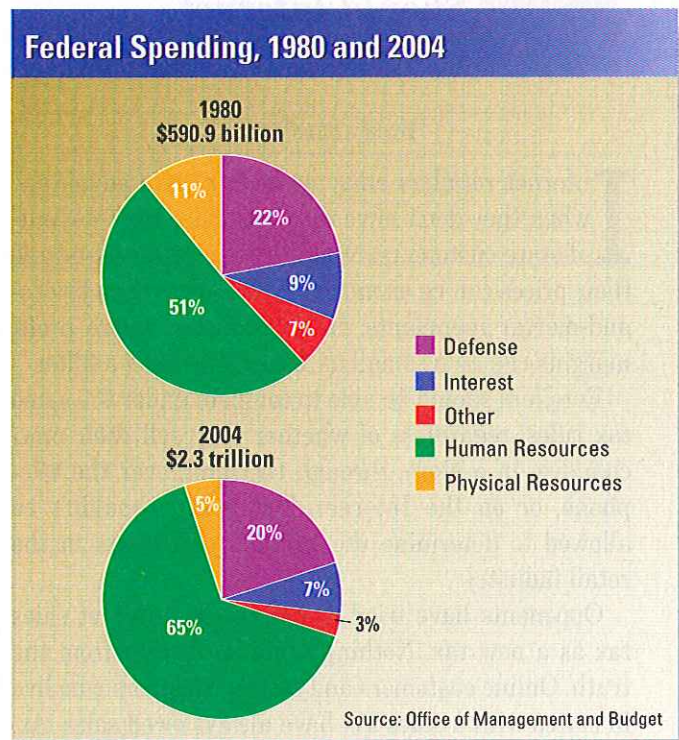
## Economics Journal

**Essay Writing** Look at your list of items paid for by the government. Which ones do you think are essential services of government, and which do you think represent unnecessary spending, if any? In what ways has government funding helped your local economy?

## Skills for Life

**Comparing Circle Graphs** Review the steps shown on page 394; then answer the following questions using the circle graphs below.

- How did the percentage of federal spending on interest payments change between 1980 and 2004?
- Which category of federal spending has seen the largest percentage decrease since 1980?
- How have human resource outlays changed as a percentage of the federal budget?



## Progress Monitoring Online

For: Chapter 15 Self-Test Visit: [PHSchool.com](http://PHSchool.com)  
Web Code: mna-6151

As a final review, take the Economics Chapter 15 Self-Test and receive immediate feedback on your answers. The test consists of 20 multiple-choice questions designed to test your understanding of the chapter content.



# THE WALL STREET JOURNAL.

## CLASSROOM EDITION

### DEBATING CURRENT ISSUES: *Internet Taxation*

In 1998, Congress adopted the Internet Tax Freedom Act, which placed a three-year moratorium on taxing many online activities, including retail sales. The moratorium has been renewed and extended.

In this debate from *The Wall Street Journal Classroom Edition*, Maureen Riehl, vice president and industry-relations counsel for the National Retail Federation, and Grover Norquist, president of

◆ Americans for Tax Reform, argue the benefits and drawbacks of taxing e-commerce.

### **YES** *Should Internet Commerce Be Taxed?*

BY MAUREEN RIEHL

Internet retailers enjoy an unfair price advantage when they don't have to collect sales tax from out-of-state customers. Not collecting sales tax means their prices can be as much as 10% lower than bricks-and-mortar merchants. In an industry where profit margins can be as small as 1% to 2%, that's a killer.

Retailers should be able to compete under the same tax rules, regardless of whether they sell their merchandise in a store, through the mail, over the telephone, or on the Internet. Tax policy shouldn't be allowed to determine the winners and losers in the retail industry.

Opponents have tried to portray an Internet sales tax as a new tax. Nothing could be further from the truth. Online customers and catalog shoppers who live in states with a sales tax have always owed sales tax. They are legally obligated to report purchases where sales tax wasn't collected and pay "use" tax on their state income-tax forms. Unfortunately, few people pay and enforcement has been lax.

Opponents also claim taxation would discourage new technology investment and employment growth. Not true. This is not a tax on an Internet company, it is a tax on the consumer/customer making the purchase.

When sales tax isn't collected, everyone suffers. Bricks-and-mortar retailers experience unfair competition. But the police departments, fire departments,

and local schools that depend on sales-tax revenue for their funding suffer far more.

This isn't an "us vs. them" issue—the National Retail Federation includes both bricks-and-mortar and Internet members. And modern retailers are increasingly multichannel retailers who sell their merchandise through whatever medium the customer demands.

Collecting sales tax won't kill the Internet—a Jupiter Research study found that the convenience of online shopping is far more important to consumers than pricing. Instead, it will put Internet retailing on the same footing with bricks-and-mortar retailing, where everyone can compete fairly and freely.



A worker at an Internet retailer gathers books in a warehouse to meet a customer's order. Should sales over the Internet be taxed like local purchases?



# **NO** *Should Internet Commerce Be Taxed?*

BY GROVER NORQUIST

The Internet has become increasingly more important to the U.S. economy as the number of companies and jobs created by its existence continue to increase. Yet, some politicians want to tax Internet purchases across state lines.

Such taxation would discourage new technology investment and employment growth. A study by the National Bureau of Economic Research found that Internet taxation will reduce the number of people purchasing goods on the Internet by 25%. And fewer purchases means fewer jobs and more corporate bankruptcies.

Additionally, online taxes impede new technological growth by limiting people's access to and use of the Internet. Small businesses that sell goods over the Internet will be subject to more than 7,500 different tax rates on transactions with consumers. As such, Internet taxation will not simplify the tax code. It will add new complexities and will limit the goods available to consumers online because fewer retailers will opt to sell their goods on the Internet.

Proponents of the tax also argue that Internet retailers enjoy a price advantage over regular retailers. That is not the case as the shipping costs for an online transaction can cancel out any price advantage.

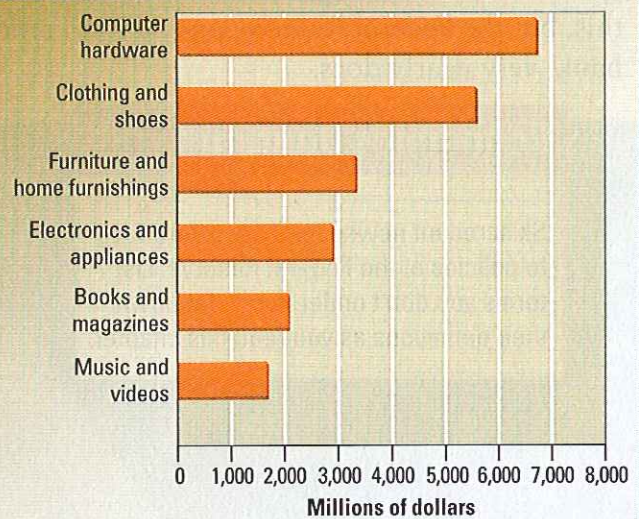
Today's economy demands a new business model, one that employs both an Internet and physical presence. This has allowed Main Street businesses to enter a worldwide market, while giving consumers a greater choice of products. Successful companies have readjust-

ed to the changing times, and the retailers pushing for Internet taxation are the companies who fail to realize the new realities of the marketplace.

Finally, allowing states to tax out-of-state residents will force states to forfeit sovereignty over their individual tax laws and reverse 300 years of American history by leading to "taxation without representation." Politicians will have an unchecked ability to raise taxes on consumers in other states who are not permitted to vote for or against them, thus damaging the American political system.

## E-commerce, 2003

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Source: U.S. Census Bureau

**Billions of dollars worth of goods are sold over the Internet each year.**

## DEBATING THE ISSUE

1. Why does Maureen Riehl state that Internet retailers have an "unfair price advantage" when they don't collect sales tax from out-of-state customers?
2. Why does Grover Norquist disagree with Riehl's statement?
3. **Distinguishing Fact from Opinion** Agree or disagree with the following statement: Taxing the Internet would discourage new technology investment and employment growth.
4. **Synthesizing Information** Why do you think the value of computer hardware purchased online was so much greater than the value of books or clothing purchased online?

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