16 Deficits and Debt

You may have seen the national debt clock in New York City that continually shows how much our debt is increasing by the second. The total amount of the debt, which exceeds $16 trillion, seems very large. But what does it mean? To whom do we owe all this money? Is it a serious problem? Should we care about government debt when the economy has yet to recover from the financial crisis? Is it possible for the United States to stop borrowing? This chapter goes into detail in answering these questions and even considers some possible ways to reverse the trend. But first we provide some historical context to the notion of a national debt.

1. Deficits and the National Debt

Perhaps because the two terms sound so much alike, many people confuse the government's deficit with the *government debt.* But the two "D words" are very different. The deficit totaled $1.1 trillion in fiscal 2012, while total federal debt exceeded $16 trillion at the end of fiscal 2012. The reason the second number is much larger than the first is that the debt represents deficits accumulated over many years. In economists' terms, we can say that the government deficit is a *flow variable* while its debt is a *stock variable.* (See Chapter 3 for this distinction.)

The government's debt rises when the government runs a deficit and falls when it runs a surplus.* Figure 16.1 shows some recent data on the government's debt, measured as a percentage of GDP. The two lines on the graph indicate the total government debt and the part of government debt held by the public (as opposed to debt held by government agencies). After hitting a high of more than 100 percent of GDP during World War II, the debt generally declined as a percentage of GDP until 1980. It rose somewhat before 1996, then fell until 2000. Since 2000 the debt has risen, with a particularly sharp increase in the years following the 2007–9 recession.

What is the impact on the economy of government debt? One commonly expressed view of the government's debt is that it represents a burden on future generations of citizens. There is some truth to this assertion, but it is also somewhat misleading. It implicitly compares the government's debt to the debt of a private citizen. Certainly, if you personally accumulated a huge debt, it would not be a good thing for your financial future. But government debt is different in some important ways.

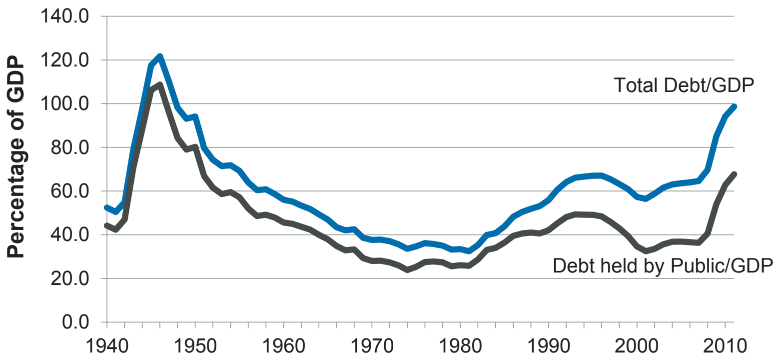
First, about half of government debt is, directly or indirectly, owed to U.S. citizens. When people own Treasury bills (T-bills), Treasury notes, or Treasury bonds, they own government

*Although the arithmetic requires that the debt rise when the government is in deficit—because the only way to finance a deficit is to borrow money—in the case of a surplus it is possible for the government to hold some funds in reserve, for example, to finance future expenditures. It is usually the case, however, that governments will use some or all of a surplus to reduce existing debt.

IOUs. From their point of view, the government debt is an asset, a form of wealth. If your grandmother gives you a U.S. Savings Bond, she is giving you a benefit, not a burden. These assets are some of the safest ones that you can own.

Second, government debt does not have to be paid off. Old debt can be "rolled over," that is, replaced by new debt. Provided that the size of the debt does not grow too quickly, the government's credit is good—there will always be people interested in buying and holding government bonds. Most economists use the rule of thumb that as long as the rate of increase in government's debt is not significantly greater than that of GDP for several years in a row, it does not represent a severe problem for the economy. As Figure 16.1 shows, following the 2007–9 recession, persistently large deficits have caused the debt to rise much more rapidly than GDP in recent years. Nonetheless, the debt is still at a lower level relative to GDP than it was immediately after World War II, which was followed by nearly two decades of relative economic prosperity.

Figure 16.1 **U.S. National Debt as a Percentage of GDP**



Total U.S. national debt, including debt held by the Federal Reserve Bank, has risen to about 100 percent of GDP, while debt held by the public is about 70 percent of GDP.

Source: Whitehouse.gov

Third, the U.S. government pays interest in U.S. dollars. A country such as Argentina that owes money to other countries and must pay interest in a foreign currency (the U.S. dollar) can get into big trouble and go bankrupt. But it is much easier to manage a debt that is denominated in your own currency. Even if some of the debt is owed to foreigners, the United States does not have to obtain foreign currency to pay it. And so long as foreigners are willing to continue holding U.S. government bonds, it will not be necessary to pay it at all—instead, the debt can be rolled over as new bonds replace old ones.

But this should not encourage us to believe that government debt is never a concern. Rising debt creates several significant problems. First, interest must be paid on the debt. This means that a larger share of future budgets must be devoted to paying interest, leaving less for other needs. It is also true that the largest holders of government bonds tend to be wealthier people, so most of the interest paid by the government goes to better-off individuals. If this payment is not counteracted by changes in the tax system, it encourages growing income inequality. It also creates a problem of generational equity—future taxpayers will have to pay more interest because of government borrowing today. It is a burden on future generations in that debt finance detracts from other important functions that the government could be performing.

A second problem is that in recent years an increasing proportion of the debt has been borrowed from governments, corporations, and individuals in foreign countries (Figure 16.2). The interest payments on this portion of the debt must be made to those outside the country. That means that the United States must earn enough income from exports and other sources to pay not only for imports but also for interest payments to the rest of the world. Alternatively, the country could borrow more, but it is best to avoid this solution, since it would just make the overall foreign debt problem larger in the long run.

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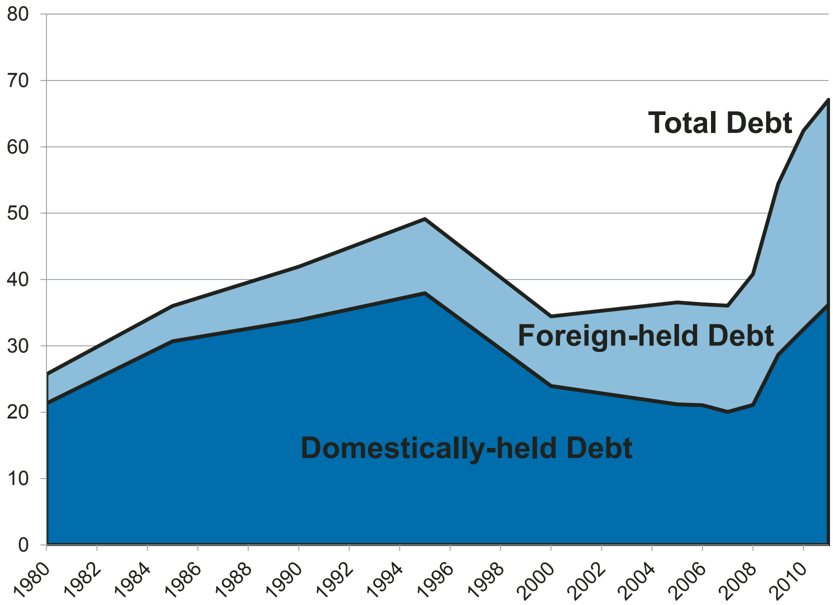
Figure 16.2 **Domestic and Foreign Holdings of U.S. Debt**



The proportion of the U.S. national debt held by foreign individuals, corporations, and governments has risen in recent years.

Source: White House Office of Management and Budget, Economic and Budget Analyses, Table 6–7

Large foreign holdings of debt also pose another problem—what if those foreign debt holders decided to sell the U.S. bonds that they own? In that case, the government might have trouble finding enough people who are willing to hold government bonds (that is, lend money to the government). This could cause interest rates to rise sharply, which in turn would push the government budget further into deficit.

The question "Is government debt worth it?" can be answered only if we consider what that debt is used to finance. In this respect, an analogy to personal or business debt is appropriate. Most people—including economists—do not reject consumer and corporate debt. Rather, our judgment about debt depends on the benefits received.

For example, if debt is accumulated for gambling, it is a bad idea. If the bet does not pay off, then it is very difficult to pay the interest on the debt (not to mention the principal). But if the government borrows to pay for intelligently planned investment, it can be very beneficial. If the investment leads to economic growth, the government's ability to collect tax revenue is enhanced. This kind of borrowing can pay for itself, as long as the investment is not for wasteful "pork barrel" spending, poorly planned or unnecessary projects, and so on. Recalling our earlier discussion of the opportunity cost of government borrowing at full employment, the interest-generating capacity of the proposed project is certainly an important—though not the only—consideration.

Even if the debt finances current spending, it can be justifiable if it is seen as necessary to maintain or protect valuable aspects of life. Most people would not be opposed to borrowing to pay for cleanup after a natural disaster (e.g., in January 2013 Congress appropriated $60 billion in relief funds for Hurricane Sandy relief) or to contain a deadly pandemic. How about for military spending? Opinions differ about whether particular defense expenditures are necessary to maintain or protect valuable aspects of life. But wasteful spending, or spending on unwise defense policies, constitutes a drag on more productive economic activity (as suggested by the production-possibilities curve "guns-versus-butter" analysis introduced in Chapter 2).

The management of debt involves standard principles of wise stewardship of finances. When we apply them to government deficits and debt, we need to weigh the economic benefits of different spending and tax policies.

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Discussion Questions

1. What is the difference between the deficit and the national debt? How are they related?
2. "The national debt is a huge burden on our economy." How would you evaluate this statement?

2. The U.S. National Debt: A Historical Perspective

2.1 Two Centuries of Deficits and Debt

Deficit financing has been part of U.S. history from the very beginning. The Continental Congress put the country into debt in order to continue its fight for independence from Great Britain. As is done today, Congress issued bonds in order to finance the country's war effort. There was considerable controversy after the war regarding the role of the new federal government in absorbing the debts incurred by individual states. Alexander Hamilton, secretary of the Treasury under George Washington, was prominent among those who believed that, by introducing greater flexibility into the money supply, a national debt had the potential to strengthen the economy and the country. Despite opposition from other political leaders—John Adams and Thomas Jefferson among them—Hamilton helped set in motion a process through which the federal government regularly relied on debt to finance its operations.

After the United States became independent from Great Britain, its federal government generally repaid its debts fairly quickly. The War of 1812, however, proved very costly, and the national debt approached 15 percent of national income by 1816. In the nineteenth and early twentieth centuries, it was mostly wars that depleted the government's finances. The Civil War was especially costly—the debt approached 40 percent of total national income at its peak—but the Mexican-American and Spanish-American wars also added to the national debt. By 1900 it had fallen below 5 percent of total GDP, but the budget deficits during World War I again pushed the national debt beyond 40 percent of GDP.

In terms of its effect on government finances, the Great Depression of the 1930s was truly a watershed. The economic crisis ultimately led to President Franklin D. Roosevelt's New Deal social programs. From that point on, federal spending on social programs—in addition to continued military spending—has figured prominently in the total debt figures. Consequently, since 1931 the U.S. federal budget has been in surplus only seven years, compared with the years from independence until then, during which surpluses were seen twice as frequently as deficits. National debt in relation to income rose significantly during the 1930s, but it was World War II that had an even greater impact. Because consumer goods were rationed, savings accumulated, and people used them to purchase U.S. war bonds (a form of debt), which helped finance U.S. participation in World War II. After the war, the national debt totaled an unprecedented 122 percent of GDP (Figure 16.1).

2.2 "Supply-Side" Economics

After World War II, as noted, the debt generally declined as a percentage of GDP until 1980. The national debt was just over $900 billion in 1981, but rose by nearly $2 trillion during the next eight years. In other words, over those eight years the country incurred twice as much debt as it had in its first 200 years! How did this happen?

Ronald Reagan's 1980 presidential campaign leaned heavily on the principles of "supply-side" economics, which promised that offering more benefits and incentives to the individuals and groups that held the most wealth and productive capital would stimulate rapid investment growth and job creation. According to this principle, tax cuts would pay for themselves through greater revenues from an expanded economy.

The major policy experiment with supply-side economics was the Economic Recovery Act (ERA, 1981), which cut income and corporate tax rates, substantially reducing government

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revenues. At the same time, military spending increased in the 1980s. Consequently, the annual budget deficit, which had been 2.7 percent of GDP in 1980, grew to an annual average of 4 percent during the Reagan presidency. True, a portion of the increase was due to cyclical factors, specifically an unusually deep recession in 1981–82. Most of it, however, resulted from the failure of supply-side economics to produce the revenue growth that was needed to make up for the tax cut.

2.3 1989 to the Present

In absolute terms, the national debt continued to grow after Reagan left office, despite the fact that by then public awareness of the government's fiscal problems had grown. In an attempt to address the persistent deficits, President George H.W. Bush raised tax rates slightly and signed a bill in 1990 requiring that all spending increases be matched by either decreases in spending in other areas or tax increases, in a system known as PAYGO ("pay as you go"). Despite the introduction of that system, another recession (1990–91) and the first Iraq war kept deficits in the range of 4 percent of GDP annually. It also did not help matters that sizable sums had to be used to bail out many savings and loan banks that collapsed due to losses from risky and ill-conceived real estate investments (a precursor of the real estate bubble of the twenty-first century). In 1992 the national debt was $4 trillion.

Bush's PAYGO policy was continued under the administration of Bill Clinton. Congress again raised income tax rates, and the end of the cold war allowed the federal government to lower military expenditures (relative to GDP, although not in absolute terms), a side benefit often referred to as a "peace dividend." At the same time, the economy emerged from recession and began a period of sustained growth. The resulting movement from the trough to the peak of the business cycle from 1992 to 2000 generated surpluses in the overall federal budget from 1998 to 2001, a feat that had not been achieved since 1969. This period of budget surpluses, however, was short-lived.

During the presidency of George W. Bush (2001–9), a combination of recession, tax rate cuts, and increased military expenditures pushed the budget back into deficit and caused the debt to increase further. By 2008 the debt totaled almost 70 percent of GDP.

The first Obama administration (2008–12) was spent dealing with the worst recession since the 1930s. During this period, annual deficits averaged 8.7 percent of GDP, and the national debt rose to just over 100 percent of GDP, as the government deployed a $787 billion fiscal policy package to keep the 2007–9 recession from turning into a full-fledged depression. Tax revenue fell sharply, from $2.5 trillion in 2008 to $2.1 trillion in 2009. As is normal in a recession, expenditures increased due to automatic stabilizers (see Chapter 10). The combination of these factors with continued military expenses in Iraq and Afghanistan led to record deficits of more than $1 trillion. In 2012 the deficit began to decline, with further declines projected, but the national debt overall increased to more than $16 billion).

Discussion Questions

1. Has the U.S. federal government ever had a budget surplus? When was the last time? Was there ever a time that the government was not in debt?
2. What causes budget deficits? Are budget deficits necessarily a bad thing?

3. The Debt and Its Links to Finance

3.1 Taxonomy of Debt Types

In the popular press, one encounters different estimates of the country's debt, which can vary considerably. By some estimates, U.S. total debt now approximates 350 percent of GDP. Some confusion has been caused by differing terminology relating to the debt, so it may be helpful to distinguish between different categories.

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gross federal debt: total amount owed by the federal government to all claimants, including foreigners, the public in the United States, and other government accounts

public debt: the gross federal debt minus the debt owed to other government accounts such as Social Security and Medicare

Usually, the term "national debt" refers to the **gross federal debt**, which is actually the total debt outstanding for the federal government (Table 16.1) and is the debt to which we have referred until now. It is not, however, the same as the **public debt**. The gross federal debt includes money that the federal government "borrows" from other government accounts. Prominent examples include Social Security and Medicare, which, as noted earlier, are classified as "off budget." Basically, when the government collects more in tax revenue for these programs than it pays out, it realizes an off-budget surplus. It is then in a position to "borrow" the surplus, or at least a portion of it, as an alternative to borrowing money from the public. So it is the public debt, not the gross federal debt, that is a direct consequence of federal budget deficits.

Table 16.1 **Debt Taxonomy**

	Debt type	Description
Government	Gross federal debt	Generally synonymous with the national debt; refers to the total amount of money owed by the federal government to all claimants.
	Public debt	Gross federal debt minus debt held in government accounts
	Debt held by public	Public debt minus the debt held by the Federal Reserve
	Internal debt	The share of the gross federal debt owned by domestic individuals or groups
	External debt	The share of the gross federal debt owned by foreign individuals or groups
	State and local debt	The total value of all state and local bonds outstanding
Private	Households and not-for-profits	Includes mortgage debt, credit card debt, and bank loans
	Financial sector	Total of all corporate debt for financial industry
	Nonfinancial business	All corporate debt and bank borrowing for nonfinancial business

debt held by the public: the gross federal debt minus the debt owed to other government accounts and also minus the portion that is held by the Federal Reserve

internal debt: the portion of the gross federal debt that is owed to individuals or groups within the country

external debt: the portion of the gross federal debt that is owed to foreign individuals or groups

Recall that the Federal Reserve is an active participant in the market for U.S. bonds, as it buys and sells them to conduct its open market operations in hopes of influencing interest rates. So the Fed also holds a significant share of the federal debt. Its share is also a part of the public debt. The difference between the public debt and the **debt held by the public** (this terminology is unfortunately confusing, but we need to learn it!) is the debt held by the Fed.

One final distinction is between the **internal debt** and the **external debt**. The internal debt refers to the portion of the gross federal debt that is owned by individuals or groups within the country, and the external debt represents the portion held by foreigners or foreign groups.

Like the federal government, state and municipal governments also often rely on borrowing to fund their operations. They issue a variety of bond instruments to acquire funds from the public, which in a sense add to the country's total indebtedness. This is also a point of frequent confusion. In its common usage, the term "national debt" usually refers only to the federal portion of the debt. This seems reasonable, because it is the debt that is directly related to fiscal policy and how it affects the national economy. Yet if we speak of the total debt of the country, it appears misleading to exclude the state and local debt. And the picture becomes even more complicated, because to get a complete accounting of debt we should include all household debt (e.g., mortgage and credit card), financial sector debt, and the debt of nonfinancial business, which includes both bank loans outstanding and corporate bonds issued to finance private debt.

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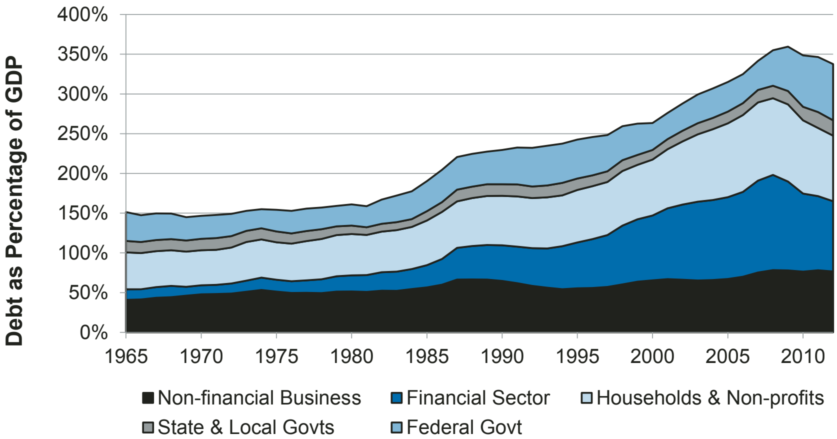
Figure 16.3 **Total U.S. Indebtedness as a Percentage of GDP**



Here the Federal debt is only a subset of the total, and one that has not increased substantially over the years. The household sector debt has grown much more rapidly, and that of the financial sector most rapidly of all.

If we add all the categories to represent the total indebtedness of the whole country, we find that, as of 2011, it did indeed exceed 350 percent of GDP and is much more than double what it was in the early 1970s (Figure 16.3). Such an inclusive debt concept is not of great significance in ordinary times, but during the run-up to the Great Recession, it should have been setting off alarm bells, as it meant that the country as a whole had used up much of the leeway in terms of borrowing capacity that could have been drawn on to get out of a recession. Note that since the Great Recession, total debt has fallen as the economic downturn forced households and businesses to reduce their debt levels.

3.2 Federal Government Borrowing: Potential Problems

In earlier chapters, we saw that when the government borrows money, it issues bonds on which it must pay interest. The interest payments form part of the annual federal budget. Figure 16.4 shows how these payments as a percentage of federal spending have varied over time. Note that interest payments accounted for a much greater portion of the budget during the 1980s and 1990s than they do now. Considering that federal debt as a percentage of GDP has risen quite rapidly over the past decade, how can this be? The answer that the unusually low interest rates that have prevailed over the same period make this possible.

We have seen in earlier chapters that a weak economy tends to induce lower interest rates, both naturally and as a consequence of policy measures. If interest rates are lower throughout the economy, the Treasury can issue new debt (e.g., Treasury bonds) at a low interest rate. When it does so, it is effectively reducing the portion of the federal budget that must be set aside for debt service. The phenomenon is not unlike the low monthly payments a homeowner makes after obtaining a mortgage with a very low interest rate. The major difference to keep in mind is that, unlike a household, the federal government has the ability to print money if need be to pay off its debt.

As of January 2013, the interest rate on a 10-year Treasury bond was 1.86 percent (see Figure 16.5). But during 2013 rates started rising, and in September 2013 had reached 2.92 percent. One might think that at the historically low interest rates prevailing from 2009 to 2012, borrowing was especially cheap, making it a good time for the government to run a budget deficit and accumulate debt. The argument for adding to federal debt seems even stronger if the government spends on programs that produce a high multiplier effect (Chapter 10). With low interest rates, the gain from the multiplier effect (in terms of the increase in aggregate demand) is potentially larger than the loss (adding to debt burden), making the net gain positive.

However, it may be counterproductive to allow the debt to grow if it is to finance "low-multiplier" activities. An example is tax cuts for the wealthy, which, as we saw in Chapter

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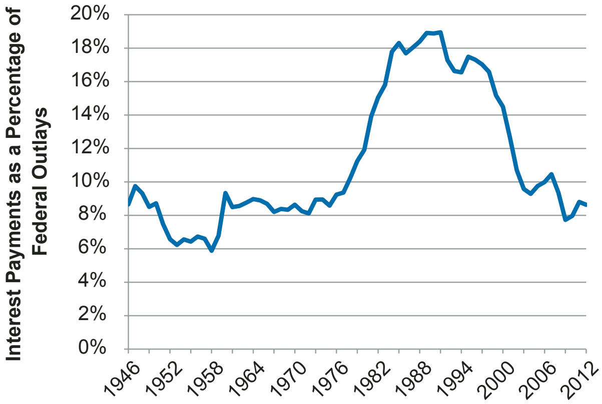
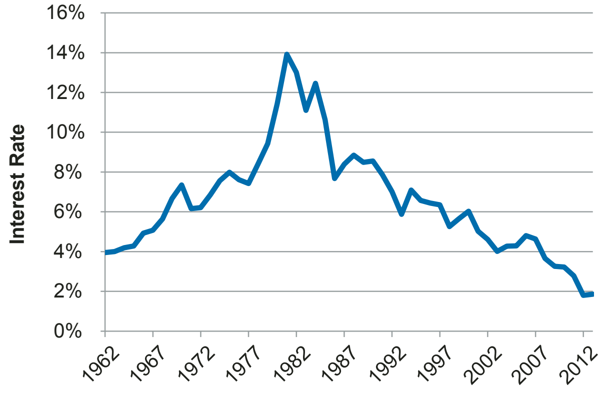
Figure 16.4 **Interest Payments as Percentage of Total Federal Outlays**



Source: BEA.gov

Despite increasing debt levels, interest payments on the debt have fallen as a percentage of total federal outlays due to unusually low interest rates.

Figure 16.5 **The Interest Rate on 10-Year Treasury Bonds**



Source: St. Louis Federal Reserve Bank

Interest rates on 10-year Treasury bonds have fallen steadily, and by the end of 2012 were slightly below 2%. They rose somewhat during 2013 (data for 2013 not included here).

10, do not produce as much "bang for the buck" as tax cuts for the poor or new spending on constructive activities. A useful way of understanding the problem is to imagine the federal government as a private business. Would a business borrow money at an interest rate higher than its expected rate of return? Here, the situation is similar, only a bit more complicated; the government needs to assess the projected "social return" of its expenditures.

Another concern with mounting debt is that, if sufficiently large, lenders might start to doubt the borrowers' ability to repay. If the doubt were severe and widespread, it could affect the bond market and, indirectly, the national economy. Risk-averse investors would sell their bonds, driving bond prices down. When bond prices go down, bond yields (interest rates) go up (as noted in the Appendix to Chapter 12), because the amount that the government has to pay in interest on the bond becomes higher relative to the value of the bond.

The greater the unease over the borrower's ability to pay, the higher the interest rate that the borrower must offer in order to attract lenders. In the summer of 2011, Standard and Poor's, one of the major ratings agencies, downgraded U.S. government debt from AAA to AA+. Fortunately for the United States, even with this downgrade, its debt remained very much in demand.

monetizing the debt: the purchase of new debt from the Treasury by the Federal Reserve.

A third potential problem with too much debt concerns exactly how it gets repaid. An indebted country must repay the principal on its debt and service it with interest payments. To do so, it must either engage in new borrowing, raise tax revenues, or **monetize the debt**. We have seen that increasing tax rates has the potential to reduce consumption and investment, hurting GDP growth and employment. But it is also possible to finance a federal budget deficit with bonds that are purchased by the Fed. As we saw in Chapter 12, this amounts to an expansionary monetary policy.

A policy of monetizing the debt risks causing inflation, especially if the increase in the money supply is sufficiently large. If such inflation does occur, the bond markets might then demand higher interest rates on new debt to compensate for the anticipated loss from inflation. How serious is this danger? Some economists believe that a mild to moderate increase in inflation is not necessarily a problem, especially if it occurs in a depressed economy facing a looming threat of deflation. As we saw in Chapter 11, deflation would in most circumstances be more dangerous than inflation, while mild inflation has historically been associated with economic recoveries and gains in domestic employment. Severe inflation,

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however, would be very damaging to the economy, and other economists point to this as a possible result of increasing government debt.

Discussion Questions

1. How many different "types" of debt can you think of? Which one do people usually mean when they speak about the "national debt"?
2. What are some potential problems with excessive federal debt? How can the debt be managed or repaid?

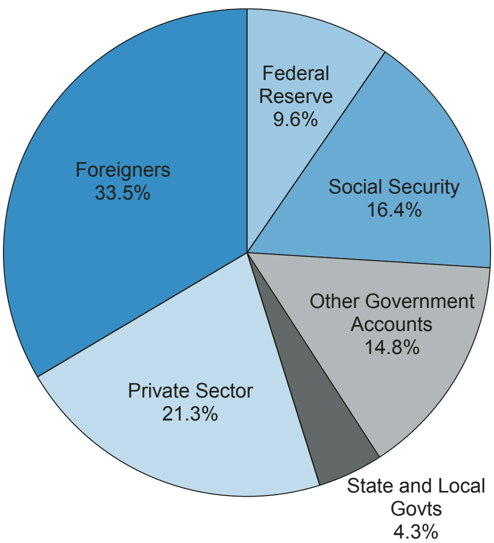
4. POLITICAL ECONOMY OF THE DEBT

4.1 WHO OWNS THE DEBT?

We have already seen that when the federal government goes into debt, it sells government bonds. But who buys these bonds? It might surprise you to see how ownership of the gross federal debt is divided up. For example, due in large part to the recent and ongoing financial crisis, the Fed has increased its holdings of government bonds, so its share of the total debt was 9.6 percent as of 2012 (Figure 16.6). Meanwhile, the amount owed to the Social Security fund accounts for 16.4 percent of the debt. As noted above in the discussion of the public debt, one thing the federal government may do when it possesses inadequate funds to pursue its objectives is skim off some of the surplus—if one exists—from the Social Security trust fund. It must then issue the fund an IOU in the form of a bond. The gross federal debt at the end of 2012 exceeded $16 *trillion,* 16 percent of which is $2.6 trillion, which means that the federal government relies on Social Security a great deal to help it pay its bills!

Social security is by far the largest of the government accounts that the federal government may tap if it needs help financing deficits. Among the many other funds, the principal ones are the funds for federal employee retirement, federal hospital insurance, and federal disability insurance. These and all the others collectively account for another 14.8 percent of federal debt. State and local governments, perhaps surprisingly, account for another 4.3 percent. States and municipalities will often use their budget surpluses to buy federal debt, because it is considered mostly risk free.

Figure 16.6 **Ownership of Gross Federal Debt**



About a third of gross federal debt is held by government agencies, another third by foreign bondholders, and the rest by U.S. individuals, institutions, and state and local governments.

Source: Treasury Department, 2013

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The domestic private sector owns a bit more than a fifth (21.3 percent) of the federal debt in the form of bonds, which are found in a variety of locations: banks, pension plans, insurance companies, mutual funds, and others, including households. Finally, as of 2012, foreigners owned just over one-third (33.5 percent) of all federal debt, totaling $5.5 trillion. This is the U.S. external debt; in absolute terms, it is by far the largest external debt of any country, but not when considered relative to GDP, as discussed below.

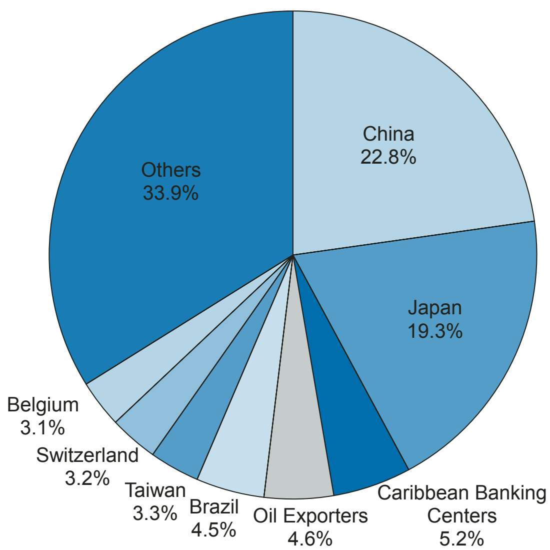
In 2013, China and Japan together owned more than 42 percent of the external U.S. debt (Figure 16.7), a reflection of the huge trade surpluses that the two countries have had with the United States for several decades. As we saw in Chapter 14, when China and Japan export more to the United States than they import from us, they acquire a surplus of U.S. dollars, which they then use to buy U.S. federal debt. Why do they choose to hold U.S. government debt? For the same reason that domestic investors, state and local governments, and the Social Security trust fund trustees do: Federal debt is widely perceived as returning risk-free income.

Four countries—Brazil, Taiwan, Switzerland, and Belgium—accounted for another 14 percent of the U.S. external debt; major oil-exporting countries had 4.6 percent, and another 5.2 percent were held in Caribbean offshore banking centers. Finally, the remaining countries (approximately 190) collectively owned 33.9 percent of the U.S. external debt as of 2013.

Although in absolute terms the U.S. debt is by far the highest in the world, it is a very different story if we look at total debt in relation to GDP. Japan's ratio of debt to GDP has risen since its economic slowdown started in the 1990s and is currently 214.1 percent of GDP (Figure 16.8). Nevertheless, Japanese bonds are still bought and traded on the secondary market, which may be a testament to the widespread belief in the stability of the Japanese economy. This is in stark contrast to Greece, which has had to raise its bond rates substantially to attract continued investors, even though its debt to GDP ratio (168 percent) is still significantly below Japan's. Italy's ratio, at 122.7 percent, also surpasses that of the United States.

Among the countries listed, only in the UK does the *rate of increase* in the debt : GDP ratio since 2006 surpass that of the United States, whose ratio increased from 66.4 percent to 108.6 percent from 2006 to 2012, impelled by tax cuts and the financial crisis. Still, the U.S. situation continues to resemble Japan's, in that growing indebtedness has not noticeably altered investor confidence, allowing the U.S. bond yields to remain fairly low.

Figure 16.7 **Foreign Holders of Gross Federal Debt**



The largest foreign holders of U.S. debt are China and Japan, as a result of their long-running trade surpluses with the United States.

Source: Treasury Department, 2013

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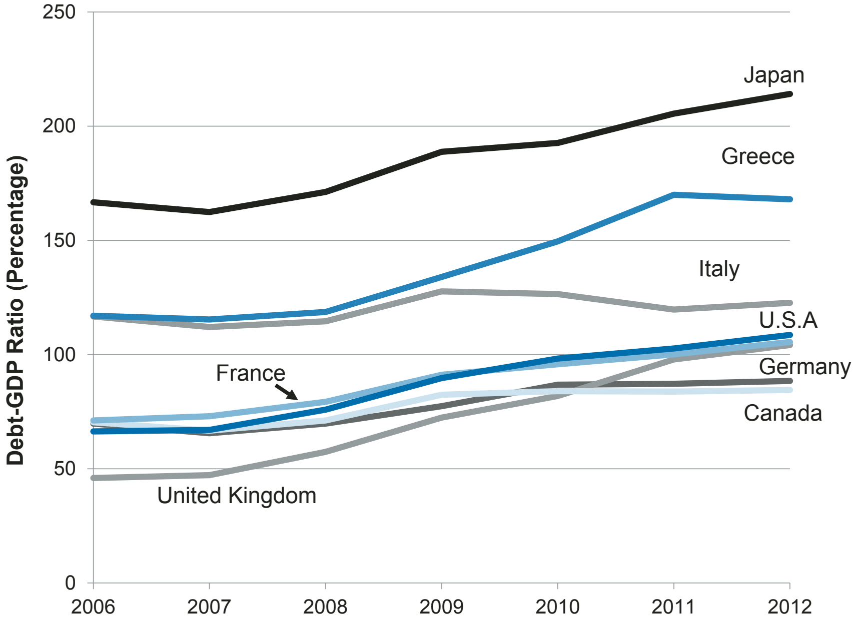
Figure 16.8 **Debt-GDP Ratios, an International Comparison**



Source: OECD, www.oecd.org

Japan's ratio of debt to GDP is over 200%, but this has not caused economic crisis. Greece, with a much smaller economy, has suffered severely in trying to get its ratio of debt to GDP, now over 150%, under control. Debt to GDP ratios have risen in the US and major European countries since 2006.

4.2 THE BALANCED BUDGET DEBATE

If balancing the budget were legally required, the United States would never have accumulated the debt that it has. Hoping to avoid uncontrolled debt dependence, many have in the past have advocated legislation requiring that the budget be balanced. Some have even recommended an amendment to the Constitution requiring a balanced federal budget, but the majority in Congress has always viewed the idea as too extreme.

Most states have a balanced budget requirement that forces them to cut services and government employees during a recession. The federal government often provides aid to allow states to minimize cost cutting, in an attempt to prevent the economy from weakening further. States have no other recourse because, unlike the federal government, they are unable to create additional funds. In large part, this explains why, as we discussed in Chapter 10, states (as well as municipalities) practice "procyclical" instead of countercyclical policy.

A balanced budget amendment would effectively make the federal government little different from the states. Proponents argue that such a law would prevent the federal government from imprudently running deficits, potentially causing inflation, in good economic times. But there is a very serious downside, in that such an amendment would make the federal government powerless to use countercyclical policy to fight recessions.

In 1985, Congress passed the Balanced Budget and Emergency Deficit Control Act, more popularly known as the Gramm-Rudman-Hollings act (named after the senators who sponsored it). It required that a limit be set on the annual deficit and that the limit be reduced until a balanced budget was achieved in 1991. While less stringent than a constitutional requirement, the **deficit ceiling** was nevertheless strict. Not meeting it would require spending to be reduced automatically to the point where the deficit was no higher than the prescribed limit for that year. It proved too much for Congress—and even for the Supreme Court, which found the automatic reduction provision unconstitutional.

deficit ceiling: a congressionally mandated limit on the size of the federal budget deficit

debt ceiling: a congressionally mandated limit on the size of the gross federal debt

In the summer of 2011, the Obama administration averted a potential crisis over the near breaching of what is known as the U.S. **debt ceiling**. (This is different from a deficit ceiling. According to rules set by Congress, a vote of Congress is required to increase the debt beyond

Text

a set amount, called the debt ceiling.) As the debt approached the mandated ceiling of $14.3 trillion, the United States faced the prospect of not being able to borrow fresh funds to pay bonds that were coming due for payment. The risk of such a default would be a decline in the perceived creditworthiness of the United States and, as noted earlier, Standard and Poor's lowered the grade of U.S. Treasury bonds from AAA to AA+, the first time in history that this had happened.

Following heated and partisan negotiations, Congress and the president struck a deal, allowing the debt ceiling to be raised (by a trillion dollars or so) and granting the federal government temporary access to more loans. The terms of the deal were that if the government failed to come to a long-term agreement by the end of 2012, the country would fall off a "fiscal cliff," meaning that $607 billion of tax rate increases and spending cuts would be implemented almost immediately.

austerity: a policy of deficit cutting that reduces public expenditures or raises taxes to balance the budget

The best way to understand the "fiscal cliff" is in terms of timing: It would have forced a dramatic, immediate turn to **austerity**, rather than leaving the option of reducing the debt over a longer period. The effort to force the issue is understandable, given the poor record of recent Congresses in making hard decisions to benefit the future. Yet conditions in 2012 were such that austerity could be more harmful to the future well-being of U.S. citizens than would rolling over the debt for a longer period. It is likely that greater budget discipline and some measure of economic pain will at some point be unavoidable. But continuing modest spending, targeted at projects that deliver bigger payoffs (larger multiplier) in the short to medium term, is a potential way of reducing future suffering from the consequences of earlier fiscal deficits.

Many people are not aware is that the debt ceiling has been raised *many times* in U.S. history, so the idea of a "cliff" is really overdramatized. The United States has had a debt ceiling since the Second Liberty Bond Act of 1917, and it was raised 18 times under Reagan, eight under Clinton, seven under George W. Bush, and three times during Obama's first term.

Obama and Congress debated until the last few hours of 2012 before reaching an agreement in January 2013 to temporarily avoid the "cliff." They agreed, among other things, to raise restore payroll taxes back to 6.2 percent of income (they had been lowered in 2010 to 4.2 percent as part of a temporary tax holiday) and to raise the marginal tax rate on individuals earning more than $400,000 and households earning more than $450,000 from 35 to 39.6 percent. These tax rate increases were considerably less than those implied by the "cliff."' But on the spending side, $85 billion in across-the-board spending cuts, known as the "sequester," did go into effect two months later.

Completely falling off the fiscal cliff undoubtedly would have contributed to debt reduction, but tax increases and spending cuts of the magnitude imposed by the terms of the 2011 agreement would have created serious dangers for a still-weak national economy. Even under normal conditions, there are strong arguments against a balanced budget requirement, but in early 2013 reducing deficits rapidly could have been especially harmful. From a Keynesian point of view (as noted in Chapters 10 and 13), a period of anemic job growth is a time to pursue countercyclical policy, using deficits to stimulate the economy and create jobs; it makes better sense to wait for a healthier economy before undertaking further deficit reduction.

In the long run, of course, it is important to keep debt levels under control, but it is a mistake to presume that the federal government should maintain zero debt. The ability to use deficits at appropriate times to generate a fiscal stimulus is what sets the federal government apart from the states and cities and possibly protects a weak economy from sinking deeper.

4.3 Imposed Austerity: The Case of the European Union

In recent years, the member countries of the European Union (EU) have been confronting issues similar to those in the United States, but their response has been quite different. In a number of EU countries, as in much of the rest of the world, a financial collapse followed

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the bursting of real estate bubbles in the U.S. and many other countries. The sudden end to a global spree of excessive bank leverage and speculation forced many economies into recession.

Governments, faced with the choice of complete financial collapse or the bailout of banks with public money, chose the latter. Recessions in countries like Greece, Spain, and Portugal caused government revenues to fall and expenditures to rise, increasing deficit and debt levels. While the overall situation in Europe may seem strikingly similar to that of the United States, there is an important difference. In Europe, much of the crisis focuses on what is called **sovereign debt**—that is, government debt, especially government debt in a currency that the government does not control.

sovereign debt: government debt, especially debt denominated in a currency that the government does not control.

Seventeen countries within the European Union have adopted the euro as their currency.

In order to participate in the euro currency, EU member countries must meet certain **convergence criteria**. One criterion concerns government finances and requires both that a country's annual deficit not exceed 3 percent of GDP and that its national debt not exceed 60 percent of GDP.* After the country is accepted into the eurozone (countries that have adopted the euro as the national currency), the restriction is relaxed somewhat under circumstances of extreme economic difficulty (which explains, for example, how Greece, Italy, and others can have a debt: GDP ratio much higher than 60 percent), but countries must then demonstrate that they are making progress toward once again achieving the target amounts. What it means is that, unlike the United States, EU members must observe strict fiscal discipline (though not necessarily balanced budgets).

convergence criteria: the requirements that EU member countries must satisfy as a condition of participating in the eurozone

Table 16.2 shows deficit and debt figures for Portugal, Italy, Ireland, Greece, and Spain. Although all are still far from satisfying the convergence criteria (Italy meets the deficit criterion but not the debt criterion), only for Greece have leading experts even discussed possible expulsion from the eurozone. But this does not mean that governments have not taken action to reduce these numbers.

Greece, Spain, and, to a lesser degree, Portugal have experienced considerable social unrest in recent years. There is widespread resentment of governments that are willing to bail out investors in the financial industry but then ask the public to accept higher taxes and spending cuts to pay for them. The populations of these countries include millions of retirees who see grave threats to the government pensions on which they rely for income support in their old age. Many citizens would prefer to see their country default on its debt than have retirement pension and social programs cut as a result of a banking crisis for which most of them had no responsibility. Government leaders feel squeezed, but see no way to avoid austerity, because of the requirements for remaining in the eurozone.

Allowing deficits and debts to grow would only cause greater unease among European bondholders and cause interest rates on new debt to rise. The problem would then become self-reinforcing as it would become more expensive to service the debt.

Table 16.2 EU Deficit and Debt Levels in 2012 (percentage of GDP)

	Deficit	Debt
Portugal	–4.6	124.3
Italy	–1.7	122.7
Ireland	–8.4	121.6
Greece	–7.4	168.0
Spain	–5.4	87.9

Source: Organization for Economic Cooperation and Development, www.oecd.org.

*The other three, which need not concern us here, are (1) an inflation rate no more than 1.5 percent higher than the average in the three best-performing EU members; (2) not having devalued domestic currency for at least two years; and (3) long-term interest rate no higher than 2 percent above that in the three best EU inflation performers.

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The United States does not confront the same problems, for two reasons. The first is that, at least up to the present, its bond yields are not nearly as sensitive to its escalating debt as are yields in other countries. In other words, demand for U.S. bonds is not as sensitive to the country's level of indebtedness as is demand for the sovereign debt of other countries. The issue is related to the U.S. position in the global economy, which, as noted in Chapter 14, has much to do with the historic prestige and strength of the U.S. dollar. The U.S. dominance in this regard may change in the future, but as of now the United States enjoys the advantages of having a "safe haven" currency.

The second, and more immediate, reason is that the Fed is far more flexible than its EU counterpart, the European Central Bank (ECB). The ECB's singular agenda is controlling inflation, and it does not consider the fiscal conditions in individual countries. The Fed, in contrast, has recently been following a dual mandate to address both inflation and unemployment, providing more flexibility to address short-term economic problems.* As we have seen since the financial crisis, the United States has the ability to employ countercyclical fiscal policy and use monetary policy such as lower interest rates and quantitative easing to try to spur economic activity. The EU, however, has favored policies of austerity, which have worsened recessionary conditions but have done little to reduce overall debt levels (see Box 16.1).

Discussion Questions

1. Should there be a balanced budget amendment to the Constitution? What problems might such an amendment create?
2. What is the difference between austerity and stimulus? Which tack does the European Union follow? How is it different from what the United States does? Which side is correct? Can they both be?

BOX 16.1 EUROPE PRESSURED TO RECONSIDER AUSTERITY POLICIES

In 2013, unemployment surpassed Great Depression-era levels in Southern Europe, and was rising even in the less hard-hit economies of the north. The jobless rate in the 17 countries of the Eurozone topped 12 percent in mid-2013. Influential voices warned that European policies of austerity were failing, worsening recession while not helping deficit and debt problems.

> After years of insisting that the primary cure for Europe's malaise is to slash spending, the champions of austerity, most notably Chancellor Angela Merkel of Germany, find themselves under intensified pressure to back off unpopular remedies and find some way to restore faltering growth to the world's largest economic bloc.
>
> Mounting doubts among ordinary Europeans and even the International Monetary Fund have forces senior officials in Brussels [official seat of the European Union] to acknowledge that a move away from what critics see as a fixation on debt and deficits toward more growth-friendly policies is necessary. "There has been a clear shift in thinking," said Guntram Wolff, a German economist who has worked at the European Commission, the union's policy-making arm.
>
> Hints of a new approach in Europe are likely to be greeted as good news by the Obama administration, which has urged healthy European economies to stimulate growth with increased spending and more relaxed monetary policy. The American economy, where government spending has not been reduced as drastically, looks relatively robust in comparison with Europe.

Sources: Andrew Higgins, "Europe Facing More Pressure to Reconsider Cuts as a Cure," *New York Times*, April 26, 2013; Harvey Morris, "Europe Urged to Make a U-Turn on Austerity," *International Herald Tribune*, April 10, 2013; "Joblessness Edges Higher To Hit a Eurozone Record," *New York Times*, Tuesday, July 2, 2013.

*The "dual mandate" is only a recent phenomenon, resulting from amendments to the Federal Reserve Act in 1977. The Fed does not have a history of pursuing job growth and has a reputation primarily as an inflation fighter.

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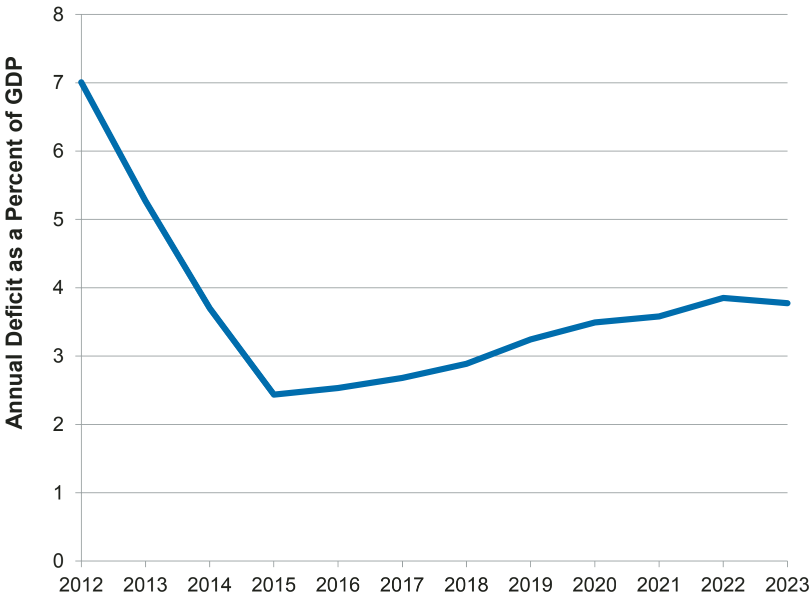
5. DEFICIT PROJECTIONS AND POTENTIAL POLICY RESPONSES

5.1 DEFICIT PROJECTIONS

The U.S. annual federal deficit declined from a peak of 10 percent of GDP in 2009 to 7 percent of GDP in fiscal 2012, and appeared on track to decline further, to around 4 percent of GDP in fiscal 2013.[1] The Congressional Budget Office (CBO), which provides nonpartisan economic analysis for Congress, projects that the deficit will continue to decline as a percentage of GDP for a couple of years but then start to increase again after 2015 (Figure 16.9).[2] Although the annual federal deficit averaged 3.1 percent of GDP from 1973 to 2012, the deficit is projected to grow to 3.8 percent of GDP in 2023 and continue on an upward trajectory after that (see Box 16.2, p. 372).

Figure 16.9 **Projected Annual Deficit as a Percent of GDP**



The annual federal deficit is expected to decline through 2015 as the economy improves, but over the longer term deficits are expected to rise due to the effects of an aging population, higher health care costs and subsidies, and rising interest payments on the national debt.

Source: Congressional Budget Office, 2013

Similarly, the federal debt held by the public is projected to decrease to 73 percent of GDP in 2018 but then slowly increase to 77 percent of GDP by 2023. The CBO analysis, which assumes no major changes in federal law, identifies four main reasons deficits are projected to remain at relatively high levels even as the economy stabilizes:

1. the demographic pressures of an aging population
2. an increase in health-care costs
3. an increase in federal subsidies for health care
4. an increase in interest payments on the federal debt

Note that the first three factors are closely related and suggest that a focus on health care should be an important component of any significant long-term budgetary reforms in the United States. The CBO explains:

> The aging of the baby-boom generation portends a significant and sustained increase in coming years in the share of the population that will receive benefits from Social Security and Medicare and long-term care services financed through Medicaid. Moreover, per capita spending on health care is likely to continue to grow faster than per capita spending on other goods and services for many years. . . . Without significant changes in the laws

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governing Social Security, Medicare, and Medicaid, those factors will boost federal outlays as a percentage of GDP well above the average of the past several decades—a conclusion that applies under any plausible assumptions about future trends in demographics, economic conditions, and health care costs. Unless the laws governing those programs are changed—or the increased spending is accompanied by sufficiently lower spending on other programs, sufficiently higher revenues, or a combination of the two—deficits will be much larger in the future than they have tended to be in the past.[3]

5.2 POLICY CHOICES

The principle that the United States requires long-term budgetary reform is widely accepted. As implied in the CBO quotation above, the basic math dictates that the choices for reform are limited to three basic options:

1. revenue (i.e. tax) increases
2. spending decreases
3. some combination of revenue increases and spending decreases

Few economists or politicians advocate tax increases alone as a solution to reduce the federal deficit. Thus most of the debate concerns whether budgetary reforms should include only spending cuts or whether tax revenues also need to be increased. So far, both spending cuts and tax increases have been pursued.

BOX 16.2 DECLINING BUDGET DEFICITS

According to a report issued by the Congressional Budget Office (CBO) in May 2013, the federal deficit fell by 32 percent over the period October 2012—April 2013 compared to the same period in the previous year. The CBO noted:

> The federal government ran a budget deficit of $489 billion in the first seven months of fiscal year 2013, according to CBO's estimates. That amount is $231 billion less than the shortfall recorded during the same period last year, primarily because revenue collections have been much greater than they were at this point in 2012. In contrast, federal spending so far this year has been slightly lower than what it was last year at this time.

And the CBO projected a continuation of the trend of shrinking deficits:

> If the current laws that govern federal spending and taxes do not change, the budget deficit will shrink this year to $642 billion, the smallest shortfall since 2008. Relative to the size of the economy, the deficit this year—at 4.0 percent of gross domestic product (GDP)—will be less than half as large as the shortfall in 2009, which was 10.1 percent of GDP.

Tax receipts increased for several reasons, including:

- rising wages as the economy recovers
- the expiration of a payroll tax cut
- the implementation of higher tax rates on high-income earners
- an increase in corporate taxes due to higher profits

The reasons federal spending decreased included:

- decreasing payments for unemployment benefits
- a 5 percent decrease in defense spending
- decreased spending for housing assistance, energy programs, and international assistance

Spending on some programs increased, including Social Security and Medicare. Spending by the Federal Emergency Management Agency increased due to Hurricane Sandy, and spending by the Department of Agriculture increased as a result of drought conditions.

In longer-range projections, budget deficits were projected to fall even further, to about 2.1 percent of GDP in 2015. However, deficits were projected to increase again in the coming decade, reaching 3.5 percent of GDP in 2023, due to an aging population, rising health care costs, an expansion of federal subsidies for health insurance, and growing interest payments on federal debt.

Sources: Congressional Budget Office, Monthly Budget Review for April 2013, and *Updated Budget Projections*, May 2013.

Text

Federal spending declined from a peak of 25.2 percent of GDP in 2009 to 22.8 percent in 2012, with further minor declines projected through 2017. Federal revenues increased from a low of 15.1 percent of GDP in 2009 to 15.8 percent in 2012 and are expected to continue growing for a few more years. Some of the change in both spending and revenues relates to improving economic conditions, but federal legislation has also been enacted to reduce budget deficits.

As mentioned earlier, in January 2013 Congress agreed to increase tax rates on the wealthiest households (individuals making more than $400,000 per year and couples making more than $450,000). At the same time, the 2010 provision that had temporarily reduced payroll taxes by two percentage points for all workers was allowed to expire. So while the richest households faced the largest tax increases, federal taxes rose for about 77 percent of American households in 2013.

The January 2013 legislation reduces current deficits but does not address the fundamental long-term budgetary imbalance of the federal government. We next consider two proposals for budgetary reform.

5.3 BUDGETARY REFORMS: THE SIMPSON-BOWLES PLAN

In early 2010, President Obama appointed an 18-member bipartisan commission to develop specific recommendations for deficit reduction. Known as the National Commission on Fiscal Responsibility and Reform (NCFRR), it was led by Republican Alan Simpson (a former senator) and Democrat Erskine Bowles. Their recommendations are commonly known as the Simpson-Bowles Plan.* The plan called for a cumulative (not annual) deficit reduction of almost $4 trillion from 2012 to 2020 and eliminating the deficit entirely by 2035. The plan also projected that the debt held by the public would be reduced to 40 percent of its current level by 2035. Some key elements of this plan include:

1. Reducing discretionary spending by a cumulative $1.7 trillion, including both defense and nondefense cuts. The report suggests spending caps, a three-year freeze on congressional pay, eliminating Congressional “earmarked” spending for specific local projects, and a reduction in the federal workforce.
2. Adding about $1 trillion in cumulative revenues. While the report actually recommends reducing marginal tax rates, it more than offsets that by eliminating more than 150 tax deduction provisions. For example, under current law, a taxpayer can deduct the interest paid on the mortgage for a second home—the plan would eliminate this deduction. The plan advocates that the overall progressivity of the federal tax system should be maintained or increased, rather than imposing an additional burden on low-income households, and also recommends an increase in the gasoline tax of 15 cents per gallon ,.
3. Creating about $340 billion in cumulative savings from reductions in health-care costs, through various reforms to Medicare and Medicaid.
4. Realizing about $240 billion in cumulative savings from Social Security reforms. The plan recommends gradually increasing the full retirement age from 67 to 69 by 2075, slowing the growth of benefits to middle- and high-income individuals, and raising the cap on income subject to Social Security taxes (the cap was $113,700 as of 2013; increasing the cap would mean that wealthier individuals would pay more social security tax).

After being drafted, the Simpson-Bowles Plan first needed to be approved by 14 members of the full 18-member NCFRR. However, the plan received only 11 votes (support for the plan was split essentially equally among Republicans and Democrats). Thus the plan was not

*The plan is detailed in NCFRR, “The Moment of Truth: Report of the National Commission on Fiscal Responsibility and Reform,” December 2010.

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put to a vote in Congress. Despite this failure, both Simpson and Bowles have continued to advocate for their plan, making slight changes to it. In February 2013, they wrote:

> The failure to get our debt under control, reform our Tax Code and put our entitlement programs on a fiscally sustainable course is robbing us of the ability to invest in our future and will leave us without the resources we need to meet other challenges facing our nation. And moving forward will be out of our reach as long as we continue to "pass the buck" on the debt crisis. It is critical that leaders in both parties come together in an honest and meaningful way to put our fiscal house in order if they have any hope of addressing the other challenges and opportunities that we face as a nation. . . . If both sides move as one beyond their comfort zone on health and tax reform, those changes could be combined with the other spending cuts discussed in the negotiations last December [2012] to produce a package large enough to stabilize and begin to reduce our debt as a share of the economy.[6]

5.4 Budgetary Reforms: Congressional Budget Office

As a nonpartisan organization, the CBO does not provide specific recommendations. Instead, it aims to analyze the implications of various policy options from an objective point of view. Based on a 2012 analysis, the CBO considers three potential policy objectives:

1. *Balance the federal budget by 2020:* This would require $1 trillion in total annual budgetary reforms by 2020 (i.e., a combination of spending reductions and revenue increases).
2. *Limit debt to 75 percent of GDP in 2020:* This would require $500 billion in total annual budgetary reforms.
3. *A midway objective that would "keep future deficits stable at a relatively small percentage of GDP":* This would require $750 billion in total annual budgetary reforms.

The CBO notes that even the most modest of these proposals (#2) would require substantial policy adjustment:

> Very few policy changes, taken individually, can shrink the deficit enough to achieve any of those objectives. Ultimately, significant deficit reduction is likely to require a combination of policies, many of which may stand in stark contrast to policies now in place. . . . [A] wide gap exists between the future cost of the services that the public has become accustomed to receiving from the federal government—especially in the form of benefits for older people—and the tax revenues that the public has been sending to the government to pay for those services.[4]

The CBO analysis considers three categories of budgetary reforms:

1. *Reduce mandatory spending:* This primarily includes spending on programs such as Social Security, Medicare, and Medicaid.
2. *Reduce discretionary spending:* This includes spending on national defense, education, highways, scientific research, and the environment.
3. *Increase revenues:* This includes letting some existing tax cuts expire, as well instituting new taxes.

The CBO considered nearly 70 potential budgetary reforms. For each reform, it estimated the budgetary savings that would accrue in 2020. Table 16.3 lists some of these reforms.

One implication of the CBO's estimates is that there is no "magic bullet" that can resolve the country's budgetary imbalance. Even the most significant action, letting all 2001, 2003, and

Table 16.3 **Selected Budgetary Reforms, Congressional Budget Office**

Budgetary Reform	Potential Budget Savings in 2020 (billions)
Reductions in Mandatory Spending	
Repeal the expansion of health-care coverage under the Affordable Care Act	$150
Repeal the individual health insurance mandate	$40
Raise the age of Medicare eligibility to 67	$30
Raise the full retirement age for Social Security	$30
Link Social Security payments to average prices rather than average earnings	$30
Limit malpractice torts	$10
Increase the interest rates charged on student loans	$10
Reductions in Discretionary Spending	
Allow the sequestration budget cuts to reduce military spending*	$75
Allow the sequestration budget cuts to reduce nonmilitary spending	$70
Limit highway funding to expected highway revenues	$11
Reduce funding for the National Institutes of Health	$4
Reduce Department of Energy funding for energy research	$4
Eliminate certain education programs	$2
Revenue Increases	
Allow all 2001, 2003, and 2009 tax cuts to expire as scheduled	$550
Limit tax deductions to 15 percent of income	$150
Institute a tax on greenhouse gas emissions	$140
Eliminate the tax deduction for state and local income	$110
Increase the earnings subject to Social Security taxes	$60
Gradually eliminate the mortgage interest deduction	$50
Increase the motor fuels excise tax by 25 cents per gallon	$30

Source: CBO, 2012.

*The "sequestration" budget cuts refer to the Budget Control Act of 2011; "sequestration" came into force in 2013.

2009 tax cuts expire, satisfies only the least stringent policy objective listed above. Another implication is that spending cuts alone will not be sufficient to balance the federal budget. Even if all 47 budget cuts considered by the CBO were enacted, including the politically unpopular sequestration cuts, total budgetary savings would be only about $900 billion while $1 trillion in savings would be required to balance the budget.

Revenue increases offer larger total budgetary savings (nearly $2 trillion for all 20 options considered by the CBO), but many of these options are rather unpopular, including letting existing tax cuts expire for all income levels and eliminating various tax deductions. Note that a tax on greenhouse gas emissions, starting at $20 per ton of carbon dioxide and increasing by 5.6 percent per year, could generate $140 billion in additional revenues.[5]

The various budgetary reforms analyzed by the CBO would differ in terms of their impact on the economy and the distribution of the burden. For example, the CBO notes that reducing investment on things like infrastructure and education would decrease future economic production. Increasing the retirement age for Social Security would disproportionately harm lower-income individuals, as they rely more heavily on Social Security benefits.

5.5 Debt and Deficits in Context

The analyses by the CBO and Simpson-Bowles indicate that significant budgetary policy changes are needed to address a long-term structural fiscal imbalance in the United States. In both analyses, most of the policy options are phased in gradually to reduce the likelihood of economic disruptions.

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The debate over debts and deficits should be placed in a larger macroeconomic context as well as a social and environmental context. For example, proposals to balance the federal budget by "broadening the tax base" may imply increasing economic inequality, already at historically high levels. Given the strong negative impacts of wide inequalities on the social and economic health of a society, it makes sense that major federal policies, regarding both spending and taxing, should emphasize reducing inequality. As shown in Table 16.3, some possibilities for generating additional revenues also address environmental concerns. A carbon tax on gasoline or, more broadly, on greenhouse gas emissions would not only reduce budget deficits but also internalize the negative externalities associated with burning fossil fuels and increase overall economic efficiency.

Recent budgetary impasses also reflect a change from earlier generations, when policies were frequently adjusted, often with bipartisan support, to address national needs. Consider that Social Security tax rates were raised more than 20 times between 1937 and 1990 as the program's needs increased. More recent strong opposition to raising those taxes stands in contrast to this historical context. Although the budgetary challenge facing the United States may not be its most pressing policy priority, relative to other priorities such as job generation and climate change, it will clearly require some difficult choices. But the problem is solvable, as long as policymakers are willing to compromise and take a long-term perspective.

Discussion Questions

1. Do you think that we can reduce deficits while also avoiding an increase in tax rates? Why would political leaders consider tax hikes? Should everyone experience the same increase?
2. Are there tax policies that can reduce the deficit while also addressing environmental problems?

REVIEW QUESTIONS

1. What is the difference between the national debt and a deficit?
2. What years were debt/GDP levels the highest in the United States? What years were the lowest?
3. What was the role of the national debt in the early period of U.S. history? What was Hamilton's vision for the U.S national debt?
4. How did the national debt picture change with the New Deal and World War II?
5. What factors contributed to the federal surplus during the Clinton administration, and why did it turn into a deficit in the following Bush administration?
6. Summarize some of the potential problems with government debt.
7. What does it mean to monetize the debt?
8. How do European policies of austerity differ from U.S. policies reading debt and deficits?
9. According to the Simpson-Bowles plan, what are six broad ideas for cutting deficits over the next 10 years?
10. According to the Congressional Budget Office, what are some possible budgetary reforms that could reduce the deficit?
11. What are the pros and cons of a balanced budget amendment?

REVIEW QUESTIONS

1. Go to Federal Reserve Economic Database (http://research.stlouisfed.org/fred2/) and look in categories/national accounts for recent data on the U.S. national debt as a percent of GDP and recent figures on budget deficits. What does this tell you about recent trends? Compare the period 1990-2007 to more recent years. Do the figures indicate that we may be returning to a more "normal" situation regarding debt and deficits?
2. Search the internet and locate relatively recent debt / GDP data for European countries. Construct a table of Eurozone members and their debt / GDP ratios based on your search. Review the **convergence criteria** for participation in the Eurozone presented in the chapter. Don't forget to document your source(s)! What did you discover in this exercise? Explain your answer.
3. The chapter identifies and explains several reasons why it is inappropriate to compare the government

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debt to the debt of a private citizen. Which of these explanations are consistent with the presentation in the chapter?

a. Governments have the ability to "roll over" their debt more or less endlessly.
b. Governments cannot default on their debt obligations.
c. A significant portion of the government debt is owed to U.S.citizens.
d. The U.S. government pays interest on its debt in dollars that it prints.
e. Government debt is always used to finance investment.

4. The chapter identifies and explains several reasons why we are likely to observe relatively high deficits in the U.S. even as the economy stabilizes. Which of these explanations is consistent with the chapter's presentation?
   a. Health care costs are expected to continue to increase.
   b. Young adults are having too many children and that creates demographic pressures.
   c. Federal subsidies of health care are expected to grow.
   d. The rising costs of higher education will contribute to deficits.
   e. Interest payments on the debt will likely increase in the future.
5. The chapter is very clear that it's dangerous to assume that, "government debt is never a concern." Which of the following are reasons articulated in the chapter for why debt can be a concern?
   a. Foreign holders of U.S. debt may decide to sell their bonds.
   b. A larger share of future budgets must be devoted to interest payments.
   c. It is always unwise for governments to get into debt
   d. Interest payments to high income individuals could exacerbate income inequality.
   e. Deficit spending during a recession will only make the economic downturn worse.
6. Match each concept in Column A with a definition or example in Column B.

Column A	Column B
Debt	The portion of the gross federal debt that is owed to individuals or groups within the country
Deficit	A congressionally mandated limit on the size of the federal debt
Gross federal debt	The portion of the gross federal debt that is owed to foreign individuals or groups
Public debt	A stock variable that represents the accumulation of deficits over many years
Internal debt	The gross federal debt minus the debt owed to other government accounts such as Social Security and Medicare
External debt	A policy of deficit cutting that reduces public expenditures and/or raises taxes to balance the budget
Monetizing the debt	A flow variable that measures the excess of spending over revenue collections
Debt ceiling	The requirements that EU countries must satisfy as a condition for participating in the Eurozone
Austerity	The purchase of new debt from the Treasury Department by the Federal Reserve.
Convergence criteria	Total amount owed by the federal government to all claimants, including foreigners, the public in the United States, and other government accounts

Notes

1. Office of Management and Budget, "The President's Budget for Fiscal Year 2013," Historical Table 1.2.
2. Congressional Budget Office, "The Budget and Economic Outlook: Fiscal Years 2013 to 2023," February 5, 2013.
3. CBO, "Choices for Deficit Reduction," November 2012.
4. Ibid., p. 2.
5. See CBO, "Reducing the Deficit: Spending and Revenue Options," March 2011, for details.
6. Erskine Bowles and Alan Simpson, "Memo to Congress, White House: Get Serious on Debt," Politico, February 14, 2013. www.politico.com/story/2013/02/memo-to-congress-white-house-get-serious-on-debt-87678.html

Text

17 How Economies Grow and Develop

What do people mean by economic development? How do the economic status of countries and the well-being of their people change over time? Most of the macroeconomic theory that we have presented so far relates to advanced economies such as that of the United States. But if we think back a hundred years, the United States was a very different place than it is today. Most transportation was still horse drawn, with only a few cars operating on a poor-quality road system. Most rural areas did not have electricity or telephone service. In 1900, real per capita income in the United States was about $5,000 (measured in 2000 dollars). During the twentieth century, real per capita income in the United States rose about sevenfold, to more than $35,000.

The median income in the world today is about equal to that of the United States in the early 1900s. Although billions of people still live in severe poverty, some formerly poor countries—such as South Korea, China, and India—are rapidly developing. Many others have experienced little economic progress. It is both interesting and important to evaluate how economies grow, how the growth process differs in different cases, and why some countries are very successful at promoting rapid growth, while others seem to be "stuck" at a low level of income.

As we will see in what follows, *economic growth* and *economic development* are not always the same thing, and the differences become more pronounced at higher levels of income. One important theme in this chapter is that, contrary to some earlier theories, there is nothing "automatic" about poor countries' becoming developed. Another is that even rapid and sustained GDP growth may not be sufficient to ensure broad-based well-being improvement.

1. Development and Economic Growth

Economic development is an idea that became formalized in the mid-twentieth century, as the colonial empires began to break down and the more industrialized countries gradually took on a changed set of attitudes toward the parts of the world that had not experienced industrialization.* The economic relations between colonies and their rulers had been dominated by the desire of the ruling countries to enrich themselves, first, through extraction of raw materials, and, second, through the creation of markets for goods that they wished to export. By the mid-twentieth century, resistance to imperial domination and strong movements for independence had made it impossible for the ruling countries to maintain their control. The emergence of many new independent countries required a change in attitude.

On the economic side, it was recognized that countries make better trading partners if they can escape from poverty. On the moral side was the recognition that, considering the

*In the first half of the twentieth century, a number of Western countries, including Britain, France, the Netherlands, and Spain, were colonial powers, exerting control over many colonies in Africa, Asia, and South America. Japan was also a colonial power, ruling South Korea and, at various times, parts of China. Most of the colonies had become independent countries by the 1960s.