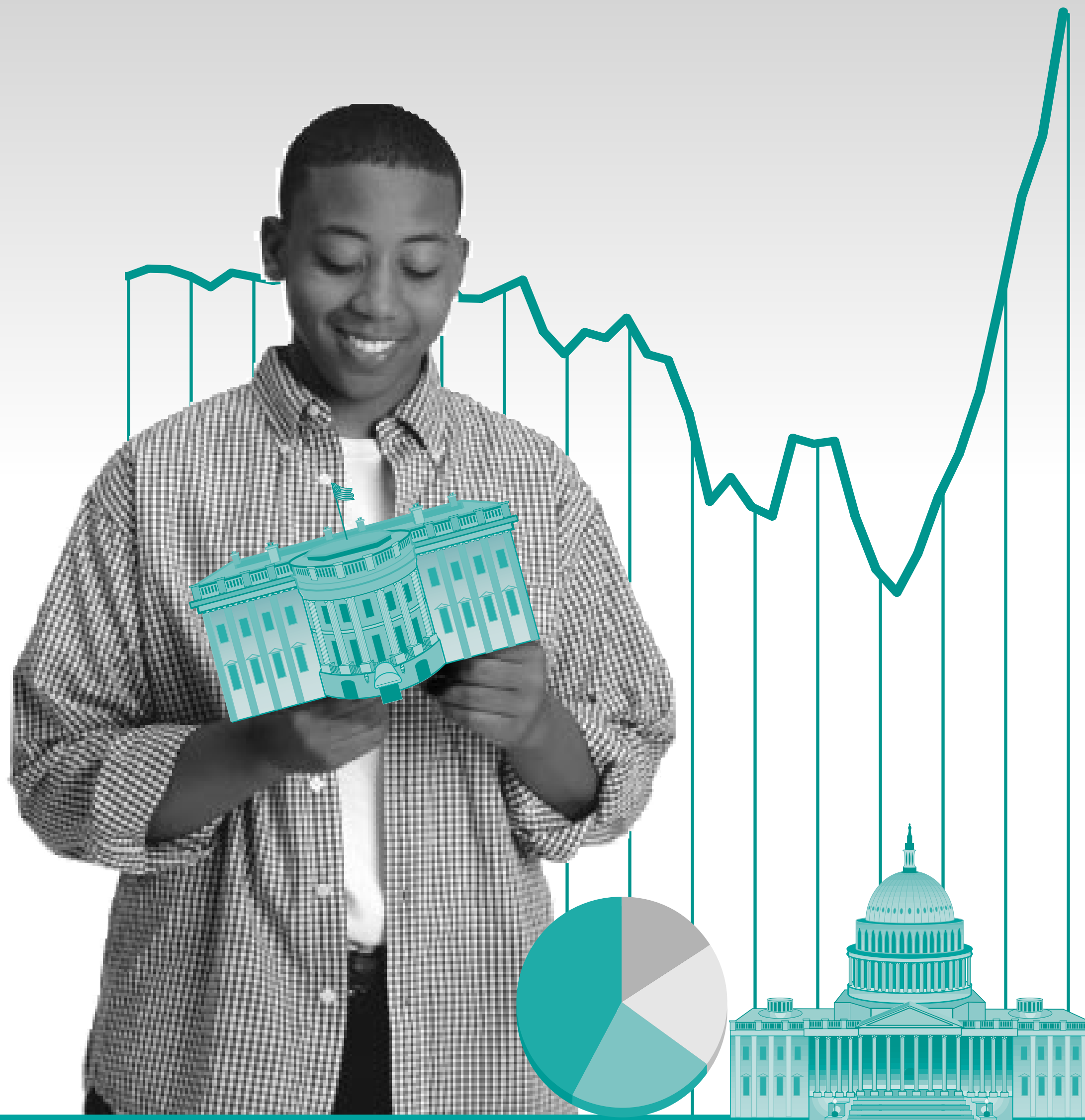
UNDERSTANDING the FEDERAL BUDGET

DEFICIT SURPLUS REVENUES SPENDING



FEDERAL RESERVE BANK OF NEW YORK
PUBLIC INFORMATION DEPARTMENT

By Ed Steinberg
Public Information Department
Federal Reserve Bank of New York

This booklet provides an overview of the basic economic concepts related to the budget of the federal government. It discusses the sources of the government's revenues, the nature of the government's major expenditures, and some issues related to the government debt and surplus or deficit.

the BUDGET

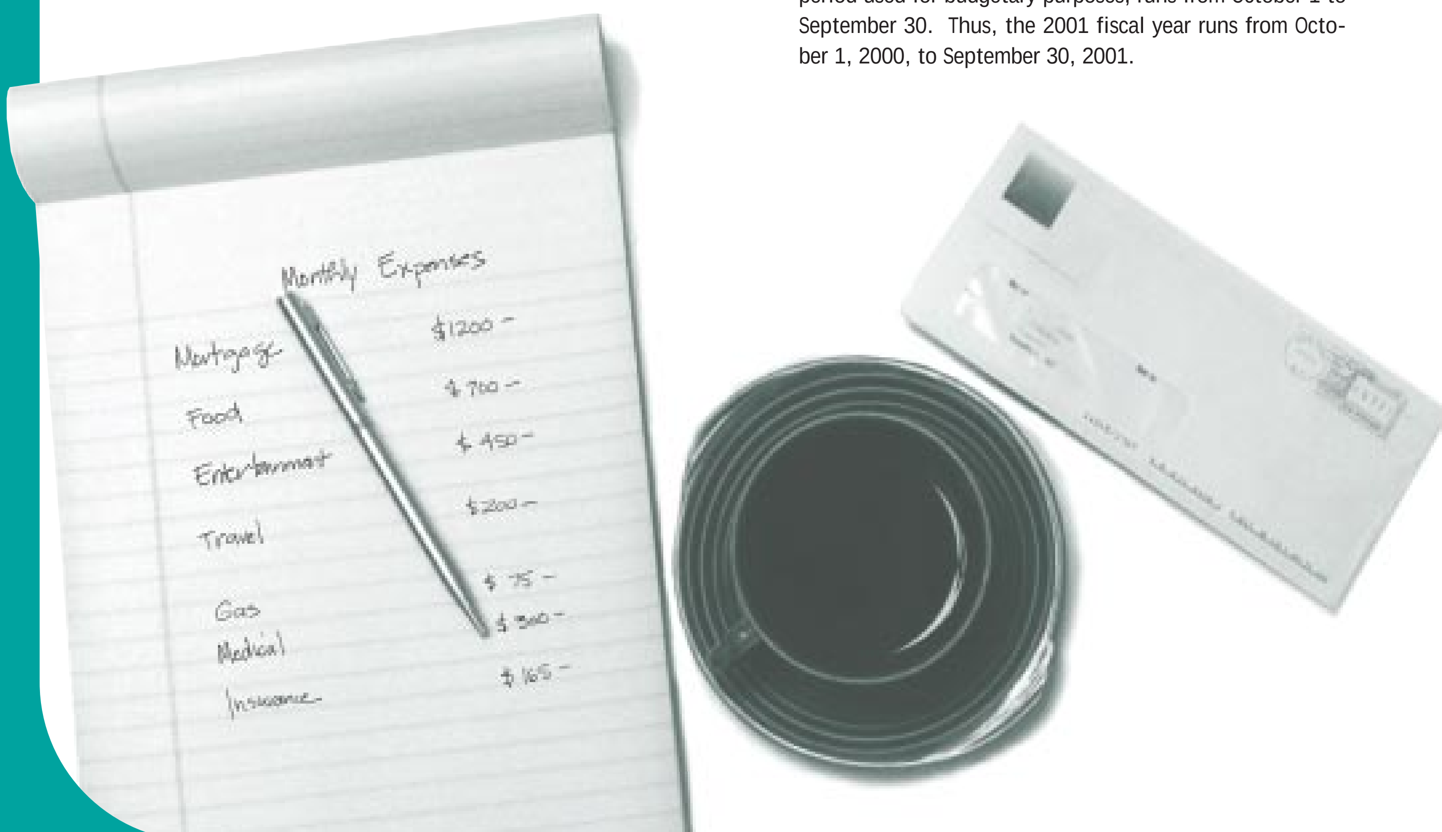
The Family Budget

If you receive an allowance from your family, or if you have a part-time job, you know that you have to operate within a budget — that is, the amount you can spend is limited by the size of your income. Similarly, your family has to live within a budget — that is, the amounts it can spend on food, clothing, housing, entertainment, and other items are limited by the size of your family's income. Of course, for a limited time, you or your family can spend more than your income — by borrowing or by dipping into your savings — but you can't do that on a permanent basis.

The Federal Budget

The federal government, too, has to operate within a budget. Decisions have to be made as to how much the government will spend on each of many items, such as national defense, Social Security, the FBI, and space exploration.

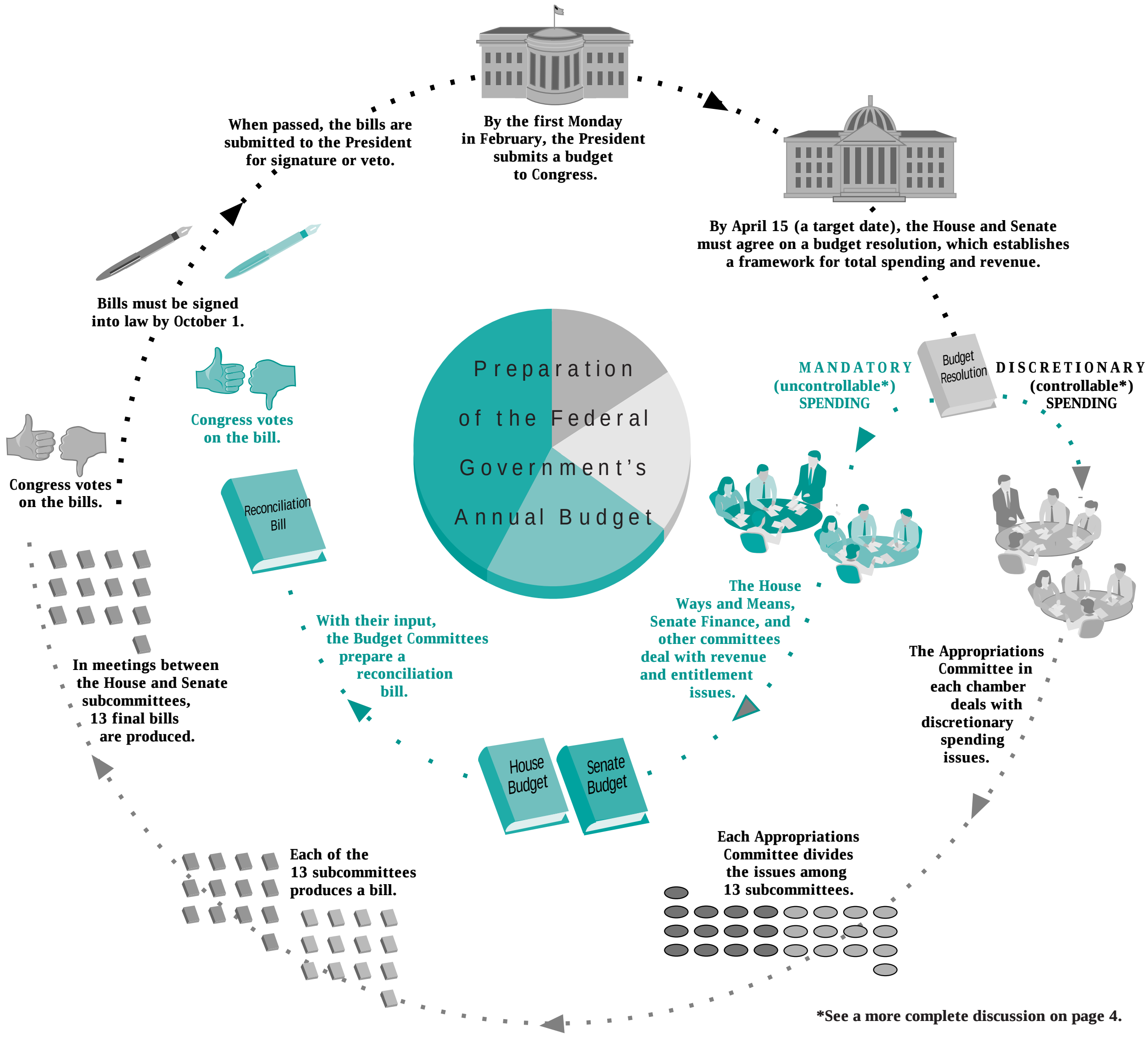
A budget usually applies to a certain period of time. Your family may have a monthly budget, deciding how much to spend each month on food, clothing, housing, etc.; or perhaps it has a yearly budget that includes items such as a summer vacation. The federal government prepares its budget for each *fiscal* year. The fiscal year, the 12-month period used for budgetary purposes, runs from October 1 to September 30. Thus, the 2001 fiscal year runs from October 1, 2000, to September 30, 2001.



DISCUSSION QUESTION

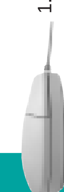
In what ways do you think the federal government's preparation of a budget is similar to the preparation of a family's budget? ■ In what ways are the processes different?

The preparation of the federal government's annual budget is a complicated process. The steps in the process are illustrated below, and more information is available on the Web.[1]



*See a more complete discussion on page 4.

1. www.access.gpo.gov/usbudget/fy2001/guide03.html#TheBudgetProcess



SPENDING

Your family's budget and the government's budget are alike in that both include some items on which spending is discretionary, or controllable, and some items on which spending is mandatory, or not controllable.

For example, if your family rents its house or apartment, it has to pay the rent each month, and if you live in your own home and have a mortgage, you have to pay the mortgage each month. Such payments are mandatory (they have to be made); they are not discretionary. On the other hand, the amounts that your family chooses to spend on items such as food and entertainment are discretionary. In any particular month, for example, you may decide to eat out more or less often.

Similarly, the federal government's budget contains both mandatory and discretionary elements. Consider, for example, Social Security, which accounts for more than 20 percent of total federal expenditures. (Social Security is a program that taxes people when they are working, and then provides them with income when they retire; it also provides income for workers who become disabled and for the dependents of workers who die.) By law, the government has to pay Social Security benefits to anyone who qualifies for them.

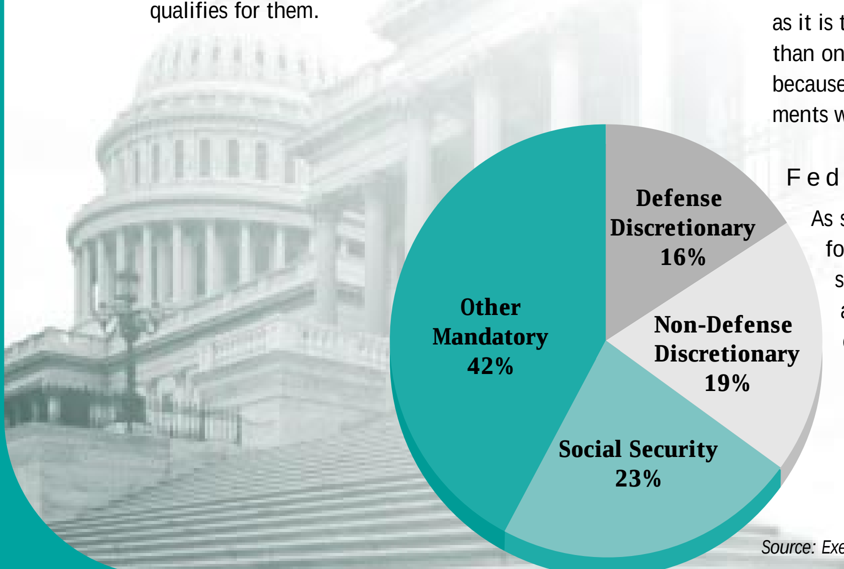
Other examples of mandatory spending are Medicare, Medicaid, benefits to retired civil servants, and interest on the debt that the government has accumulated over the years. (Medicare is a program that pays for health care for the elderly and certain disabled persons, while Medicaid is a joint federal-state program that provides medical assistance to low-income persons.) In contrast, spending on items such as national defense, space exploration, and the FBI is discretionary; the government can do more or less of it, as it decides.

Spending Priorities Change Over Time.

Thirty-five years ago, for example, defense accounted for more than two-thirds of all discretionary spending, and discretionary spending exceeded mandatory spending, because many of today's social programs were much smaller. For example, the number of retired workers receiving Social Security benefits was only about one-third as large as it is today, and Medicare, which today accounts for more than one-tenth of the budget, was not yet in effect. Also, because the federal debt was much smaller, interest payments were a smaller share of the budget.

Federal Spending

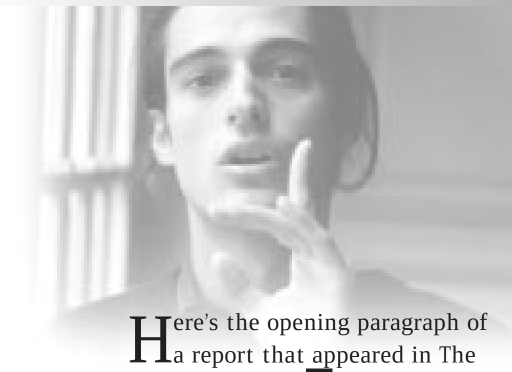
As shown in the chart, mandatory spending accounts for the majority of the federal budget. The largest single discretionary item is national defense, which accounts for almost half of the discretionary share of the budget.



Source: Executive Office of the President of the United States, 2000.

D I S C R E T I O N A R Y

DISCUSSION QUESTION



A Budget Cut of 1% Is Passed by Senate; Clinton Dismisses It

By TIM WEINER

WASHINGTON, Nov. 2 — The final battle of this year's budget war was joined today, as President Clinton rejected as ''blind'' and ''mindless'' an across-the-board budget cut passed by Congress and his negotiators hunkered down with congressional chairmen to shape the federal budget behind closed doors.

Here's the opening paragraph of a report that appeared in The New York Times. ■ What are the advantages and disadvantages of across-the-board budget cuts — that is, cutting all items by the same percent? ■ Suppose your family had to cut its budget one percent; would you use an across-the-board approach? ■ Why or why not? ■ How do your arguments apply to the federal budget?

How Much Do We Pay?

The Independent Budget Office of the City of New York will tell you how much of the federal taxes that your family pays goes for individual items such as national defense, Social Security, health care coverage, and interest payments.

Go to **www.ibo.nyc.ny.us** and click on *1999 Tax Receipt.* You will be asked how much you pay in federal taxes. If you don't know (or don't want to tell), enter any amount and you will learn how much of that amount would go for national defense, Social Security, etc.

TAKE THE BUDGET CHALLENGE!

An economist recently made the following comments about the shift that has occurred in the budget from discretionary to mandatory spending. The economist was speaking to a group of colleagues, though, and he used language that is meaningful to economists but perhaps unclear to others. Can you help? Explain in everyday language the three points that appear below:

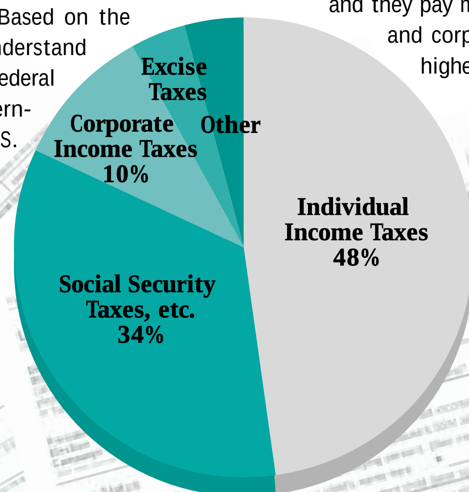
■ First, short-term deficits have become less and less useful as indicators of the longer term fiscal situation, because of the current budgetary approach of ignoring implicit federal commitments. ■ Second, the recent reliance on discretionary spending cuts to *make room* for ongoing entitlement growth may have reached the end of its effectiveness, as discretionary spending is approaching an historically low share of GDP. ■ Third, as entitlement growth is driven by demographic and economic factors rather than by explicit legislation, it will require active program *reductions*, rather than simply legislative forbearance, to improve the current fiscal situation.

REVENUES

Your family's income probably consists largely of wages and salaries, or perhaps the profits of a family business. In contrast, the federal government's income, or revenues, consists predominantly of taxes.

Composition of Federal Revenues

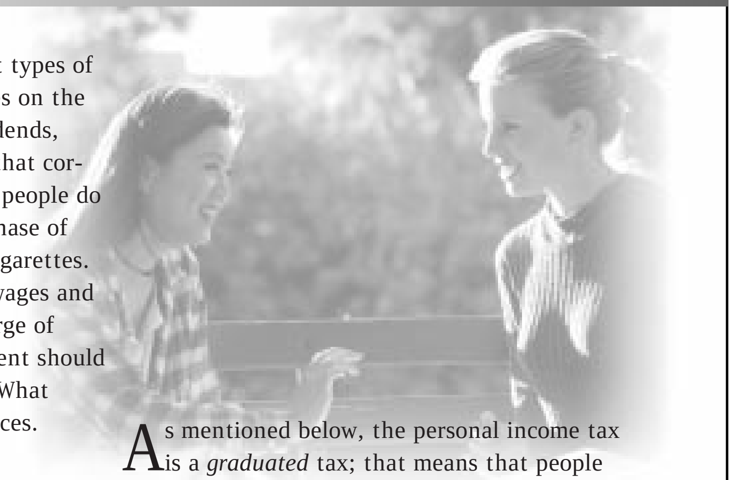
As shown in the chart, individual income taxes make up about one-half of federal revenues, Social Security payroll taxes and related revenues (such as unemployment insurance taxes) provide another one-third, and corporate income taxes another 10 percent. Based on the information in the chart, you can understand something very important about the federal budget, something the federal government has in common with many U.S. families. That is, income is higher in good economic times than in bad economic times, such as in a recession. When times are good, family incomes are larger because it is easier to find work, overtime work may be more available, and business profits are higher. Similarly, the government's revenues are higher in good times because more people are working and they pay more taxes on their larger incomes, and corporations pay more taxes on their higher profits.



Source: Executive Office of the President of the United States, 2000.

W A G E S S A L A R I E S B U S I N E S S
S O C I A L S E C U R I T Y T A X E S

DISCUSSION QUESTIONS



Governments rely on many different types of taxes. For example, there are taxes on the income (wages, salaries, interest, dividends, etc.) that people earn, on the profits that corporations make, on the spending that people do (general sales taxes), and on the purchase of particular items, such as gasoline or cigarettes. Social Security is funded by a tax on wages and salaries. ■ Suppose you were in charge of determining which taxes the government should levy. What would you tax more? ■ What would you tax less? Explain your choices.

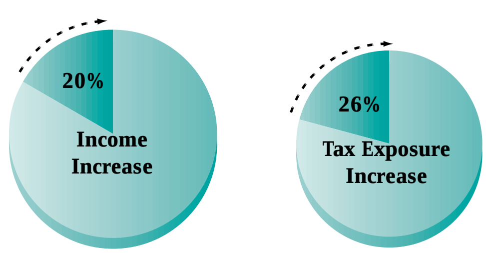
As mentioned below, the personal income tax is a *graduated* tax; that means that people with higher incomes pay higher tax rates than people with lower incomes. Lower amounts of income are currently taxed at a 15 percent rate, higher amounts at 31 percent, even higher amounts at 36 percent, and the highest at 39.6 percent. During World War II, though, the highest rate was 94 percent. ■ What arguments can you make for and against taxing away 94 percent of each extra dollar earned by someone with a very high income?

A Tax Advantage

In fact, when times are good and people's incomes increase, federal tax revenues rise even more rapidly than people's incomes. That happens for two reasons. First, the income tax is *graduated*, meaning that as people's incomes rise, they pay higher tax rates on the higher amounts.

The second reason has to do with the personal exemption, or the amount of tax-free income per person to which a family is entitled. Suppose a family has $12,000 in personal exemptions, and prosperity increases the family's income from $50,000 to $60,000, or by 20 percent. Because of the $12,000 in exemptions, the amount of income on which the family may have to pay taxes increases from $38,000 to $48,000, or 26 percent.

Tax Exposure Can Increase Faster Than Income

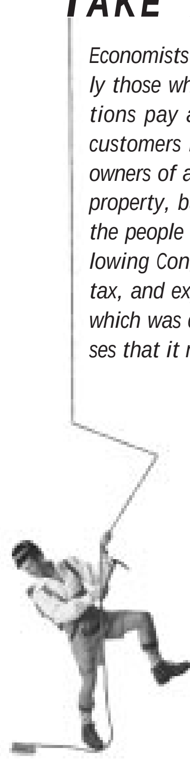


$50M to $60M
Increase of income is 20 percent

$38M to $48M
Increase of tax exposure is 26 percent

TAKE THE BUDGET CHALLENGE!

Economists recognize that the people who pay a tax are not necessarily those who bear the true burden of the tax. For example, corporations pay a tax on profits, but they may pass the tax on to their customers in the form of higher prices on their products. Similarly, owners of apartment buildings have to pay a tax on the value of their property, but they pass the tax on — by charging higher rents — to the people who rent the apartments. With that in mind, read the following Congressional Budget Office discussion of the Social Security tax, and explain the last sentence. (The Congressional Budget Office, which was created in 1974, provides Congress with nonpartisan analyses that it needs for economic and budget decisions.)



The tax that finances Social Security equals 6.2 percent of wage, salary, and self-employment income up to a taxable maximum ($76,200 in 2000), paid by both employer and employee. Thus, the total Social Security tax is 12.4 percent of earnings up to the maximum. The Medicare tax has no cap and equals 1.45 percent of earnings, again paid by both employer and employee, to yield a total tax of 2.9 percent. Economists generally agree that the entire payroll tax is actually paid by workers because their wages are lower by the employer's share of the tax.

SURPLUS and

The difference between the government's revenues and spending in a fiscal year is the government's annual *surplus or deficit*. If the government's revenues exceed its spending in a particular year, there is a surplus. If outlays exceed revenues, there is a deficit.

Government Borrowing

If your family spends more than its income, it may borrow to make up the difference, perhaps by taking on some credit card debt or by taking out a loan from a bank or credit union. The government borrows mainly by issuing Treasury bills, notes, and bonds. Bills are loans that the government repays in a year or less, notes have maturities of from two to 10 years, and bonds mature in more than 10 years. When someone buys a U.S. Savings Bond, for example, the person is lending to the federal government. While Savings Bonds exist in paper form, the other government IOUs exist only as electronic accounting entries on computers. That allows the large IOUs to be bought and sold easily, and it reduces their vulnerability to theft and loss.

Interestingly, the government has to borrow even when it doesn't have a deficit. The reason is that the government is constantly paying off old debt. Suppose, for example, that the government is running a balanced budget — revenues are precisely equal to spending — and you cash in a Savings Bond. Because the government's spending is already equal to its revenues, the government has to borrow the funds it needs to pay off your Savings Bond. People are constantly cashing in government IOUs, so the government has to do new borrowing to offset that, and it actually does some borrowing every week.

For a description of the mechanics of government borrowing, see *Public Debt: Private Asset*, an 8-page booklet published by the Federal Reserve Bank of Chicago. The booklet can be obtained free of charge from:

Publications Coordinator
Public Information Center
Federal Reserve Bank of Chicago
P.O. Box 834
230 South LaSalle Street
Chicago, Illinois 60690-0834
Telephone: 312-322-5111

You can also order the booklet online at **www.frbchi.org** and view it on the Web.[1]

B O R R O W M O N E Y F R O M
I S S U E T - B I L L S ,

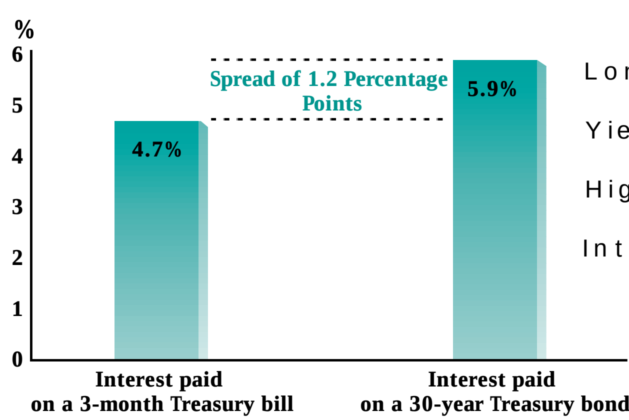
Interestingly, the government has to borrow even when it doesn't have a deficit. The reason is that the government is constantly paying off old debt.

D E F I C I T

Paying Back With Interest

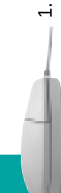
What determines how much interest the government has to pay when it borrows? The answer is that interest is the price of credit, and, as in any competitive market, price is determined by demand and supply. Thus, the interest rates that the government has to pay are determined by the interaction of the government's demand for credit and the supply of credit to the government by lenders, including banks, corporations, private citizens, U.S. government agencies, and foreign individuals and institutions. That supply, in turn, is determined by such factors as the willingness of the U.S. consumer to save, the borrowing needs of U.S. business to invest in new equipment and buildings, and the total budget surplus or deficit of state and local governments.

You should remember two major points about the interest that the federal government pays. First, the government can borrow at lower interest rates than private parties (such as your family), because lenders are less worried about not being repaid when they lend to the government than they are when they lend to private parties; people are sure the government will pay its debts. Second, rates generally are higher on longer maturities than on shorter maturities, because people who lend for longer periods have to be compensated for the risk that inflation might accelerate during the longer periods. If inflation accelerates, the lenders will be repaid with dollars that cannot buy as much as could the dollars that they originally lent to the government. As an example of what's called the *spread* between short- and long-term rates, the rate on three-month bills averaged 4.7 percent in 1999, while the rate on 30-year bonds averaged 5.9 percent, a *spread* of 1.2 percentage points.



Longer Terms Yield Higher Interest

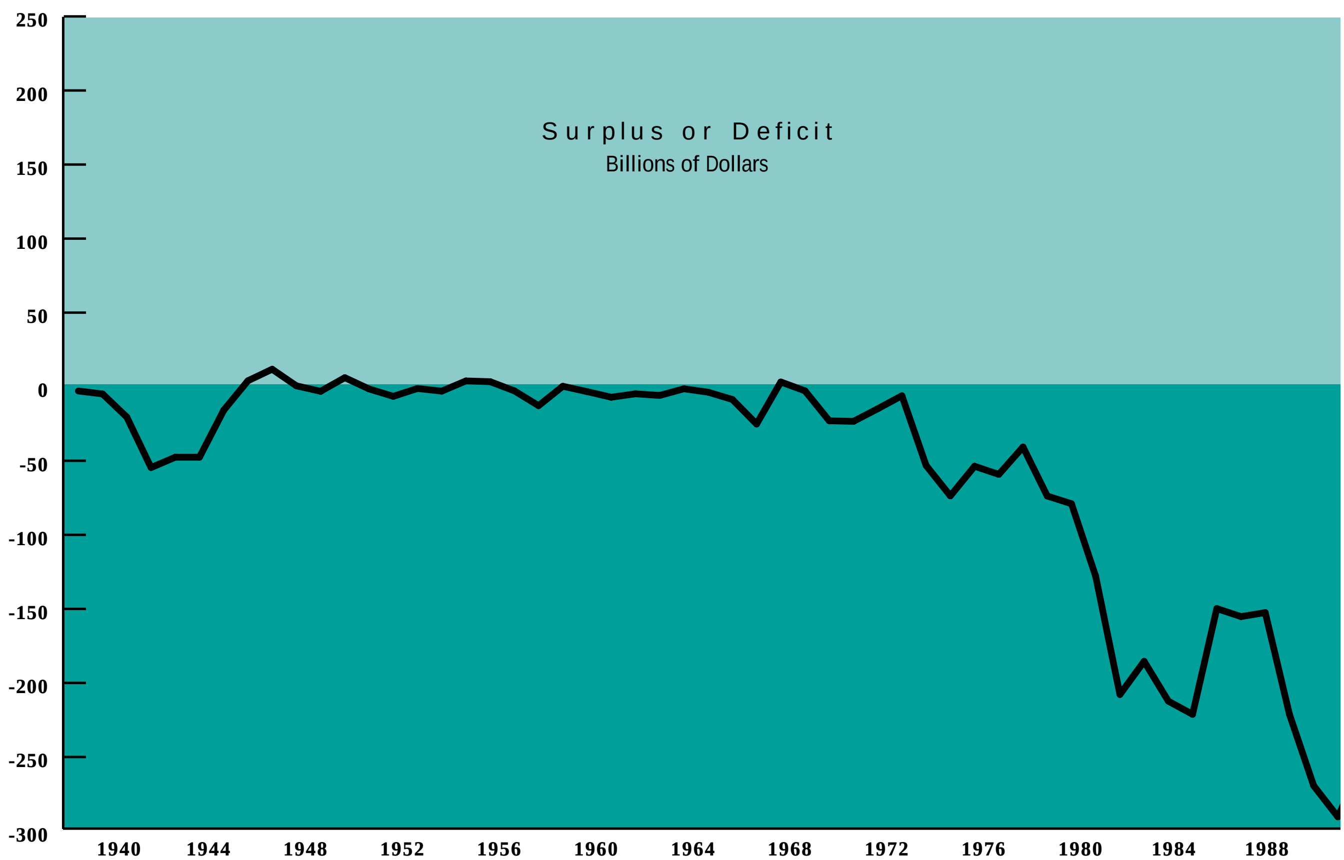
1. www.frbchi.org/pubs-speech/publications/BOOKLETS/public_debt/public_debt.html



THE BUDGET IN

What has the government run in recent years, a surplus or a deficit? As shown in the chart below, the government ran a surplus in fiscal 1998, 1999, and 2000, but those surpluses were the first since 1969.

What brought on a surplus after so many years of deficits? Part of the answer is that the government took steps to control discretionary spending. Much of the credit, though, has to go to the long economic expansion of the 1990s.



Source: Department of the Treasury. The figure for 2000 is a Federal Reserve Bank of New York projection.

STRONGER ECONOMY
HIGHER

RECENT YEARS

As explained earlier, a strong economy increases government revenues, because people and corporations pay higher taxes on their higher incomes. In addition, prosperity reduces the amounts that the government has to spend on items such as unemployment insurance.

THE BUDGET SURPLUS OF THE LATE 1990s WAS DUE MAINLY TO ECONOMIC EXPANSION.

DISCUSSION QUESTION

Why did the government find it easier than your family would to run a deficit almost 30 years in a row?

The BUDGET

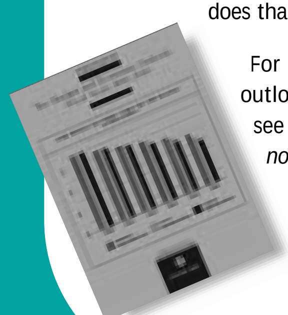
Forecasting a Surplus or Deficit

Economists expect that under current laws, the government will continue to enjoy a budget surplus for many years. A note of caution, though:

The New York Times reported on its January 26, 2000, front page that long-term budget projections have proven notoriously volatile and unreliable. As recently as January 1998, for example, the Congressional Budget Office (CBO) forecast a budget deficit for the 1999 fiscal year, while in fact, the government ran a surplus of more than $120 billion that year.

Why do you think it is difficult to forecast the surplus or deficit? What developments could occur that would affect the accuracy of the forecasts? Explain the impact those developments would have on the predicted surplus or deficit. You can find part of the answer in a six-page paper by Yale University economist William D. Nordhaus, *Policy Rules in the New Economy*. This paper is available on the Web.[1]

Despite the uncertainties, CBO does provide a forecast of the government surplus or deficit 10 years into the future (www.cbo.gov). Why do you think CBO does that?



For an excellent discussion of why the budget outlook improved so dramatically in recent years, see Box 1-1 of CBO's July 2000 *Budget and Economic Outlook,* available on the Web.[2]

Now, when your family has extra funds in its budget, it may look for ways to spend them. Similarly, government officials propose many options for using the anticipated federal surpluses. Some would like to increase discretionary spending — by spending more on national defense, for example. Others would like to cut taxes or pay off some of the debt that the government has accumulated over the years, and others would like to use the surplus to help fund the Social Security program. For a discussion of the various proposals, see the CBO's March 2000 report, *Budget Options,* which is available on the Web.[3] Also available on the Web[4] is a CBO discussion of the forces likely to affect the budget over the next 75 years.

Photo courtesy of the Congressional Budget Office.

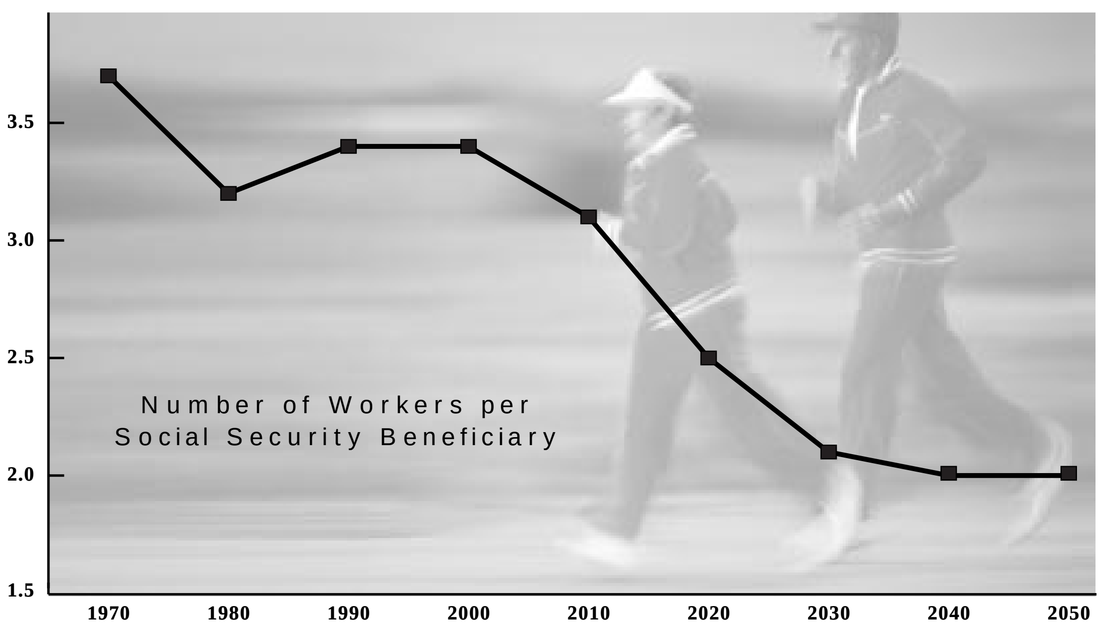
O U T L O O K

The Social Security Factor

Why does Social Security need help? The answer is that Social Security actually has a surplus now, but it will face financial pressures in the coming decades, as the large numbers of people born in the two decades after World War II retire. Birth rates were high in the two decades after World War II, but lower in subsequent decades. For that reason, and also because retired people are living longer, the ratio of the number of workers paying Social Security taxes to the number of people receiving Social Security benefits will fall sharply when the so-called *baby boomers* retire. As shown in the chart, the ratio is expected to fall from 3.4 in 2000 to 2.1 in 2030 and 2.0 in 2040 and 2050.

For more information on the financial outlook for Social Security, go to the Web.[5]

How large a factor are Social Security benefits in the incomes of people over 65? You can find out from *Income of the Aged Chartbook, 1998,* a 23-page publication of the Social Security Administration, available on the Web.[6]



Source: Congressional Budget Office. The figures for 2010 and beyond are estimates.

1. www.cbo.gov/showdoc.cfm?index=2095&sequence=0&from=7
2. www.cbo.gov/showdoc.cfm ?index=2241&sequence=0&from=7
3. www.cbo.gov/showdoc.cfm?index=1845&sequence=0&from=7
4. www.cbo.gov/showdoc.cfm?index=2517&sequence=0&from=7
5. www.ssa.gov/understanding.htm
6. www.ssa.gov/statistics/iac98toc.html

The FEDERAL

A Growing Problem

While the *deficit* is the amount by which government spending exceeds revenues in a particular year, the federal *debt* is the total amount of funds that the government has borrowed over the years, but has not yet repaid. When this booklet was written, in mid-2000, the federal debt was about $5.6 trillion. That's $5,600,000,000,000.

When did the debt get so large? Until recent decades, large increases in the debt generally occurred only during wars and recessions. During World War I, for example, the debt increased from a little over $1 billion to about $15 billion. Then, by reducing taxable income and creating a need for new social programs, the Depression of the 1930s brought the debt to almost $50 billion by the start of World War II.

The costs of World War II drove the debt to more than $250 billion, but the debt hardly grew at all for the next quarter century. In the late 1960s, though, spending increases due to the Vietnam War and new social programs put the government deeper in debt. After 1981, deficits increased very sharply. Tax cuts reduced revenue, while spending grew rapidly for programs such as Social Security and Medicare and, to a lesser extent, for national defense. The debt grew rapidly until the mid-1990s, when it leveled off.

Is the debt too large? To answer that question, economists sometimes compare the size of the debt with that of the country's Gross Domestic Product (GDP), the dollar value of all the goods and services produced in the economy each year. Just as your family can put the debt it owes into perspective by measuring it against your family's income, so, too, we can gain some perspective on the size of the federal debt by measuring it against GDP, the total income from which the government can derive its revenue.

As shown in the chart, the debt rose very sharply to more than 100 percent of GDP during World War II, then fell steadily to about one-third of GDP by 1980. The ratio rose during the 1980s and early 1990s, reaching a high of about 67 percent in the mid-1990s, but it has come down in recent years to about 60 percent.

Source: Economic Report of the President, February 2000.

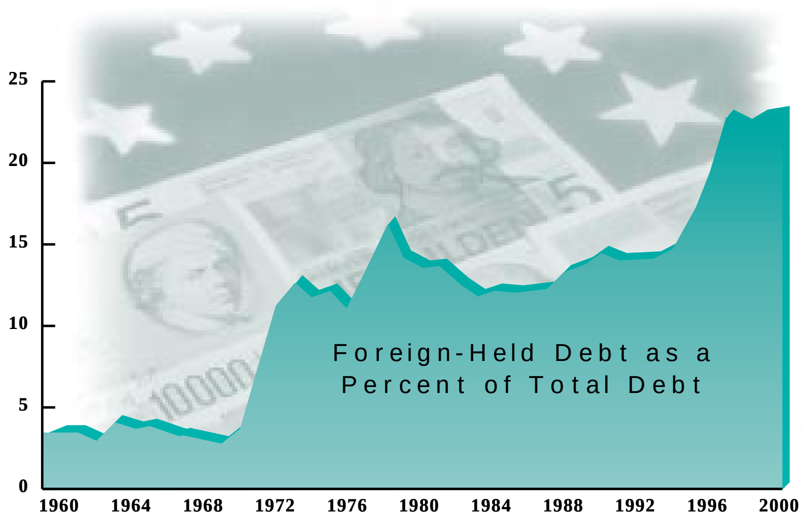
D E B T

Do you want an up-to-date figure on the size of the federal debt to the penny? You can find it at www.publicdebt.treas.gov.

Or Is It a Problem?

Why worry at all about the size of the federal debt? After all, doesn't the government simply owe the debt mainly to U.S. residents and to U.S. business firms? In a sense, don't we (through the government) simply owe the debt to ourselves?

To a large extent, the answer is yes, but many economists have at least two worries about a large federal debt. The first is that if the government does a lot of borrowing, the increased demand for credit may push interest rates up. The higher interest rates, in turn, make investment more expensive, and thus may discourage some investment in the buildings and equipment that help our economy grow. In that way, a large federal debt could lead to slower economic growth for the United States.



Source: Department of Commerce, Department of the Treasury, and Federal Reserve Bank of New York.

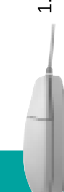
Second, as shown in the chart above, there has been an increase in the proportion of the debt that is owed to foreigners, from around 13 percent in the late 1980s to 22 percent in the late 1990s. A large foreign-held debt can be a concern, because it is something we don't owe to ourselves. In order to pay it off, we will have to transfer some of our purchasing power to foreigners, and that means that in the future, the ability of U.S. households to consume goods and services will be diminished.

In its fiscal year 2000 budget, the Clinton Administration had this to say about government deficits and debt (available on the Web[1]):

We must do all we can to keep the days of deficits in the past. Budget deficits force the Government to borrow money in the private capital markets. That borrowing competes with (1) borrowing by businesses that want to build factories and machines that make workers more productive and raise incomes, and (2) borrowing by families who hope to buy new homes, cars, and other goods. The competition for funds tends to produce higher interest rates.

Deficits increase the Federal debt and, with it, the Government's obligation to pay interest. The more it must pay in interest, the less it has available to spend on education, law enforcement, and other important services, or the more it must collect in taxes — forever after. As recently as 1997, the Government spent over 15 percent of its budget to pay interest, in con

1. w3.access.gpo.gov/usbudget/fy2000/guide04.html



$1,000,000,000,000
$5,600,000,000,000

trast to a projected 12 percent for 2000. Continuing surplus will reduce these interest payments further in future years.

In the end, the surplus is a decision about our future. We can provide a solid foundation for future generations, just as parents try to do within a family. For a Nation, this means a strong economy and low interest rates and debt. Alternatively, we can generate large deficits and debt for those who come after us.

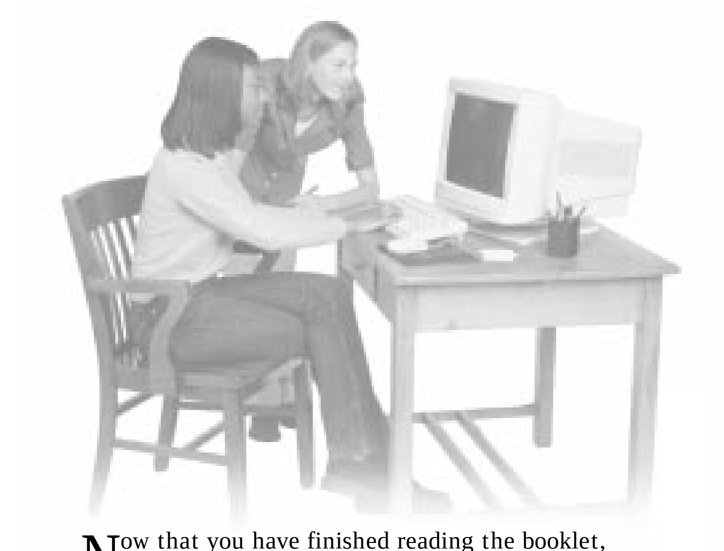
To learn more about the federal debt (including how to make a contribution to reduce the debt), check out the Web.[1]

Let's return to our earlier analogy between a family budget and the government budget. Under what circumstances should a family run a deficit in a particular year? What reasons are there for running a deficit in the government budget?

In recent years, many countries have *privatized* many activities, such as telephone service — that is, they have shifted the production of the services from the government to private industry. Why do you think they have done that?

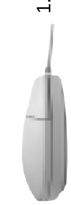
Source: Organisation for Economic Co-operation and Development. Data are for 1997.

DISCUSSION QUESTION



Now that you have finished reading the booklet, let's consider a basic question about the role that the government should play in the economy. The chart at the left shows that the government plays a larger role in the economy in other countries than it does in the United States, mainly because foreign governments play more of a role in funding health care than does the U.S. government. ■ What roles do you think the government should play in the economy? ■ Which goods and services should be produced by the private sector, and which ones should the government produce? Why? ■ Why, for example, does the government provide national defense? ■ Why does the government provide free elementary and high school education? ■ Should tax dollars be used to pay for people's health care? Why or why not?

1. www.publicdebt.treas.gov/opd/opdfaq.htm



Design: Robert Silverman Design

Federal Reserve Bank of New York
Public Information Department
33 Liberty Street
New York, NY 10045
www.ny.frb.org
2000