天津外国语大学(天外)
Tianjin Foreign Studies University
(TFSU)

Class starts at 14:00

(Beijing Time, GMT+8)

Ivan Monich, PhD

Task for our seminar

Dear students,

In this task, you will explore the topic of fiscal policy, with a focus on taxation. Taxation is the main source of revenue for the government, and it affects the economic behavior of individuals and corporations. You will learn about the different types of taxes, such as income tax, corporate tax, sales tax, etc., and how they vary across countries.

Your task is to choose a country of your interest and provide a summary of its taxation system for individuals and corporations. You should include the following information in your summary:

- The main types of taxes and their rates

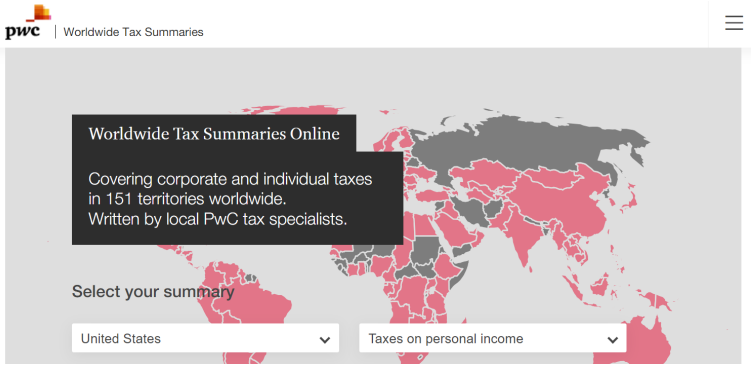
- The tax brackets and exemptions for individuals (if applicable)

~~- The tax incentives and deductions for corporations~~

~~- The advantages and disadvantages of the taxation system for the country's economy and society~~

~~You should write your summary in a paragraph of about 200 words, using a professional tone and clear language.~~ You should cite your sources using APA style. Please share your summary in the second part of the class.

Task for our seminar



Dear students,

In this task, you will explore the topic of fiscal policy, with a focus on taxation. Taxation is the main source of revenue for the government, and it affects the economic behavior of individuals and corporations. You will learn about the different types of taxes, such as income tax, corporate tax, sales tax, etc., and how they vary across countries.

Your task is to choose a country according to your students ID and country's dial code and provide a summary of its taxation system for individuals and corporations. You should include the following information in your summary:

- The main types of taxes and their rates
- The tax brackets and exemptions for individuals (if applicable)

You will be given two minutes. The time limit encourages you to present your findings on different occasions (do you remember the presentation in the elevator from Palo Alto = Silicon Valley = 硅谷

Dial codes https://46elks.com/kb/country-codes

+86	CN	CN	China

Tax summaries https://taxsummaries.pwc.com/

VAT

ZOOM charges you 14.99$ per month

The user from Russia should pay 14.99$+20% of VAT = 17.99$

The user from Germany should pay 14.99$+19% of VAT= 17.8381$

The user from _____ will pay 14.99& + 0% of VAT= 14.99$

Task for our seminar

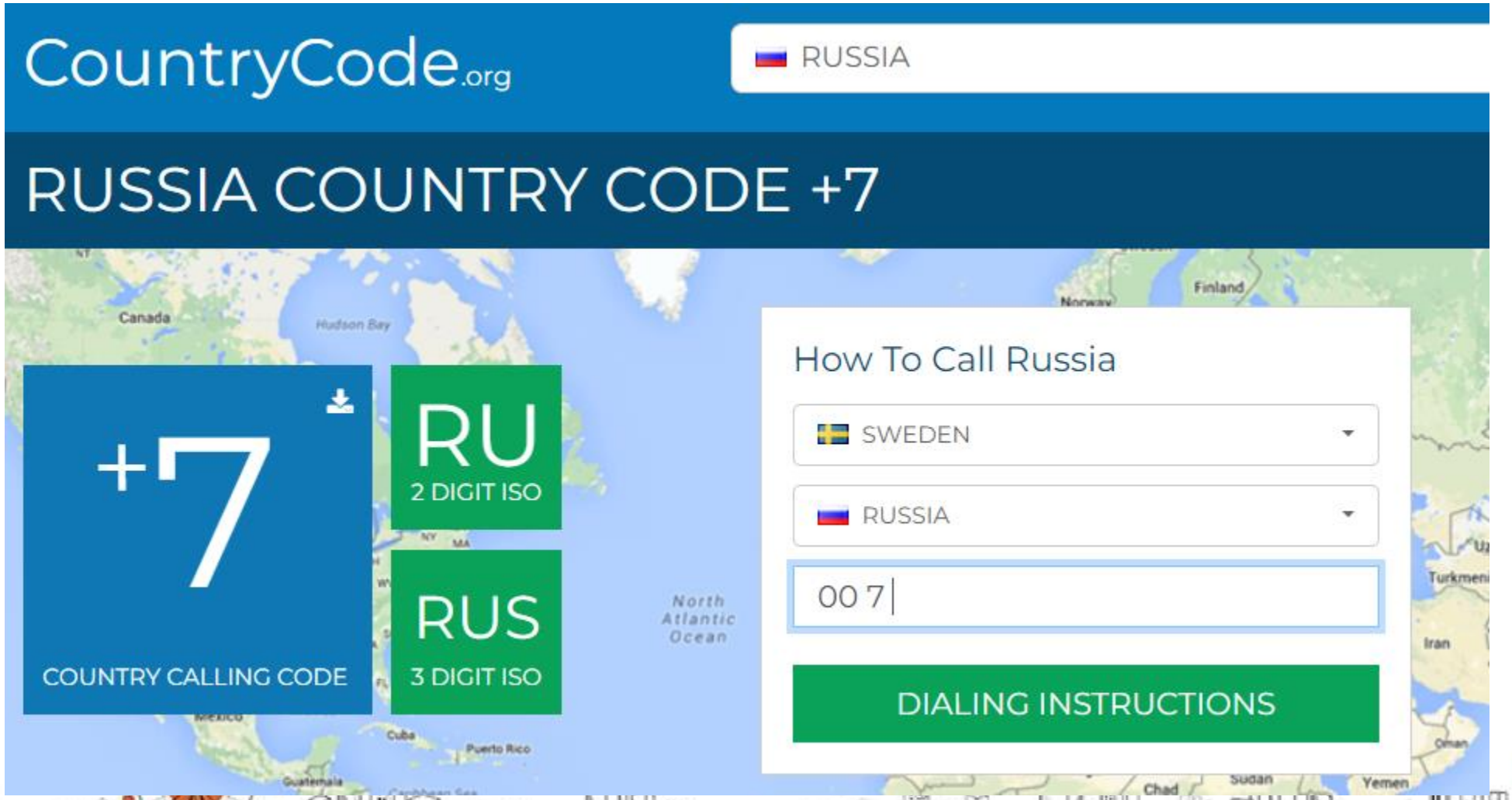
How should you choose the country? I propose an elegant approach. Every country has a telephone code, and every student has a corresponding student ID. Use the last two (three) digits to determine your country to explore its taxation.

After the break, you need to share the main types of taxes and their rates – individual and corporate taxes. Please note that you will be given two minutes only.

01 – the US

02

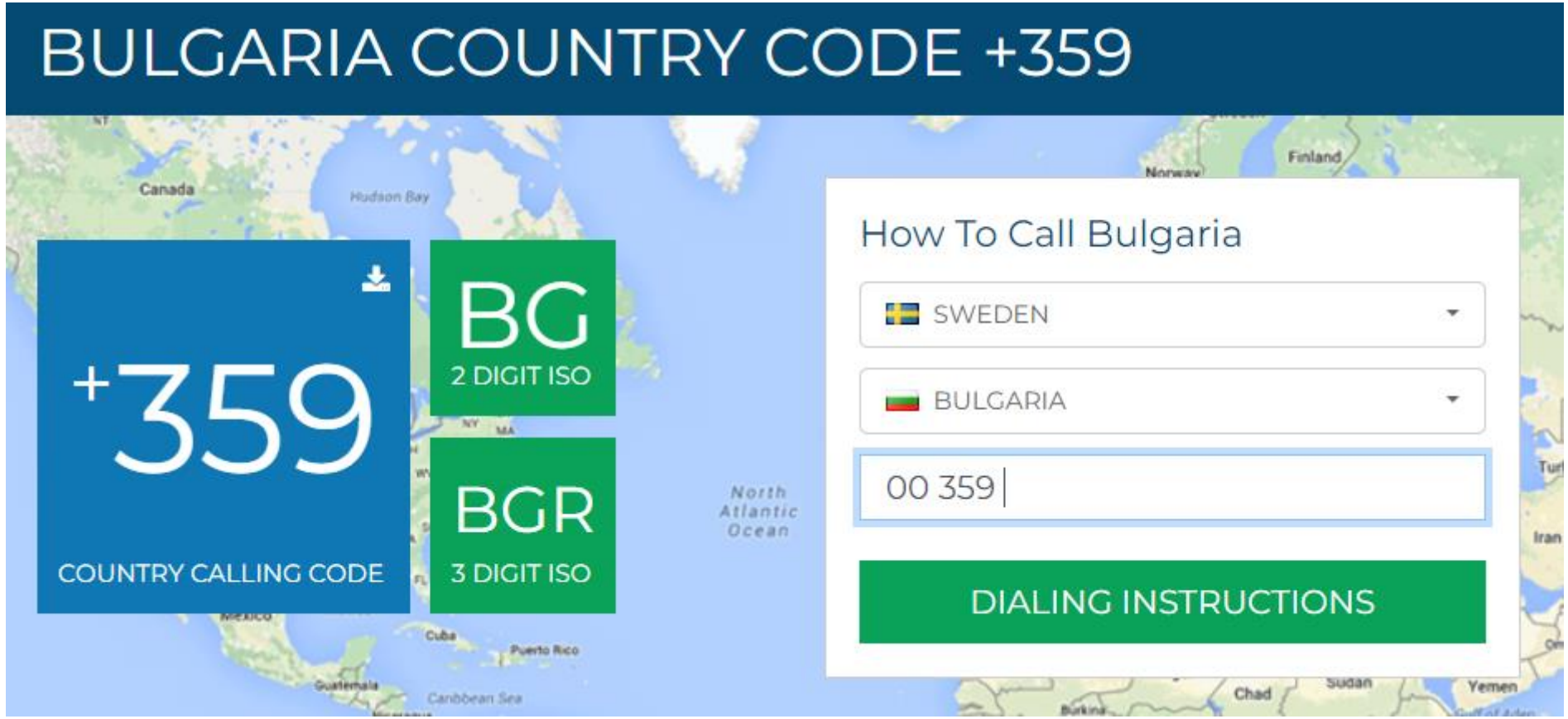
Task for our seminar https://countrycode.org/china



Task for our seminar

Online seminar emulation

Task for our seminar



Task for our seminar

Task for our seminar

https://www.iban.com/country-codes

COUNTRY CODES ALPHA-2 & ALPHA-3

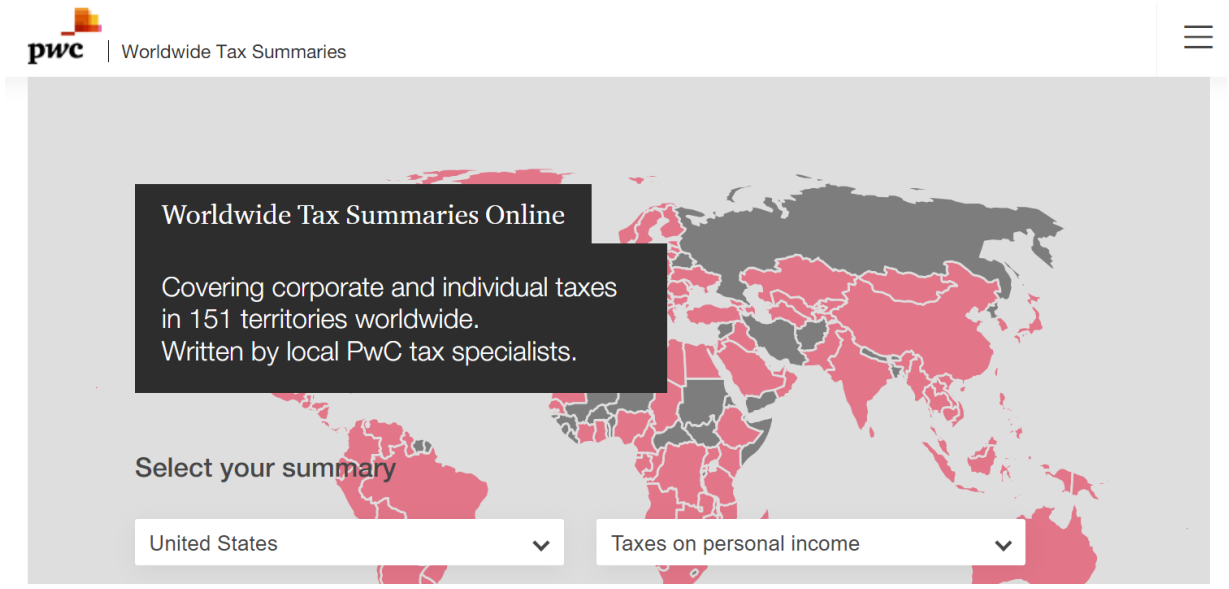
This is a complete list of all country ISO codes as described in the ISO 3166 international standard.
These codes are used throughout the IT industry by computer systems and software to ease the identification of country names.
We have compiled them in the quick reference table below in order to help our clients do quick conversions from the numeric or 2 letter code to any country name.

Country	Alpha-2 code	Alpha-3 code	Numeric
Afghanistan	AF	AFG	004
Albania	AL	ALB	008
Algeria	DZ	DZA	012
American Samoa	AS	ASM	016
Andorra	AD	AND	020
China	CN	CHN	156

Task for our seminar

Dial codes (https://46elks.com/kb/country-codes)

Tax summaries https://taxsummaries.pwc.com/



local taxes as a share of GDP

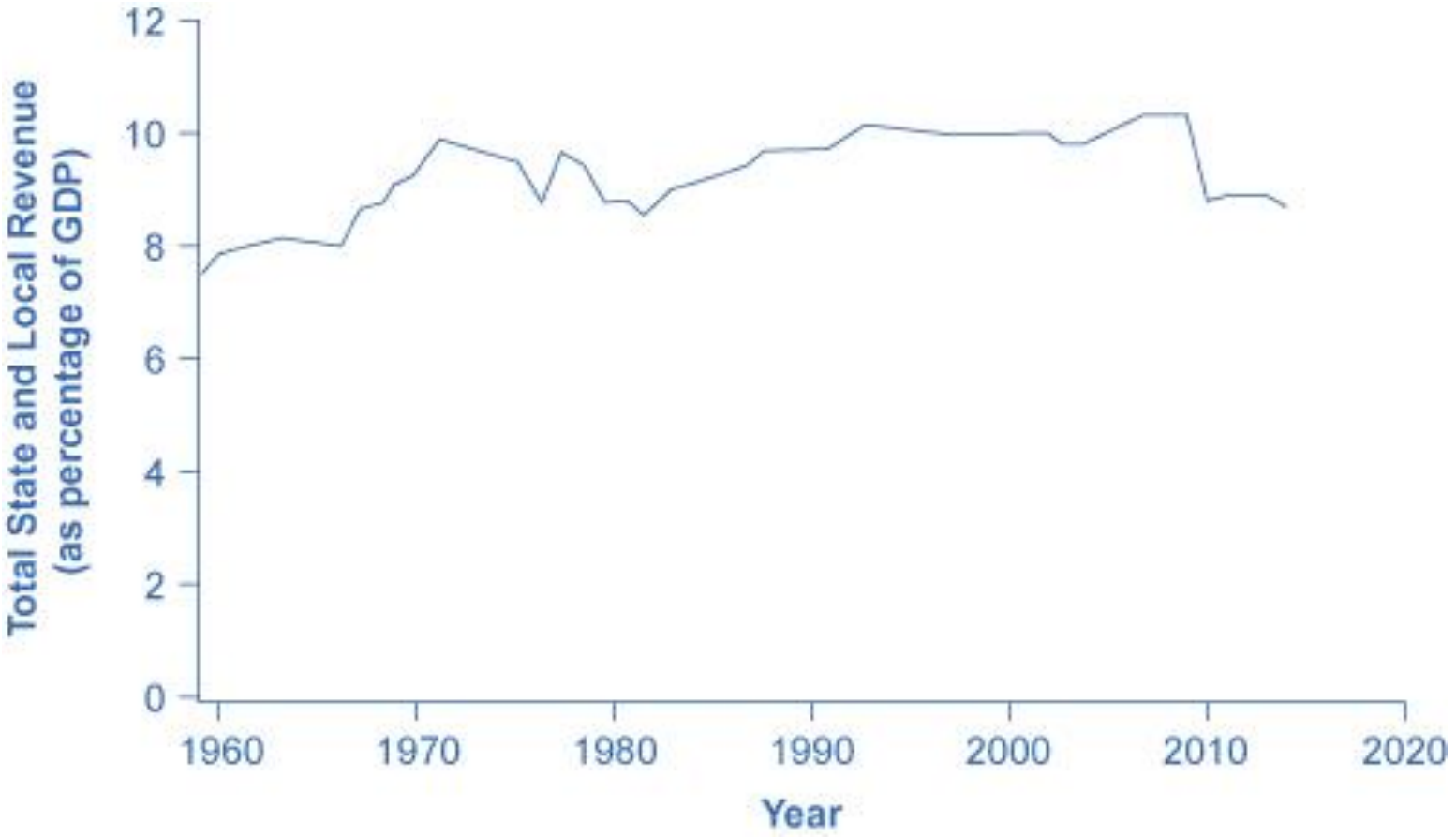


Figure 2. State and local tax revenues have increased slightly to match the rise in state and local spending. (Source: Economic Report of the President, 2015. Table B-21, https://www.whitehouse.gov/administration/eop/cea/economic-report-of-the-President/2015)

GLOSSARY

ability to pay principle:
normative argument that citizens with more income or wealth should bear more of the cost of social programs by paying a higher tax rate, since they have a greater ability to pay

benefit principle:
normative argument that tax payers should pay in proportion to the benefit they receive

corporate income tax:
a tax imposed on corporate profits

estate and gift tax:
a tax on people who pass assets to the next generation—either after death or during life in the form of gifts

excise tax:
a tax on a specific good—on gasoline, tobacco, and alcohol

flat tax:
proportional income tax system where all individuals pay the same income tax rate

individual income tax:
a tax based on the income, of all forms, received by individuals

marginal tax rates:
the tax one pays on the higher income one earns; see tax bracket

payroll tax:
a tax based on the pay received from employers; the taxes provide funds for Social Security and Medicare

progressive tax:
a tax that collects a greater share of income from those with high incomes than from those with lower incomes

property taxes:
taxes based on the value of your home or other real estate

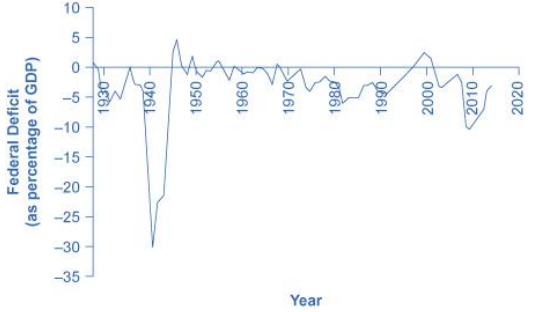
proportional tax:
a tax that is a flat percentage of income earned, regardless of level of income

regressive tax:
a tax in which people with higher incomes pay a smaller share of their income in tax

sales taxes:
taxes as a percentage of one's retail purchases

tax bracket:
range of personal income at which a given marginal tax rate applies; for a progressive income tax, as one's income increases, one moves to a higher tax bracket and pays a higher marginal tax rate on the amount of income above the tax bracket's lower bound

Federal Budgets and National Debt



LEARNING OBJECTIVES

- Differentiate between deficit and debt
- Explain how economic growth or decline can influence a budget surplus or budget deficit

Having discussed the revenue (taxes) and expense (spending) side of the budget, we now turn to the annual budget deficit or surplus, which is the difference between the tax revenue collected and spending over a fiscal year, which starts October 1 and ends September 30 of the next year.

Federal Budgets and National Debt

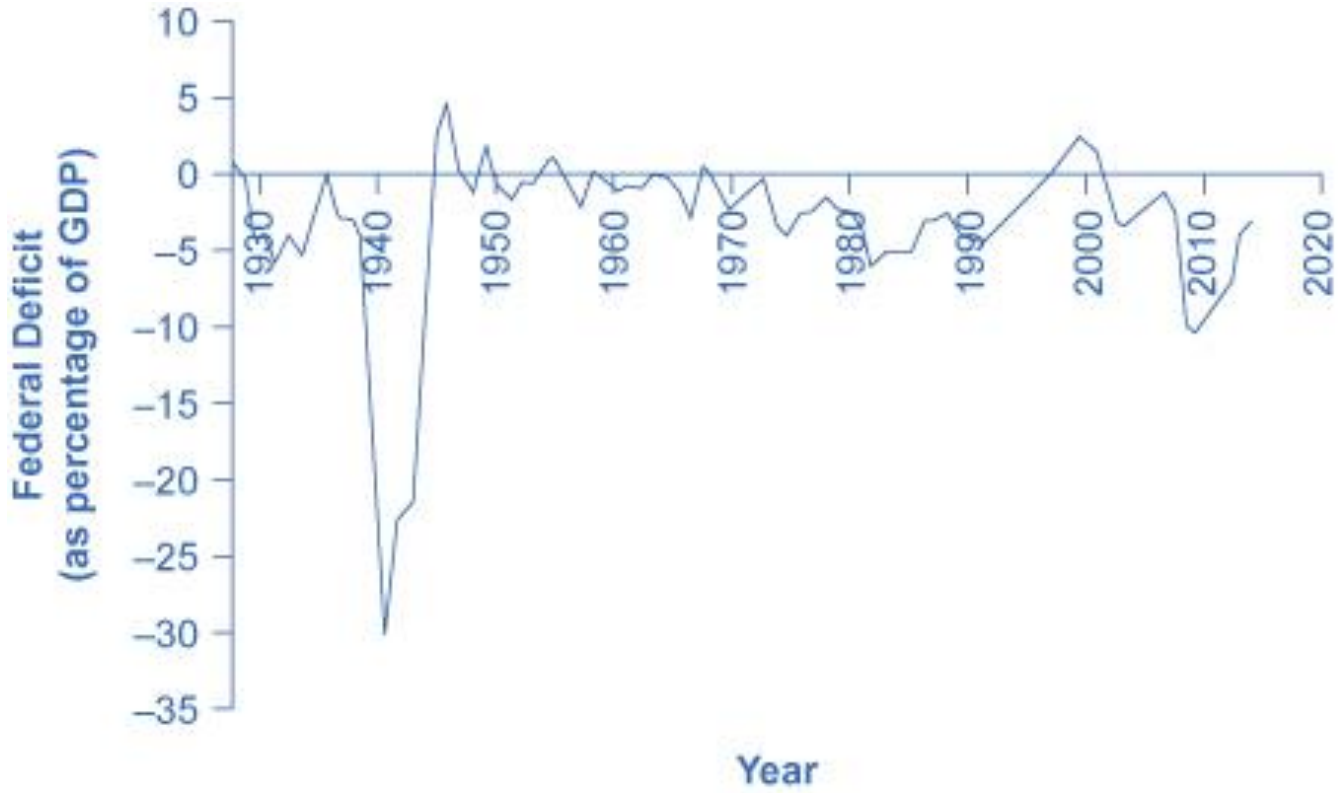
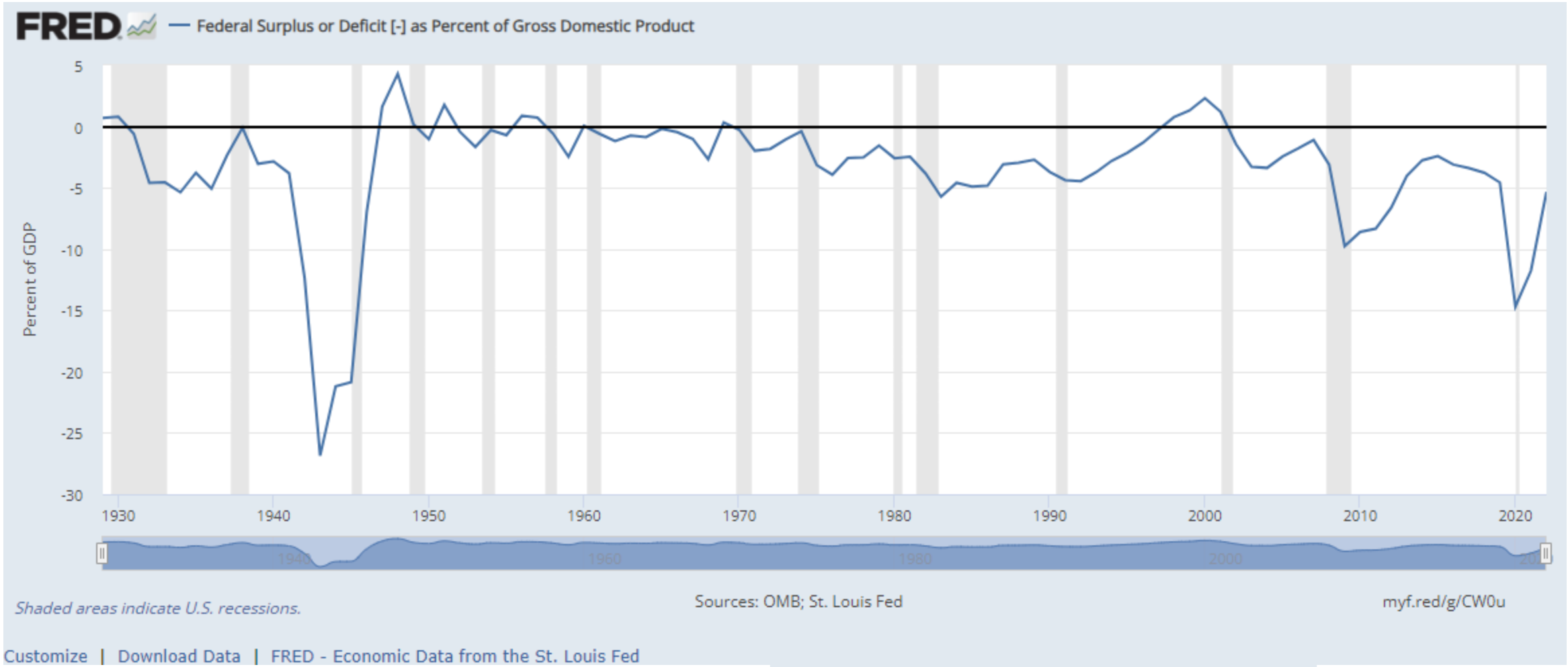


Figure 1. Pattern of Federal Budget Deficits and Surpluses, 1929–2014. The federal government has run budget deficits for decades. The budget was briefly in surplus in the late 1990s, before heading into deficit again in the first decade of the 2000s—and especially deep deficits in the 2008-2009 recession. (Source: Federal Reserve Bank of St. Louis (FRED). http://research.stlouisfed.org/fred2/series/FYFSGDA188S).



Customize | Download Data | FRED - Economic Data from the St. Louis Fed

Click to view the FRED graph in a new tab. This graph shows the Federal Surplus or Deficit as a Percentage of Gross Domestic Product from 1929 to the present.

You may visit this website: https://fred.stlouisfed.org/graph/graph-landing.php?g=CW0u

Debt/GDP Ratio

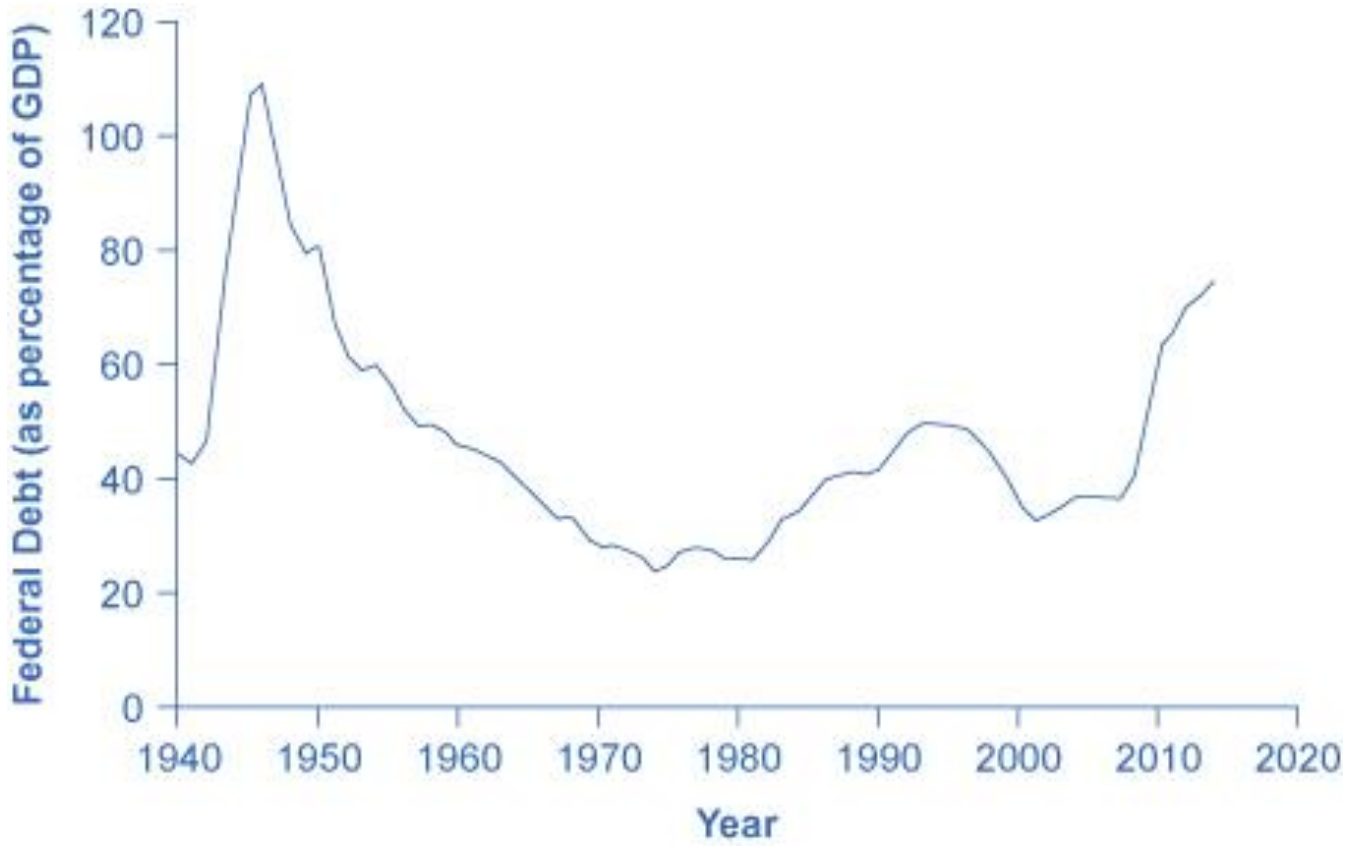
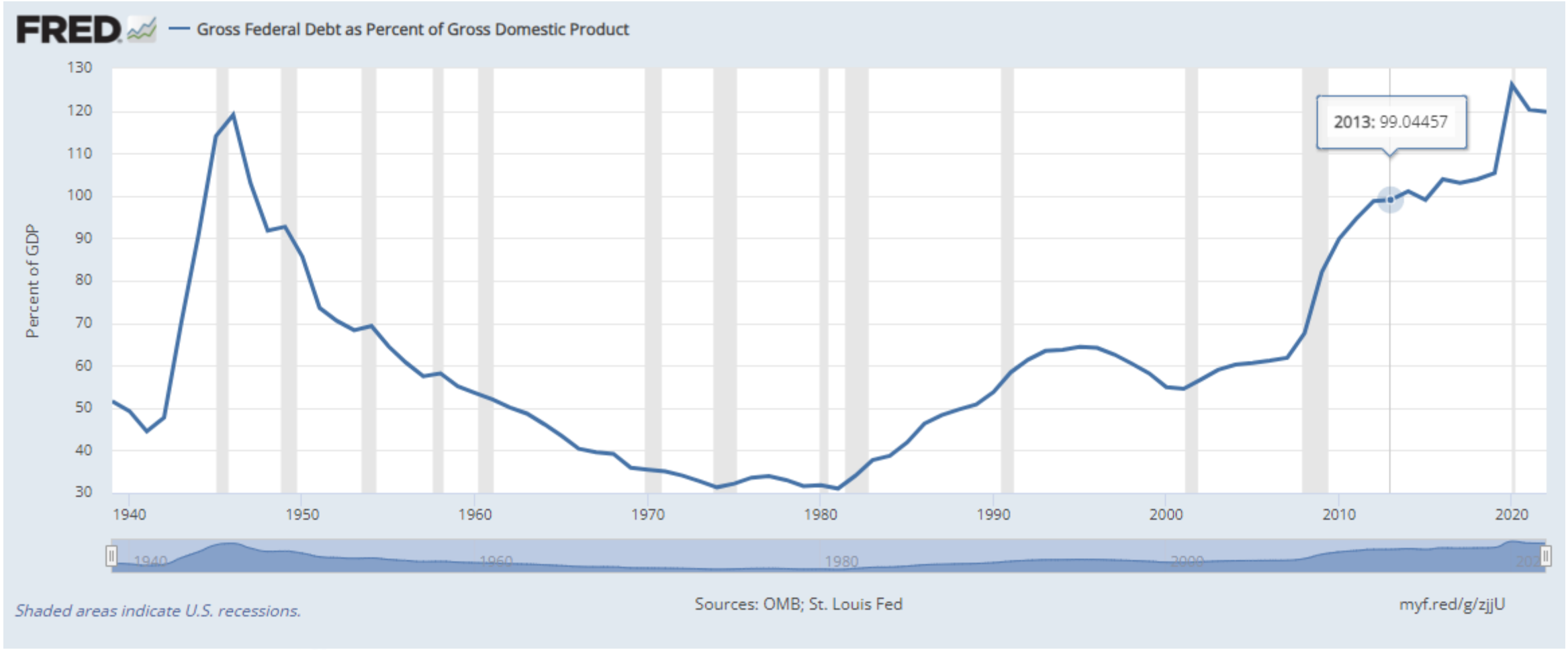


Figure 2. Federal Debt as a Percentage of GDP, 1942–2014. Federal debt is the sum of annual budget deficits and surpluses. Annual deficits do not always mean that the debt/GDP ratio is rising. During the 1960s and 1970s, the government often ran small deficits, but since the debt was growing more slowly than the economy, the debt/GDP ratio was declining over this time. In the 2008–2009 recession, the debt/GDP ratio rose sharply. (Source: Economic Report of the President, Table B-20, http://www.gpo.gov/fdsys/pkg/ERP-2015/content-detail.html)



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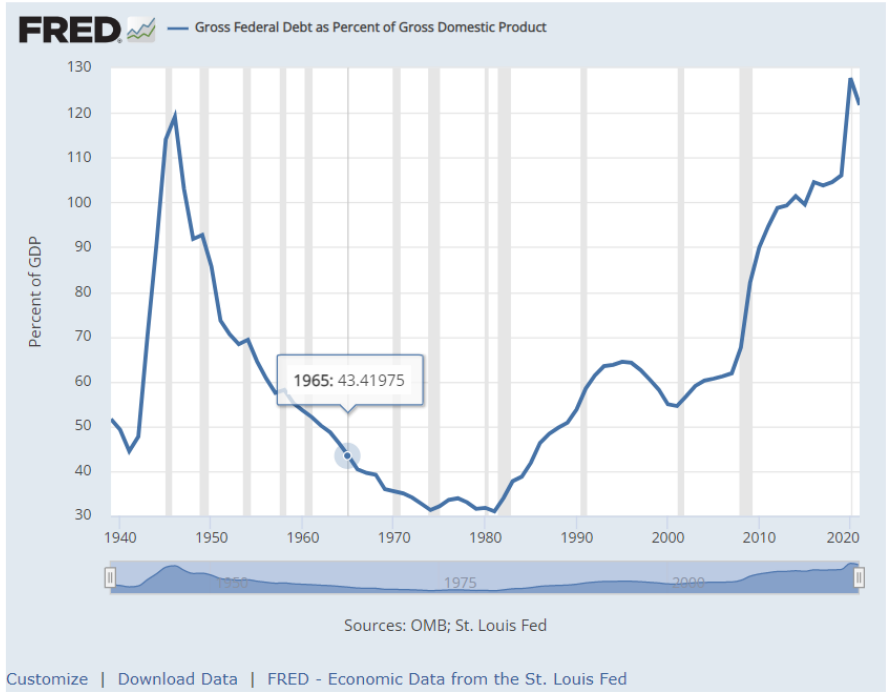
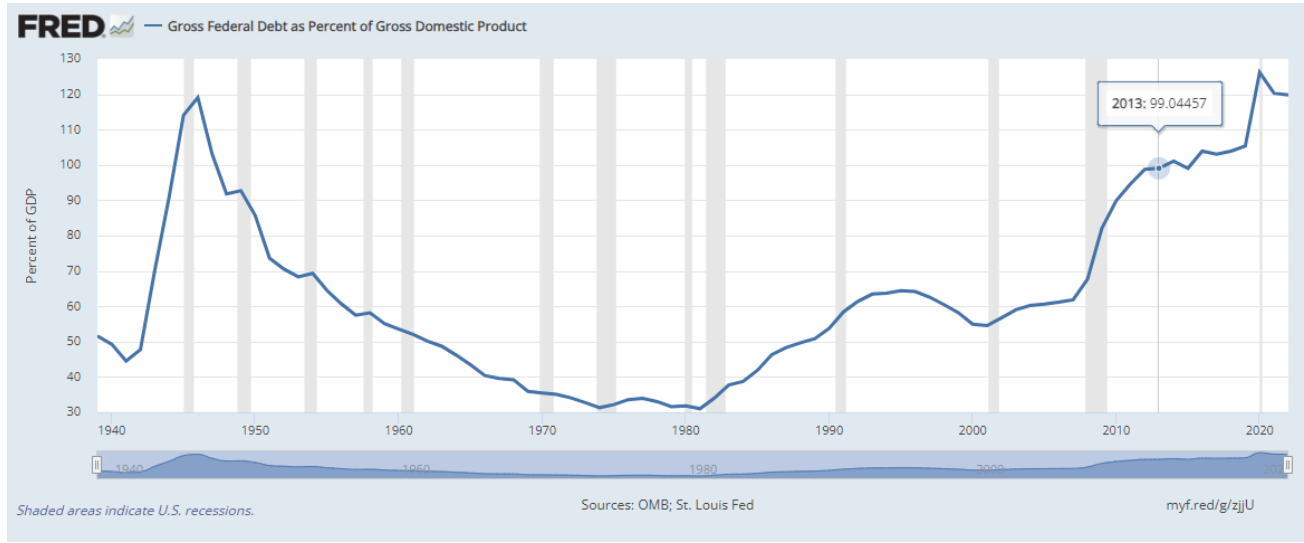


Click to view the FRED graph in a new tab. This graph shows the Gross Federal Debt as a Percentage of Gross Domestic Product from 1939 to the present.



https://fred.stlouisfed.org/graph/graph-landing.php?g=zjjU

DEBT VS. DEFICIT?

DEBT VS. DEFICIT?

The deficit is not the debt. The difference between the deficit and the debt lies in the time frame. The federal deficit (or surplus) refers to what happens with the federal government budget each year. The public (or Federal government) debt is accumulated over time; it is the sum of all past deficits and surpluses. If you borrow $10,000 per year for each of the four years of college, you might say that your annual deficit was $10,000, but your accumulated debt over the four years is $40,000.

One year's federal budget deficit causes the federal government to sell Treasury bonds to make up the difference between spending programs and tax revenues. The dollar value of all the outstanding Treasury bonds on which the federal government owes money is equal to the national debt.

Q

1 of 1

In 2017, the federal government spent $4 trillion but collected $3.3 trillion in taxes, therefore in 2017, the US government accumulated

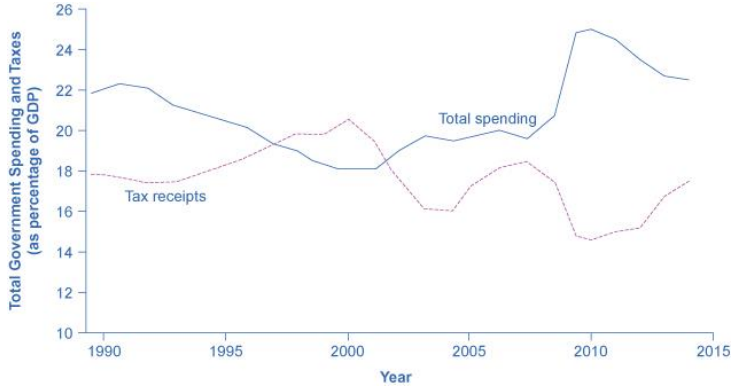
- ○ a federal debt of $700 billion.
- ◉ a budget deficit of $700 billion. ✔
- ○ a budget surplus of $700 billion.

Check Answer

Correct. A budget deficit will occur if over one year, the spending is greater than revenue for the government.

The Path from Deficits to Surpluses to Deficits

Why did the budget deficits suddenly turn to surpluses from 1998 to 2001 and why did the surpluses return to deficits in 2002? Why did the deficit become so large after 2007? Figure 3 suggests some answers. The graph combines the earlier information on total federal spending and taxes in a single graph, but focuses on the federal budget since 1990.



The Path from Deficits to Surpluses to Deficits

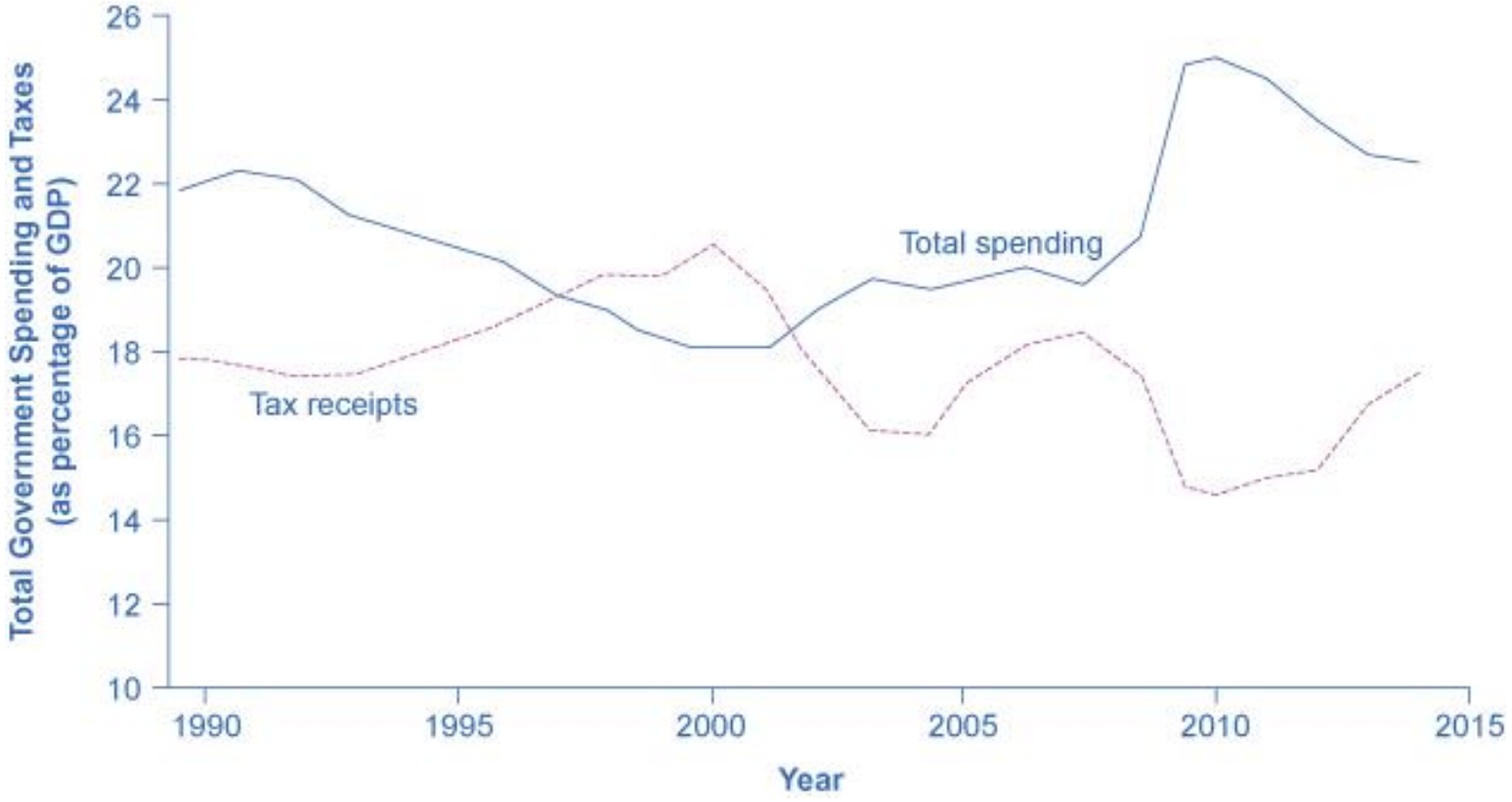


Figure 3. Total Government Spending and Taxes as a Share of GDP, 1990–2014. When government spending exceeds taxes, the gap is the budget deficit. When taxes exceed spending, the gap is a budget surplus. The recessionary period starting in late 2007 saw higher spending and lower taxes, combining to create a large deficit in 2009. (Source: Economic Report of the President, Tables B-21 and B-1,"http://www.gpo.gov/fdsys/pkg/ERP-2015/content-detail.html)

Q 5-minute break

1 of 1

Assume that the federal government of country ABC planned on spending 15 billion Lira (name of their currency) and expected tax revenue of 16 billion Lira in 2016. If the economy of ABC grows at a higher rate than expected (other things equal), the government's annual budget should see

- (●) a greater surplus. ✔
- ( ) a lower surplus.
- ( ) a lower deficit.

Check Answer

Correct. If the economy grows faster than expected, the government is likely to collect more taxes as people's income increases and the surplus would increase.

We stopped here on 23-11-2023

Longer-term U.S. budget forecasts

Longer-term U.S. budget forecasts, a decade or more into the future, predict enormous deficits. The higher deficits during the 2008-2009 recession have repercussions, and the demographics will be challenging. The primary reason is the “baby boom”—the exceptionally high birthrates that began in 1946, right after World War II, and lasted for about two decades. Starting in 2010, the front edge of the baby boom generation began to reach age 65, and in the next two decades, the proportion of Americans over the age of 65 will increase substantially.

WHAT IS THE LONG-TERM BUDGET OUTLOOK FOR SOCIAL SECURITY AND MEDICARE?

In 1946, just one in every thirteen Americans was over age 65. By 2000, it was one in eight. By 2030, one American in five will be over age 65. Two enormous U.S. federal programs focus on the elderly—Social Security and Medicare. The growing numbers of elderly Americans will increase spending on these programs, as well as on Medicaid. The current payroll tax levied on workers, which supports all of Social Security and the hospitalization insurance part of Medicare, will not be enough to cover the expected costs, so what are the options?

Long-term projections from the Congressional Budget Office in 2009 are that Medicare and Social Security spending combined will rise from 8.3% of GDP in 2009 to about 13% by 2035 and about 20% in 2080. If this rise in spending occurs, without any corresponding rise in tax collections, then some mix of changes must occur: (1) taxes will need to increase dramatically; (2) other spending will need to be cut dramatically; (3) the retirement age and/or age receiving Medicare benefits will need to increase, or (4) the federal government will need to run extremely large budget deficits.

Some proposals suggest removing the cap on wages subject to the payroll tax, so that those with very high incomes would have to pay the tax on the entire amount of their wages. Other proposals suggest moving Social Security and Medicare from systems in which workers pay for retirees toward programs that set up accounts where workers save funds over their lifetimes and then draw out after retirement to pay for healthcare.

The United States is not alone in this problem. Providing the promised level of retirement and health benefits to a growing proportion of elderly with a falling proportion of workers is an even more severe problem in many European nations and in Japan. How to pay promised levels of benefits to the elderly will be a difficult public policy decision.

Q

Question 1

Suppose that the amount of taxes in Japan is equal to $2000.

Suppose that the government expenditures is equal to $1600.

In addition, you know that the current level of debt in Japan is equal to $270000 (all numbers in billions of domestic currency).

Given this data, what is the new level of Japan's debt?

$ 269600 ✔

Show Answer

Subtract the difference between taxes and expenditures from debt.

Hint

✔ Correct.

GLOSSARY

National debt:

the total accumulated amount the government has borrowed, over time, and not yet paid back

The Question of a Balanced Budget

LEARNING OBJECTIVES

- Describe the arguments for and against requiring the U.S. federal budget to be balanced

Introduction to Fiscal Policy in Action

What you'll learn to do: explain fiscal policies, including automatic, expansionary, and contractionary fiscal policies

In this section, we will segue from discussing government budgets, per se, to discussing fiscal policy. Recall that fiscal policy is the use of changes in government spending and tax rates to influence the path of the macro economy. Every federal budget reflects some fiscal policy. Fiscal policy approaches range from passive to activist. In this section, you will use the AS-AD model to help you understand how governments use fiscal policies to fight against recession and inflation, and also to promote economic growth.

We stopped here with 210710 on 24-11-2023

LEARNING OBJECTIVES

- Describe how fiscal policy can be designed to stabilize the economy using automatic stabilizers

Fiscal policies include discretionary fiscal policy and automatic stabilizers. Discretionary fiscal policy occurs when the Federal government passes a new law to explicitly change tax rates or spending levels. The stimulus package of 2009 is an example. Changes in tax and spending levels can also occur automatically through non-discretionary spending, due to automatic stabilizers, which are programs that are already in place, and thus do not require Congress to act. Instead, they prevent aggregate demand from falling as much as it otherwise would in recession, or they hold down aggregate demand in a potentially inflationary boom.

210711 we stopped here on 24-11-23

Automatic Stabilizers
Counterbalancing Recession and Boom

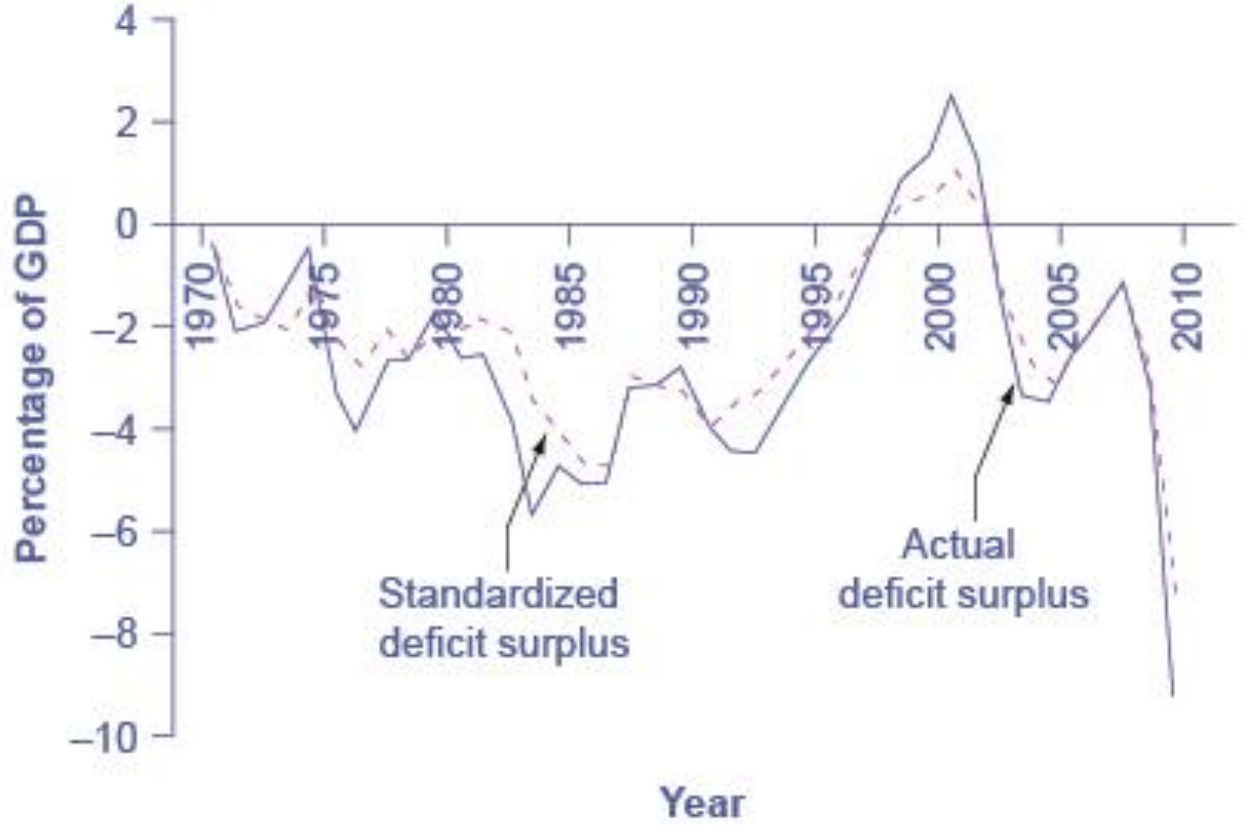
Automatic stabilizers include unemployment insurance, food stamps, and the personal and corporate income tax.

The Standardized Employment Deficit or Surplus

From the previous section, it should be clear that the budget deficit or surplus responds to the state of the economy. That is, the automatic stabilizers cause the budget to go into deficit (higher spending and lower tax revenues) during recessions and to go into surplus (lower spending and higher tax revenues) during booms. As a result, we can't look at the deficit figures alone to see how aggressive fiscal policy is.

Each year, the nonpartisan Congressional Budget Office (CBO) calculates the standardized (or full) employment budget—that is, what the budget deficit or surplus would be if the economy were producing at potential GDP. Since the automatic stabilizers are "in neutral" at potential GDP, neither boosting nor dampening aggregate demand, the standardized employment budget calculation removes the impact of the automatic stabilizers on the budget balance.

Figure 2. Comparison of Actual Budget Deficits with the Standardized Employment Deficit



GLOSSARY

automatic stabilizers: tax and spending rules that have the effect of slowing down the rate of decrease in aggregate demand when the economy slows down and restraining aggregate demand when the economy speeds up, without any additional change in legislation

discretionary fiscal policy: the government passes a new law that explicitly changes overall tax rates or spending levels with the intent of influencing the level or overall economic activity

standardized (or full) employment budget: estimate of the budget deficit or surplus excluding the effects of fiscal policy, that is, as if GDP were at potential

Thank you for your attention

Who is entitled to 10,000 RUB per child in Russia?

A one-time payment of 10 thousand rubles to families with children from 3 to 16 years old.

In accordance with the Decree of the President of the Russian Federation No. 317 of May 11, 2020, families with children from 3 to 16 years old received the right to a one-time payment in the amount of 10 thousand rubles. Funds are provided starting June 1, 2020 for each child.

天津外国语大学(天外)
Tianjin Foreign Studies University
(TFSU)

Class starts at 10:00

(Beijing Time, GMT+8)

Ivan Monich, PhD

Expansionary and Contractionary Fiscal Policy

LEARNING OBJECTIVES

- Explain how expansionary fiscal policy can increase aggregate demand and boost the economy
- Explain how contractionary fiscal policy can decrease aggregate demand and depress the economy

Fiscal Policy

Fiscal policy is the use of government spending and tax policy to influence the path of the economy over time. **Automatic stabilizers,** which we learned about in the last section, are a passive type of fiscal policy, since once the system is set up, Congress need not take any further action. On the other hand, **discretionary fiscal policy** is an active fiscal policy that uses expansionary or contractionary measures to speed the economy up or slow the economy down.

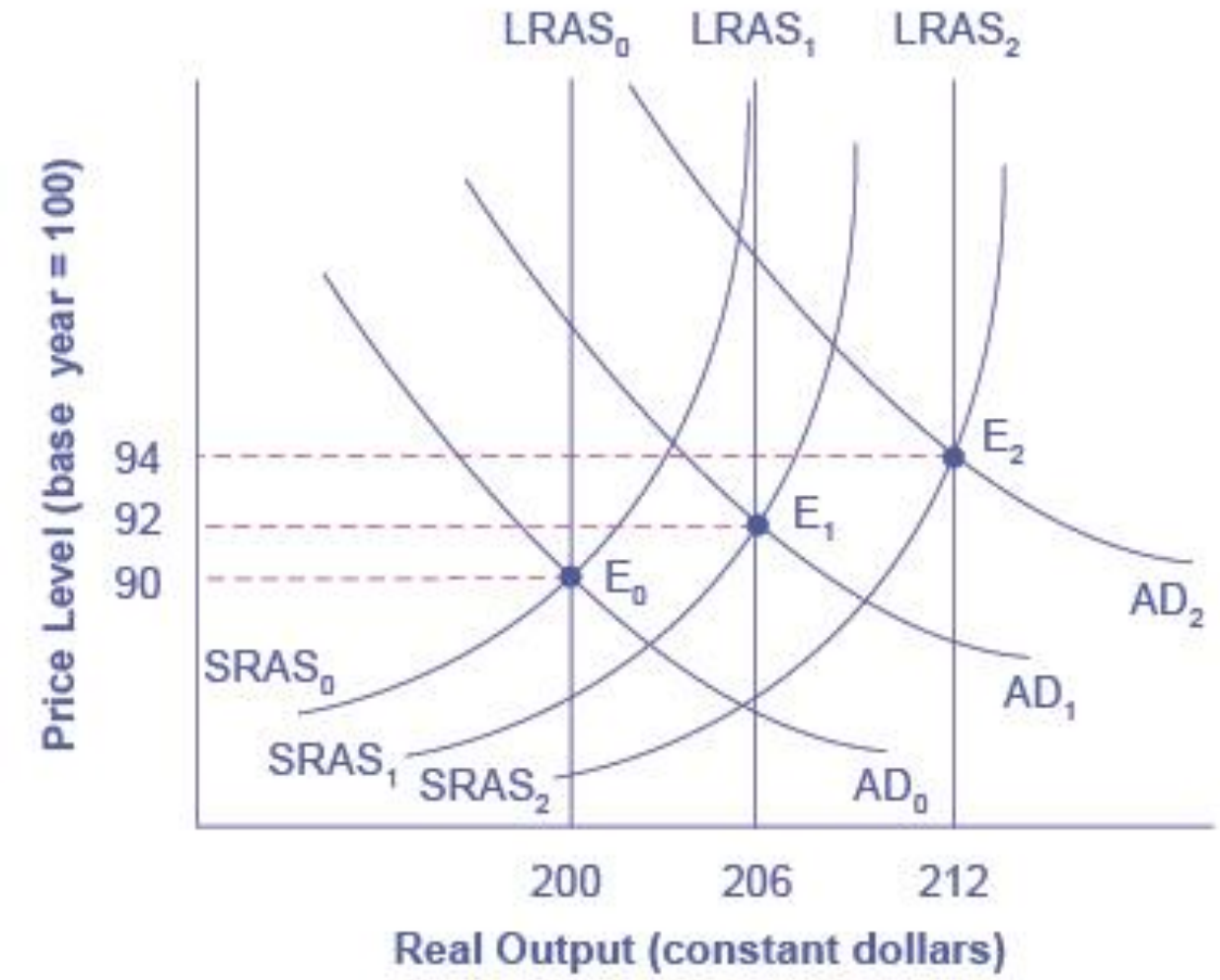
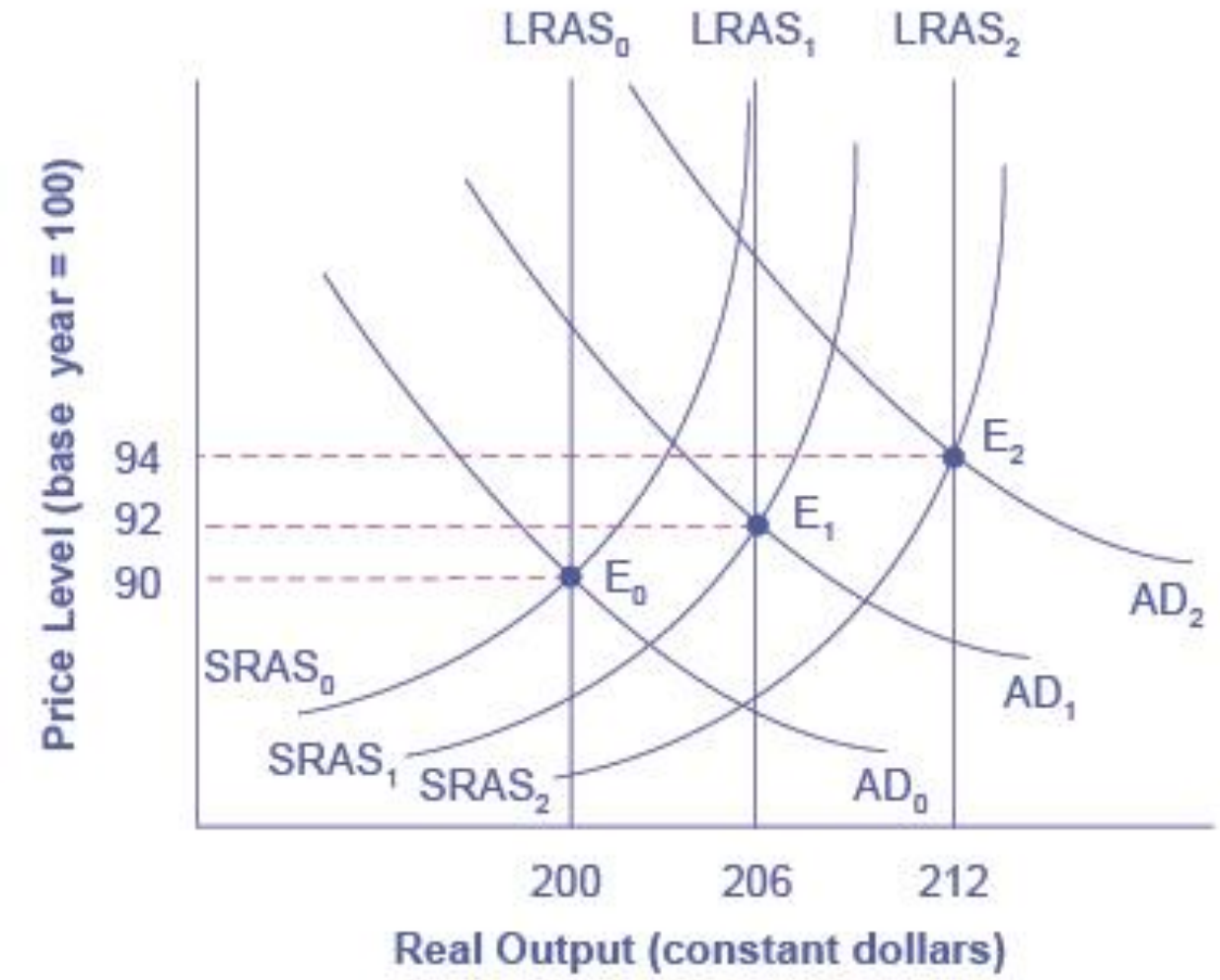


Figure 1. A Healthy, Growing Economy. In this well-functioning economy, each year aggregate supply and aggregate demand shift to the right so that the economy proceeds from equilibrium E_0 to E_1 to E_2. Each year, the economy produces at potential GDP with only a small inflationary increase in the price level. But if aggregate demand does not smoothly shift to the right and match increases in aggregate supply, growth with deflation can develop.



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Expansionary Fiscal Policy

Expansionary fiscal policy increases the level of aggregate demand, through either increases in government spending or reductions in taxes. Expansionary policy can do this by:

1. increasing consumption by raising disposable income through cuts in personal income taxes or payroll taxes;
2. increasing investments by raising after-tax profits through cuts in business taxes; and
3. increasing government purchases through increased spending by the federal government on final goods and services and raising federal grants to state and local governments to increase their expenditures on final goods and services

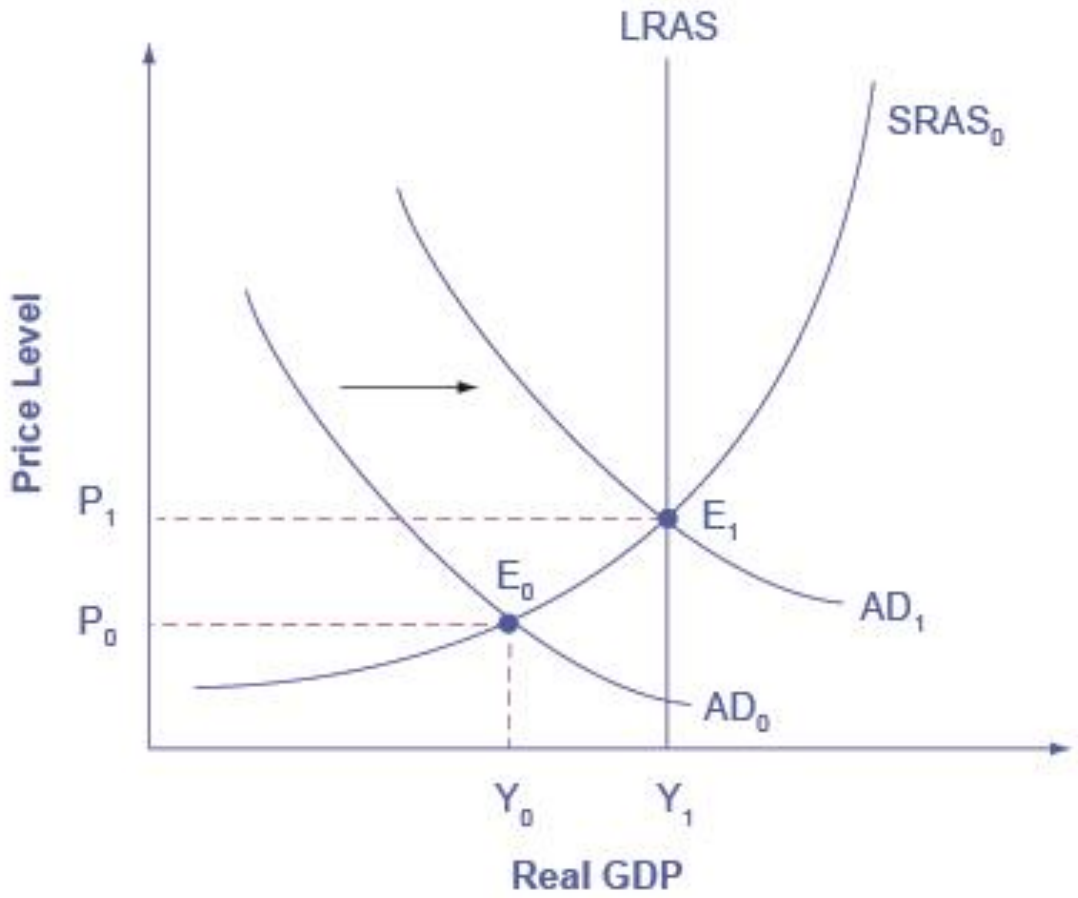
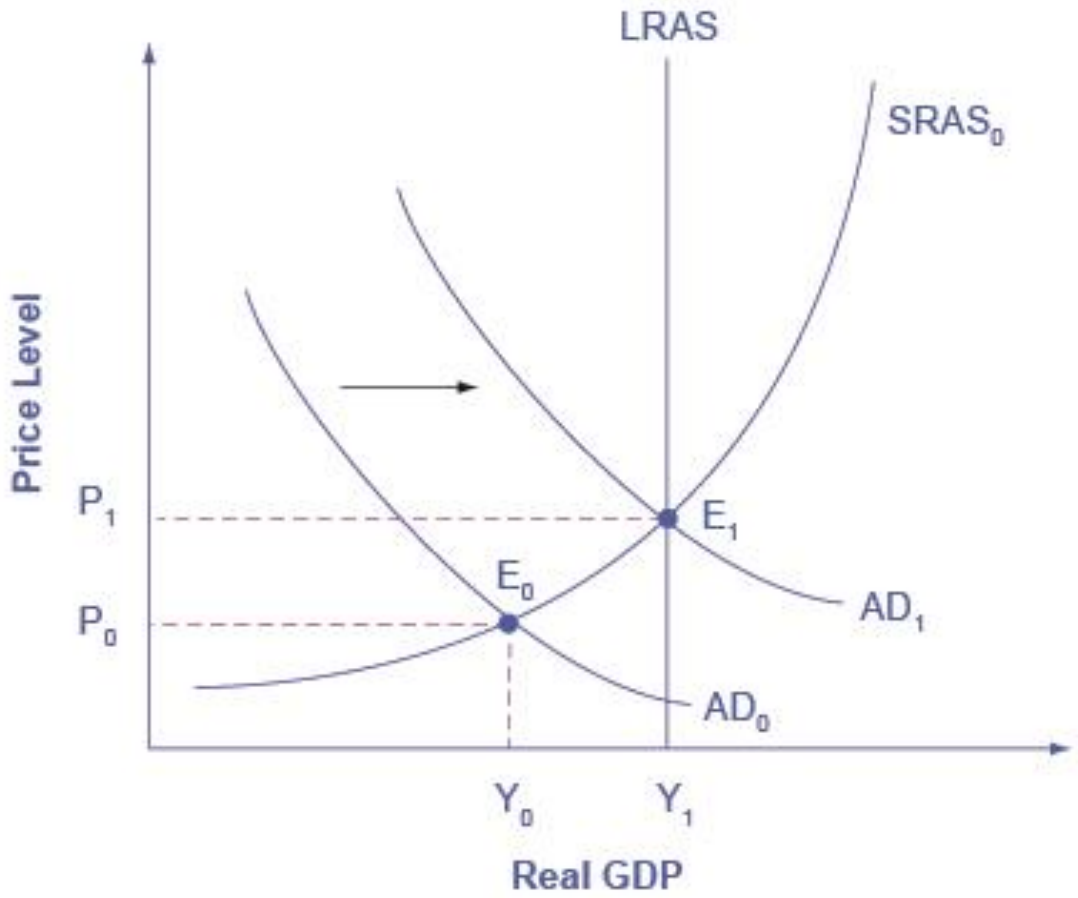


Figure 2. Expansionary Fiscal Policy. The original equilibrium (E_0) represents a recession, occurring at a quantity of output (Yr) below potential GDP. However, a shift of aggregate demand from AD_0 to AD_1, enacted through an expansionary fiscal policy, can move the economy to a new equilibrium output of E_1 at the level of potential GDP. Since the economy was originally producing below potential GDP, any inflationary increase in the price level from P_0 to P_1 that results should be relatively small.



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Q

1 of 1

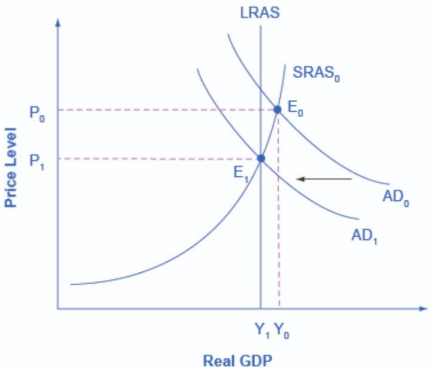
Which of the following would be an example of a discretionary and expansionary fiscal policy?

- ○ A federal income tax increase of 5%.
- ◉ Approval of a new spending bill by congress. ✔
- ○ Increased government spending on unemployment insurance.

Check Answer

Correct. An increase in spending in an active way by congress is an example of discretionary policy, and it would be expansionary and will increase aggregate demand and GDP.

Contractionary Fiscal Policy



Fiscal policy can also be used to slow down an overheating economy. Suppose the macro equilibrium occurs at a level of GDP above potential, as shown in Figure 3. The intersection of aggregate demand (AD0) and aggregate supply (AS0) occurs at equilibrium E0. In this situation, contractionary fiscal policy involving federal spending cuts or tax increases can help to reduce the upward pressure on the price level by shifting aggregate demand to the left, to AD1, and causing the new equilibrium E1 to be at potential GDP.

Contractionary Fiscal Policy

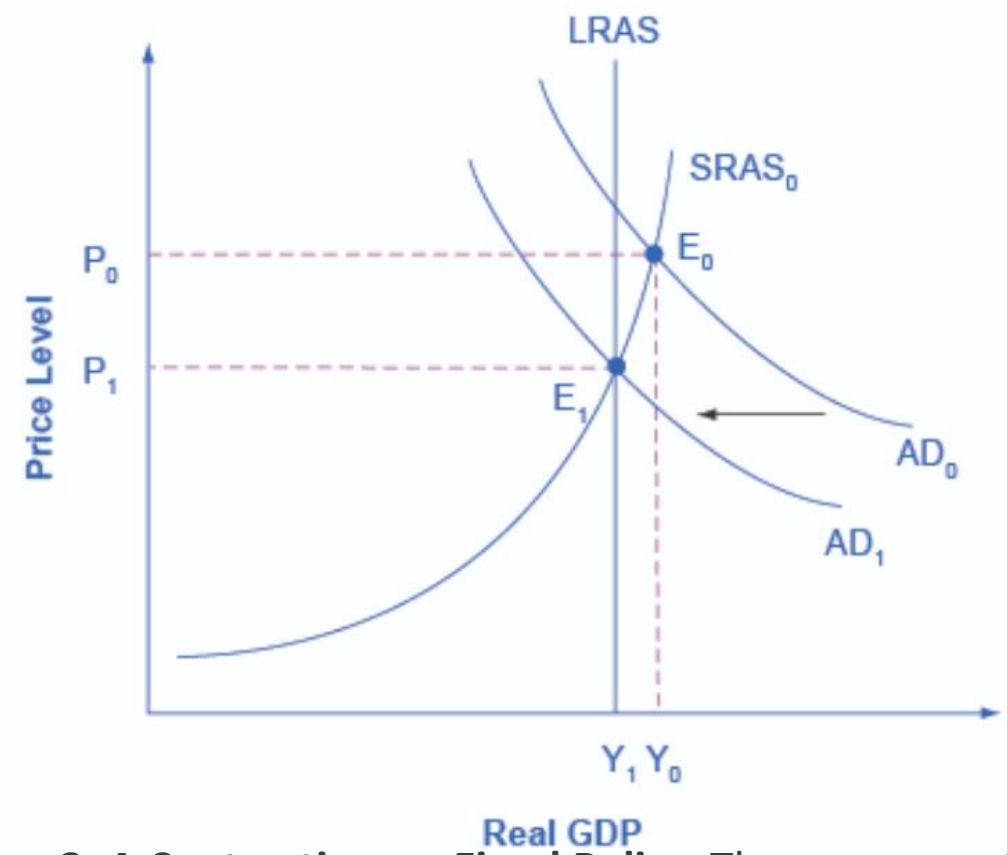


Figure 3. A Contractionary Fiscal Policy. The economy starts at the equilibrium quantity of output Yr, which is above potential GDP. The extremely high level of aggregate demand will generate inflationary increases in the price level. A contractionary fiscal policy can shift aggregate demand down from AD_0 to AD_1, leading to a new equilibrium output E_1, which occurs at potential GDP.

Q

1 of 1

A reduction in government spending through a new budget would

- (●) shift the aggregate demand left as it falls and reduce the Gross Domestic Product at the new equilibrium. ✔
- ( ) shift the aggregate demand left as it falls and increase the Gross Domestic Product at the new equilibrium.
- ( ) shift the aggregate demand right as it rises and reduce the Gross Domestic Product at the new equilibrium.

Check Answer

Correct. Reducing government spending would lower the aggregate demand and therefore reduce GDP.

GLOSSARY

automatic stabilizers:

tax and spending rules that have the effect of slowing down the rate of decrease in aggregate demand when the economy slows down and restraining aggregate demand when the economy speeds up, without any additional change in legislation.

contractionary fiscal policy:

fiscal policy that decreases the level of aggregate demand, either through cuts in government spending or increases in taxes

discretionary fiscal policy:

the government passes a new law that explicitly changes overall tax rates or spending levels with the intent of influencing the level or overall economic activity

expansionary fiscal policy:

fiscal policy that increases the level of aggregate demand, either through increases in government spending or cuts in taxes

Task 1

Choose the country and propose the type of discretionary policy: contractionary or expansionary fiscal policy.

Please, specify the details (Spending cut or tax rate changes)

Introduction to Fiscal Policy Approaches

What you'll learn to do: compare neoclassical and Keynesian approaches to Fiscal Policy

In this section, you'll learn about how and why there are varying recommendations from economists regarding fiscal policy. As you know, neoclassical economists emphasize less government intervention with the assumption that the economy will return to full employment in the long run. Keynesian economists recommend more intervention, and in this section you'll learn about some of the specific arguments for both sides.

Neoclassical Fiscal Policy and Supply-Side Economics

LEARNING OBJECTIVES

- Explain supply-side economics, including the role of tax cuts and the Laffer curve
- Compare and contrast Keynesian and neoclassical approaches to fiscal policy

Neoclassical Fiscal Policy and Supply-Side Economics

Figure 1. Alan Greenspan, neoclassical economists and Chairman of the Federal Reserve from 1987 to 2006.

Much of the previous discussion in this module has taken a Keynesian policy-activist perspective. Recall that the classical, hands-off, approach was initially recommended when the economy collapsed during the Great Depression, but then Keynes came along and recommended that the government step in and intervene in order to make up for a shortfall in private sector spending. One criticism of the Keynesian approach is that the government needs to deficit spend in order to stimulate the economy. Deficit spending requires the government to borrow money, which may lead to higher interest rates, making it harder for private businesses to borrow money. This is known as crowding out, and weakens the effects of fiscal policy. Keynesians would argue that any crowding out is minimal, since the economy is not operating at full capacity; thus resources can be found easily without taking them away from private businesses.

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Keynesians ✔ would advocate for increased government spending in times of recession while Neoclassicals ✔ would advocate against budget deficit as they trigger the crowding out effect and depress investment.

Check Answer

Correct - Keynesians advocate for greater government spending to boost aggregate demand when the economy is in a recession.

Correct. Neoclassicals avoid budget deficit and government borrowing as they believe it causes interest rates to rise and reduces private investment.

WATCH IT: TAX CUTS DURING THE RECESSION

Watch this video to understand how some neoclassically-minded small business owners and economists felt about the possibility of ending the Bush tax cuts in 2010. Note that these tax cuts were eventually extended, although changes were made later in the American Taxpayer Relief Act of 2012.

You can view the transcript for "Tax Cuts During the Recession" here (opens in new window).

Supply-Side Economics

A particular type of Neoclassical economics became popular in the 1980s, after the election of President Ronald Reagan. This was supply-side economics, also known as Reaganomics. Supply-siders believe that economic activity is motivated by after-tax returns to that activity. Thus, people are attracted to jobs that pay well, and businesses are attracted to industries with high profits. Additionally, tax cuts increase economic activity.

Supply-siders argue that three key elements affect the macro economy:

- Labor supply, which is determined by wages and salaries after taxes are removed (e.g. take-home pay, PDI);
- Saving, which is determined by the after-tax rate of return to saving; and
- Business investment, which is determined by the after-tax rate of return to capital investment.

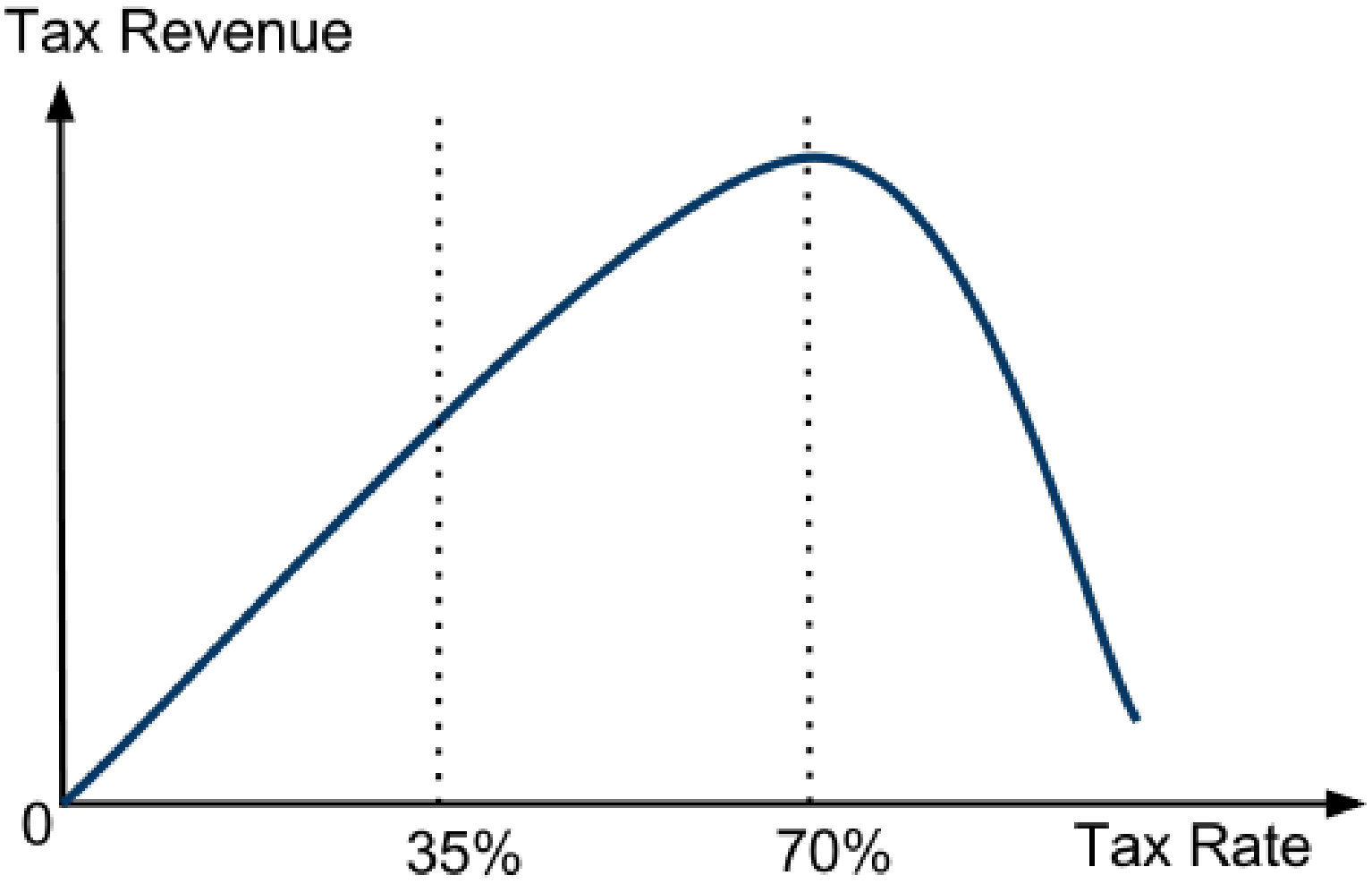


Figure 2. The Laffer Curve. As tax rates increase, tax revenues (i.e. what the government receives) increase at first, but then decrease once rates get "too high" as people reduce their work effort or hide their income. The figure indicates that the tax rate which maximizes tax revenue is 70%, but this is just an illustration of the concept.

GLOSSARY

austerity programs: measures taken to reduce budget deficits during recessions by raising taxes and cutting government spending

crowding out: federal spending and borrowing causes interest rates to rise and business investment to fall; crowding out can also be caused by federal tax cuts

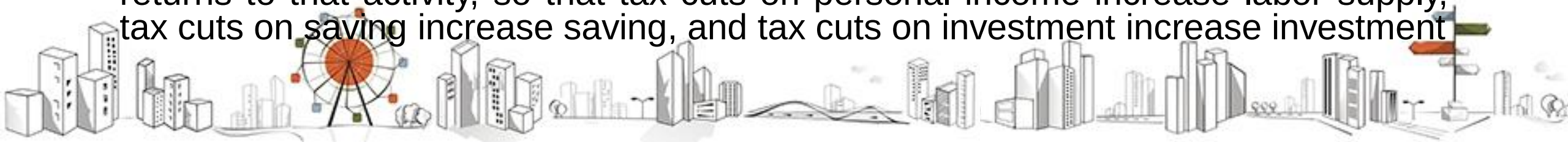
flat tax income tax: system where all pay the same tax rate

Laffer Curve: hill-shaped relationship between tax rates and tax revenues; if tax rates are high enough, lowering rates actually increases revenues

multiplier effect: idea that a change in spending causes a more than proportionate change in real GDP

Reaganomics: see Supply-Side Economics

Supply-side Economics: belief that economic activity is motivated by after tax returns to that activity, so that tax cuts on personal income increase labor supply, tax cuts on saving increase saving, and tax cuts on investment increase investment



Fiscal Policy, Investment, and Crowding Out

LEARNING OBJECTIVES

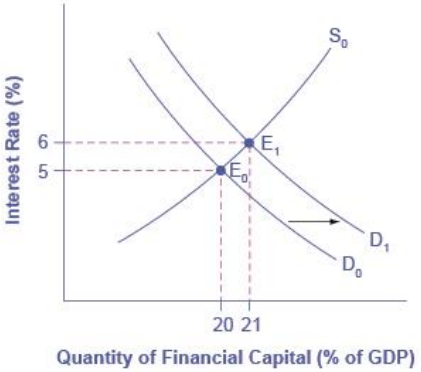
- Explain crowding out and its effect on physical capital investment
- Explain how economic growth is tied to investments in physical capital, human capital, and technology

Neoclassical economists believe we should focus attention on the long run (e.g. economic growth) and that the short run will take care of itself. We know that economic growth, defined as the percentage change in real GDP over time, comes about through increases in the quantity and quality of labor, physical capital, and technology—all set in an economic environment where firms and individuals can react to the incentives provided by well-functioning markets and flexible prices. In this section, we will examine how fiscal policy can affect these variables.

Crowding Out Physical Capital Investment

When government conducts an expansionary fiscal policy (i.e. increases in government spending or decreases in tax rate) it may run afoul of the crowding out effect. Expansionary fiscal policy means an increase in the budget deficit. The government is spending more money than it has in income. Where does government obtain the necessary funds to cover it's increased deficit? The answer is borrowing.

The Interest Rate Connection



Let's look at the details of how crowding out occurs. A larger federal budget deficit requires increased government borrowing in financial markets. How will this affect interest rates in financial markets? In Figure 1, the original equilibrium (E0) where the demand curve (D0) for financial capital intersects with the supply curve (S0) occurs at an interest rate of 5% and an equilibrium quantity equal to 20% of GDP. However, as the government budget deficit increases, the demand curve for financial capital shifts from D0 to D1. The new equilibrium (E1) occurs at an interest rate of 6% and an equilibrium quantity of 21% of GDP.

The Interest Rate Connection

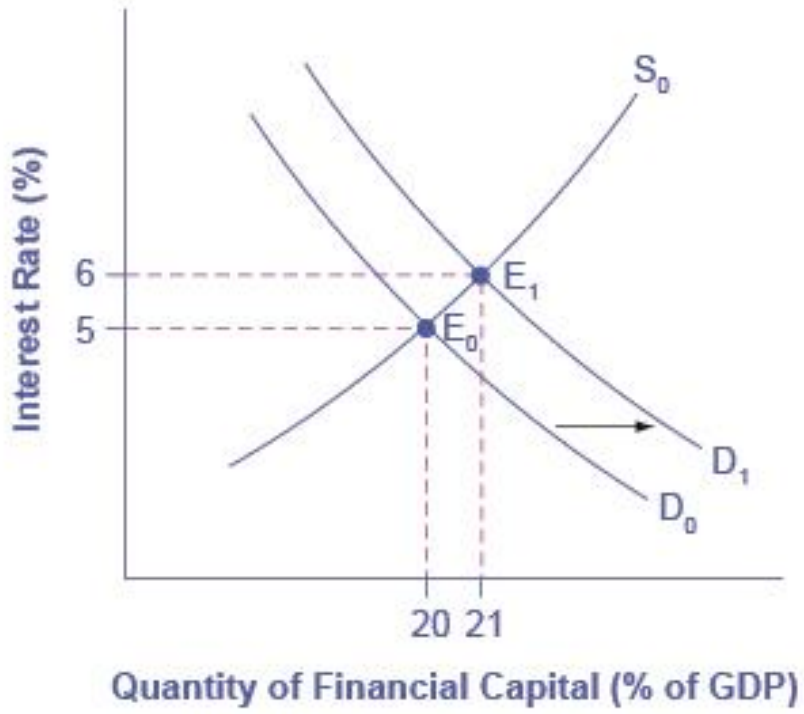


Figure 1. Budget Deficits and Interest Rates. In the financial market, an increase in government borrowing can shift the demand curve for financial capital to the right from D_0 to D_1. As the equilibrium interest rate shifts from E_0 to E_1, the interest rate rises from 5% to 6% in this example. The higher interest rate is one economic mechanism by which government borrowing can crowd out private investment.

Effects of Crowding Out

How does crowding out affect the path of the economy? If the purpose of expansionary fiscal policy was to stimulate GDP and employment (i.e. a Keynesian stimulus for the short-term), the extent to which crowding out occurs will limit the stimulus. If say a $100 billion increase in government spending results in a $50 billion decrease in private investment spending, then the net increase to total expenditure is $50 billion instead of $100 billion. Crowding out reduces the effects of a fiscal stimulus.

Q

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Which of the following stories describe the crowding out effect?

- ○ After the large government budget deficit financed through borrowing, more funds are available from the government and Luis, a home builder, can secure a new loan for a new crane with an interest rate of 3% which is lower than the rate on his previous loan (5%).
- ○ After the large government budget surplus for several years, more funds are available for lending and Luis, a home builder, ia able to secure a new loan for a new crane with an interest rate of 3% which is higher than the rate on his previous loan (5%).
- ◉ After the large government budget deficit financed through borrowing, less funds are available for private lending and Luis, a builder, just secures a new loan for a new crane with an interest rate of 5% which is higher than the rate on his previous loan (3%). ✔

Check Answer

Correct. As the government borrows large amounts to finance the budget shortfall, less is available for private companies to borrow and interest rates increase.

Public Investment in Physical Capital

Public infrastructure spending on physical capital can enhance private investment. Public infrastructure spending in investment in roads and bridges; water supply and sewers; seaports and airports; schools and hospitals; plants that generate electricity, like hydroelectric dams or windmills; telecommunications facilities; just to name a few. New highways (or other transportation networks) can raise the rate of return on private investment by making it easier to transport products to market. As a result, infrastructure investments can result in increased private investment too. Part of the reason for the booming U.S. economy during the 1960s may have been the completion of the interstate highway system.

Table 1. Grants for Major Physical Capital Investment, 2014

Type of Public Physical Capital	Federal Outlays 2014 ($ millions)
Transportation	$91,915
Community and regional development	$20,670
Natural resources and the environment	$36,171
Education, training, employment, and social services	$90,615
Other	$37,282
Total	**$276,653**

Public Investment in Human Capital

In most countries, the government plays a large role in society's investment in human capital through the education system, both K12 and higher education. Education conveys positive externalities–while individuals gain from an education, so does society at large. A highly educated and skilled workforce contributes to a higher rate of economic growth. For the low-income nations of the world, additional investment in human capital seems likely to increase productivity and growth. Of course, spending more dollars on education is no guarantee that students will learn more. Despite significant increases over the last several decades in U.S. education spending per pupil, standardized test scores like the SAT have failed to increase significantly. Still, in this day and age it's hard to argue that education isn't important.

How Fiscal Policy Can Improve Technology

Research and development (R&D) efforts are the lifeblood of new technology. According to the National Science Foundation, federal outlays for research, development, and physical plant improvements to various governmental agencies have remained at an average of 8.8% of GDP. About one-fifth of U.S. R&D spending goes to defense and space-oriented research. Although defense-oriented R&D spending may sometimes produce consumer-oriented spinoffs, R&D that is aimed at producing new weapons is less likely to benefit the civilian economy than direct civilian R&D spending.

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Tianjin Foreign Studies University
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Online class starts at 10:00

(Beijing Time, GMT+8)

Ivan Monich, PhD

Summary of Fiscal Policy, Investment, and Economic Growth

Investment in physical capital, human capital, and new technology is essential for long-term economic growth, as Table 2 summarizes. In a market-oriented economy, private firms will undertake most of the investment in physical capital, and fiscal policy should seek to avoid a long series of outsized budget deficits that might crowd out such investment. We will see the effects of many growth-oriented policies very gradually over time, as students are better educated, we make physical capital investments, and people invent and implement new technologies.

Table 2. Investment Role of Public and Private Sector in a Market Economy

	Physical Capital	Human Capital	New Technology
Private Sector	New investment in property and equipment	On-the-job training	Research and development
Public Sector	Public infrastructure	Public education Job training	Research and development encouraged through private sector incentives and direct spending.

Q

Question 2

Suppose that the government of Slovenia is running a large budget deficit.

As a result of this, what will happen to the interest rates in Slovenia?

- ○ Interest rates will increase.
- ○ Interest rates will remain the same.
- ○ Interest rates will decrease.

Show Answer

Hint

Submit

Question 3

Suppose that the government of Slovenia is running a large budget deficit.

As a result of this, what will happen to the Investment (I) and Consumption (C) in Slovenia?

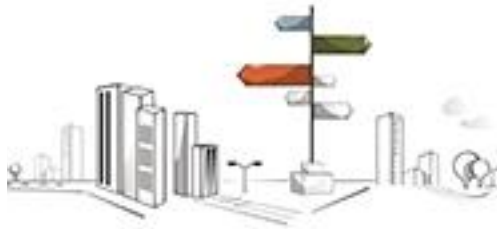
- ○ Investment and consumption will increase.
- ○ Investment and consumption will remain the same.
- ◉ Investment and consumption will decrease.

✔

Show Answer

Hint

✔ Correct.



GLOSSARY

crowding out: federal spending and borrowing causes interest rates to rise and business investment to fall; crowding out can also be caused by federal tax cuts.

Head Start program: a program for early childhood education directed at families with limited educational and financial resources.

Infrastructure: public investment in public and externality goods like roads and transportation features (e.g. airports, seaports), water supply and sewers, schools and hospitals.

Putting It Together: Fiscal Policy

In this module, you learned about fiscal policy and the power that government has to adjust government spending and taxes to stimulate or slow down the economy. First, you learned that the federal government spends most of its budget in a small number of areas, including national defense, social security, social welfare programs, healthcare, and interest on the federal debt. Most federal tax revenue comes from individuals' income, though some comes from corporate profits. State and local governments spend the majority of their budgets on education and transportation, while their tax revenue comes primarily from property and sales taxes. Some states don't even have an income tax.

Thank you for your attention