



PAGE ONE Economics®

TEACHER EDITION Middle School Version

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National Standards and Benchmarks (see page 11)



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Income Tax: Facts and Filings

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Focus on
FINANCE

Income Tax: Facts and Filings



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GLOSSARY

Adjusted gross income: Gross income minus specific adjustments.

File (a tax return): To mail or electronically transmit a taxpayer's income and tax liability information in a specified format.

Gross income: The total amount earned before any adjustments are subtracted.

Income: The payment people receive for providing resources in the marketplace. People also earn income in the form of rent, profit, and interest.

Income tax: Tax on income, both earned (salaries, wages, tips, commissions) and unearned (interest, dividends). Income taxes can be levied on both individuals (personal income taxes) and businesses (business and corporate income taxes).

Revenue: The income received by government from taxes and other nontax sources.

Tax credit: An amount directly deducted from the total tax owed.

Tax deduction: A fixed amount or percentage permitted by taxation authorities that a taxpayer could subtract from his or her gross income to reduce taxable income.

Taxes: Fees charged on business and individual income, activities, property, or products by governments. People are required to pay taxes.

Tax exemption: Amount allowed by the IRS that can be deducted from taxable income to reduce the amount of income tax owed. There are two types: personal and dependency. The personal exemption is for the taxpayer; the dependency exemption is based on the number of dependents the taxpayer has. The exemption amount is a set amount that changes from year to year.

"The hardest thing in the world to understand is the income tax."
—Albert Einstein

1 Introduction

It's on the calendar: the April 15th filing deadline for federal individual **income tax**. Just as a new year begins, it's tax-filing season and the frenzy begins. Some taxpayers are excited and eagerly anticipate a tax refund. Predictably, they are likely to **file** their tax returns early. Others are stressed and fearful of how much they might owe the government. Tax preparers are extremely busy filling out forms and filing tax returns. And on April 15th, some post offices stay open late to accommodate filers who wait until the last minute to make the midnight deadline. Why do tax forms cause such frenzy?

Taxes must be paid—it's the law. Federal individual income tax must be paid to the U.S. government on all forms of annual earnings that make up a taxpayer's taxable income. Taxable **income** is calculated based on the taxpayer's **adjusted gross income** for the tax year minus allowable **tax exemptions, deductions, and credits**. But making the calculations and completing all the correct forms necessary for determining taxable income can be complicated and confusing!

16th Amendment to the U.S. Constitution (1913)

The Congress shall have the power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration.

SOURCE: <http://www.ourdocuments.gov/doc.php?flash=true&doc=57>.

2 History of the Federal Income Tax

The first U.S. federal income tax was in effect from 1862 until 1872. It was used to collect **revenue** for the expenses of the Civil War. A federal income tax was tried again in 1894. The very next year it was ruled unconstitutional. Then, in 1913, the federal income tax resurfaced. In

2016 Income Tax Brackets

The seven IRS tax brackets are 10%, 15%, 25%, 28%, 33%, 35%, and 39.6%. The amount of income tax owed depends on taxable income and filing status. Income falling within a particular bracket will be taxed at that tax rate. Additional income will be taxed according to the rate in the next tax bracket.

Example: The income tax a single taxpayer with a taxable income of \$10,000 must pay is 10% for the first \$9,275 plus 15% for the remaining \$725.

$$10\% \times \$9,275 = \$927.50$$

$$15\% \times \$725 = \$108.75$$

$$\text{Total Tax} = \$927.50 + \$108.75 = \$1,036.25$$

Rate	Filing Status			
	Single	Married filing separately	Married filing jointly or qualifying widow(er)	Head of household
10%	\$0 to \$9,275	\$0 to \$9,275	\$0 to \$18,550	\$0 to \$13,250
15%	\$9,276 to \$37,650	\$9,276 to \$37,650	\$18,551 to \$75,300	\$13,251 to \$50,400
25%	\$37,651 to \$91,150	\$37,651 to \$75,950	\$75,301 to \$151,900	\$50,401 to \$130,150
28%	\$91,151 to \$190,150	\$75,951 to \$115,725	\$151,901 to \$231,450	\$130,151 to \$210,800
33%	\$190,151 to \$413,350	\$115,726 to \$206,675	\$231,451 to \$413,350	\$210,801 to \$413,350
35%	\$413,351 to \$415,050	\$206,676 to \$233,475	\$413,351 to \$466,950	\$413,351 to \$441,000
39.6%	\$415,051 or more	\$233,476 or more	\$466,951 or more	\$441,001 or more

SOURCE: IRS; <https://www.irs.com/articles/2016-federal-tax-rates-personal-exemptions-and-standard-deductions>.

that year, the 16th Amendment to the Constitution gave Congress authority to tax income.¹

3 Collection of Federal Income Tax

Income tax is collected by the Internal Revenue Service (IRS), a federal agency. The IRS was originally called the Bureau of Internal Revenue before the name changed in the 1950s.² In 1943, a law was passed to make it easier for the IRS to collect the tax. This law requires employers to withhold federal income tax from an employee’s paycheck each pay period. The employer then sends the payment directly to the IRS on behalf of the employee.³ In this way, income tax is collected on a “pay as you earn” basis.

The amount withheld is determined by information the employee provides on an IRS W-4 form. The information is used to estimate how much income tax to withhold from each paycheck.

By January 31 of each year, employers must furnish employees a W-2 Wage and Tax Statement. This form is used by employees to complete individual tax returns. Among other things, it includes the total amount of income earned and the amount of federal

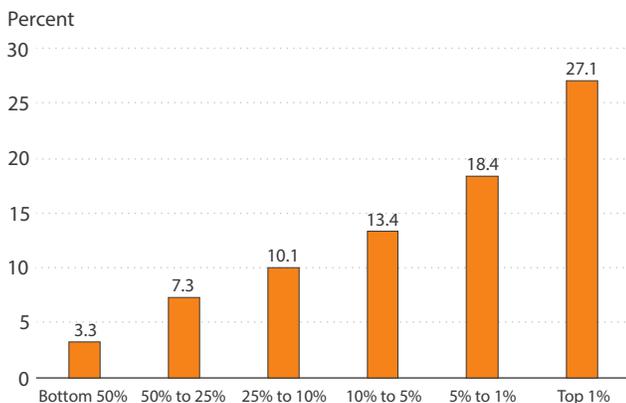
income tax withheld over the given year. Generally, if too much federal income tax has been withheld, a taxpayer will receive a refund. If not enough has been withheld, the taxpayer must pay the government the additional amount owed.

4 The Individual Income Tax Structure

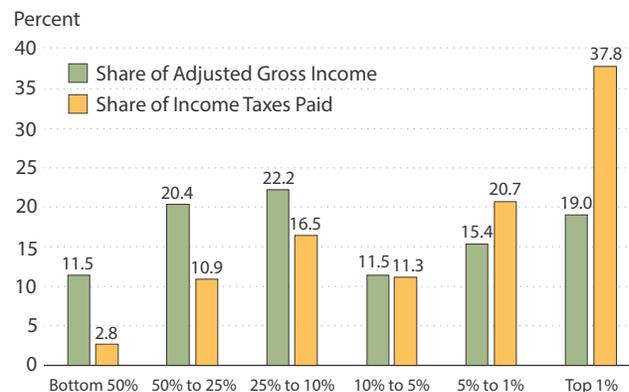
The federal individual income tax is a progressive tax based on the ability-to-pay principle. With a progressive tax, higher-income earners pay a larger percentage of their income in tax than do lower-income earners. The IRS categorizes taxable income into tax brackets, and each tax bracket pays a different tax rate. The tax rate paid is determined by the taxpayer’s filing status as explained in Publication 501 from the IRS. For example, for 2016, the seven tax brackets range from 10 to 39.6 percent.

Without doubt, the highest income earners pay a greater portion of *total* income taxes collected by the IRS. For example, the top 50 percent of income earners paid 97.2 percent of all federal income taxes in the year 2013. (See the graphs.)

High-Income Taxpayers Pay the Highest Average Tax Rates
Average Income Tax Rate, by Income Group (2013)



Half of Taxpayers Pay 97.2 Percent of All Income Taxes
Share of Income and Share of Income Taxes Paid, by Income Group (2013)



NOTE: Original images ©Tax Foundation.
SOURCE: IRS; <http://www.irs.gov/uac/SOI-Tax-Stats-Individual-Income-Tax-Rates-and-Tax-Shares>. Tax Foundation. "Summary of the Latest Federal Income Tax Data, 2015 Update." November 19, 2015; <http://taxfoundation.org/article/summary-latest-federal-income-tax-data-2015-update>.

5 The Purpose of Federal Income Tax

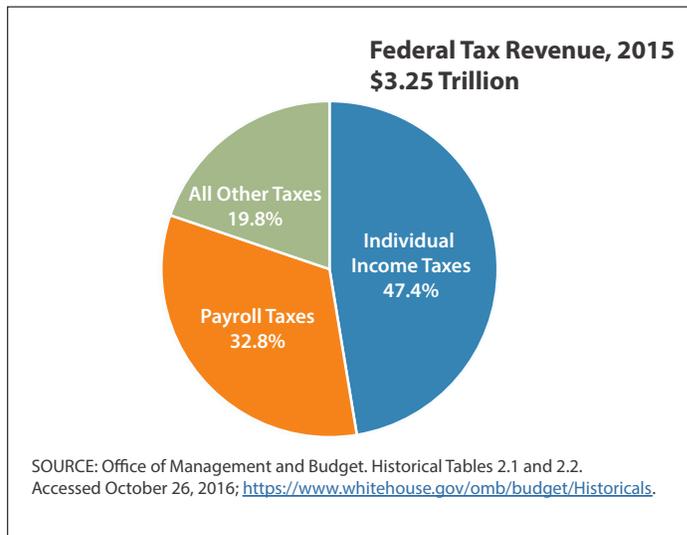
The U.S. government collects trillions of dollars in revenue from several types of taxes and fees. (See the pie chart.) Of all the federal taxes and fees, the individual income tax is the largest revenue source. For example, in 2015, it was \$1.54 trillion and nearly half of all tax revenue collected.⁴ Congress and the president determine how this tax revenue is spent. The revenue allows the government to operate and provide goods and services for citizens, such as roads, bridges, national parks, education, research, and national defense.

6 Tax Refunds

A tax refund is money owed to a taxpayer when total tax payments or credits are greater than the total tax liability. On average, nearly four out of five U.S. tax filers get a tax refund each year.⁵ For the 2015 tax year, the IRS reports nearly 117 million tax refunds, which totaled over \$346 billion.⁶

7 Overpayment

The majority of tax refunds are because taxpayers having paid the government more than they actually owed in taxes. When a tax return is completed and an overpayment is shown, the IRS refunds the over-



payment. The government is not giving anything away—just returning money. Actually, since the government does not pay interest on an overpayment, the taxpayer is giving the government an interest-free loan out of each paycheck.

8 Earned Income Tax Credit

A second reason for tax refunds is the earned income tax credit (EITC). Of the nearly 117 million refunds for individual income tax in 2015, almost 24.1 million were based on the EITC.⁷

About the EITC

IRS Publication 596 is updated each year to assist taxpayers in determining the EITC allowed. Some of the general rules for 2015 are shown below.

Rules for Qualifying for EITC in 2015

- You must have a valid Social Security number by the due date of your 2015 return.
- Your filing status cannot be married filing separately.
- You must be a U.S. citizen or resident alien all year.
- You must have earned income.

Note: Your income must be less than the maximum amount given in the table. (If you earn more, you do not qualify.)

Number of qualifying children	Adjusted gross income for single taxpayers	Adjusted gross income for married filing jointly taxpayers
3 or more	Less than \$47,747	Less than \$53,267
2	Less than \$44,454	Less than \$49,974
1	Less than \$39,131	Less than \$44,651
0 (You must be at least age 25 but under age 65.)	Less than \$14,820	Less than \$20,330

SOURCE: IRS Publication 596.

The EITC is a **tax credit** for low- to moderate-income working taxpayers, particularly those with children. The amount of the EITC benefit depends on the taxpayer’s income and number of children. (See the “About the EITC” boxed insert.)

A tax credit directly reduces the amount of taxes owed. The EITC is different from most tax credits because it is a *refundable* tax credit. The credit can completely eliminate the income tax owed and result in a refund. For example, if a taxpayer owes \$200 in taxes and has an EITC of \$500, then the taxpayer would be refunded the difference and receive a refund check in the amount of \$300.

2013 Federal Spending on the Largest Anti-Poverty Programs

Program	Millions of dollars*
Medicaid	\$266,565
SNAP	\$82,603
EITC	\$55,123

NOTE: *Inflation adjusted.

SOURCE: Office of Management and Budget; <https://www.whitehouse.gov/sites/default/files/omb/budget/fy2014/assets/hist.pdf>.

9 Federal Spending

The EITC began in 1975, and Congress has expanded this anti-poverty program over the years.⁸ The refundable portion of the EITC is part of the spending program of the government. Today it is the third-largest social welfare program in the United States after Medicaid and Supplemental Nutrition Assistance Program (SNAP, formerly called food stamps). The EITC is a benefit to taxpayers who receive it. However, it directly reduces the amount of tax revenue for the U.S. government. In 2015, the EITC refunded more than \$60 billion.⁹

10 Conclusion

The original income tax codes and regulations designed in 1862 were described in about 400 pages. In 1913, the tax form was four pages and included one page of instructions.¹⁰ Today, the federal tax code is almost 75,000 pages,¹¹ and the IRS website lists over 2,000 different forms and publications.¹² Because of the complexity of filing taxes, many taxpayers rely on professional tax preparers to complete and file their tax returns. In fact, a study of the 2011 tax year shows that more than half of the 145 million individual tax returns were completed by a paid tax preparer.¹³ With tax returns becoming longer and more complex and with more forms to file, the frenzy continues. ■

Notes

¹ Library of Congress. "Today in History: Tax Day." Accessed October 17, 2016; <https://www.loc.gov/item/today-in-history/april-15#tax-day>.

² IRS. "Brief History of IRS." Accessed October 17, 2016; <https://www.irs.gov/uac/brief-history-of-irs>.

³ Tax History.com. "Historical Perspectives on the Federal Income Tax." Accessed October 17, 2016; <http://www.taxhistory.com/1943.html>.

⁴ Office of Management and Budget. Historical Tables 2.1 and 2.2. Accessed October 26, 2016; <https://www.whitehouse.gov/omb/budget/Historicals>.

⁵ Sahadi, Jeanne. "Nearly 8 Out of 10 U.S. Taxpayers Get Refunds." CNN Money, January 14, 2015; <http://money.cnn.com/2015/01/13/pf/taxes/taxpayer-refunds/>.

⁶ IRS. *Internal Revenue Service Data Book, 2015*. Publication 55B. Washington, DC: March 2016, pp. 17 and 19; <https://www.irs.gov/pub/irs-soi/15databk.pdf>.

⁷ IRS. *Internal Revenue Service Data Book, 2015*. Publication 55B. Washington, DC: March 2016, p. 2; <https://www.irs.gov/pub/irs-soi/15databk.pdf>.

⁸ Hungerford, Thomas L. and Thiess, Rebecca. "The Earned Income Tax Credit and the Child Tax Credit: History, Purpose, Goals, and Effectiveness." Economic Policy Institute, September 25, 2013; <http://www.epi.org/publication/lb370-earned-income-tax-credit-and-the-child-tax-credit-history-purpose-goals-and-effectiveness/>.

⁹ IRS. *Internal Revenue Service Data Book, 2015*. Publication 55B. Washington, DC: March 2016, p. 19; <https://www.irs.gov/pub/irs-soi/15databk.pdf>.

¹⁰ Chamberlain, Andrew. "America's First Income Tax Form." Tax Foundation, July 7, 2005; <http://taxfoundation.org/blog/americas-first-income-tax-form>.

¹¹ Russell, Jason. "Look at How Many Pages Are in the Federal Tax Code." *Washington Examiner*, April 15, 2016; <http://www.washingtonexaminer.com/look-at-how-many-pages-are-in-the-federal-tax-code/article/2563032>.

¹² IRS. "Forms and Publications." Accessed October 19, 2016; <https://www.irs.gov/forms-pubs>.

¹³ McTigue, James R. Jr. "Paid Tax Return Preparers: In a Limited Study, Preparers Made Significant Errors." GAO-14-467T. Washington DC: April 8, 2014; <http://www.gao.gov/assets/670/662356.pdf>.

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Name _____ Period _____

Federal Reserve Bank of St. Louis *Page One Economics*®:

“Income Tax: Facts and Filings”

After reading the article, complete the following:

1. Determine whether each statement is fact or opinion. Write “F” for fact or “O” for opinion. For each fact, write the title of the section of the article that provides information and evidence.

Statement	Fact or opinion	Section title
a. The 16th Amendment to the Constitution gives Congress legal authority to tax income to collect revenue.		
b. The U.S. government benefits when taxpayers have more income tax withheld from each paycheck than is owed in taxes.		
c. The EITC directly reduces the amount of tax revenue for the U.S. government.		
d. Filing income tax forms has become increasingly complex since 1913.		
e. The progressive income tax is fair for all taxpayers.		
f. Higher-income earners pay more of the total income tax collected than do lower-income taxpayers.		
g. The EITC should not be a <i>refundable</i> tax credit.		
h. The income tax is collected by the IRS and spent according to decisions made by Congress and the president.		
i. The pay-as-you-earn method of collecting income tax is beneficial to all taxpayers.		
j. Regardless of the amount of income, all income should be taxed at the same rate.		
k. The amount of income tax owed depends on taxable income and filing status.		
l. The W-2 Wage and Tax Statement is needed to complete a tax return.		

2. When thinking about your income, circle the one that will be the largest dollar amount. Cite evidence to explain your answers.

Taxable income Gross income Adjusted gross income

3. You are a 22-year-old married taxpayer with no children. Your adjusted gross income is \$15,000. Will you qualify for the EITC? Cite evidence to support your answer. What is the title of the table or chart with the answer?
4. What percentage of federal tax revenue collected in 2015 was not individual income tax? What is the title of the table or chart with the answer?
5. Your filing status is "single" and your taxable income is \$34,500. What amount of your income will be taxed at the 10% tax rate? What is the title of the table or chart with the answer?
6. Your filing status is "married filing separately," and your taxable income is \$19,300. What amount of your income will be taxed at the 15% tax rate? What is the title of the table or chart with the answer?
7. The government spends billions of dollars on social welfare programs. Circle the spending program that is not an anti-poverty program.
- Medicaid SNAP EITC National Defense
8. What is the purpose of the W-2 form?

Teacher's Guide

Federal Reserve Bank of St. Louis *Page One Economics*®:

"Income Tax: Facts and Filings"

After reading the article, complete the following:

1. Determine whether each statement is fact or opinion. Write "F" for fact or "O" for opinion. For each fact, write the title of the section of the article that provides information and evidence.

Statement	Fact or opinion	Section title
a. The 16th Amendment to the Constitution gives Congress legal authority to tax income to collect revenue.	F	History of the Federal Income Tax
b. The U.S. government benefits when taxpayers have more income tax withheld from each paycheck than is owed in taxes.	F	Overpayment
c. The EITC directly reduces the amount of tax revenue for the U.S. government.	F	Federal Spending
d. Filing income tax forms has become increasingly complex since 1913.	F	Conclusion
e. The progressive income tax is fair for all taxpayers.	O	
f. Higher-income earners pay more of the total income tax collected than do lower-income taxpayers.	F	The Individual Income Tax Structure
g. The EITC should not be a <i>refundable</i> tax credit.	O	
h. The income tax is collected by the IRS and spent according to decisions made by Congress and the president.	F	The Purpose of Federal Income Tax
i. The pay-as-you-earn method of collecting income tax is beneficial to all taxpayers.	O	
j. Regardless of the amount of income, all income should be taxed at the same rate.	O	
k. The amount of income tax owed depends on taxable income and filing status.	F	The Individual Income Tax Structure
l. The W-2 Wage and Tax Statement is needed to complete a tax return.	F	Collection of Federal Income Tax

2. When thinking about your income, circle the one that will be the largest dollar amount. Cite evidence to explain your answers.

Taxable income **Gross income** Adjusted gross income

Gross income is the total amount earned before any adjustments are subtracted.

Adjusted gross income is gross income minus specific adjustments.

Taxable income is gross income minus allowable deductions and credits.

3. You are a 22-year-old married taxpayer with no children. Your adjusted gross income is \$15,000. Will you qualify for the EITC? Cite evidence to support your answer. What is the title of the table or chart with the answer?

No, you will not qualify because you have no children and are under age 25.

Table: About the EITC

4. What percentage of federal tax revenue collected in 2015 was not individual income tax? What is the title of the table or chart with the answer?

52.6% of revenue (100% – 47.4%) was collected from all other taxes.

Chart: Federal Tax Revenue, 2015

5. Your filing status is “single” and your taxable income is \$34,500. What amount of your income will be taxed at the 10% tax rate? What is the title of the table or chart with the answer?

\$9,275

Table: Filing Status

6. Your filing status is “married filing separately,” and your taxable income is \$19,300. What amount of your income will be taxed at the 15% tax rate? What is the title of the table or chart with the answer?

\$10,025 (\$19,300 – \$9,275)

Table: Filing Status

7. The government spends billions of dollars on social welfare programs. Circle the spending program that is not an anti-poverty program.

Medicaid SNAP EITC **National Defense**

8. What is the purpose of the W-2 form?

This form is used by employees to complete individual tax returns. Among other things, it includes the total amount of income earned and the amount of federal income tax withheld over the given year.

Additional Resources

Econ Lowdown® of the Federal Reserve Bank of St. Louis provides numerous economic education resources for teachers to use with their students. These free resources include lesson plans, videos, online modules, interactive whiteboard lessons, and podcasts. They are available at <https://www.stlouisfed.org/education>.

The resources listed below from Econ Lowdown can be integrated with the content contained in this article.

It's Your Paycheck! Lesson 2: "W" Is for Wages, W4 and W2

Students compute the gross pay for a fictional John Dough given his hourly wage and the number of hours worked. They compare gross pay to net pay. They learn what FICA and federal income taxes are, how to complete a W-4 form, and what a W-2 form is.

<https://www.stlouisfed.org/~media/Education/Curriculum/pdf/Its-Your-Paycheck-Lesson-2.pdf>

Scraps of Time: Abby Takes a Stand (Lesson, Grades 6-8)

Students read the book *Scraps of Time: Abby Takes a Stand* about incidences of racial discrimination and how those incidences were met with methods of protests. They then engage in an activity that matches programs for low-income people with the type of economic inequity the program addresses and observe an activity simulating tax payments and transfers.

<https://www.stlouisfed.org/education/scraps-of-time-abby-takes-a-stand>

Standards and Benchmarks

Common Core State Standards

Grades 6-12 Literacy in History/Social Studies, Science, and Technical Subjects

History and Social Studies, Grade 6-8

- **Key Ideas and Details**

RH.6-8.1: Cite specific textual evidence to support analysis of primary and secondary sources.

RH.6-8.2: Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.

- **Craft and Structure**

RH.6-8.4: Determine the meaning of words and phrases as they are used in the text, including vocabulary specific to domains related to history/social studies.

RH.6-8.5: Describe how a text presents information (e.g., sequentially, comparatively, causally).

RH.6-8.6: Identify aspects of a text that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).

- **Integration of Knowledge and Ideas**

RH.6-8.7: Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

RH.6-8.8: Distinguish among fact, opinion, and reasoned judgment in a text.

National Standards for Financial Literacy

Standard 1: Earning Income

Income for most people is determined by the market value of their labor, paid as wages and salaries. People can increase their income and job opportunities by choosing to acquire more education, work experience, and job skills. The decision to undertake an activity that increases income or job opportunities is affected by the expected benefits and costs of such an activity. Income also is obtained from other sources such as interest, rents, capital gains, dividends, and profits.

- **Benchmarks: Grade 8**

10. Some people receive income support from government because they have low incomes or qualify in other ways for government assistance.

Voluntary National Content Standards in Economics

Content Standard 16: Role of Government and Market Failure

There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also have direct or indirect effects on people's incomes.

- **Benchmarks: Grade 8**

3. Most federal government tax revenue comes from personal income and payroll taxes. Payments to Social Security recipients, the costs of national defense and homeland security, medical expenditures (such as Medicare), transfers to state and local governments, and interest payments on the national debt constitute the bulk of federal government spending.