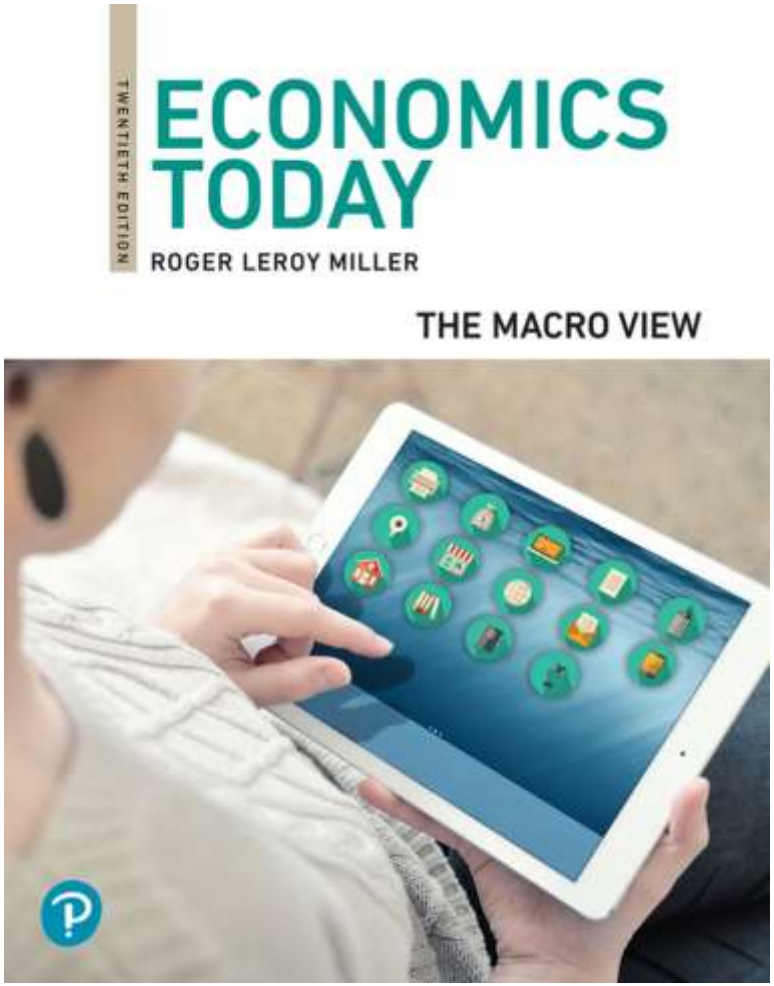
Economics Today

Twentieth Edition



Chapter 5

Public Spending and Public Choice

Introduction

People regularly pay user charges for commodities provided by governments, such as fees for trash pickup and entering a state park.

In this chapter, you will learn about the important distinctions between private goods and private goods.

Learning Objectives (1 of 2)

5.1 Explain how market failures such as externalities might justify economic functions of government

5.2 Distinguish between private goods and public goods and explain the nature of the free-rider problem

5.3 Describe political functions of government that entail its involvement in the economy

Learning Objectives (2 of 2)

5.4 Analyze how public spending programs such as Medicare and spending on public education affect consumption incentives

5.5 Discuss the central elements of the theory of public choice

Chapter Outline

Did You Know That ...

- A nonprofit corporation manages all air traffic control in Canada?
- Some U.S. politicians have called for the United States to follow Canada's example by shifting air-traffic control responsibilities to a private company.
- In this chapter, you will learn that a key requirement of any economic analysis of governmental behavior is to account for the government's distinctive *incentive structure*.

5.1 Market Failures and Externalities (1 of 10)

- In its most ideal form, a price system allows resources to move from lower-valued to higher-valued uses through voluntary exchange.
  - Economic efficiency arises when all mutually advantageous trades have taken place.
- There are, however, situations when a price system does not generate the desired results.

5.1 Market Failures and Externalities (2 of 10)

- Market failure
  - A situation in which the unrestrained market economy leads to too few or too many resources going to a specific economic activity:
    - Prevents economic efficiency and individual freedom
    - Is addressed by public policy (government)

5.1 Market Failures and Externalities (3 of 10)

- In a pure market system, economic efficiency occurs when individuals know and must bear the true opportunity cost of their actions.
  - In some cases, the price that someone actually pays for a resource, good, or service is higher or lower than the opportunity cost that all of society pays.

5.1 Market Failures and Externalities (4 of 10)

- Market failure example:
  - Assume:
    - No government regulation against pollution
    - A town with clean air
    - A steel mill opens and emits smoke that causes:
      - More respiratory diseases
      - Dirtier clothes, houses, and cars

5.1 Market Failures and Externalities (5 of 10)

- Market failure example:
  - Market failure occurs:
    - Steel mill does not pay for the clean air.
    - Costs of production have “spilled over” to the residents (third parties).
    - Lower production cost:
      - More steel is produced than would otherwise be the case.

5.1 Market Failures and Externalities (6 of 10)

- Externalities
  - Consequences of an economic activity that spill over to affect third parties
- Third parties
  - Parties who are not directly involved in a given activity or transaction
- Property rights
  - Rights of an owner to use and exchange property

5.1 Market Failures and Externalities (7 of 10)

- Externalities are examples of market failures.
- Pollution is an example of a negative externality.
- Inoculations are an example of positive externality.

Example: Neighbors Are Not Hog Wild about a North Carolina Pig Farm

- North Carolina residents who live close to a pig farm owned by Smithfield Foods have to deal with its spillover effects—foul odors and pollution in the air.
- Neighbors of this and other pig farms regard these spillover effects of hog production as external costs not taken into account by pork-producing firms.

Figure 5.1 (1 of 2)

External Costs and Benefits, Panel (a)

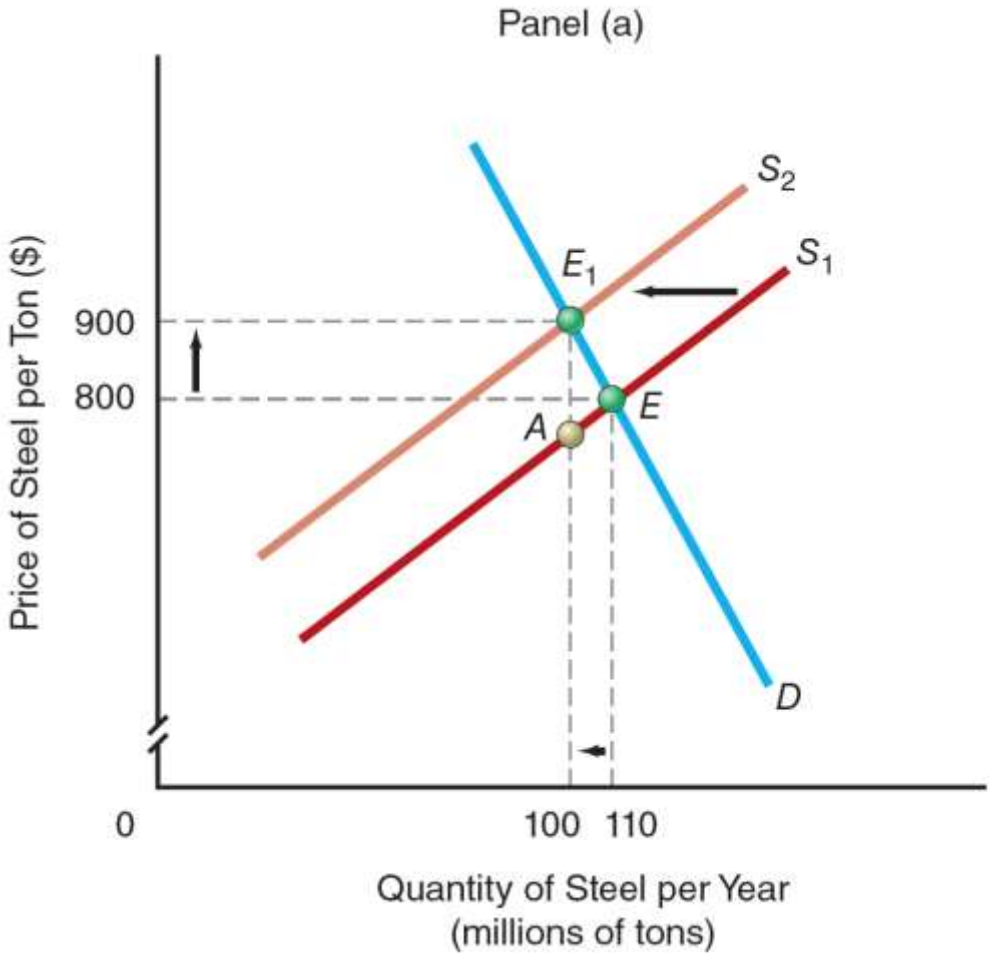
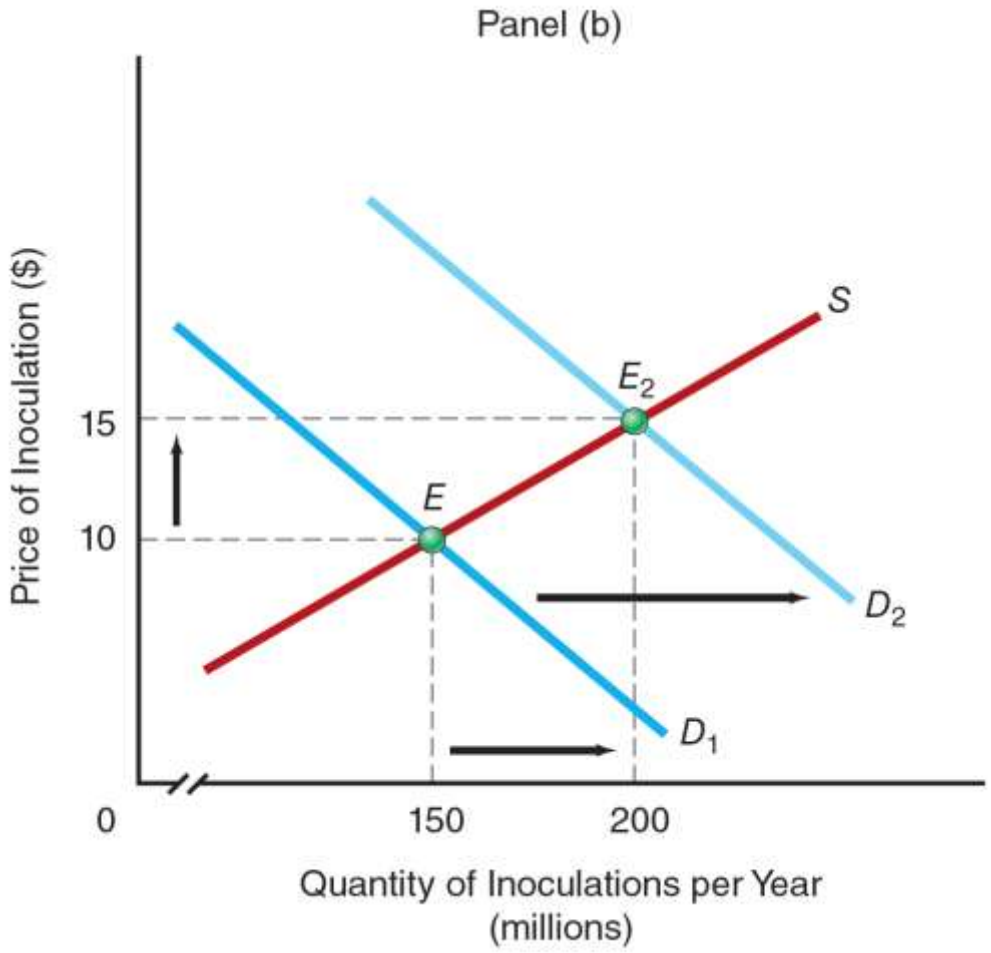


Figure 5.1 (2 of 2)

External Costs and Benefits, Panel (b)



5.1 Market Failures and Externalities (8 of 10)

- Resource misallocations of externalities:
  - External costs—market overallocates
  - External benefits—market underallocates

5.1 Market Failures and Externalities (9 of 10)

- How the government can correct negative externalities:
  - Effluent fee as a special tax
    - A charge to a polluter that gives the right to discharge into the air or water a certain amount of pollution
    - Also called a pollution tax
  - Regulation

What Happens When . . . governments require everyone to purchase health insurance?

- Enforcement of laws intended to ensure that everyone obtains health care boosts the amount of health insurance demanded at any given price.
- The results are a rightward shift in the market demand curve for health insurance, an upward movement along the market supply curve, and an increase in the equilibrium price of health insurance.

5.1 Market Failures and Externalities (10 of 10)

- How the government can correct positive externalities:
  - Government financing and production
  - Regulation
  - Subsidies

5.2 The Other Economic Functions of Government (1 of 9)

- Providing a legal system
- Promoting competition
- Providing public goods
- Ensuring economywide stability

5.2 The Other Economic Functions of Government (2 of 9)

- Providing a legal system:
  - Enforcing contracts
  - Defining and protecting property rights
  - Establishing legal rules of behavior

5.2 The Other Economic Functions of Government (3 of 9)

- Promoting competition:
  - Market failure may occur if markets are not competitive:
    - Antitrust legislation
    - Monopoly power

5.2 The Other Economic Functions of Government (4 of 9)

- Antitrust legislation
  - Laws that restrict the formation of monopolies and regulate certain anticompetitive business practices
- Monopoly
  - A firm that can determine the market price; in the extreme case, the only seller of a good or service

5.2 The Other Economic Functions of Government (5 of 9)

- Providing public goods:
  - Goods to which the principle of rival consumption does not apply:
    - These are goods that may be consumed jointly by many individuals at the same time.
  - In contrast, private goods can be consumed by only one individual at a time.

5.2 The Other Economic Functions of Government (6 of 9)

- What truly distinguishes public goods from all private goods is that the costs incurred in excluding nonpayers from consuming a public good are prohibitive.
- Individuals in the private sector have little incentive to provide public goods.

5.2 The Other Economic Functions of Government (7 of 9)

- Characteristics of public goods:
  - Public goods can be used by more and more people at no additional opportunity cost.
  - It is difficult to charge for a public good based on consumption; this is called the exclusion principle.

AI—Decision Making Through Data: Contemplating Big Data as a Public Good

- Some observers have argued that big data that can readily be tracked electronically should be classified as public goods.
- However, such data are largely collected under private contractual agreements, some of which specify confidentiality of consumer data and limit access to the data.
- So, most large datasets are private goods subject to the principle of rival consumption.

5.2 The Other Economic Functions of Government (8 of 9)

- Free-rider problem
  - The free-rider problem arises when some individuals take advantage of the fact that others will take on the burden of paying for public goods.
  - The free-rider problem often emerges in connection with sharing the burden of international defense.

5.2 The Other Economic Functions of Government (9 of 9)

- Ensuring economywide stability:
  - Smooth ups and downs in overall business activity
  - Full-Employment Act, 1946:
    - Full employment
    - Price stability
    - Economic growth

5.3 The Political Functions of Government (1 of 3)

- Government-sponsored goods
  - Goods deemed socially desirable through the political process
    - Example: Museums
- Government-inhibited goods
  - Goods deemed socially undesirable
    - Example: Certain psychoactive drugs

Policy Example: Government Sponsorship Keeps Light Rail Systems in Operation

- Very few “light rail” systems in the United States could function without substantial government sponsorship.
- Washington D.C.’s Metro light rail and bus service incurs about $3.1 billion per year in operating expenses, but collects $0.8 billion in passenger fees and station parking fees annually.
- The remaining expenses are covered by local, state, and federal governments.

Behavioral Example: To Inhibit Nicotine Consumption, Should the Government Assume that All Consumers Behave the Same?

- Recent behavioral research shows evidence that nicotine consumption choices differ between traditional cigarette smoking and e-cigarette “vaping.”
- Thus, government agencies cannot assume that taxing or regulating users of e-cigarettes will yield the same outcome as those of traditional cigarettes.

5.3 The Political Functions of Government (2 of 3)

- Income redistribution includes progressive income tax system and transfers:
  - Transfer payments
  - Transfers in kind

5.3 The Political Functions of Government (3 of 3)

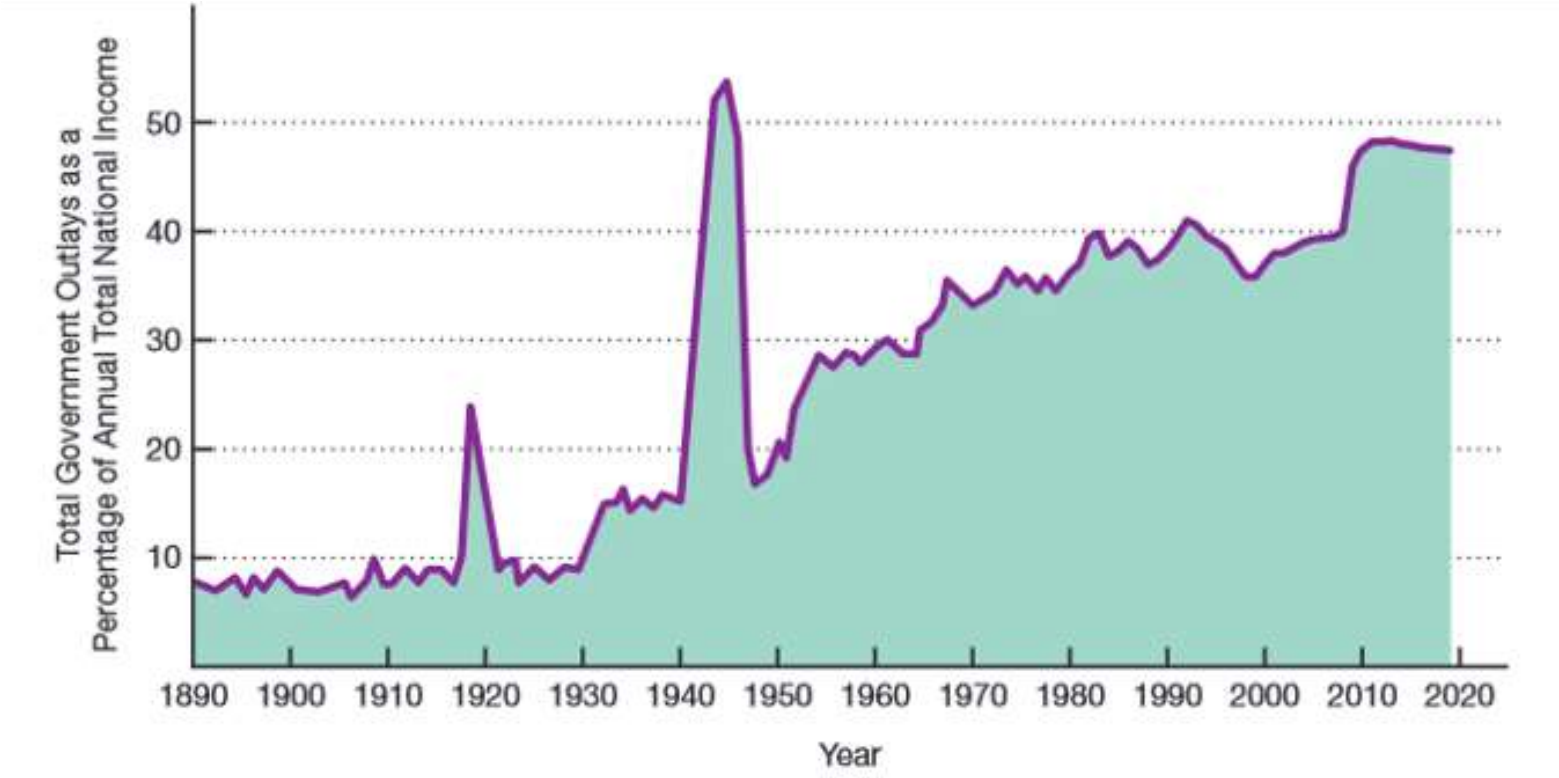
- Transfer payments
  - Money payments made by governments to individuals for which no services or goods are rendered in return
    - Examples: Social Security old age and disability benefits and unemployment insurance benefits
- Transfers in kind
  - Payments that are in the form of goods and services
    - Examples: food stamps, subsidized public housing, and medical care

5.4 Public Spending and Transfer Programs (1 of 6)

- Government outlays
  - All federal, state, and local spending
    - Examples: Defense, income security, and Social Security—at the federal level
    - Examples: Education, highways, and public welfare—at the state level

Figure 5.2

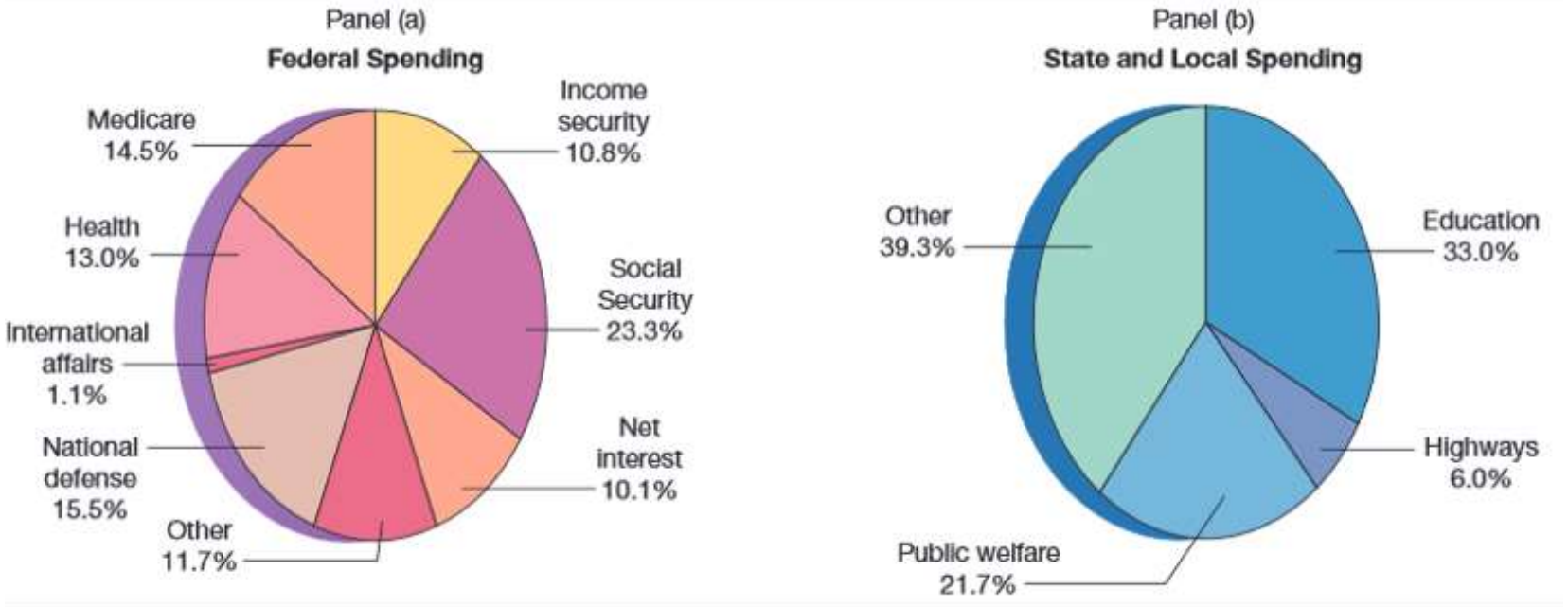
Total Government Outlays over Time



Sources: Facts and Figures on Government Finance, various issues*; Economic Indicators*, various issues.

Figure 5.3

Federal Government Spending Compared to State and Local Spending



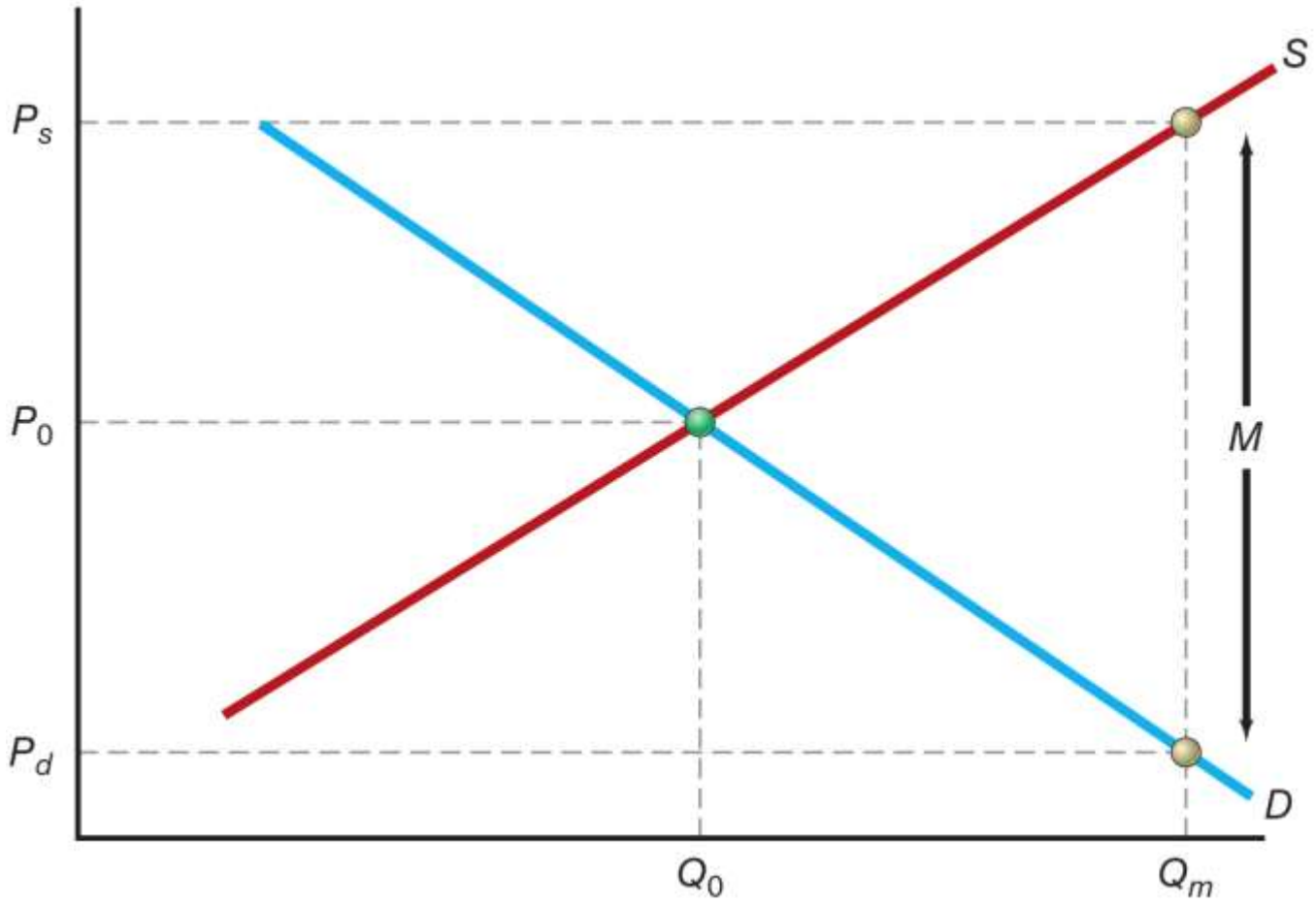
Sources: Economic Report of the President, Economic Indicators.

5.4 Public Spending and Transfer Programs (2 of 6)

- Publicly subsidized health care
  - Medicare
    - Began in 1965
    - Pays hospital and physician bills for U.S. residents over 65 with public monies
    - 2.9 percent of earnings taxed, plus 3.8 percent on certain incomes for high-income households
    - Second-biggest domestic program in existence
  - Medicaid
    - Subsidizes people with lower incomes

Figure 5.4

The Economic Effects of Medicare Subsidies



5.4 Public Spending and Transfer Programs (3 of 6)

- To increase the quantity of medical care, the government pays a subsidy:
  - The price per unit paid to medical service providers increases.
  - The price per unit paid by consumers falls.
  - More medical services are consumed.

5.4 Public Spending and Transfer Programs (4 of 6)

- Health care subsidies continue to grow:
  - The cost of Medicare is now $550 billion per year, and unfunded guarantees of future spending exceed $25 trillion.
  - In addition, the federal government pays the expenses of Medicaid, a program that provides health care for low-income citizens.
  - The current cost of Medicaid is more than $400 billion per year.

5.4 Public Spending and Transfer Programs (5 of 6)

- Economic issues of public education:
  - State and local governments provide primary, secondary, and college education at prices well below those that would otherwise prevail in the marketplace:
    - Publicly subsidized, similar to government-subsidized health care
    - Education priced below market

5.4 Public Spending and Transfer Programs (6 of 6)

- Incentive problems of public education:
  - Various measures of performance show no increase or decline in performance.
  - Many economists argue that failure to improve is explained by incentive effects.
  - Higher subsidies may translate to services unrelated to learning.

5.5 Collective Decision Making: The Theory of Public Choice (1 of 8)

- Collective decision making
  - How voters, politicians, and other interested parties act and how these actions influence nonmarket decisions

5.5 Collective Decision Making: The Theory of Public Choice (2 of 8)

- Theory of public choice
  - The study of collective decision making
  - Assumes that individuals will act within the political process to maximize their individual (not collective) well-being

5.5 Collective Decision Making: The Theory of Public Choice (3 of 8)

- Similarities in market and public-sector decision making:
  - Self-interest
  - Opportunity cost
  - Competition
  - Similarity of individuals but different incentive structures

5.5 Collective Decision Making: The Theory of Public Choice (4 of 8)

- Incentive structure
  - The system of rewards and punishments individuals face with respect to their actions

5.5 Collective Decision Making: The Theory of Public Choice (5 of 8)

- Differences between market and collective decision making:
  - Government goods at zero price
  - Use of force
  - Voting versus spending

Policy Example: Private Space Firms Recycle Rocket Boosters and Capsules That the Government Regards as Throwaways

- NASA's primary objectives involved spaceflight and exploration with an annual budget funded by taxpayers.
- In contrast, private spaceflight companies, such as SpaceX and United Launch Alliance, incur ongoing expenses that reflect the full opportunity costs of all resources devoted to space travel.
- For these firms, recycling materials yields the lowest price that must be paid for private space travel.

5.5 Collective Decision Making: The Theory of Public Choice (6 of 8)

- Differences between market and collective decision making:
  - Voting versus spending:
    - Political system versus market system:
      - Political system run by majority rule
      - Market system run by proportional rule

5.5 Collective Decision Making: The Theory of Public Choice (7 of 8)

- Government, or political goods
  - Goods (and services) provided by the public sector
- Majority rule
  - A collective decision-making system in which group decisions are based on more than 50 percent of the vote
- Proportional rule
  - A collective decision-making system in which actions are based on the proportion of the "votes" cast and are in proportion to them

5.5 Collective Decision Making: The Theory of Public Choice (8 of 8)

- Differences between market and collective decision making:
  - Voting versus spending:
    - Spending of dollars can indicate intensity of want.
    - Votes cannot indicate intensity of want; each vote counts with the same intensity.

Economics In Your Life: Fake "Service Pets" Create External Costs on Airline Flights

- The Air Carrier Access Act of 1986 allows people with physical disabilities or mental problems who travel on passenger planes to be accompanied by service pets.
- A growing number of firms provide "diagnosis" and letters attesting to "needs" for in-flight service-pet accompaniment.
- Illegitimate "service pets" can create adverse spillover effects within passenger cabins.

Issues & Applications: Residents of Wisconsin Learn That Services Provided by State Parks Are Not Public Goods

- Although state parks are publicly owned lands, the services they provide visitors are not public goods.
- Many services commonly offered by parks are subject to the principle of rival consumption: If one family camps at a campsite, another family cannot camp there.
- In Wisconsin, instead of receiving grants from the government, officials have contemplated the idea of giving "naming rights" to companies for various facilities in exchange for funding grants.

Summary Discussion of Learning Objectives (1 of 6)

- 5.1 Explain how market failures such as externalities might justify economic functions of government
  - Market failure is a situation in which an unhindered free market allocates too many or too few resources to a specific economic activity.

Summary Discussion of Learning Objectives (2 of 6)

- 5.2 Distinguish between private goods and public goods and explain the nature of the free-rider problem
  - Private goods are subject to the principle of rival consumption.
  - Public goods are not subject to the principle of rival consumption.
  - Free riders anticipate that others will pay.

Summary Discussion of Learning Objectives (3 of 6)

- 5.3 Describe political functions of government that entail its involvement in the economy
  - Merit goods are deemed socially desirable.
  - Demerit goods are deemed socially undesirable.
  - Redistributing income:
    - Transfer payments
    - In-kind transfers

Summary Discussion of Learning Objectives (4 of 6)

- 5.4 Analyze how public spending programs such as Medicare and spending on public education affect consumption incentives
  - Subsidies lead to a higher quantity of medical services consumed.
  - Medicare encourages people to consume medical services that are low in per-unit value relative to the cost.

Summary Discussion of Learning Objectives (5 of 6)

- 5.4 Analyze how public spending programs such as Medicare and spending on public education affect consumption incentives
  - Bigger subsidies for public schools do not necessarily translate into improved student performance.
  - The last unit of educational services provided is likely to cost more than its valuation by parents and students.
  - The services provided contribute every little to student learning.

Summary Discussion of Learning Objectives (6 of 6)

- 5.5 Discuss the central elements of the theory of public choice
  - Collective decision making:
    - Voters, politicians, and other participants influence nonmarket choices.
  - Incentive structures:
    - Rewards and punishments affect provision of government goods.
  - Similarities and differences with market system structures:
    - Scarcity and competition are similarities.
    - Legal coercion and majority rule are differences.

Copyright