

# The Role of Government

CHAPTER

# 4

## LEARNING OBJECTIVES

*After learning about this chapter, you should know*

- LO4-1** The nature and causes of market failure.
- LO4-2** How the public sector has grown.
- LO4-3** Which taxes finance state, local, and federal governments.
- LO4-4** The meaning of government failure.

# What Does Society Want Produced?

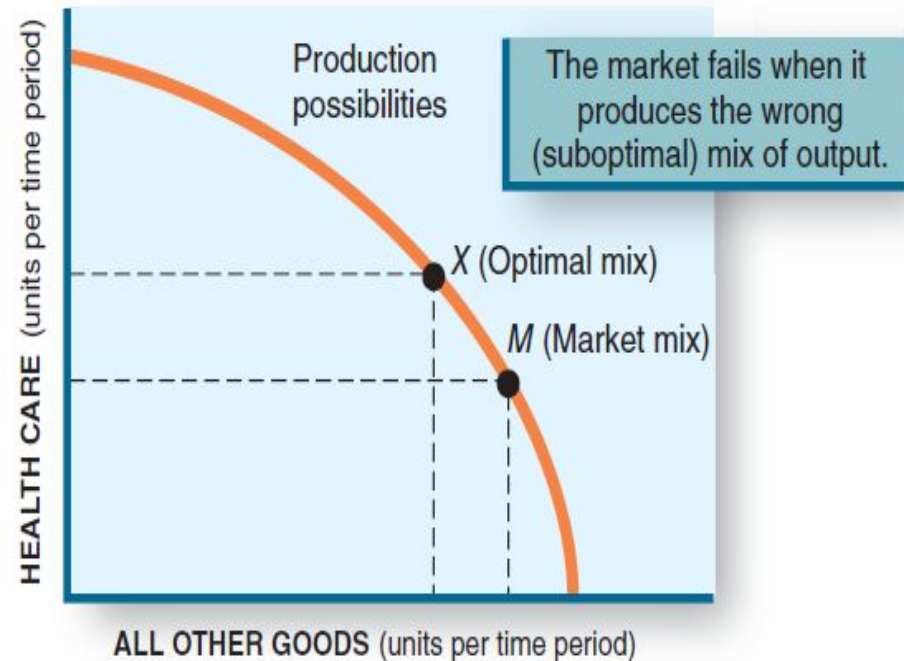
- Decisions must be made about what to produce.
  - In a market-based system, buyers and sellers make these decisions.
  - In a state-run system, those in power make these decisions.
- Can either of these systems, or a combination of the two, produce the mix of output desired by society in general?

# The Core Issues

- The market mechanism produces goods and services and yields jobs, wages, and a distribution of income.
- Is this the best possible mix of output? Should government intervene?
  - Under what circumstances do markets fail?
  - How can government intervention help?
  - How much government intervention is desirable?

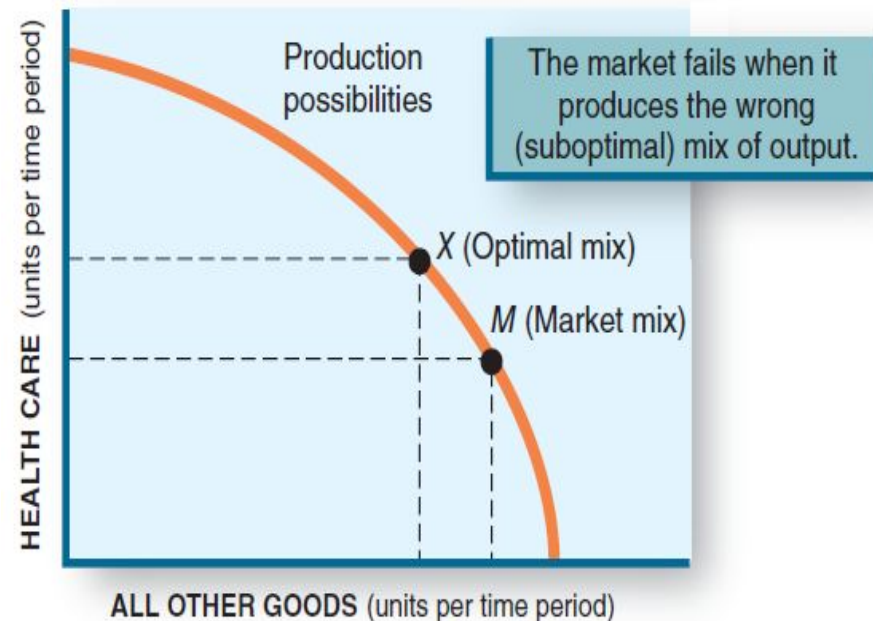
# Society's Goal

- Goal: To produce an optimal mix of output.
- **Optimal mix of output:** the most desirable combination of output attainable using existing resources, technology, and social values.



# Market Failure

- Society wants the combination at point X.
- The market mechanism would lead us to point M.
- **Market failure:** an imperfection in the market mechanism that prevents optimal outcomes.



# Market Failure II

- **Market failure:** the market mechanism did not lead us to the optimal point on the PPC.
- Market failure establishes a basis for government intervention.
- Specific sources of market failure are
  - Public goods
  - Externalities
  - Market power
  - Inequity

# Public vs Private Goods

- **Private good:** a good or service whose consumption by one person excludes consumption by others.
  - A doughnut
- **Public good:** a good or service whose consumption by one person does not exclude consumption by others.
  - National defense

# Public Goods

- **The free-rider dilemma:** the communal nature of public goods may cause some consumers to try for a free ride.
- **Free rider:** an individual who reaps direct benefits from someone else's purchase (consumption) of a public good.



# Public Goods II

- Everyone waits to use the good “for free.”
- Since there is no apparent buyer of the good, no producer will bring it to market. (No profit incentive.)
- The market fails to produce a good or service that society desires.

# Public Goods III

- The market tends to under-produce public goods, if it produces them at all.
- Government's role:
  - To step in and become the “buyer”.
  - The producer then produces the public good.
  - Government finance the purchase with taxes or user fees.

# Externalities

## Externalities

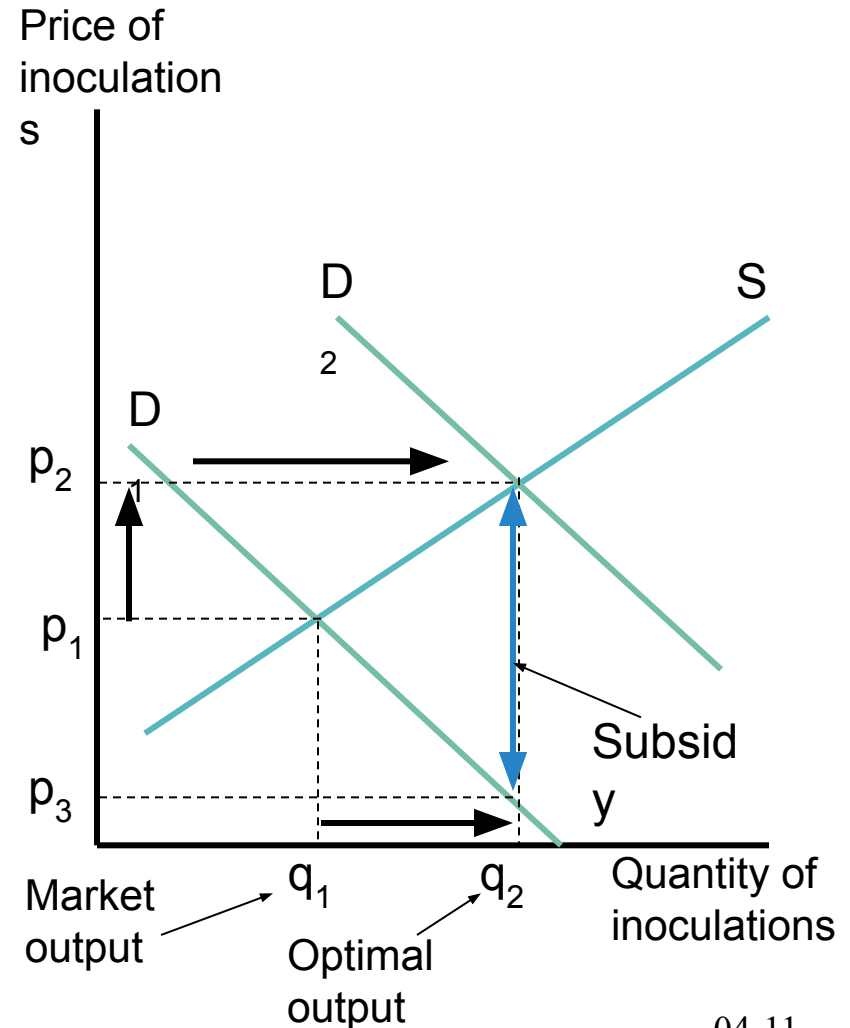
- Costs (or benefits) borne by a third party when a two-party (buyer and seller) transaction occurs.
- The difference between the social and private costs (benefits) of a market activity.
- When externalities are present, market prices are not a valid measure of a good's value to society.

# Correcting for Externalities

## Positive externality

- Third parties **benefit** because of a market transaction.
- **Not enough** is produced and sold at price  $p_1$  because society's benefits are **greater than** market benefits.
- **Government steps in** and causes **more** to be produced by subsidizing production or purchase.
  - Product is sold at price  $p_3$ .

Examples: public education and inoculations

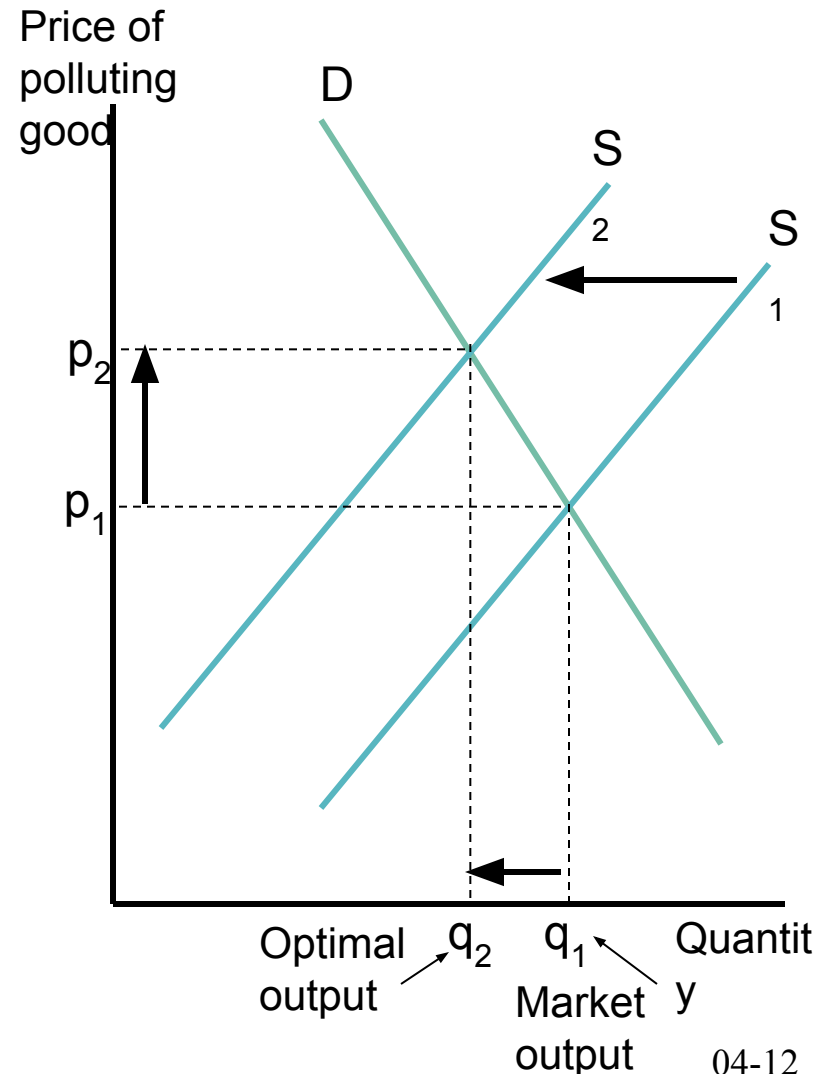


# Correcting for Externalities II

## Negative externality

- Third parties are **hurt (suffer a cost)** because of a market transaction.
- **Too much** is produced and sold at price  $p_1$  because society's costs are **greater than** market costs.
- **Government steps in** to shift costs from society to the producer and the buyer, causing the supply curve to shift left.
- Government action causes **less** to be produced and sold at a higher price  $p_2$ .

Example: pollution



# Summary: Externalities

- Positive externality
  - Society's benefit  $>$  market benefit
  - The market **underproduces**.
  - The government subsidizes to shift demand right.
- Negative externality
  - Society's cost  $>$  market cost
  - The market **overproduces**.
  - The government restricts production to shift supply left.

# Market Power

- **Market power:** the ability of a firm to manipulate the price of a good in the market.
  - The firm can restrict supply in order to drive up price and maximize profits rather than produce society's desired mix of output.
- Government role
  - Restrict market power
  - Promote more competition

# Inequity

- **Income redistribution:**
  - Reduces the inequity in incomes.
  - Provides a minimum amount of merit goods.
- **Merit good:** a good society believes everyone is entitled to some minimal quantity of.
- Government redistributes income using:
  - A progressive income tax system.
    - Collect taxes from income earners.
  - Transfer payments.
    - Provide payments to individuals for which no current goods and services are exchanged.



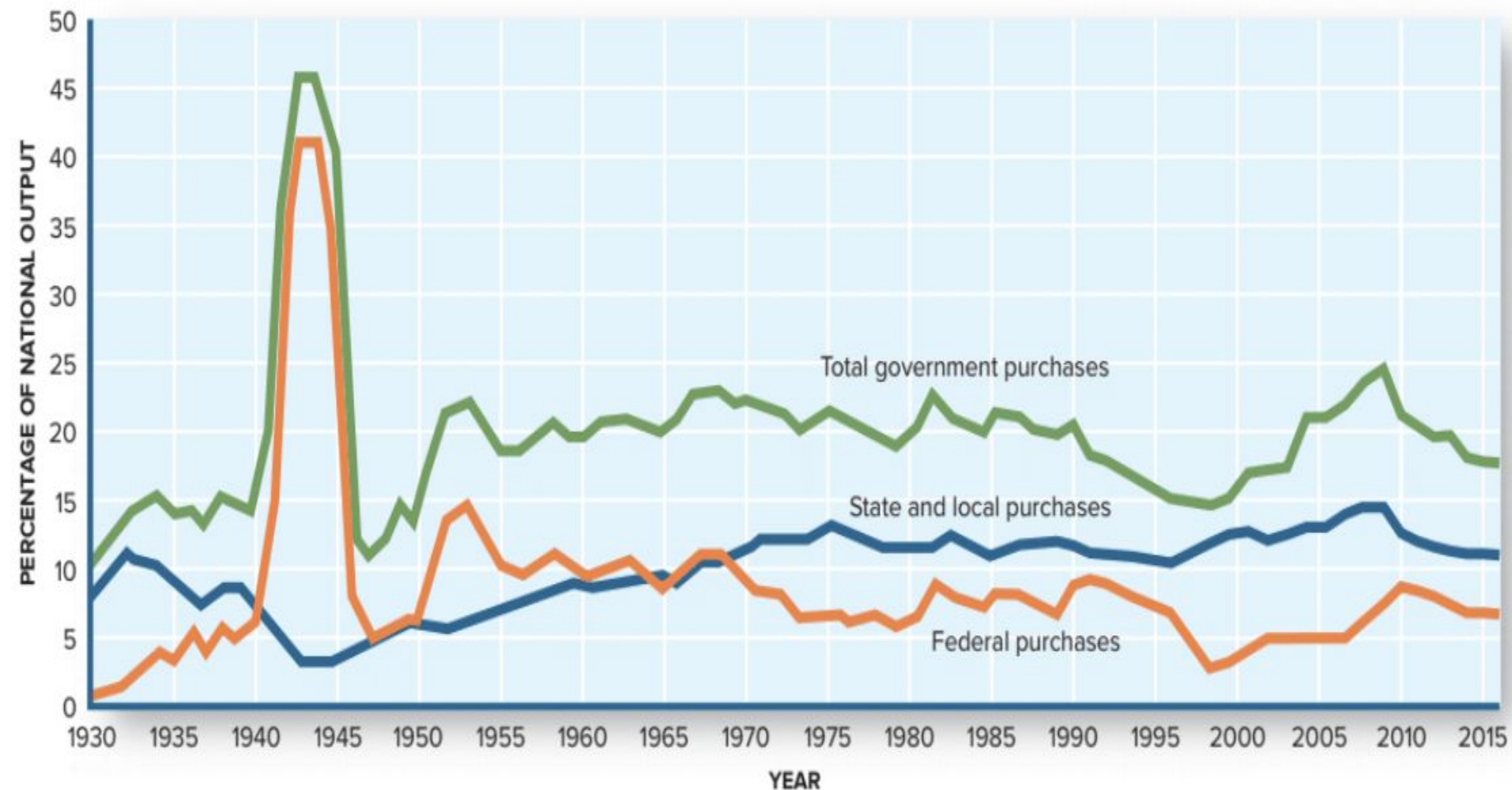
# Macro Instability

- The goal of macro intervention is to foster economic growth.
  - Move out of inefficiency and onto the PPC.
    - Reduce unemployment.
  - Avoid inflation.
    - Promote stable prices.
  - Increase our capacity to produce.
    - Economic growth
- Government uses macroeconomic policies in an attempt to meet these goals.

# Growth of Government

- When society perceives a problem, it looks to government to “fix” the problem, which provides justification for government intervention in the economy.
- As a result, government has grown over the last century:
  - Over 10 times more employees since 1900.
  - A budget 6,000 times larger since 1900.

# Growth of Government II



# Government Finances

- Each level of government (federal, state, and local) creates a budget of fund inflows and outflows.
- **Inflows (sources of funds)**
  - Taxes (and fees/user charges)
  - Borrowing
- **Outflows (uses of funds)**
  - Purchases of goods and services
  - Payments for resources used
  - Transfer payments

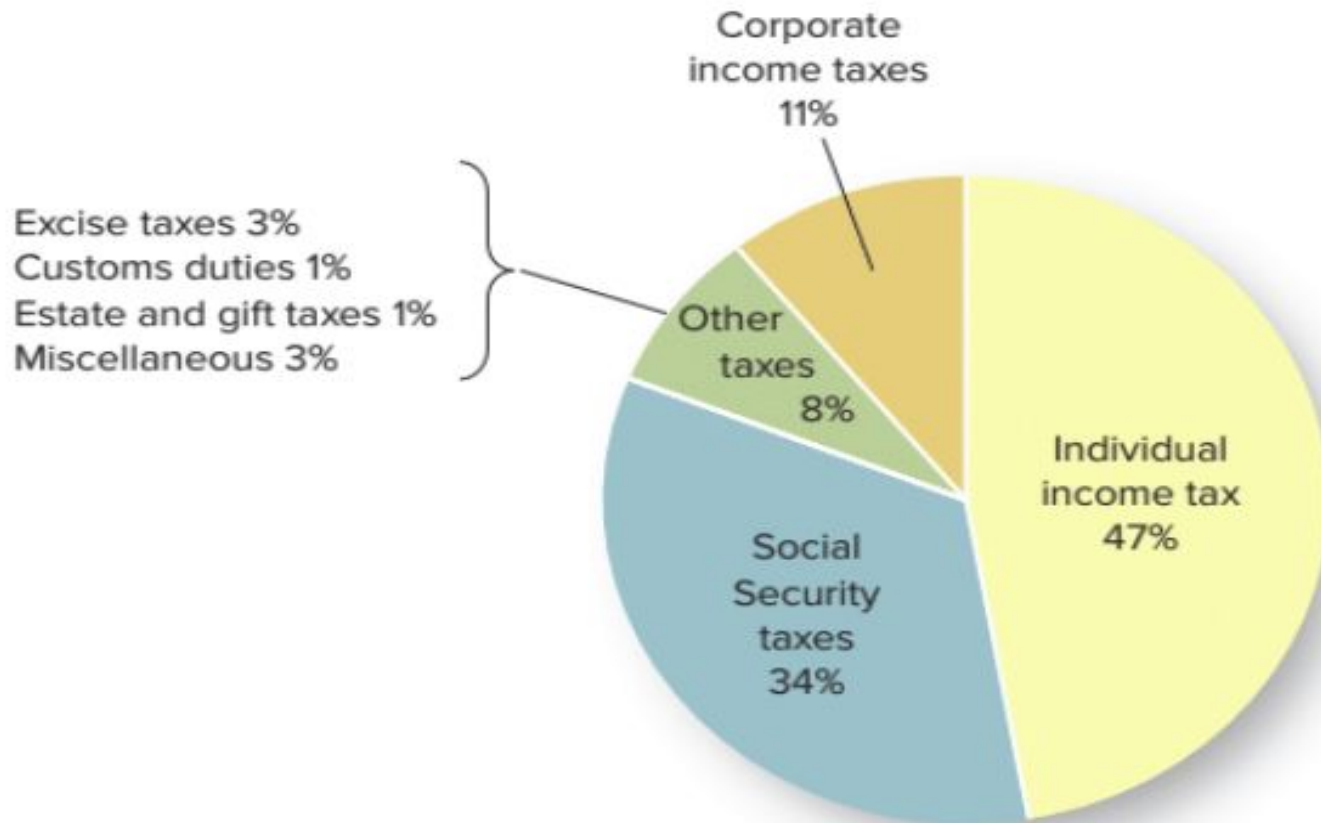
# Sources of Government Growth

- Direct government expenditures have grown a bit more slowly than private sector expenditures.
- Most of the growth in federal spending is from **increased transfer payments**, which now account for over half of the spending.
- **State and local governments** buy much more output than the federal government and employ five times as many people.

# Taxation

- Tax revenue pays for government spending.
- There is a change in the output mix as more government spending absorbs factors of production that could be used to produce consumer goods.
- The **opportunity cost of taxation** is measured by the private-sector output sacrificed when government employs scarce factors of production.
- The primary function of taxes is to transfer command over resources (purchasing power) from the private sector to the public sector.

# Federal Taxes



# Income Tax

- **Income taxes:** the largest single source of government revenue.
- Is a **progressive tax system**.
  - As income rises, the tax rate also rises.
  - Compared to those with lower incomes, those with higher incomes:
    - Pay more taxes.
    - Pay a greater fraction of their income in taxes.



# Social Security Tax

- Is a **regressive tax system**.
  - As income rises, the tax rate falls.
  - Compared to those with lower incomes, those with higher incomes:
    - Pay more taxes.
    - But pay a smaller fraction of their income in taxes.

# Other Taxes

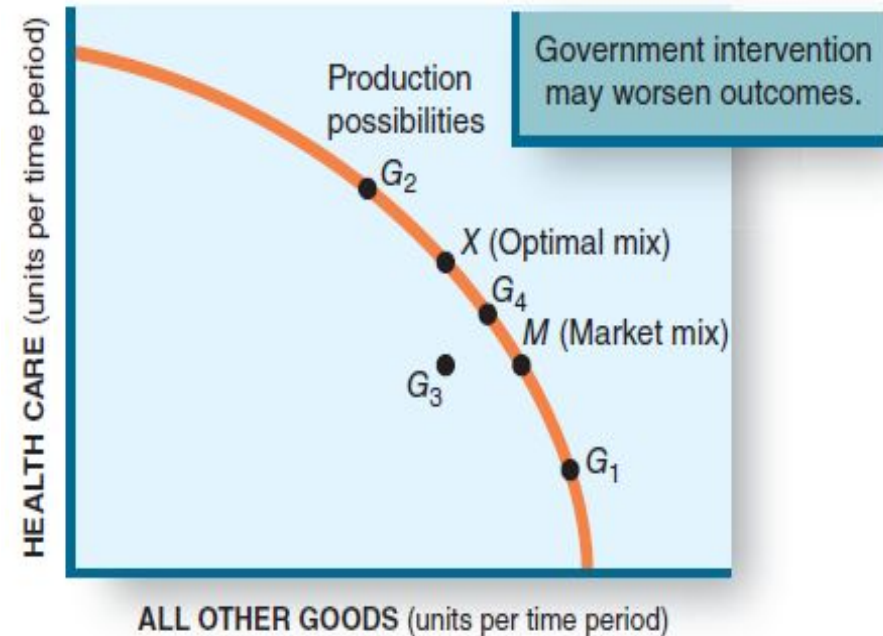
- **Corporate taxes:**
  - Is a **progressive tax** system to the corporation.
  - Is usually passed on to the customer in higher prices.
- **Excise taxes:**
  - Imposed on a specific good or service.
  - Some are imposed to discourage production and consumption of these goods.

# Other Taxes II

- **Property tax:**
  - A major source of local taxes.
  - Is a **regressive tax**, since poorer people devote a larger portion of their income to housing costs.
- **Sales tax:**
  - Another major source of local taxes.
  - Is also a **regressive tax**, since poorer people tend to spend all of their income while richer people do not.

# Government Failure

- The goal of Government intervention is to move the mix of output closer to society's desired mix.
- **Government failure:** occurs when government intervention fails to improve economic outcomes and may worsen outcomes.



# Perceptions of Waste

- Public perception is that the government isn't producing as many services as it could with the resources at its disposal.
  - This inefficiency pushes the economy inside the PPC.
- A related question is: Are we giving up too many private-sector goods in order to get those services?
  - Is the opportunity cost too high?

# Valuation of Costs and Benefits

- Additional public-sector activity is desirable only if the benefits from that activity exceed its opportunity costs.
  - How do we identify the benefits?
  - How do we enumerate the costs?
  - Whose values should be used to do this?

# Ballot Box Economics

- Voting mechanisms substitute for the market mechanism in allocating resources to the public-sector and deciding how to use them.
  - The resulting mix may be optimal for the majority but not necessarily for all society.

# Public Choice Theory

- **Public choice:** a theory of public-sector behavior emphasizing rational self-interest of decision-makers and voters.
  - Government decision-makers are supposed to serve the people.
    - Many, however, set their own agenda. Some give higher priority to personal advancement than public welfare.
  - Bureaucrats are just as “selfish” (utility maximizing) as everyone else.



# Public Choice: Benefit-Cost Analysis

- **Private-sector**

- Benefits and costs usually accrue to the same person.
- Makes it easy to compare the two and make a decision.

- **Government**

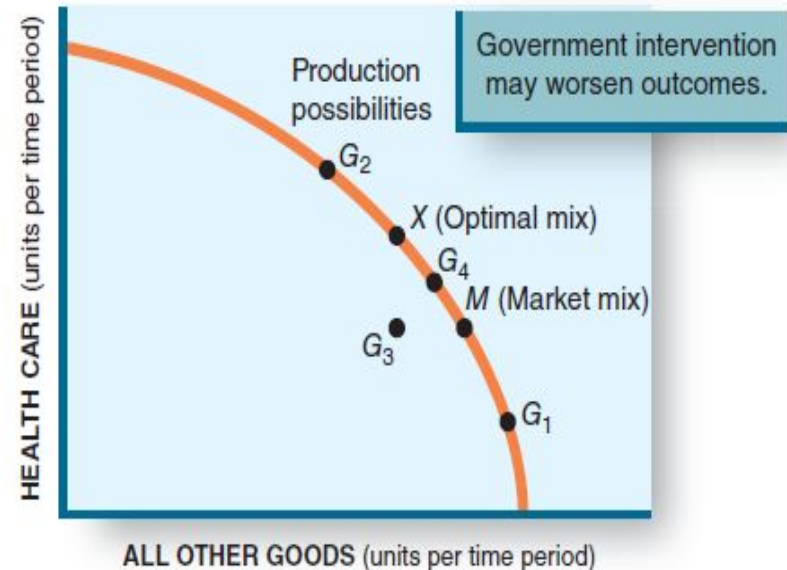
- Benefits and costs usually accrue to different groups.
- Makes it more difficult for the decision maker.
- Politics enter into the decision.
- The decision maker may have no stake in the outcome.

# What Does Society Want Produced?

- Can either the market based or the state-run system, or a combination of the two, produce the mix of output desired by society in general?
  - A pure market system will not produce adequate quantities of some goods.
  - A pure government system cannot determine the mix of output desired by buyers and sellers.
  - By trial and error, a combination of the two systems may arrive at the optimal mix of goods produced.

# Application: The Economy Tomorrow

- Right-sizing government
- The optimal mix is X
- G1, G2, G3, and G4 indicate a wrong-sized government, due to poor benefit-cost analysis, politics, and bureaucracy power grabs.
- Improvement is not likely in the economy tomorrow.



# Revisiting the Learning Objectives

- **LO4-1 Know the nature and causes of market failure.**
  - The market fails when it produces a sub-optimal mix of outputs.
  - Market failure originates in public goods, externalities, market power, and inequity in income distribution, or in the existence of unemployment and inflation.

# Revisiting the Learning Objectives II

- **LO4-2 Know how the public sector has grown.**
  - The federal government has expanded rapidly since 1930.
  - Recent growth is due to transfer payments, defense spending, and health programs.
  - State and local governments are much larger collectively than the federal government.

# Revisiting the Learning Objectives III

- **LO4-3 Know which taxes finance state, local, and federal governments.**
  - Federal government: income taxes and payroll taxes.
  - State government: sales tax.
  - Local government: property tax.

# Revisiting the Learning Objectives IV

- **LO4-4 Know the meaning of government failure.**
  - Government failure occurs when intervention does not attain the optimal mix of output.
  - Failure may result from outright waste (inefficiency) or a misallocation of resources.
  - Or, the opportunity cost of intervention, in terms of private-sector goods and services forgone, is too high.

# Looking Ahead: Chapter 5

## National Income Accounting

*After learning about this chapter, you should know*

- What GDP measures – and what it doesn't.
- The difference between real and nominal GDP.
- Why aggregate income equals aggregate output.
- The major sub-measures of output and income