CH 7 - Market Inefficiencies: Externalities and Public Goods

ECON 1B

CSUS

Big Questions

1. What are externalities, and how do they affect markets?

2. What are private goods and public goods?

3. What are the challenges of providing nonexcludable goods?

Externalities

- Internal costs
  - The costs of an activity paid by an individual engaging in the activity
- External costs
  - The cost of an activity paid for by someone else not directly involved in the activity
- Social costs
  - Sum of internal and external costs

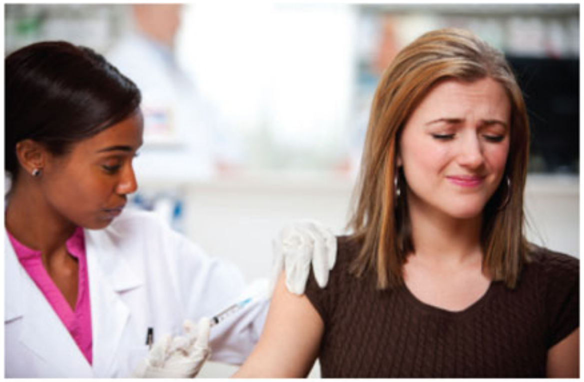
Third-Party Problem

- Third-Party Problems
  - People not directly involved in activity experience positive or externalities.
- Externalities
  - Occur when private cost (or benefit) diverges from social cost (or benefit)
  - Private Cost + External Cost = Social Cost
  - Private Benefit + External Benefit = Social Benefit

Third-Party Problem

- Negative externalities
  – Costs experienced by third parties
  – "Too much" of the good is consumed
    and produced.
  – Pollution, secondhand smoke

- Positive externalities
  – Benefits experienced by third parties
  – "Not enough" of the good is consumed and produced.
  – Education, vaccines



Practice What You Know—1

- Which of the following activities would most likely create a negative externality?

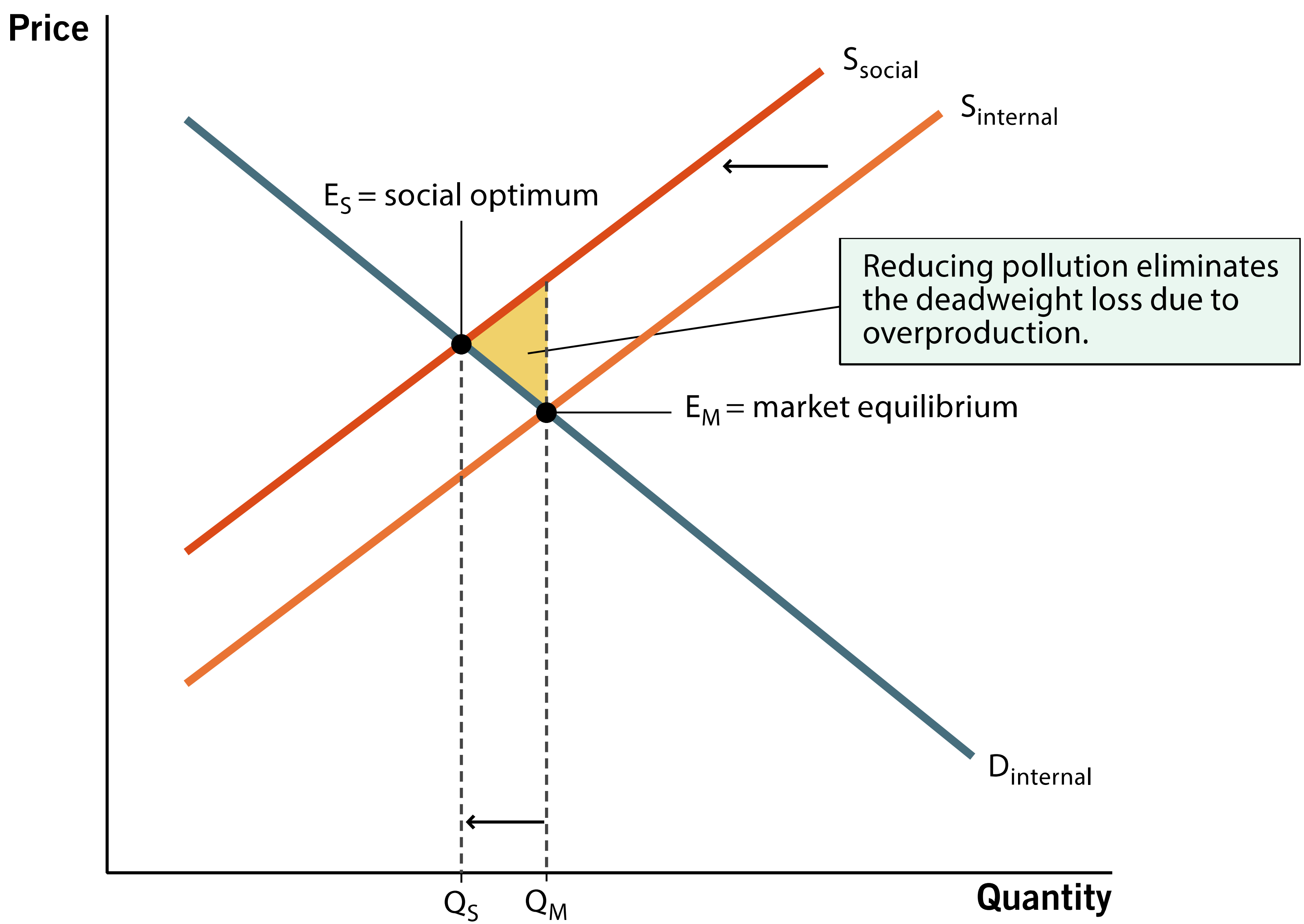
A. eating a slice of pizza
B. smoking a cigarette
C. taking a nap
D. getting a college degree

Practice What You Know—2

- Which of the following activities is most likely to create a positive externality?

A. eating a slice of pizza
B. smoking a cigarette
C. taking a nap
D. getting a college degree

Correcting for Negative Externalities



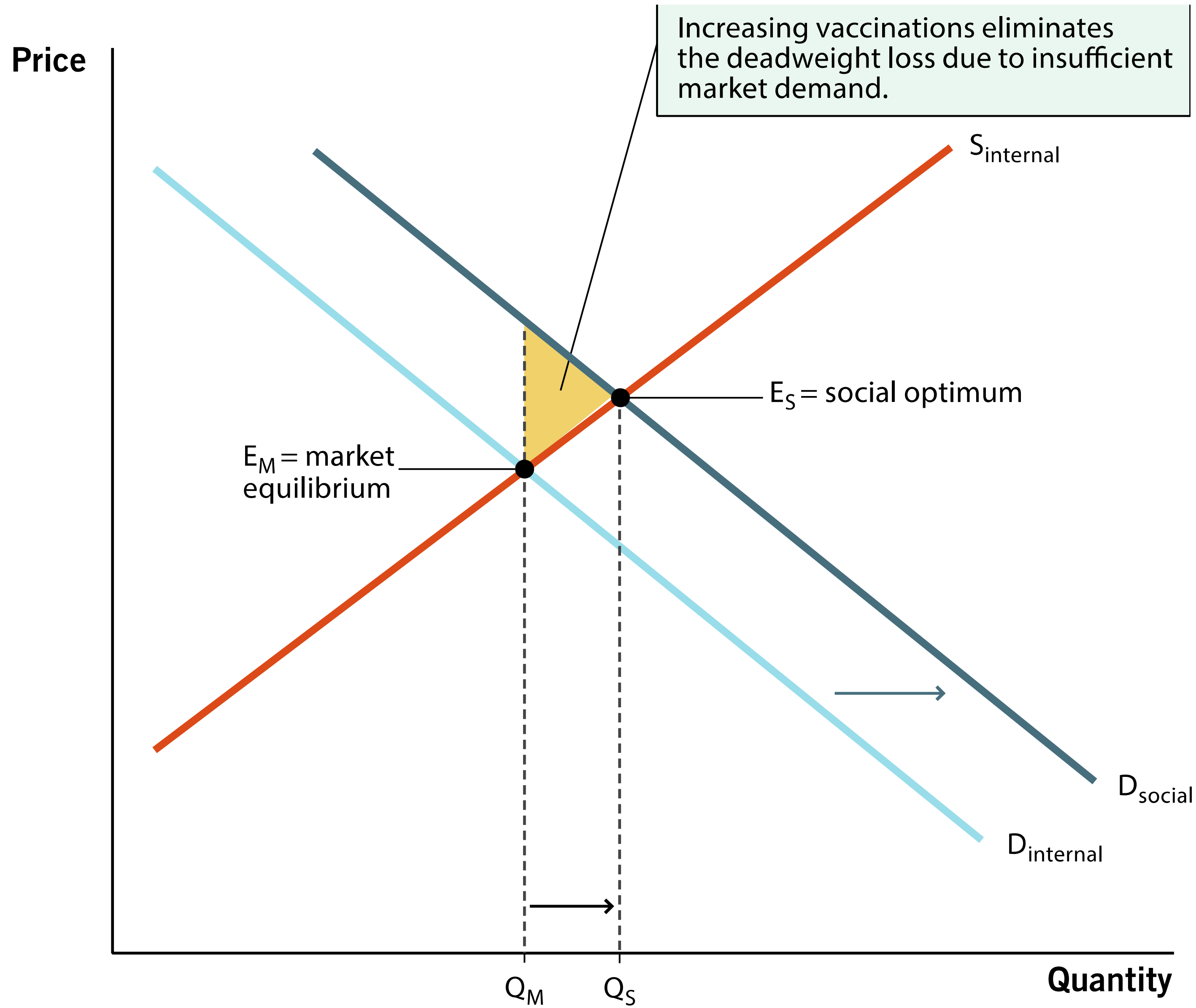
Correcting for Externalities

- Internalizing the externality
  - The individual involved in the activity takes account for social costs (or benefits).
- For negative externalities:
  - Make firm recognize the external cost
    - Tax the product
    - Regulate production
    - Force the firm to install pollution abatement measures
      - This is costly to the firm.
  - The firm's costs will equal the social cost
    - The supply curve shifts to the left

Practice What You Know—3

- Suppose good X creates a negative externality. Which of the following would NOT be an appropriate way to correct the negative externality?
  A. subsidize the production of good X
  B. tax the production of good X
  C. limit how much of good X can be produced
  D. require the producers of good X to pay for external costs that arise

Correcting for Positive Externalities



Correcting for Externalities

- For positive externalities:
  - Help individuals realize external benefits
    - Finance and/or subsidize production and consumption of the good
    - Laws requiring consumption
  - The consumer realizes the full (social) benefits
    - The demand curve shifts to the right

Property Rights

- Externalities often arise because of a lack of clearly defined property rights.
  - Who owns the air? Can I pollute?
- Private property
  - Provides exclusive right of ownership that allows for the use and exchange of property
  - Creates incentive to maintain, protect, and conserve property.

Private Property Incentives

1. Incentive to maintain
   – Keep the vehicle safe and reliable
2. Incentive to protect
   – Lock your doors
3. Incentive to conserve
   – Extend vehicle life, drive less
4. Incentive to trade with others
   – You can voluntarily trade for something better in the market.

Private Goods

- Characteristics of certain consumption goods
- Excludable
  - The good must be purchased before use.
- Rival
  - The good cannot be enjoyed by more than one person at the same time.
- Private goods
  - Are both excludable and rival in consumption
  - Most goods we purchase and consume are private goods.

Public Goods

- Public goods
  - Non-rival and non-excludable
  - Can be consumed by many
  - Difficult to exclude non-payers from consumption
  - Examples:
    - Public defense, public parks, public fireworks display
- Free-rider problem
  - Someone has the ability to receive the benefit of a good without paying for it.
  - Example:
    - Letting your other classmates do all the work in a group project

Club Goods, Common Resources

- Club goods
  - Non-rival and excludable
  - Examples:
    - Satellite TV, gym membership

- Common resource goods
  - Rival but non-excludable
  - Examples:
    - Fishing, hunting (specific animals fished and hunted), public campsites

Practice What You Know—4

- Which of the following is an example of a public good?

A. a free outdoor Christmas light display
B. a college football game
C. a parking spot with a parking meter
D. a college education

Practice What You Know—5

- Membership at your local fitness facility is what type of good?

  A. private good
  B. $\boxed{\text{club good}}$
  C. common resource good
  D. public good

Tragedy of the Commons

- Tragedy of the commons
  – Occurs when a rival (but non-excludable) good becomes depleted or ruined
- Original example:
  – Cattle grazing
  – Commons = shared area cattle farmers get to use to let cattle graze

Tragedy of the Commons: Example

- The commons can be sustained indefinitely with a capacity of around 100 cows.  
- Suppose 100 farmers are each allowed to have  1 cow freely graze in the commons.
- One farmer thinks: What if I bring 2 cows? 
- 100 cows? 101 cows? No difference! 
- But suppose that ALL the farmers are thinking   the same thing?   
- Can the commons support 200 cows?

Tragedy

- The commons get destroyed, even though this was in nobody's best interest.

Common Property Incentives

- Incentive to neglect
  - Good cannot be protected.
    No political borders or ownership.
- Incentive to overuse
  - Each individual wants to fish as much as possible for higher profits. If one conserves, others will fish even more.

- Incentive to ignore others
  - No one has the ability to define how many resources can be used. I may still break the rules set even if others follow them.
- General proactive management is needed.
  - Taxes, regulations/laws

Conclusion

- Inefficiencies occur because of poor incentives
- Externalities
  - Arise from the result of diverging social and private costs (or benefits)
  - Can be corrected by forcing economic agents to internalize them
- Public, Private, Club, and Common Resource Goods.