

# MARKET FAILURES AND GOVERNMENT INTERVENTION

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EE 474 Health Economics

Semester 1/2014

# Topics

- Economic Rationale for Government Intervention
- Forms of Government Intervention
- Government Involvement in Health Care Markets
- Government Failure

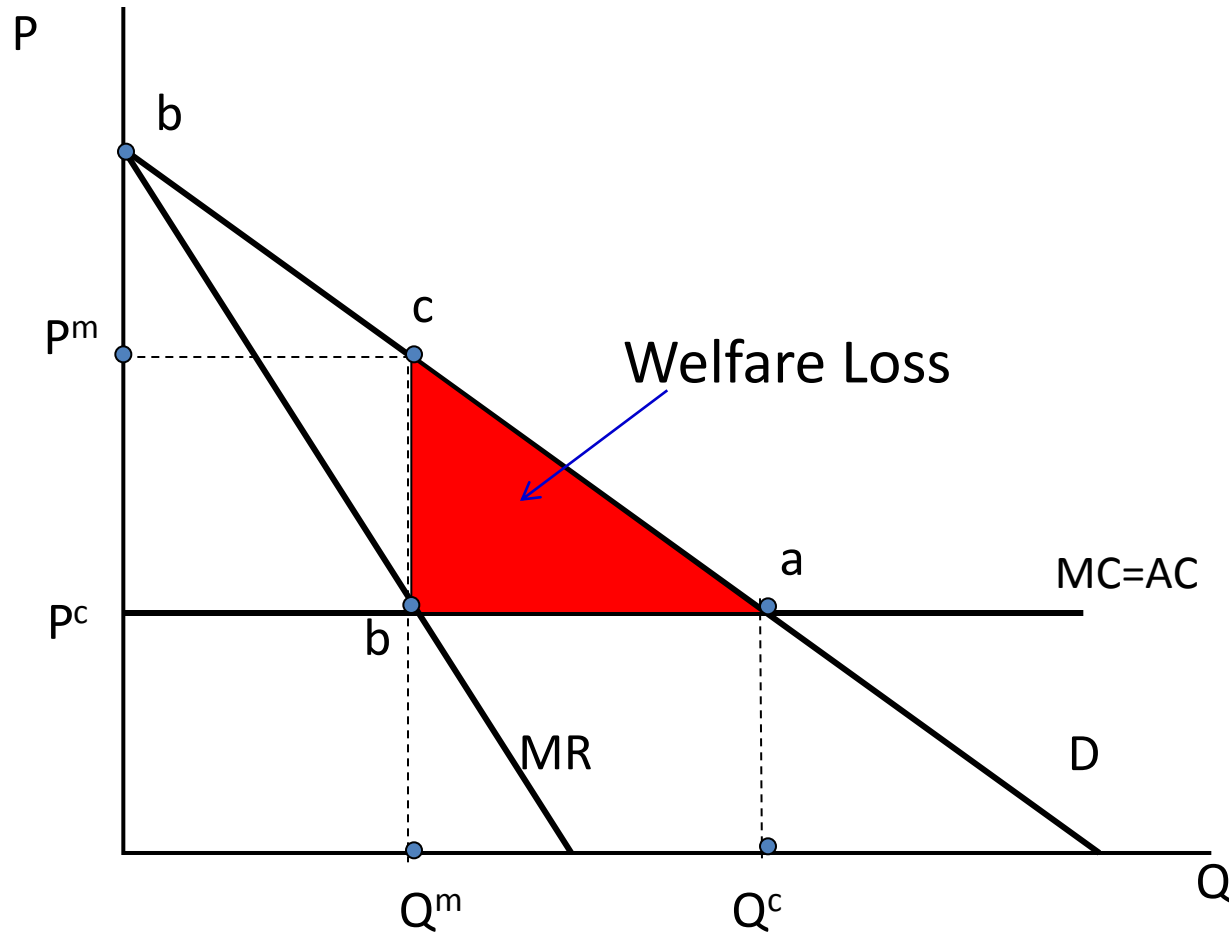
# Rationale for Government Intervention

- **Market failure** is the economic rationale for government intervention.
- What is a market failure?
  - Inefficient production or consumption
- The principle market failures are:
  - Market power
  - Externalities
  - Public goods

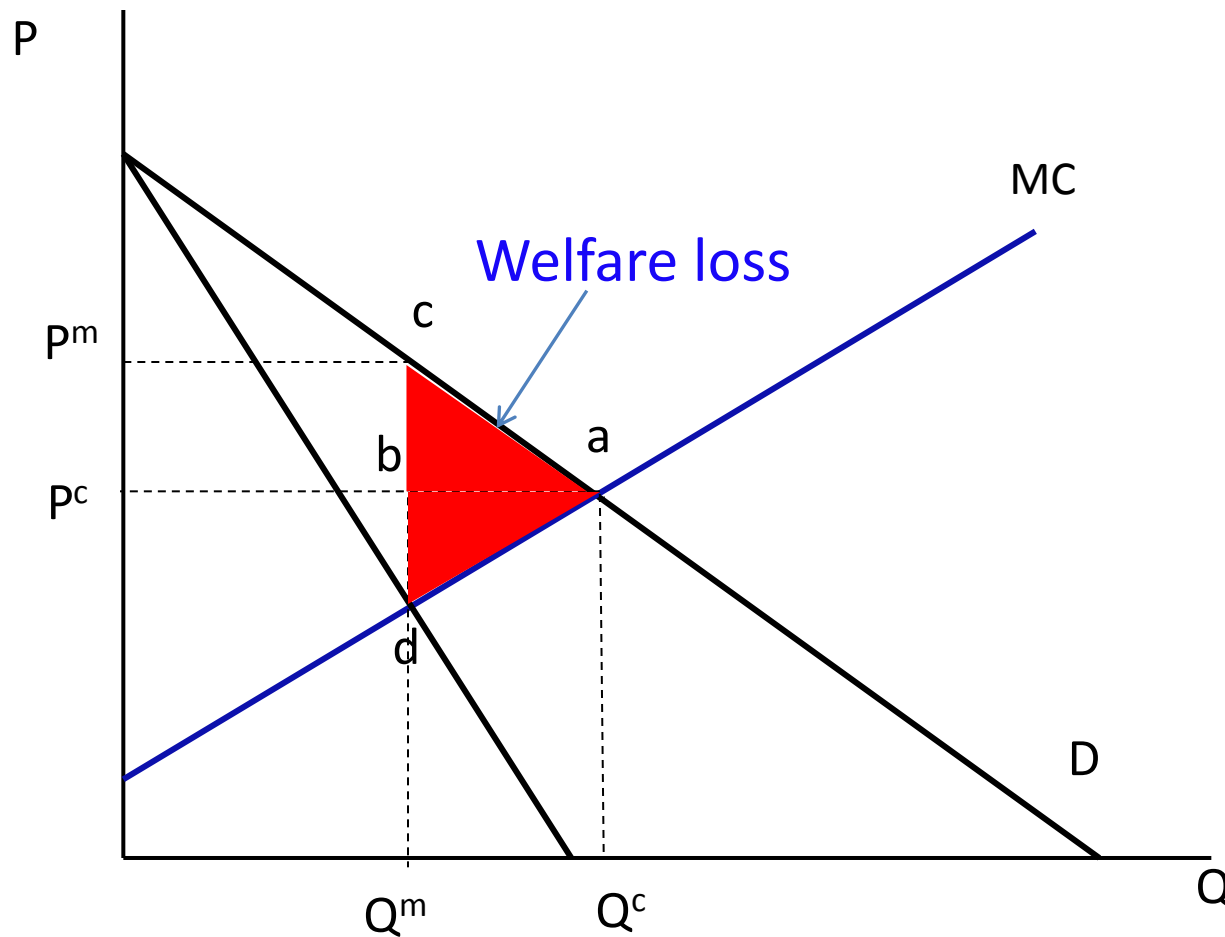
# Market Power/Monopoly

- Sources of market power?
  - Many (atomistic) sellers become a **monopoly**.
  - Information becomes monopolized and so perfect information becomes **imperfect information**.
  - Homogeneous products become **heterogeneous products**, conferring market power on suppliers.
- **Market power** means that **too little is produced or purchased on the market**, which produces a **welfare loss**.

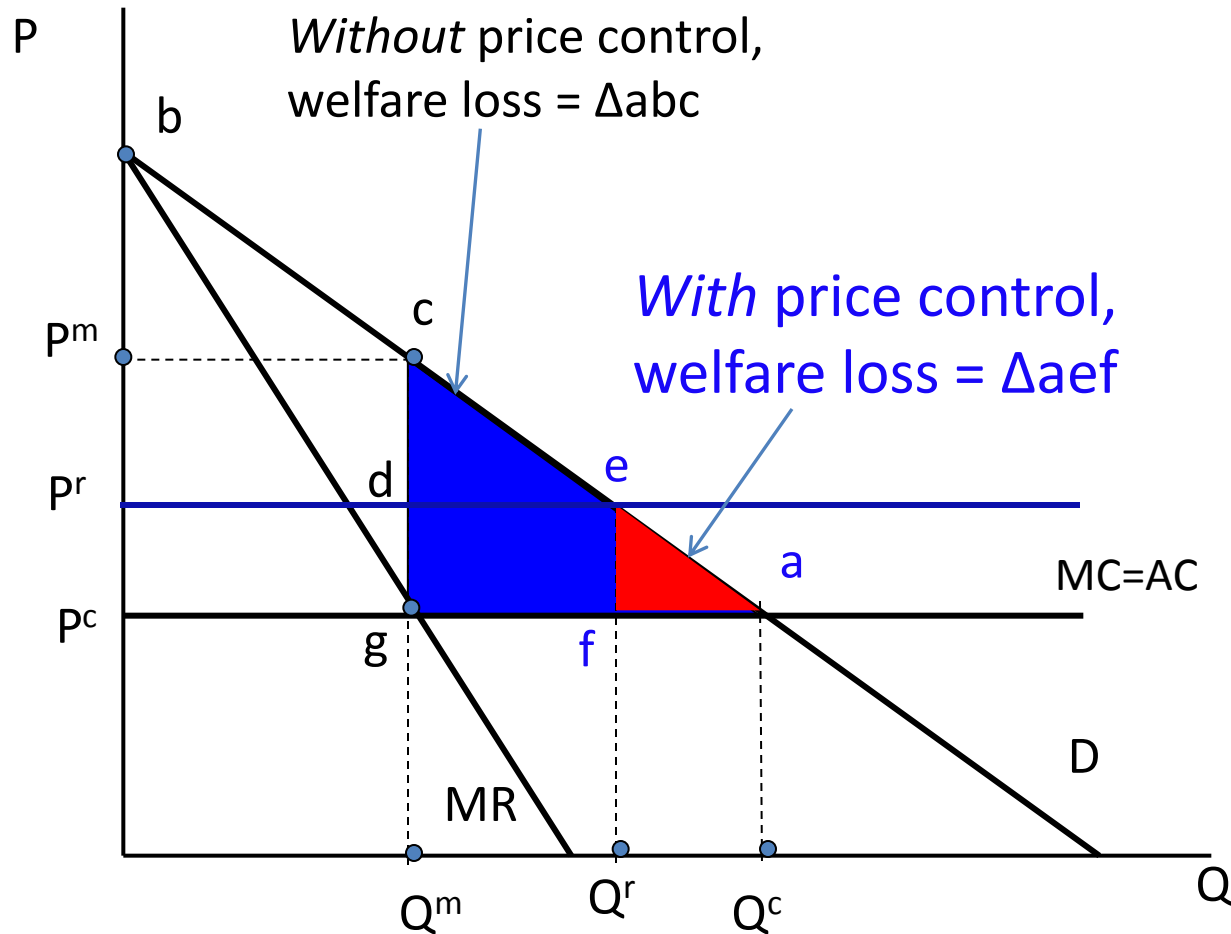
# Monopoly Power



# Monopoly Power (Increasing MC)



# Monopoly Power: Price Control



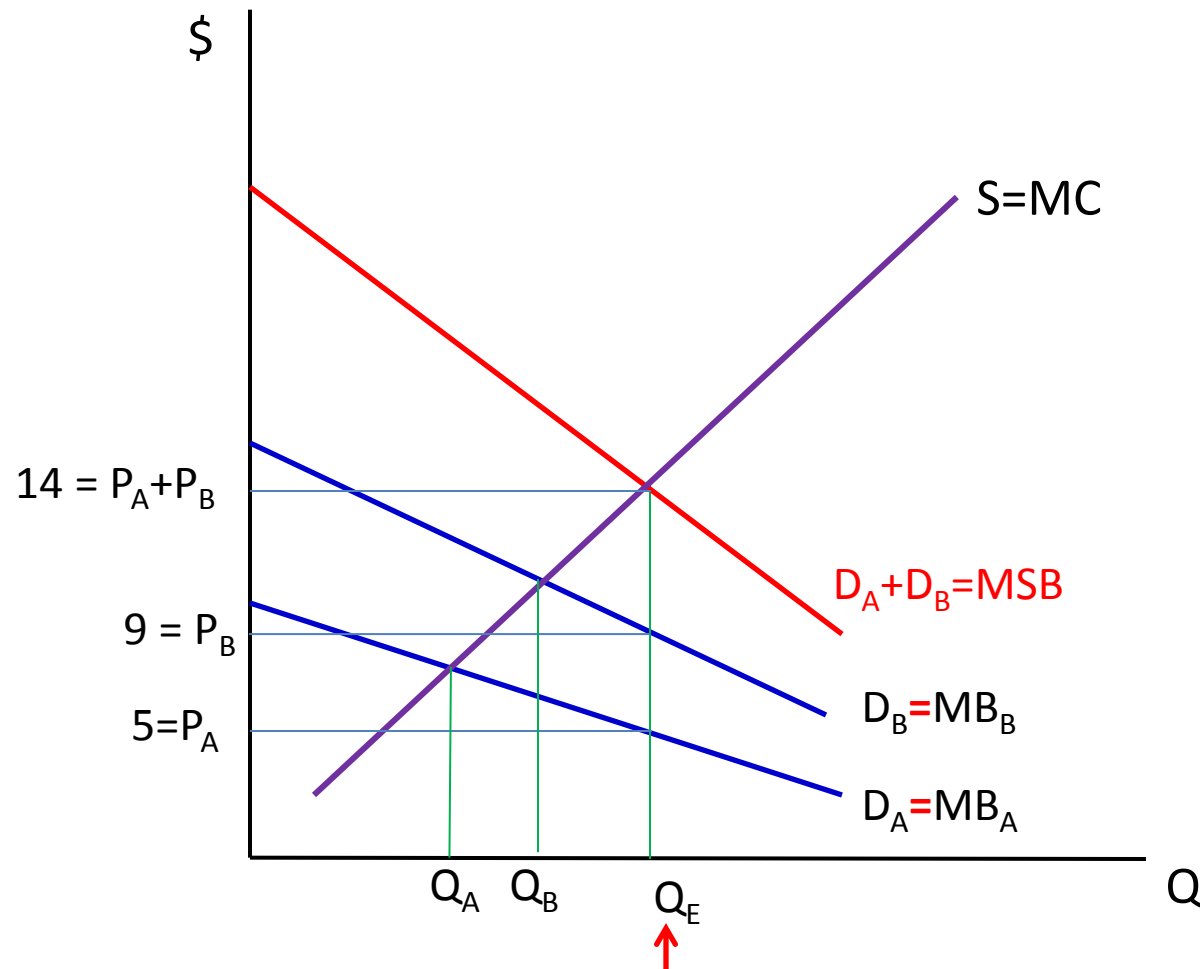
# Public Goods

- **Public goods** have 2 characteristics:
  - **Non-rivalry**: More than one consumer can simultaneously receive benefits, and
  - **Non-excludability**: It is difficult to exclude consumers from benefiting from the good once it exists
- Examples: National defense, a (non-toll) bridge, basic medical research, public internet, TV 3-5-7-9
- Why are public goods inefficient?
  - Because it is difficult to exclude others from benefiting, public goods are not typically provided by the market.
  - **Too few would be produced privately**
- Instead, government steps in to provide them.

# Examples of Public Goods

	Non- Rival	Rival
Non-Excludable	<p><b>‘Pure public goods’</b></p> <ul style="list-style-type: none"> <li>- National Defense</li> <li>- Public radio</li> <li>- TV 3-5-7-9</li> </ul>	<p>‘Common pool’</p> <ul style="list-style-type: none"> <li>- Roads in Bangkok on Monday morning</li> </ul>
Excludable	<p>‘Club goods’</p> <ul style="list-style-type: none"> <li>- Satellite TV</li> <li>- Sport club</li> <li>- Non-congested Elite card parking</li> </ul>	<p><b>‘Pure private goods’</b></p> <ul style="list-style-type: none"> <li>- Food</li> <li>- Books</li> <li>- Health care</li> </ul>

# Optimal Quantity of a Public Good



Is this quantity  $Q_E$  always reached?

→ Perhaps not!

# Public Goods

- Public goods are underprovided for 2 reasons:
- First, the **marginal willingness to pay (sum of all MBs) is likely to exceed the marginal cost** of producing the public good at the level at which it is produced.
  - Voluntary contributions for public good results in a quantity smaller than the optimal quantity.
- Second, when taxing to pay for public goods, **individuals have an incentive to be free riders** and understate the benefit they receive from a public good.
  - Even if they do, they would pay less but it wouldn't affect the amount of the public good provided.

# Is Health Care a Public Good?

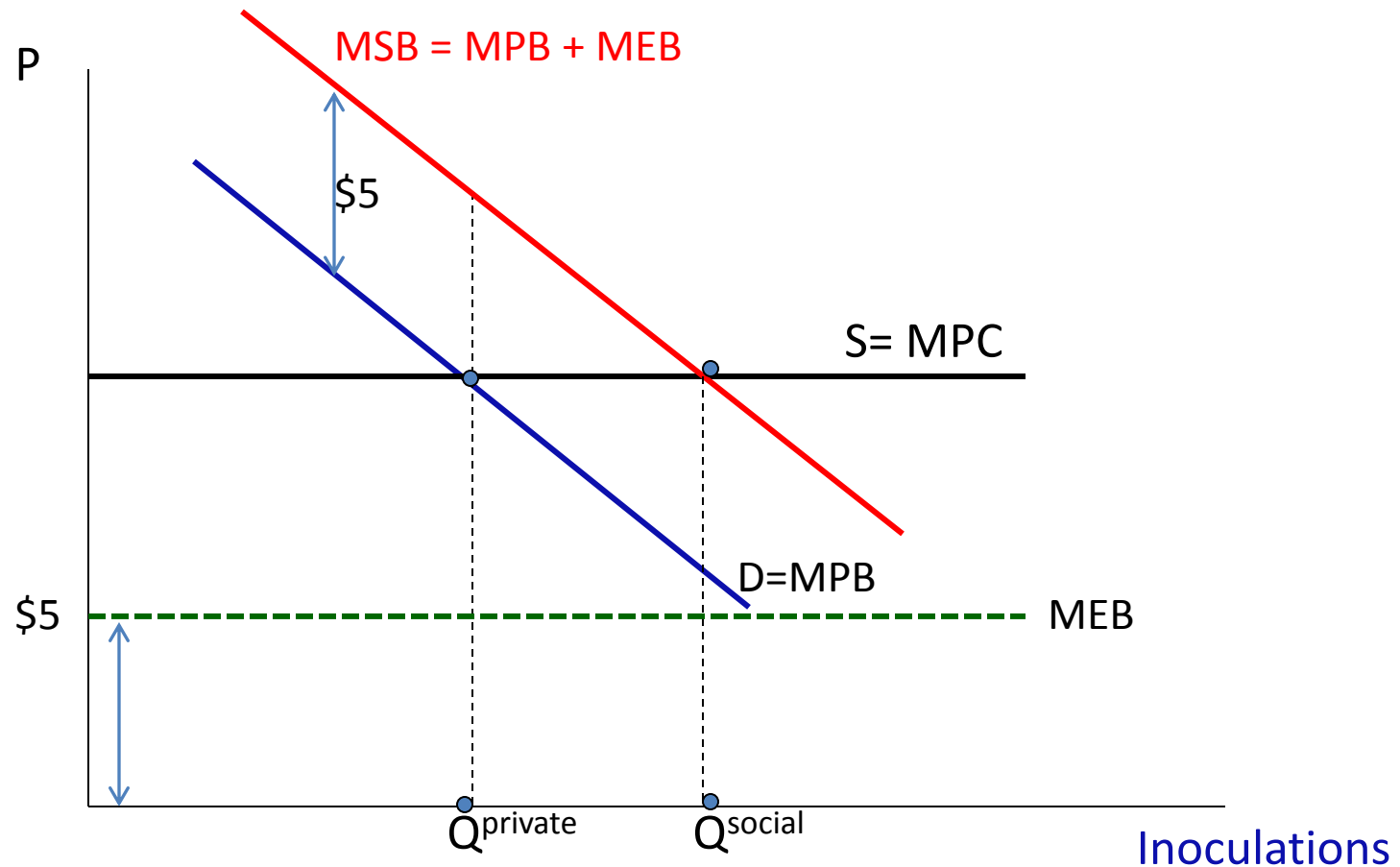
- Is health care **non-rival**?
  - Health services provided to one person are not at the same time consumed by others.
- Is health care **non-excludable**?
  - Those who do not pay can be excluded from receiving care.
- Relevance of public goods to health care issues:
  - **Information**: can be thought of as an economic good with a large public content
  - **Redistribution**: may need mandatory programs to correct the undersupply of voluntary giving (which has a public dimension)

# Externalities

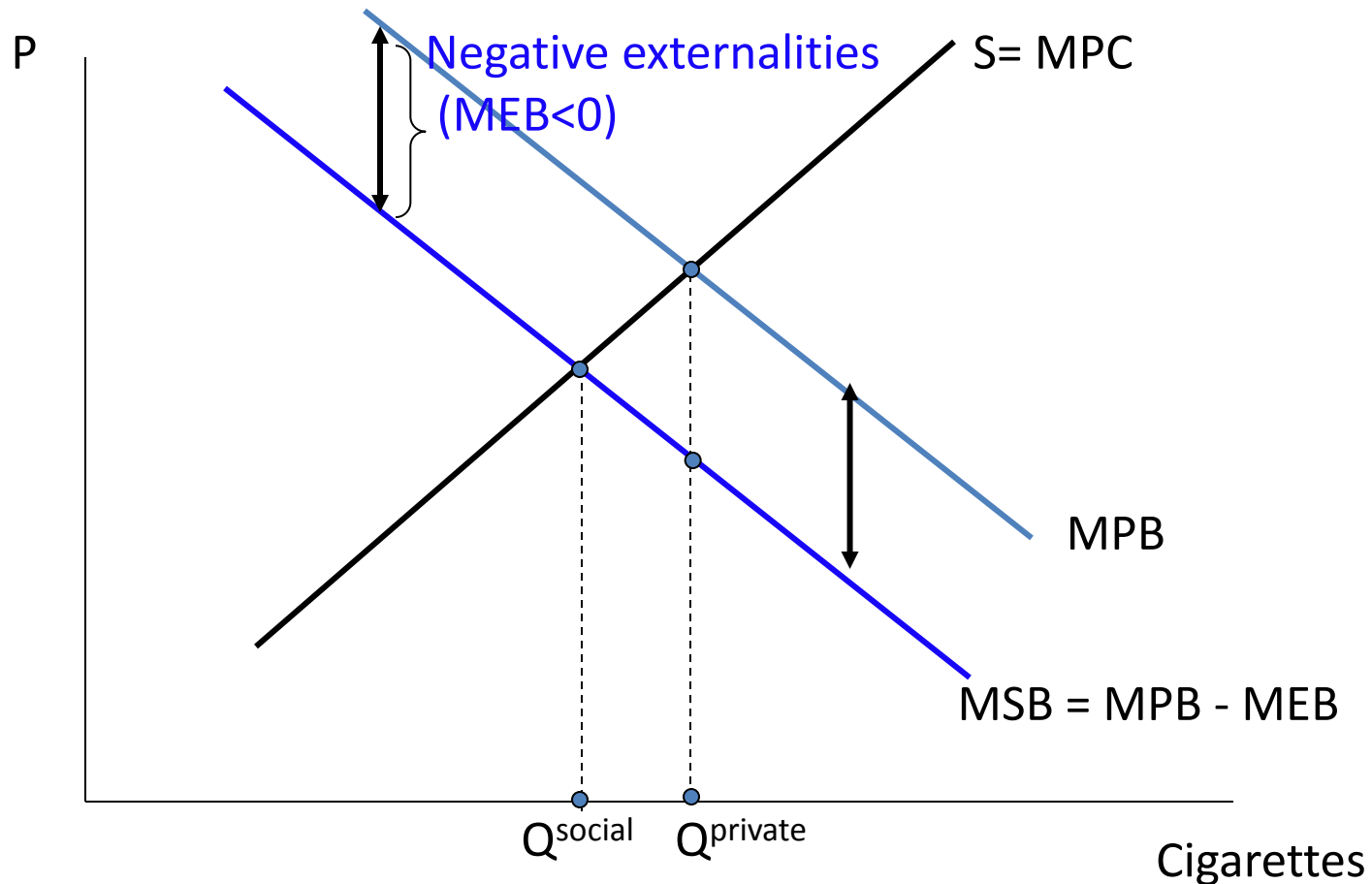
- What are **externalities**?
  - “An unpriced byproduct of production or consumption that adversely or beneficially affects another party not directly involved in the market transaction”
- Recall:

External economy of consumption e.g. Immunization	External <b>diseconomy of consumption</b> e.g. Antibiotic use, alcohol consumption
External economy of production e.g. R&D from teaching universities	External <b>diseconomy of production</b> e.g. Dumping of hospital waste into the river

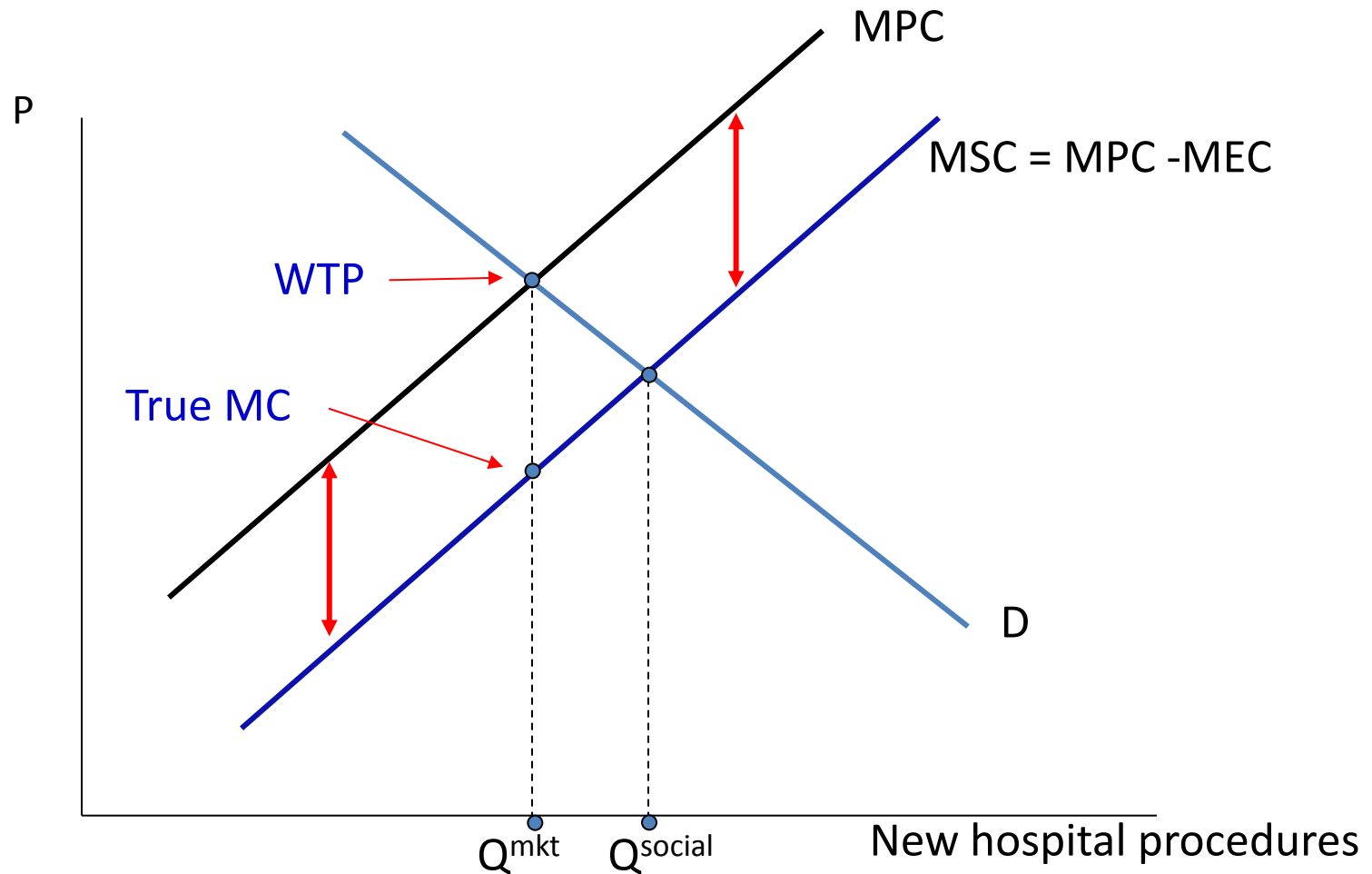
# Positive Demand-Side Externalities: Inoculations Externality



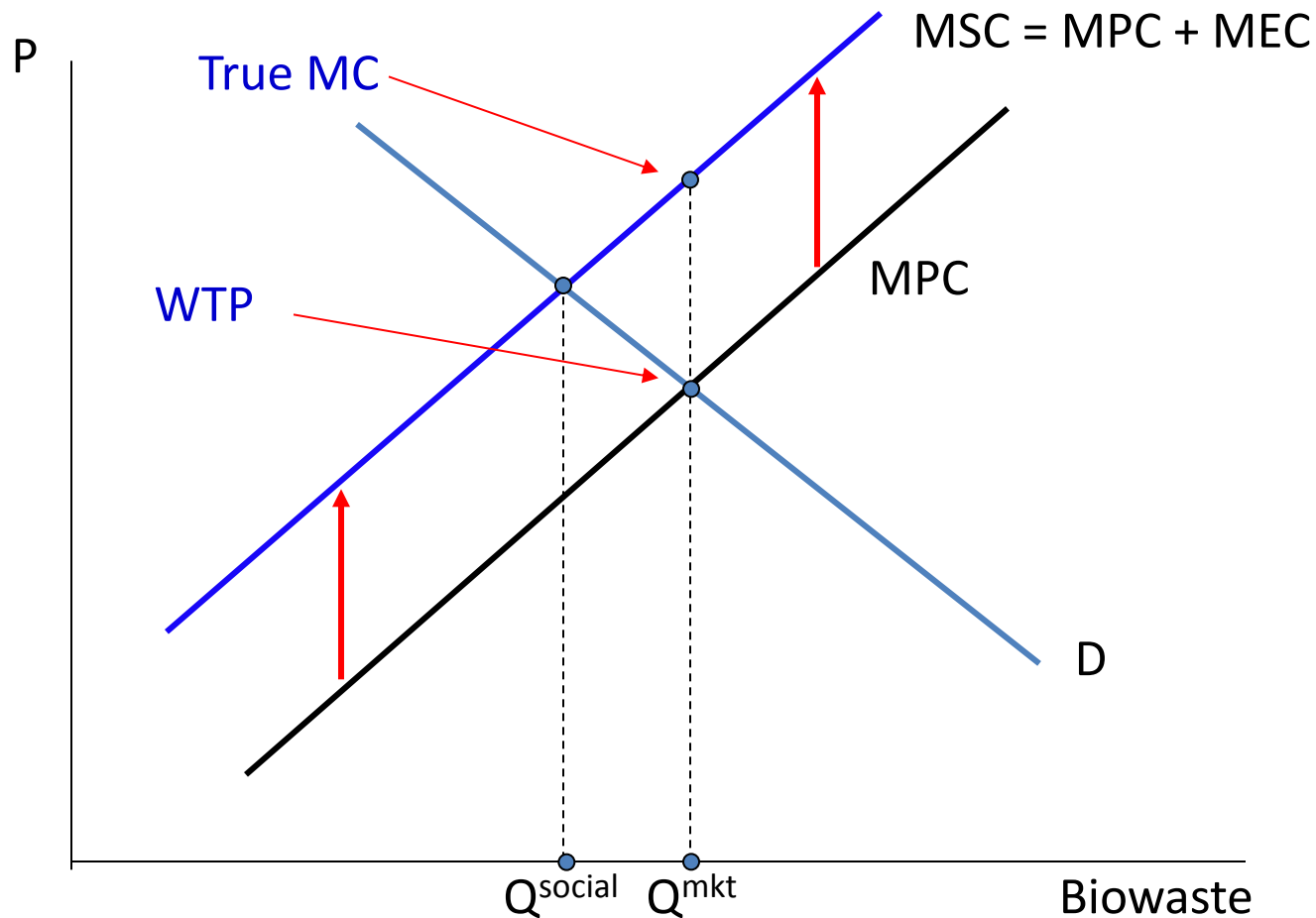
# Negative Demand-Side Externalities: Cigarette Externality



# Positive Supply-Side Externalities: Medical R&D



# Negative Supply-Side Externalities: Hospital Dumping Biowaste into Ocean



# Forms of Government Intervention

- Commodity Taxes and Subsidies

Examples: Cigarettes and alcohol taxes, vaccine subsidization

- Public Provision

Examples: Garbage collection, public provision of basic health care and education

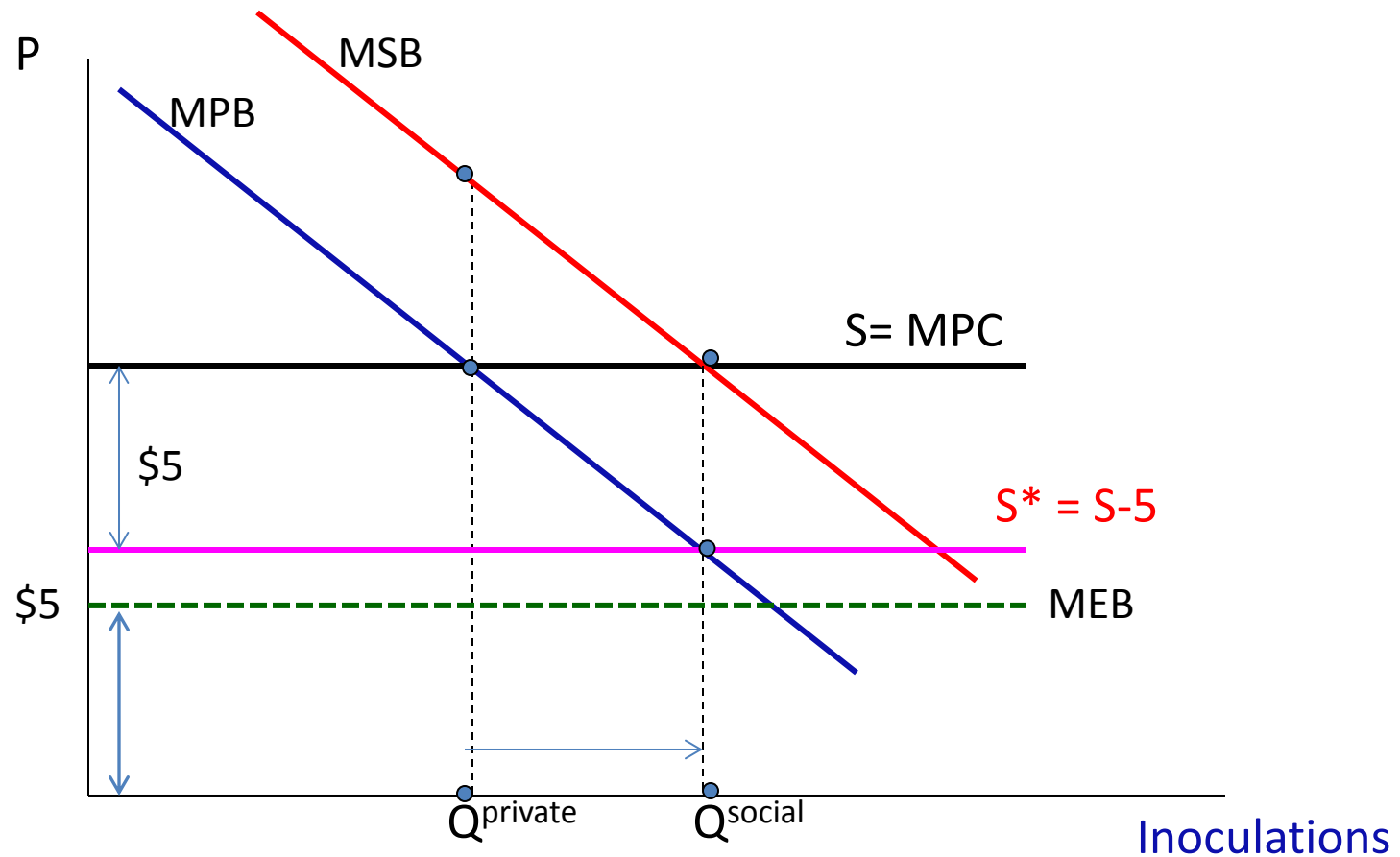
- Transfer program (redistribution)

Examples: Donations, food stamps

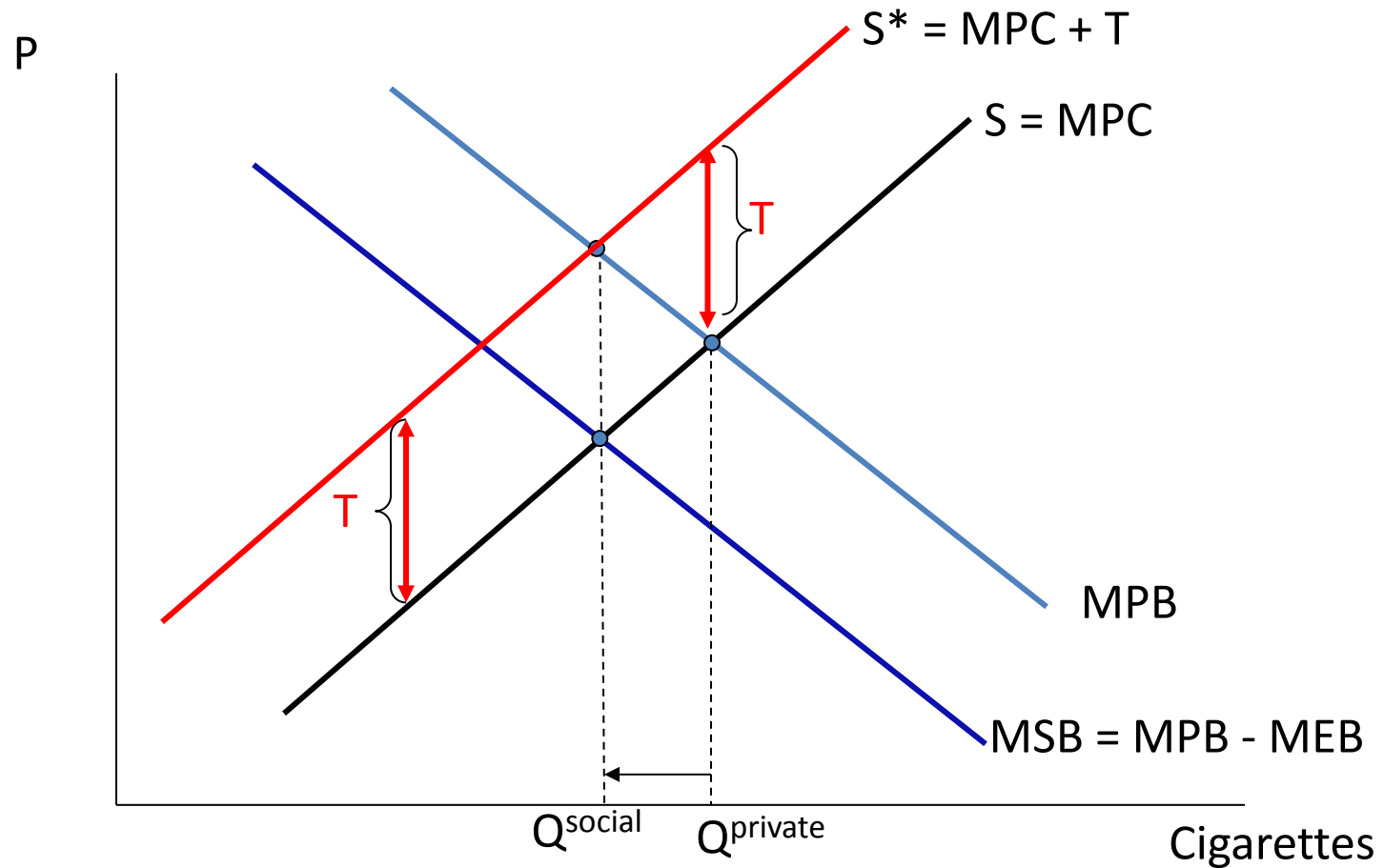
- Regulation

Examples: Regulations on food and drug

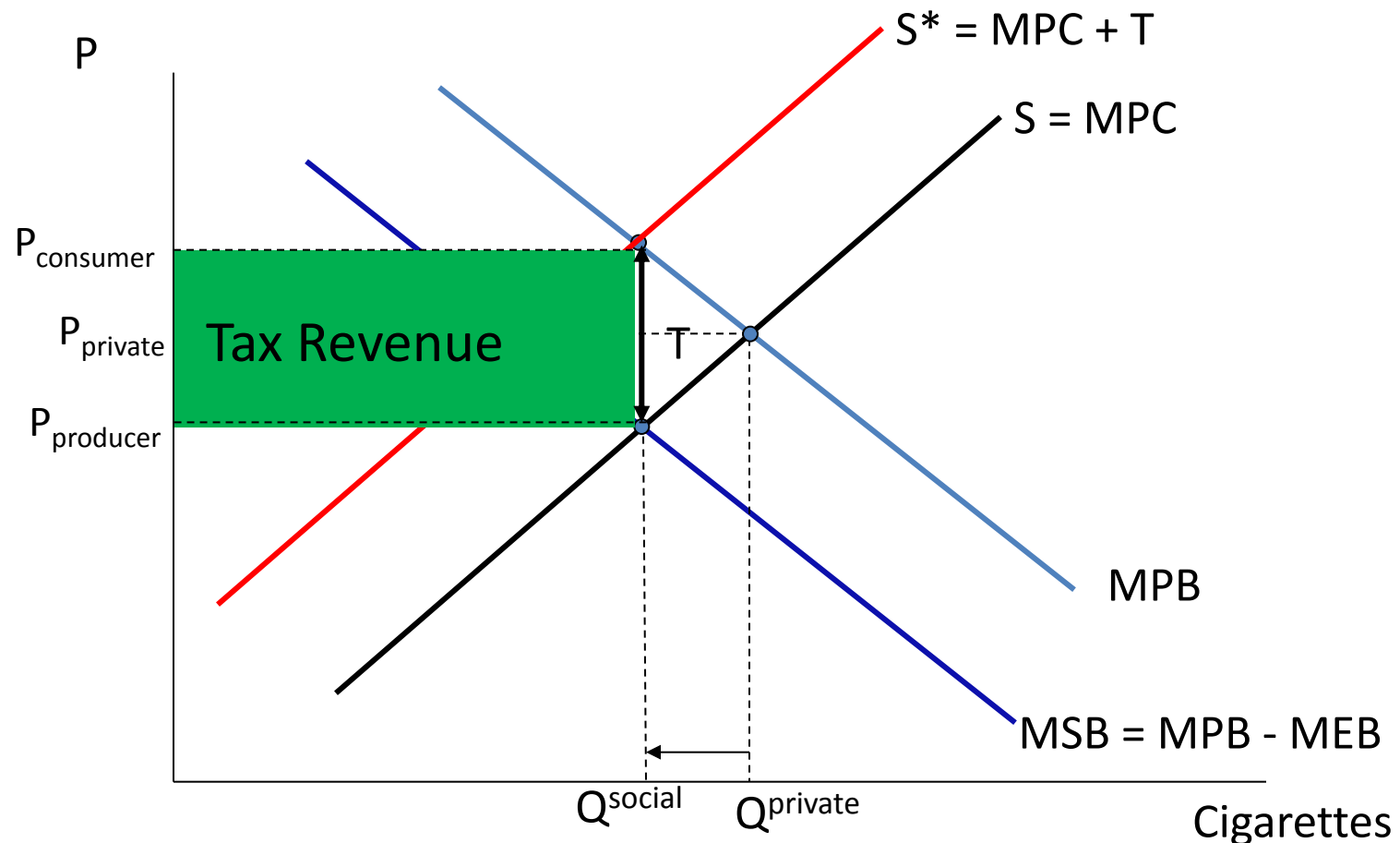
# Commodity Subsidies to Correct Inoculations Externality



# Commodity Taxes to Correct Cigarettes Externality



# Commodity Taxes to Correct Cigarettes Externality



# Government Intervention:

## Public Provision

- Certain **private goods** have some 'public' elements – they may generate **positive externalities**.
  - Examples: clean water, education, health care
- These are known as '**publicly-provided**' goods.
- Public provision of health care involves a decision making process:
  - **What?** → produce what, how much, at what quality
  - **How?** → government produces themselves or hire others
  - **For whom?** → who are the target group

# Government Intervention: Transfer Programs

- The motivation for transfer programs (or **redistribution of income**) generally comes from the realization that many consumers are **altruistic** and benefit from giving money to those who are less fortunate.
- From an economic perspective, people in the donor group would benefit if they could see the poor made better off *at no cost* to them.
  - Donors have an incentive to **free ride** on the charity of others.
  - The standard **justification for government redistribution** is that it **prohibits free riding**—all must pay.

# Government Intervention: Transfer Programs

- 2 types of transfers:
  1. **Cash transfer:**
    - Redistribute income, with recipients free to spend their income in any way they want.
    - E.g. Lump-sum transfer
  2. **In-kind transfers** (benefits other than cash)
    - Redistribute income by increasing recipients' consumption of specific goods or services.
    - e.g. Free (or subsidized) health care, food stamps

# Government Intervention:

## Regulation

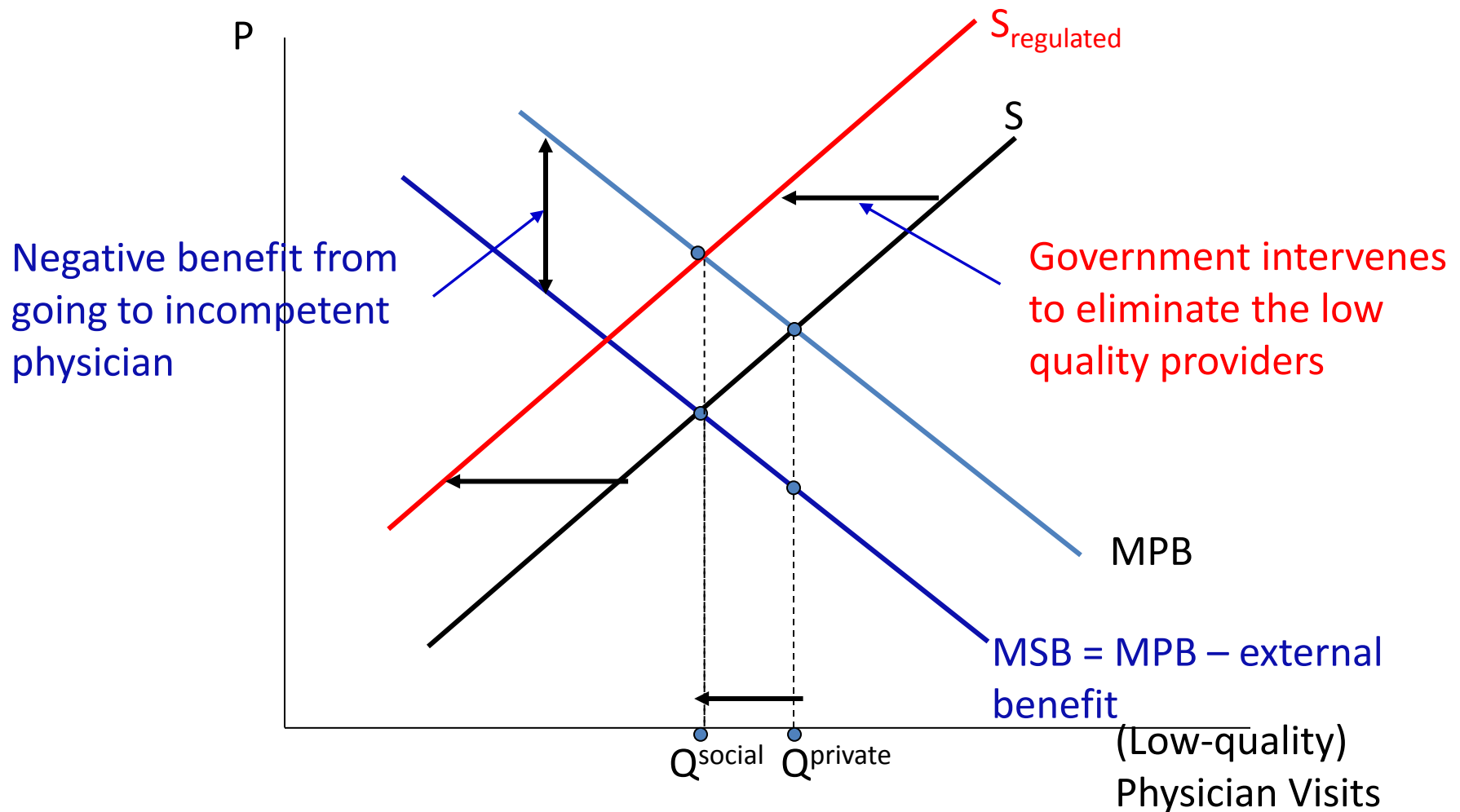
- Governments influence the allocation of resources by **establishing rules and regulations**.
- **Regulation** refers to the **use of nonmarket means** to affect the **quality, price, or quantity of a good or services**.
- Main categories of regulation:
  - Fee controls
  - Rate regulation
  - Quantity and capacity control
  - Quality control

# Direct Regulation: Quality Control

## Example:

- There are **negative externalities** from **low-quality health care** provided by incompetent (but cheap) physicians.
- Others may contract a communicable disease as a result of this health care service.
  - This is a negative demand-side externality, or external diseconomy of consumption.
- Government can set a **regulation to reduce** or eliminate this **negative externality**.

# Physician Quality Externalities



# Government Involvement in Health Care Markets

- Direct provision of health care
  - Example: Support of hospitals
- Subsidizing the production of health care
  - Example: Subsidizing medical education, R&D support
- Provision of social insurance
  - Example: the 30 baht scheme
- Regulation of health care products and providers:
  - Licensure
  - FDA

# Government Failure

- Market failure is a justification for government intervention, in order to improve efficiency and equity.
  - Public interest theory
- But, can government in practice improve efficiency and better meet society's equity objectives?
- **Government failure** occurs when **government intervention creates more *inefficient* allocation of goods and resources** (than it would be the case without intervention).
  - Example: Rice pledging program, first-car tax exempted policy, etc.

# Public Choice Theory

- **Public choice theory** addresses the government failure issue .
- Public choice attempts to model how decisions are made through the political process.
- We will limit our discussion to the models related to efficiency:
  - **Special interest groups**
  - **Bureaucratic behavior**

# Special Interest Theory

- According to this theory, government intervention is influenced by **special interest groups**, who have **incentives to lobby government** to implement **specific policies** that **benefit them**.
  - **Demanders** : Various special interest groups
  - **Suppliers**: Politicians and other elected officials
- This creates **inefficiency**, but they get away with it because the costs are often small and unnoticeable to all consumers (despite the large benefit).

# Bureaucracy and Efficiency

- **Lawmakers** pass legislation, but **government bureaucrats** are responsible for implementing programs.
- But, the bureaucrats may not necessarily minimize the costs of the programs.
  - This creates **technical inefficiency**.
- Besides, too much or too little produced could be produced (especially if there are special interest groups).
  - This creates **allocative inefficiency**.
- **Thus, government intervention may not always improve social welfare, particularly when there is government failure.**