

MARKET FAILURES AND GOVERNMENT INTERVENTION

EE 474 Health Economics

Semester 2/2021

Topics

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

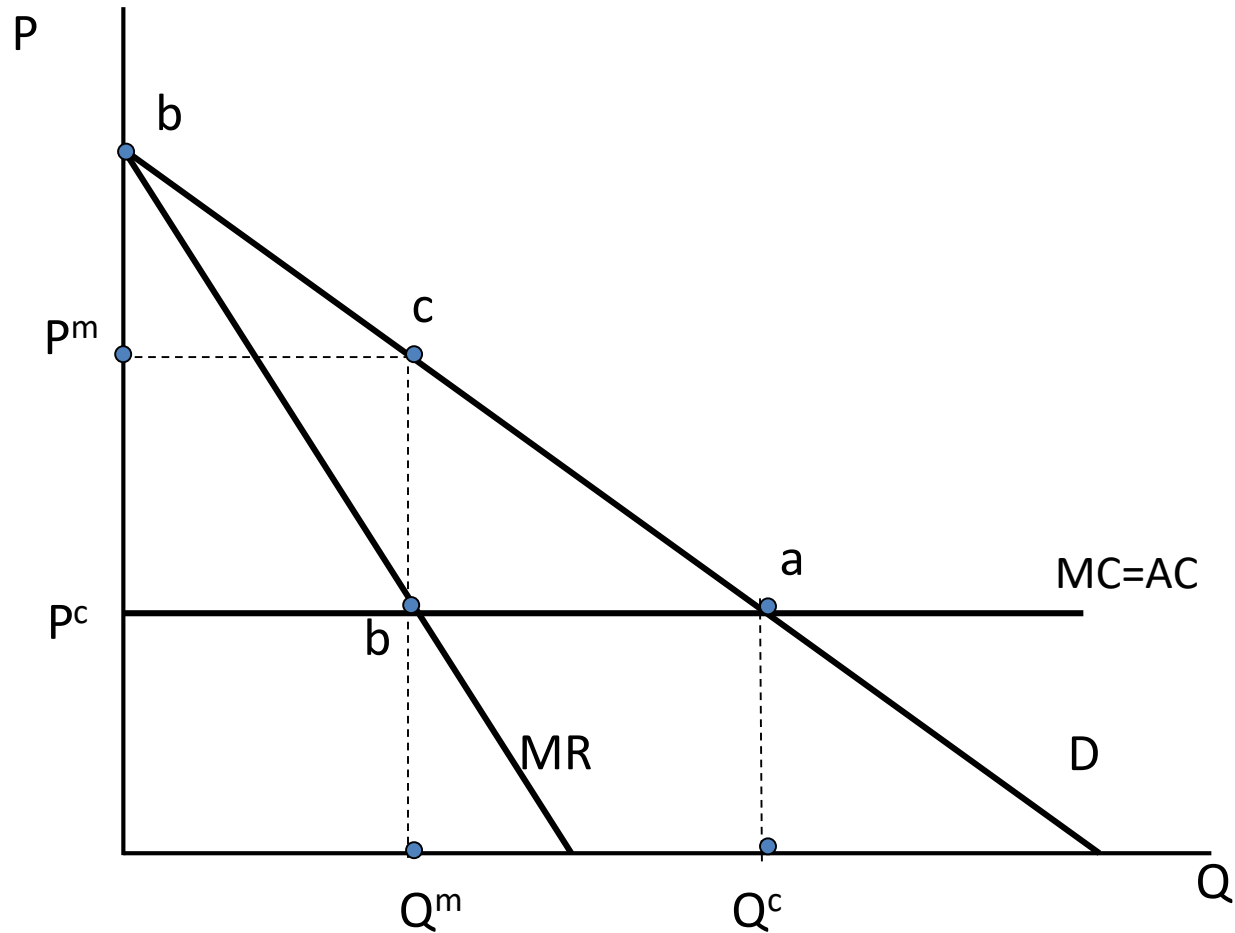
Rationale for Government Intervention

- **Market failure** is a situation defined by **inefficient production or consumption** in the free market.
- It provides justifications for government intervention.
- The principle market failures are:
 - **Market power**
 - **Externalities**
 - **Public goods**

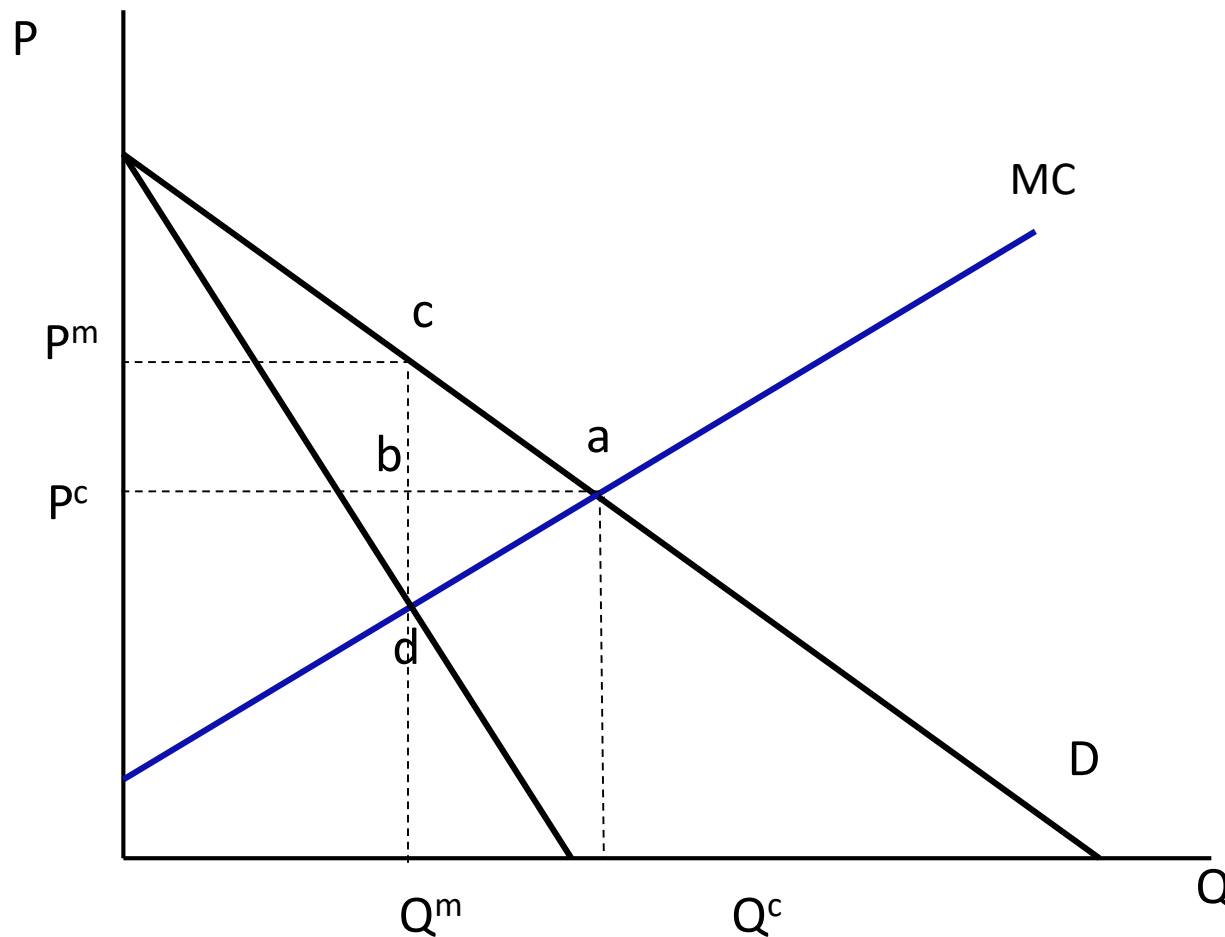
Market Power/Monopoly

- 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.

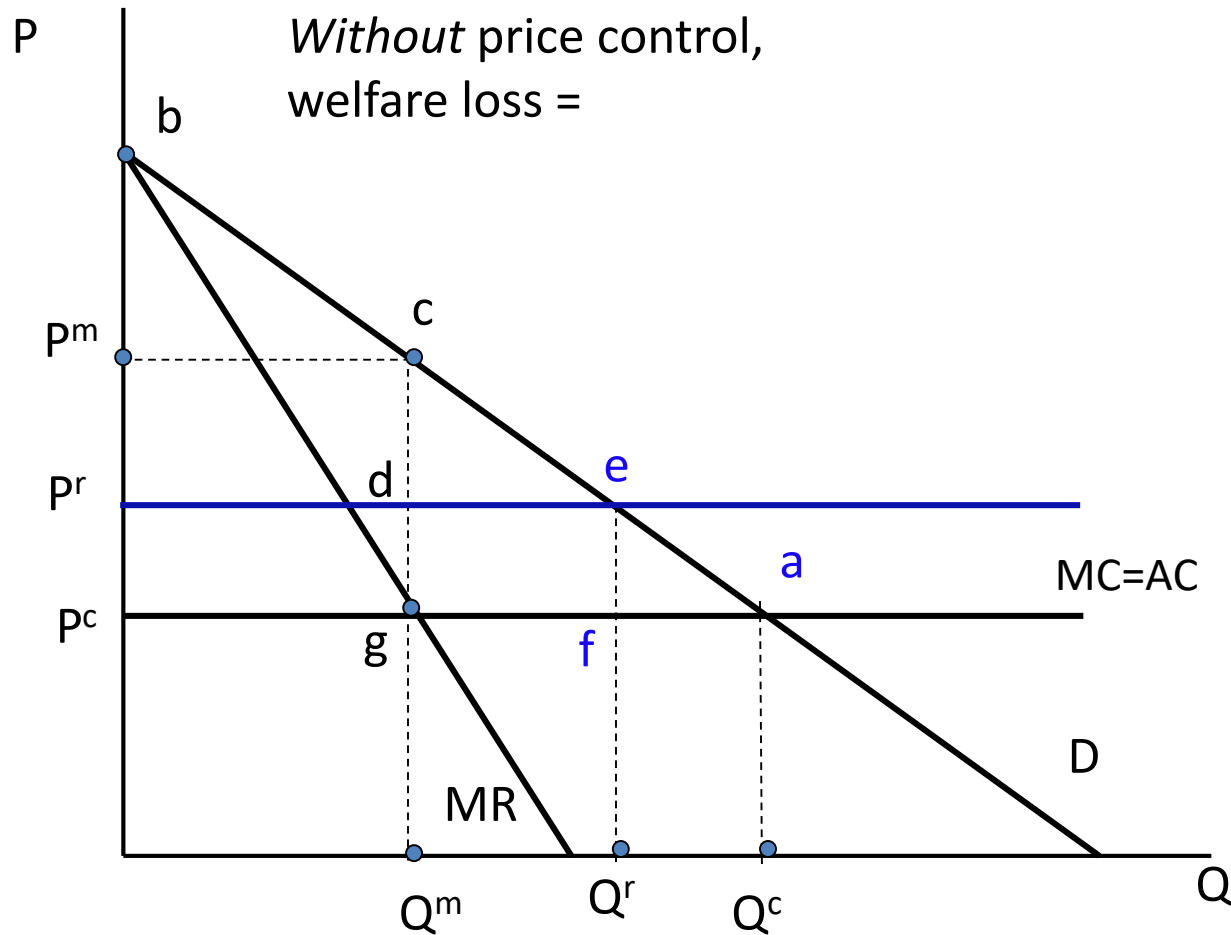
Monopoly Power



Monopoly Power (Increasing MC)



Monopoly Power: Price Control



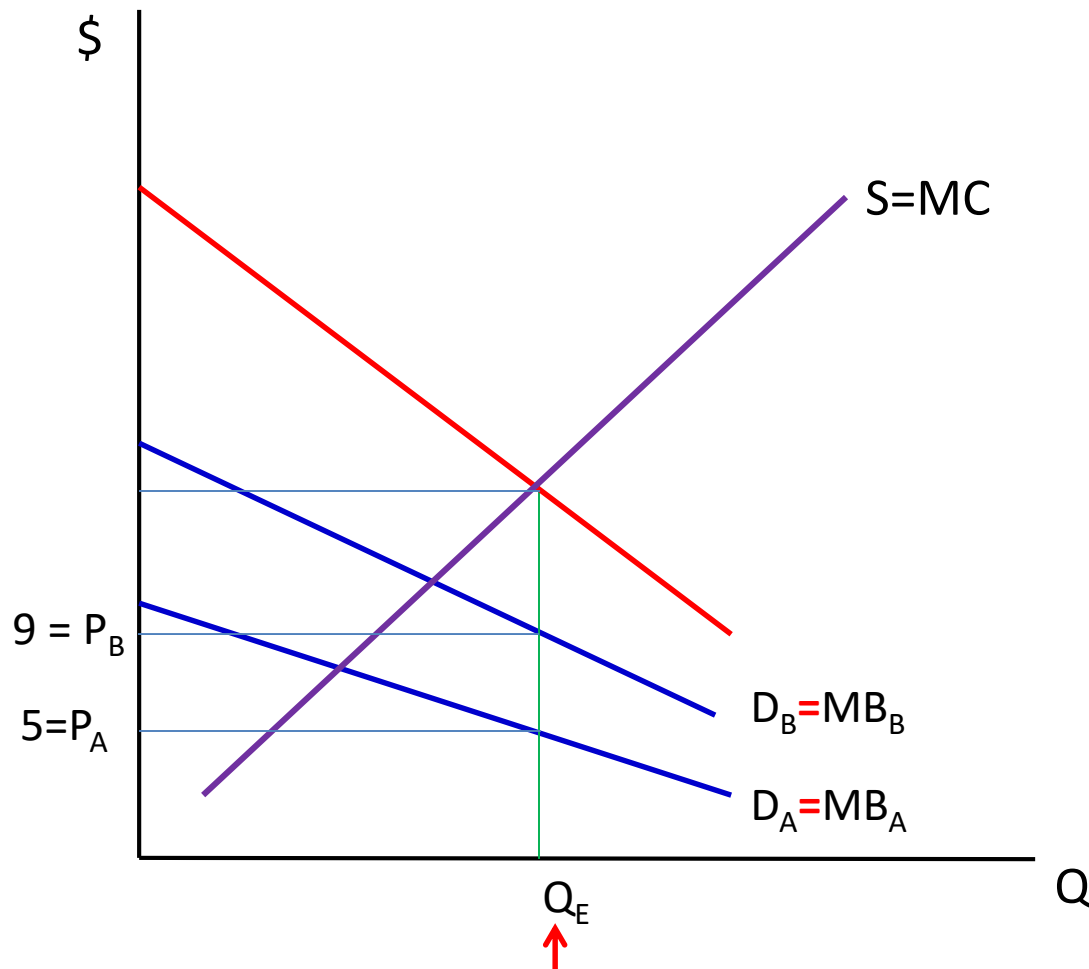
Public Goods

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

Optimal Quantity of a Public Good



Is this quantity Q_E always reached?

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?

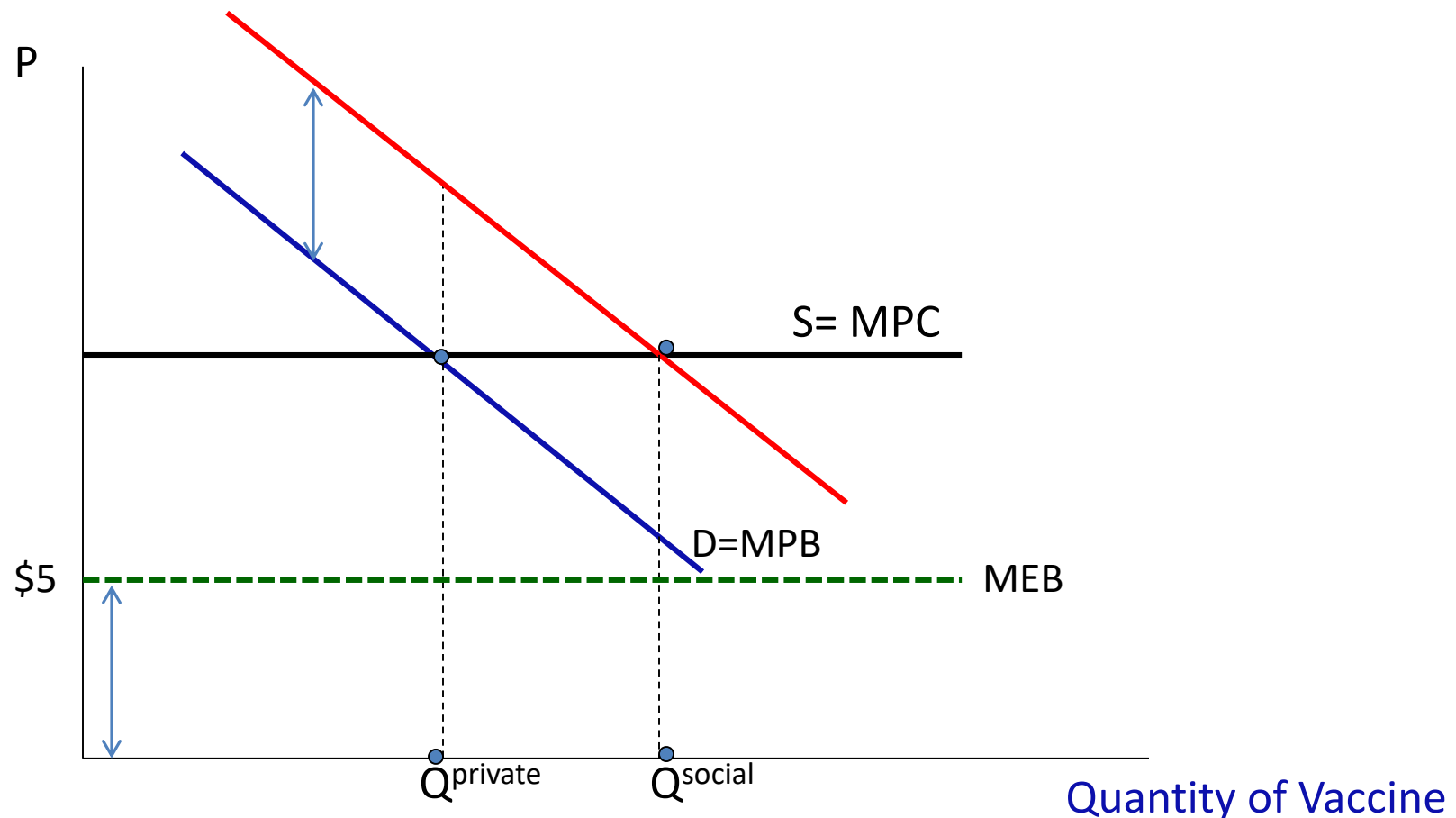
- Is health care **non-rival**?
 -
- Is health care **non-excludable**?
 -
- Relevance of public goods to health care issues:
 - **Information**: can be thought of as an economic good with a large public content
 - **Redistribution**: may need mandatory programs to correct the undersupply of voluntary giving (which has a public dimension)

Externalities

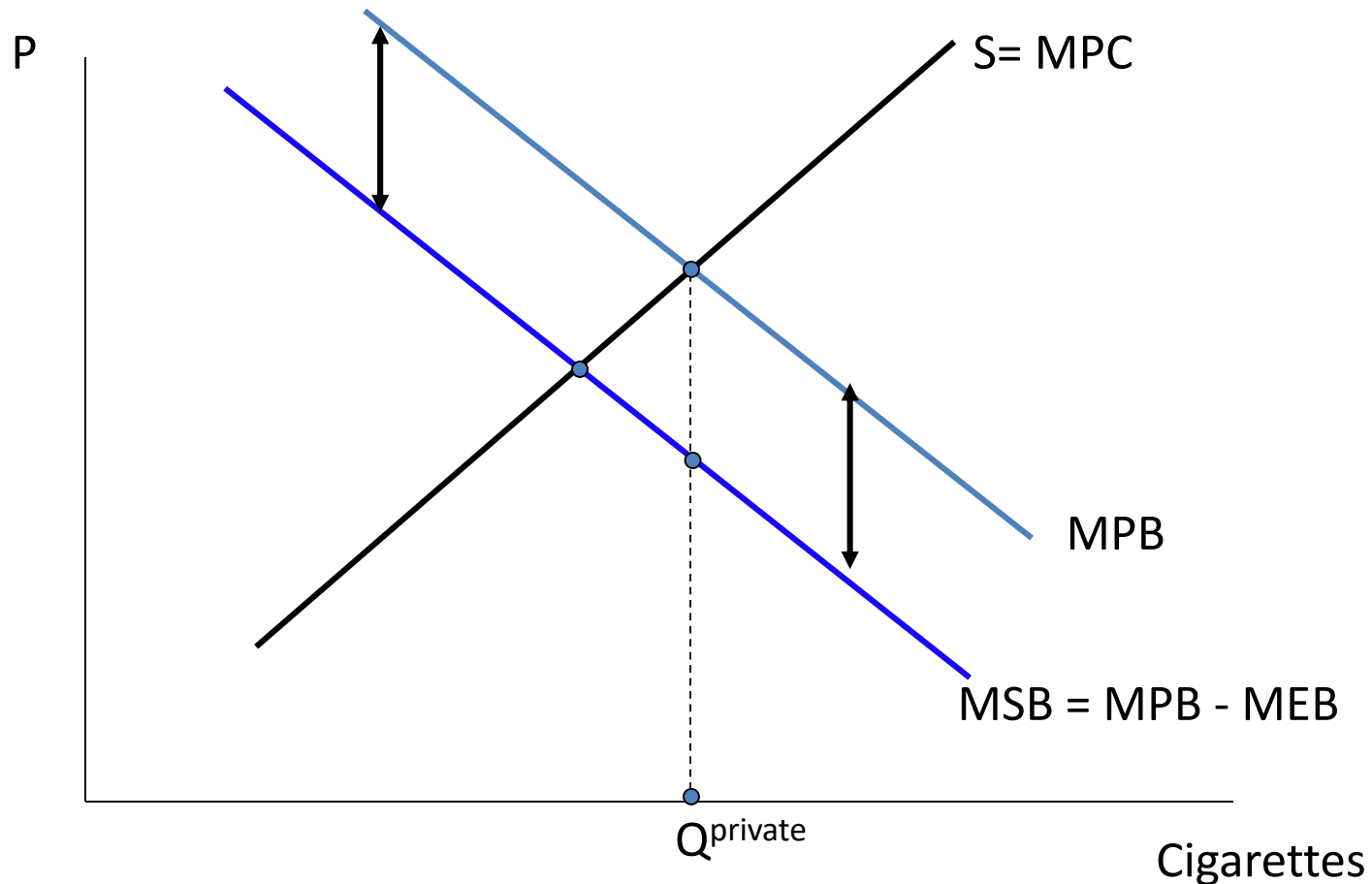
- What are **externalities**?
 - “An unpriced byproduct of production or consumption that adversely or beneficially affects another party not directly involved in the market transaction”
- Recall:

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

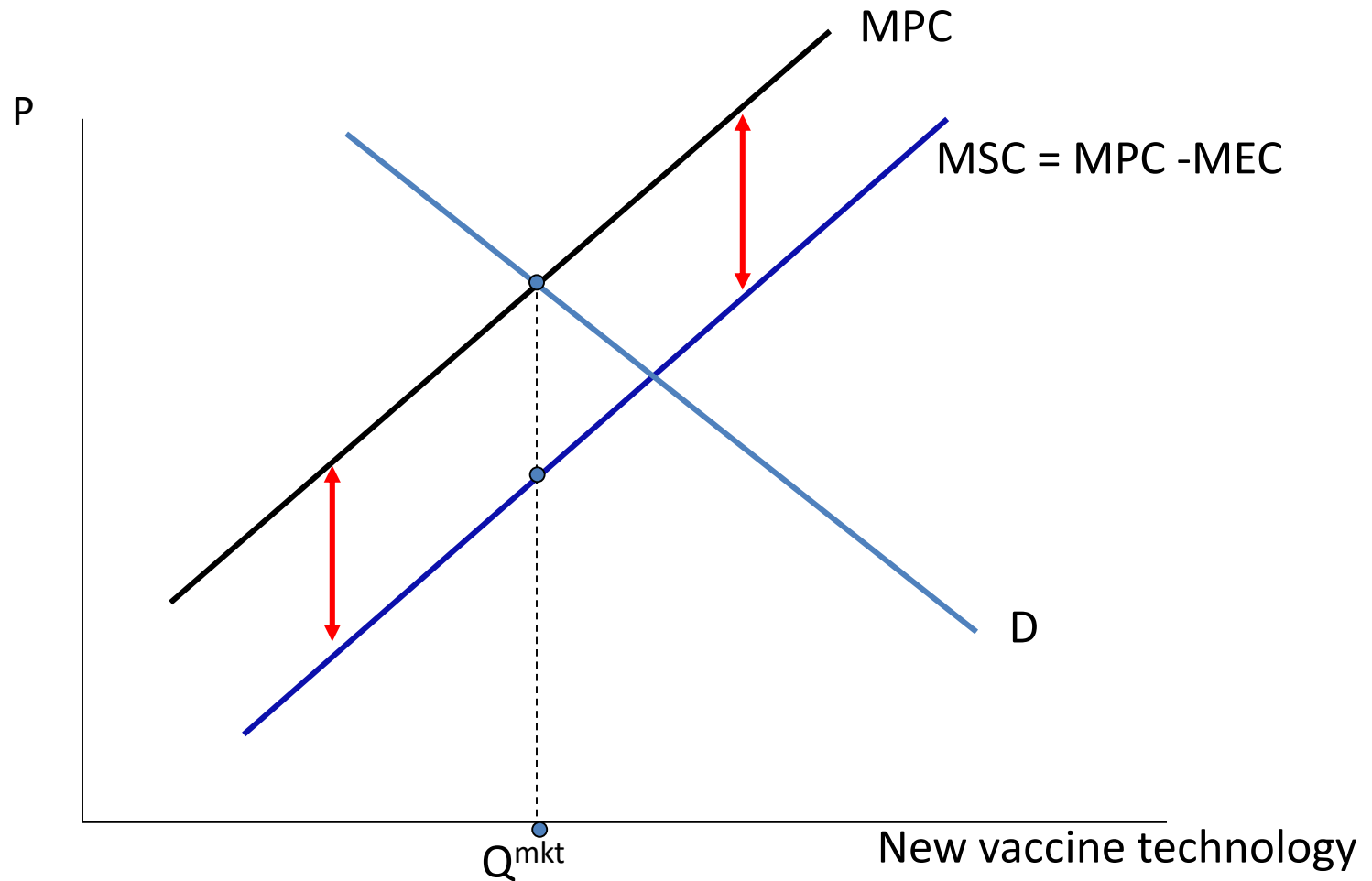
Positive Demand-Side Externalities: Vaccine Externality



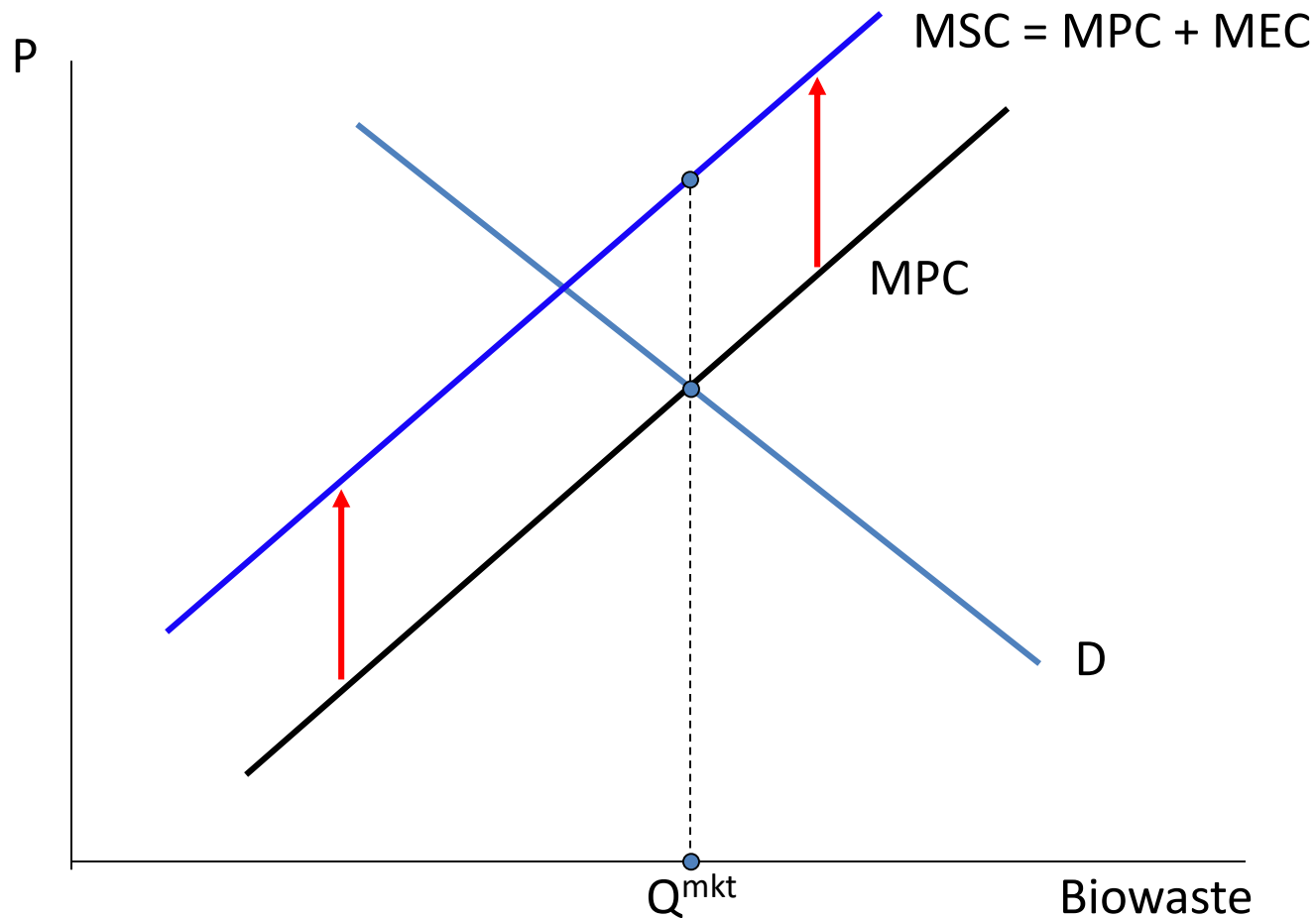
Negative Demand-Side Externalities: Cigarette Externality



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

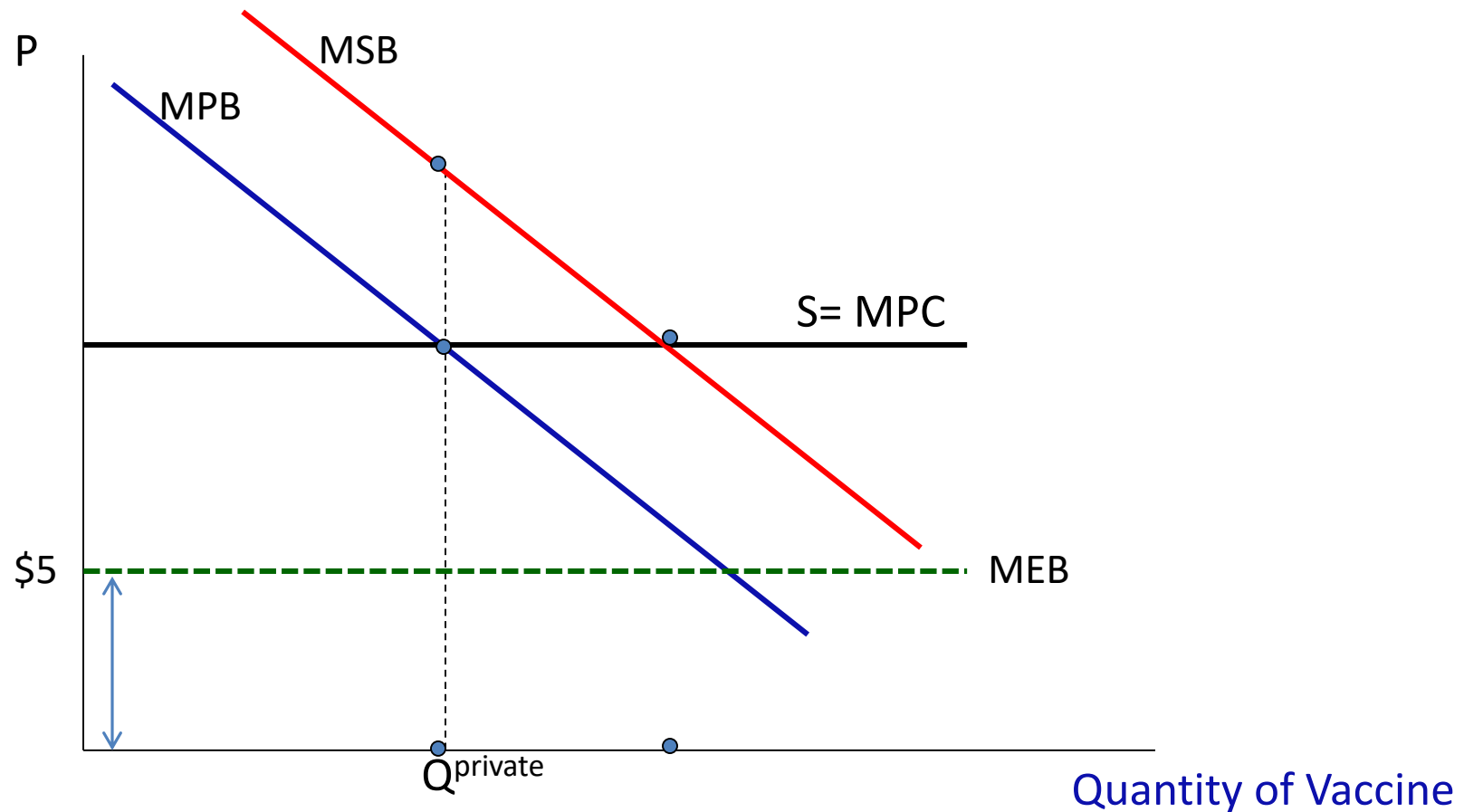
- Transfer program (redistribution)

Examples: Donations, food stamps

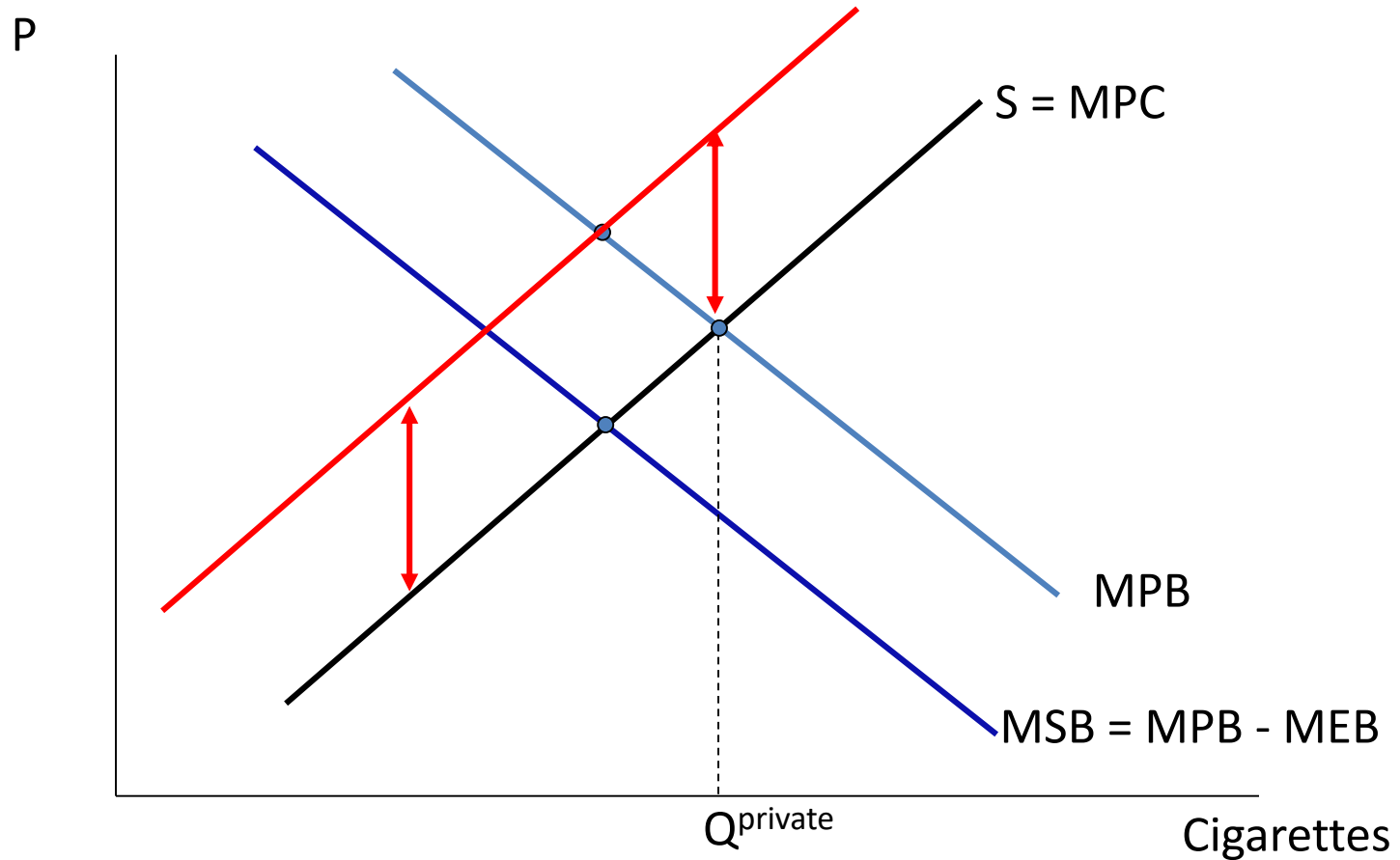
- Regulation

Examples: Regulations on food and drug

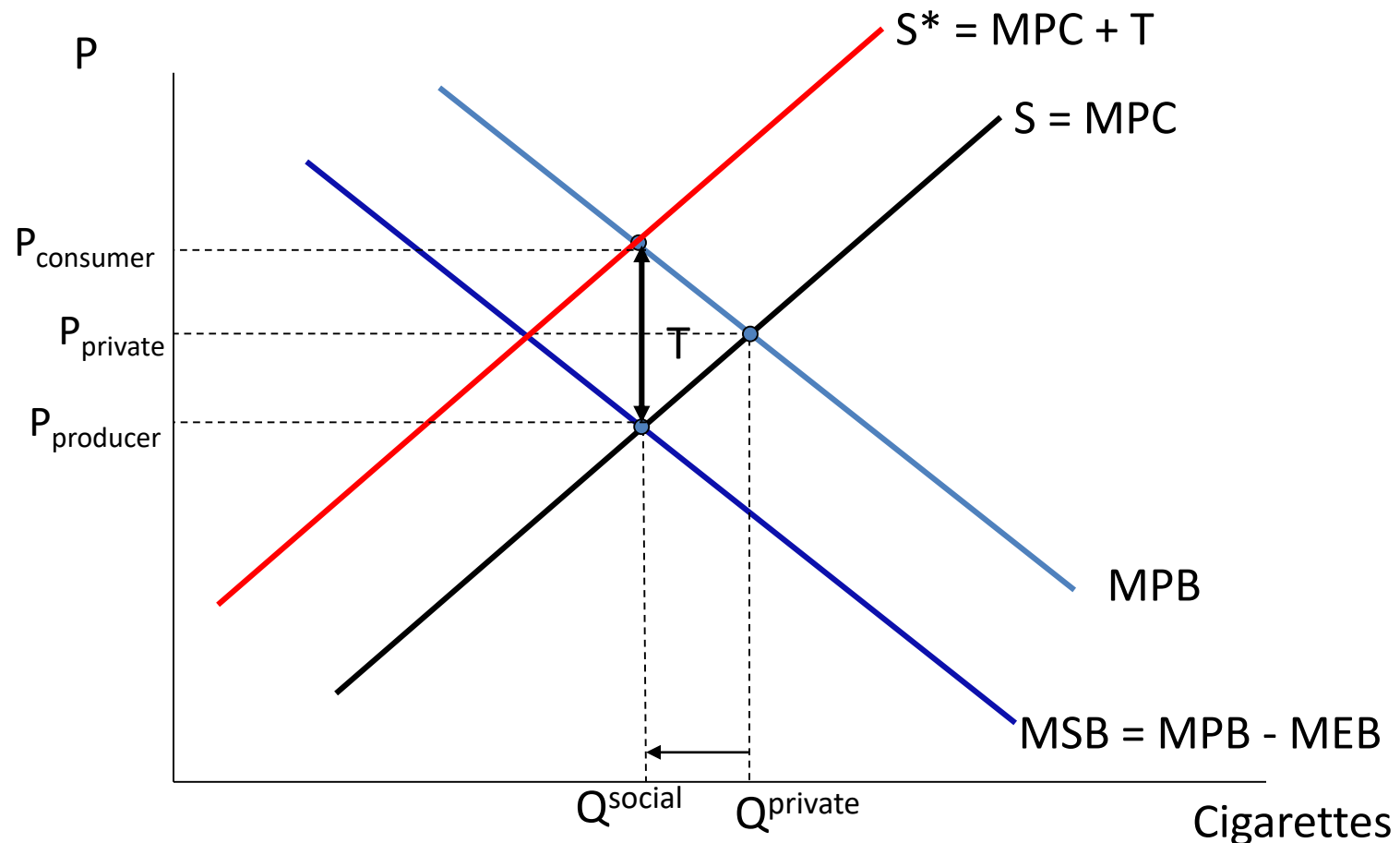
Commodity Subsidies to Correct Vaccine Externality



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

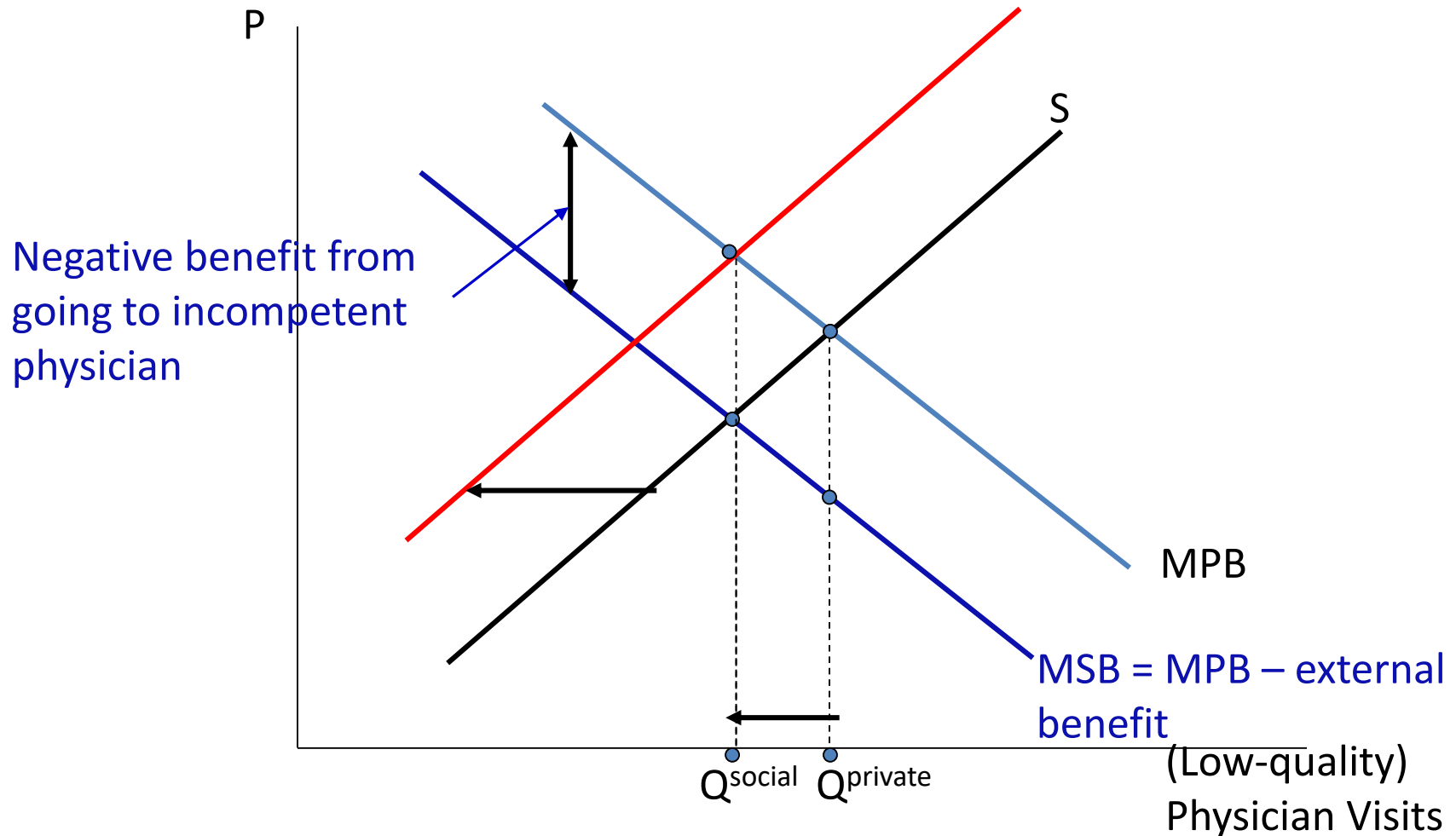
- Governments influence the allocation of resources by **establishing rules and regulations**.
- **Regulation** refers to the **use of nonmarket means** to affect the **quality, price, or quantity of a good or services**.
- Main categories of regulation:
 - Fee controls
 - Rate regulation
 - Quantity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