Market Failure & Government

AP Microeconomics ▪ Unit 6

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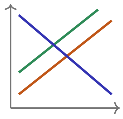
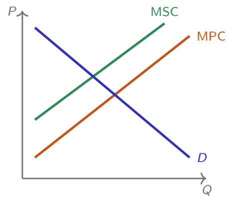


What we will cover

1. Efficiency & market failure
2. Externalities
3. Public & private goods
4. Regulating market power
5. Inequality



1 Efficiency

Efficient & inefficient outcomes

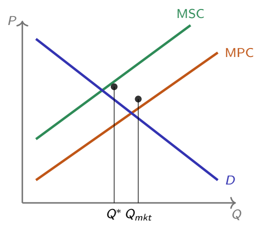
Society does best where the last unit's benefit to everyone meets its cost to everyone:

MSB 边际社会收益 = **MSC** 边际社会成本

At $MSB = MSC$ total surplus is greatest – **socially efficient** 社会有效. Any other quantity is a **market failure** 市场失灵 with a **deadweight loss** 无谓损失.

2 Externalities

Externalities



An **externality** 外部性 spills onto a **third party** 第三方.

- **negative** 负外部性 (pollution): $MSC > MPC$, market **overproduces** 过度生产
- **positive** 正外部性 (vaccines): $MSB > MPB$, market **underproduces** 生产不足

The gap creates a deadweight loss from Q^*.

Correcting externalities

- **Pigouvian tax** 庇古税 = external cost → cut output
- **Subsidy** 补贴 = external benefit → raise output
- **Tradable permits** 可交易许可证 – cap & trade pollution

Worked example

Steel private cost $200; smoke harm $30. A $30 Pigouvian tax internalises the cost and cuts to Q^*.

Taxes and permits internalise external costs

3 Public goods

Public & private goods

	Excludable	Non-excl.
Rival	Private 私人物品	Common 公共资源
Non-rival	Club 俱乐部物品	Public 公共物品

Two properties: **rivalry** 竞争性 and **excludability** 排他性.

- **free-rider problem** 搭便车问题: public goods underproduced
- **tragedy of the commons** 公地悲剧: common resources overused

4 Regulating market power

Regulating market power

Marginal-cost pricing 边际成本定价
$P = MC$: efficient quantity, but a natural monopoly then makes a loss

Average-cost pricing 平均成本定价
$P = ATC$: firm breaks even, slight inefficiency

Antitrust policy 反垄断政策 blocks anti-competitive mergers. But **government failure** 政府失灵 – when the cure costs more than the failure – means intervention is not free.

5 Inequality

Inequality – the Lorenz curve

The **Lorenz curve** 洛伦兹曲线 plots cumulative income vs population. The more it sags, the more unequal.

Gini coefficient 基尼系数 $= \frac{A}{A+B}$, from 0 (equal) to 1 (one person has all).

Income shares diverge across households

Taxes & redistribution

Progressive 累进
higher % from high incomes – reduces inequality

Proportional 比例
same % from everyone

Regressive 累退
higher % from low incomes – widens it

Inequality has many sources: differences in **human capital** 人力资本, discrimination, and inherited wealth. **Wealth inequality** 财富不平等 usually exceeds income inequality.

Key points

- Efficient at $MSB = MSC$; any gap is a **market failure**
- **Externalities**: negative over-produce, positive underproduce
- **Public goods** → free riders; **commons** → overuse
- **Lorenz & Gini** measure inequality

Check yourself

1. A factory pollutes. Which cost is missing from its decision?
2. What are the two features of a public good?
3. What does a Lorenz curve further from the diagonal mean?
4. Name one way to correct a negative externality.

Answers **1.** the external cost – so MSC > MPC **2.** non-rival and non-excludable **3.** more inequality **4.** a Pigouvian tax, regulation, or tradable permits