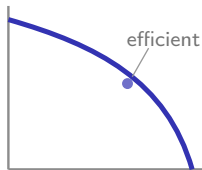


Basic Economic Concepts

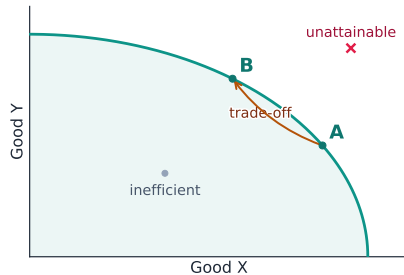
AP Microeconomics ■ Unit 1

AP Microeconomics



What we will cover

- 1 Scarcity & choice
- 2 Economic systems & prices
- 3 Production possibilities curve
- 4 Comparative advantage & trade
- 5 Costs & thinking at the margin
- 6 Consumer choice



the production possibilities curve

The economic problem

- Unlimited **wants** 欲望 > finite **resources** 资源 $\Rightarrow$ **scarcity** 稀缺
- Scarcity forces choice; every choice has an **opportunity cost** 机会成本
- Three questions: what? how? for whom?

Scarcity is not poverty: even a billionaire has only 24 hours a day, so **everyone** must choose.



Scarce goods force every buyer to choose

Factors of production

Land

土地

natural resources

Labour

劳动

human effort

Capital

资本

tools & machines

Entrepreneur

企业家才能

combines &
takes risk

The four **factors of production** 生产要素 are the scarce resources every economy allocates.

Three economic systems

Market

市场经济

buyers & sellers decide through **prices**

Command

计划经济

central **government** owns & plans

Mixed

混合经济

markets + government;
almost every country

Three economic systems

Market

firms own resources;
prices decide;
little government

Mixed

private + public
sectors both decide;
almost every country

Planned

government owns and
decides what, how
and for whom

Prices coordinate a market

A high **price** does two jobs at once:

- **signal** 信号: the good is scarce / wanted
- **incentive** 激励: rewards producers to supply more

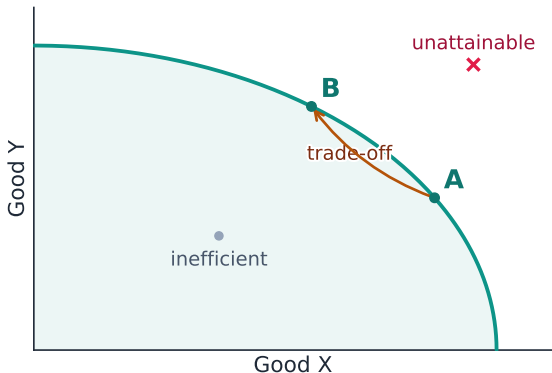
Adam Smith's **invisible**

hand 看不见的手: no one is in charge, yet resources flow toward what people value most.



Prices guide goods across markets

The production possibilities curve



The **PPC** 生产可能性曲线 shows the most an economy can make of two goods.

- **On** the curve – efficient
- **Inside** – wasteful (idle resources)
- **Outside** – unattainable

Economic growth 经济增长 shifts the whole curve **outward**.

Why the curve bows outward

The **law of increasing opportunity cost** 机会成本递增规律: resources are not equally suited to both goods, so each extra unit of one costs ever more of the other.

Worked example – opportunity cost

A country makes wheat and steel. At A: 100 wheat, 0 steel. At B: 80 wheat, 30 steel.

Moving A→B gains 30 steel by giving up 20 wheat, so

$$\text{opp. cost of 1 steel} = \frac{20}{30} = 0.67 \text{ wheat.}$$

Absolute vs comparative advantage

absolute advantage 绝对优势

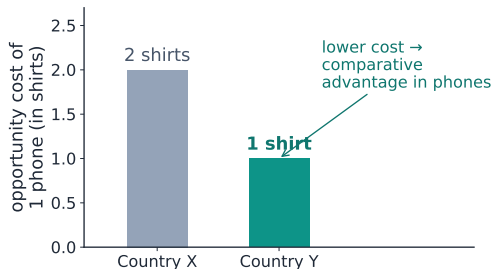
makes **more** with
the same resources

comparative advantage 比较优势

has the **lower opportunity cost**

Specialize where your opportunity cost is lower, then **trade** 贸易 – this gains for both sides **even if one is better at everything**.

Comparative advantage – worked example



In a day: X makes 10 phones **or** 20 shirts; Y makes 4 **or** 4.

■ X: 1 phone costs $\frac{20}{10} = 2$ shirts

■ Y: 1 phone costs $\frac{4}{4} = 1$ shirt

⇒ **Y** makes phones; **X** makes shirts

X has the absolute advantage in both, yet trade still helps both. The **terms of trade** 贸易条件 lie between the two costs.

Cost-benefit analysis & sunk costs

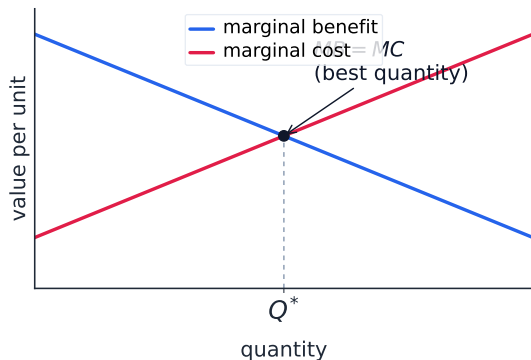
Cost-benefit analysis 成本收益分析: act only when $\text{benefit} \geq \text{cost}$ – and the real cost is the **opportunity cost**, not just money spent.

The sunk-cost fallacy

You paid \$50 for a concert ticket (a **sunk cost** 沉没成本). That night you feel ill and would rather stay home.

The \$50 is gone **either way**, so ignore it – choose what you now prefer. Going just "to get your money's worth" is the **sunk-cost fallacy** 沉没成本谬误.

Think at the margin



Decide one **margin** 边际 at a time – one more unit.

- **marginal benefit** 边际收益 (MB): extra gain
- **marginal cost** 边际成本 (MC): extra cost

Keep going while $MB > MC$; stop at $MB = MC$ – the greatest net benefit.

Consumer choice

The **law of diminishing marginal utility** 边际效用递减规律: each extra unit adds less **utility** 效用 – the fifth slice of pizza satisfies far less than the first. This is why demand curves slope **down**.

The utility-maximizing rule

Spread a fixed budget so the marginal utility **per dollar** is equal across all goods:

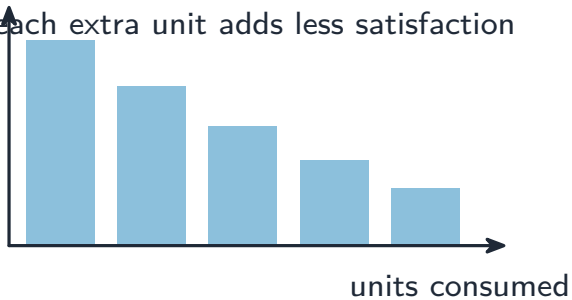
$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y}.$$

If one good gives more utility per dollar, shift spending toward it until the ratios balance.

Consumer choice

marginal utility

each extra unit adds less satisfaction



Key points

Scarcity forces choice; every choice has an **opportunity cost**

The **PPC** shows efficient, wasteful & unattainable output

Comparative advantage
+ trade gains for both sides

Choose at the **margin**: act while $MB > MC$, stop at $MB = MC$

Check yourself

- 1 Why does the PPC bow outward?
- 2 Absolute or comparative advantage: which drives trade?
- 3 Should a sunk cost affect your next decision?
- 4 What rule does marginal analysis give?

Answers 1. resources are not equally suited to both goods 2. comparative 3. no – it is already spent 4. do it while $MB > MC$; stop where $MB = MC$