

Basic Economic Concepts

AP Macroeconomics

Scarcity

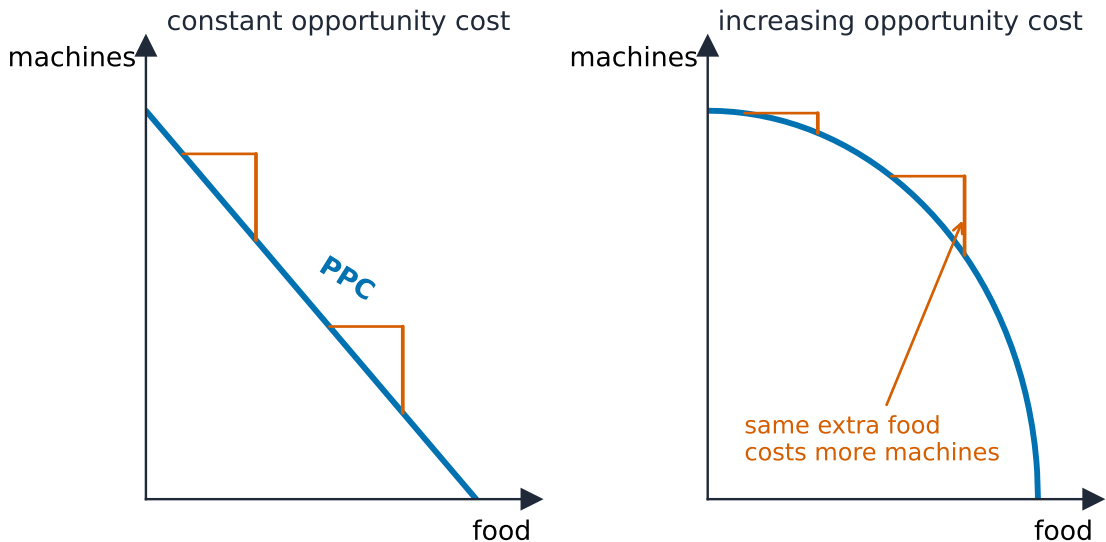


An open-pit mine: land and minerals are scarce resources with opportunity cost

Economics 经济学 begins with **scarcity** 稀缺性: people's wants are unlimited, but the **resources** 资源 to satisfy them are limited. The resources – the **factors of production** 生产要素 – are **land**, **labor** 劳动, **capital** 资本, and **entrepreneurship** 企业家才能. Scarcity forces every society to choose **what**, **how**, and **for whom** to produce, and it makes **trade-offs** 权衡 unavoidable.

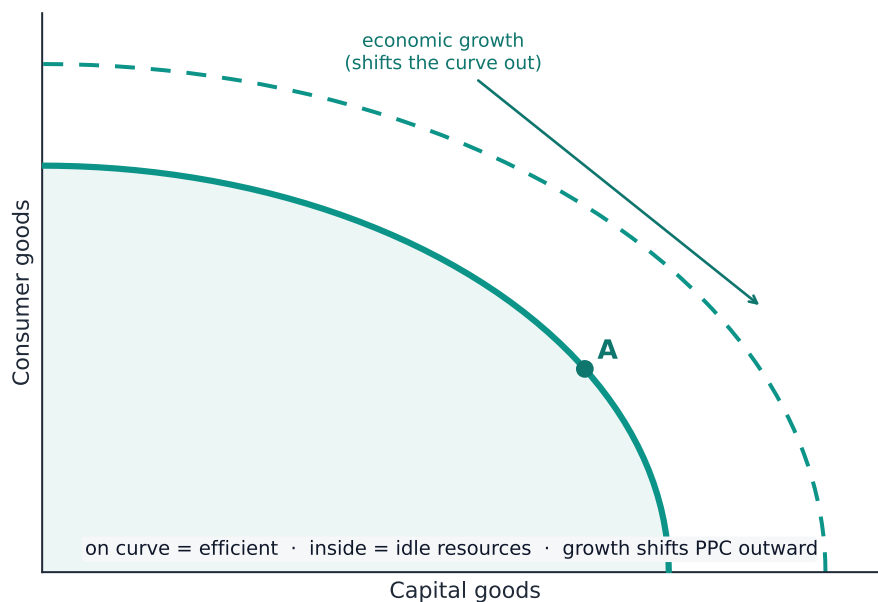
Opportunity Cost and the Production Possibilities Curve (PPC)

Every choice has an **opportunity cost** 机会成本 – the value of the next-best alternative given up. The **production possibilities curve (PPC)** 生产可能性曲线 shows the maximum combinations of two goods an economy can make when resources are fully and efficiently used.



A straight PPC means constant opportunity cost; a bowed one means increasing cost

- Points **on** the curve are efficient; **inside**, inefficient (unemployed resources); **outside**, unattainable.
- The downward slope shows opportunity cost; a **bowed-out** curve shows **increasing opportunity cost**.
- More resources or better technology cause **economic growth** 经济增长, shifting the PPC **outward**.

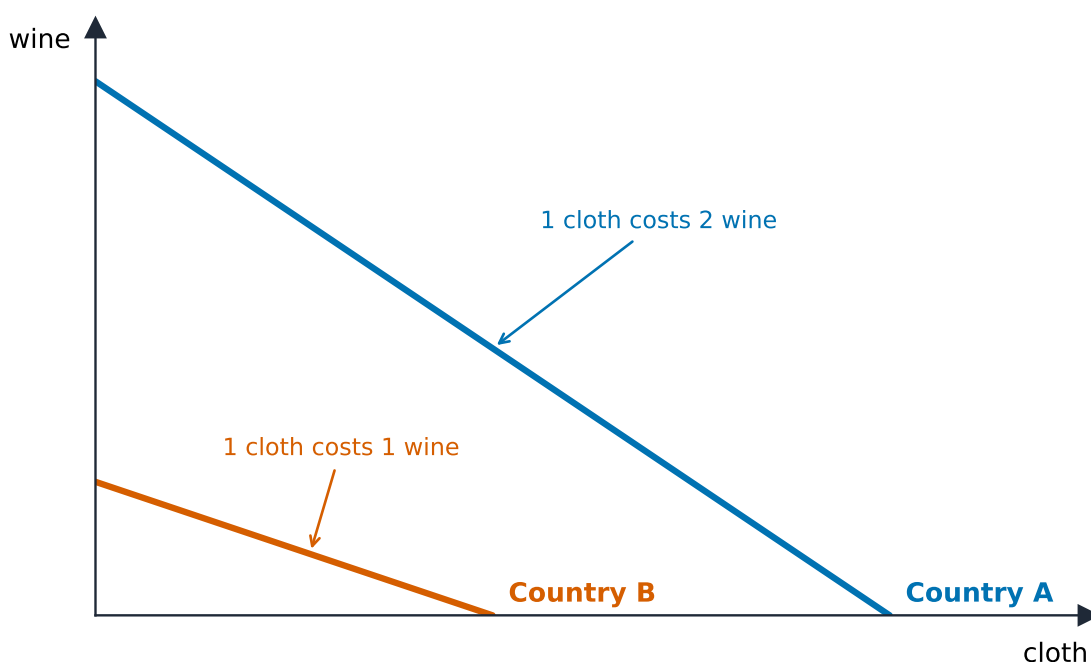


A production possibilities curve; investing in capital goods shifts it outward

Comparative Advantage and Gains from Trade

A producer has an **absolute advantage** 绝对优势 in a good if it can make more of it. It has a **comparative advantage** 比较优势 if it has the **lower opportunity cost**. Nations should specialize in their comparative-advantage goods and trade – both gain if the **terms of trade** 贸易条件 lie between the two opportunity costs. Trade lets a country consume beyond its own PPC.

Worked example. Country A can make 10 wheat **or** 5 cloth per day; Country B can make 8 wheat **or** 8 cloth. For A, one cloth costs $\frac{10}{5} = 2$ wheat; for B it costs $\frac{8}{8} = 1$ wheat. B's opportunity cost of cloth is lower, so **B specializes in cloth**. Checking wheat: A gives up 0.5 cloth per wheat and B gives up 1, so **A specializes in wheat**. Trading at any rate between the two costs, both consume beyond their own PPC.



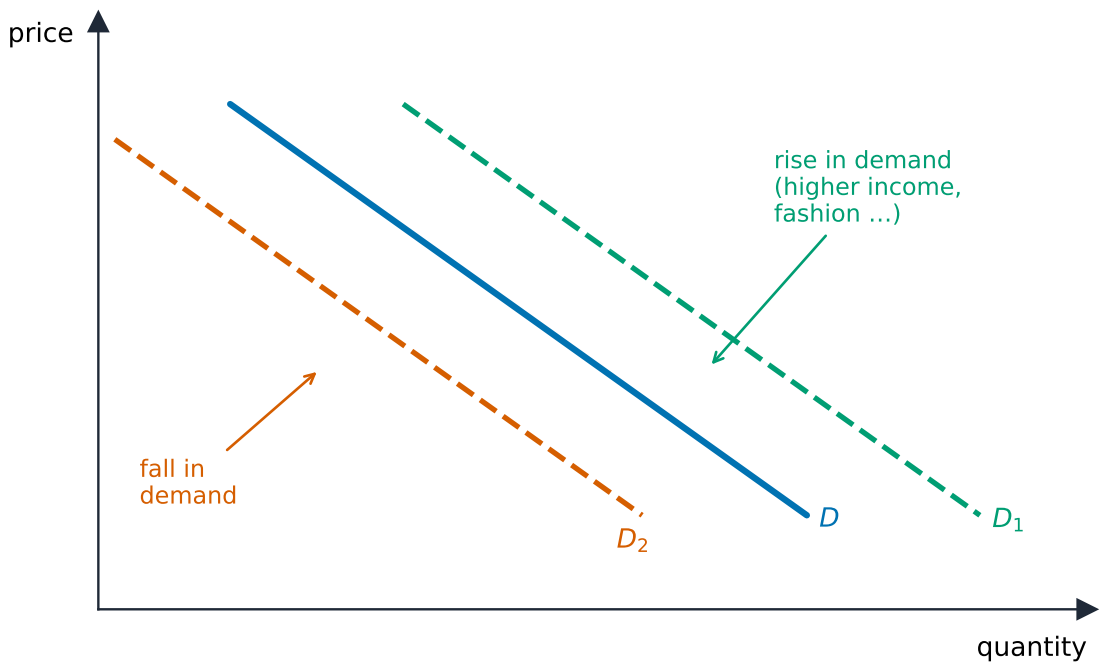
Comparative advantage comes from differently-sloped production possibilities curves



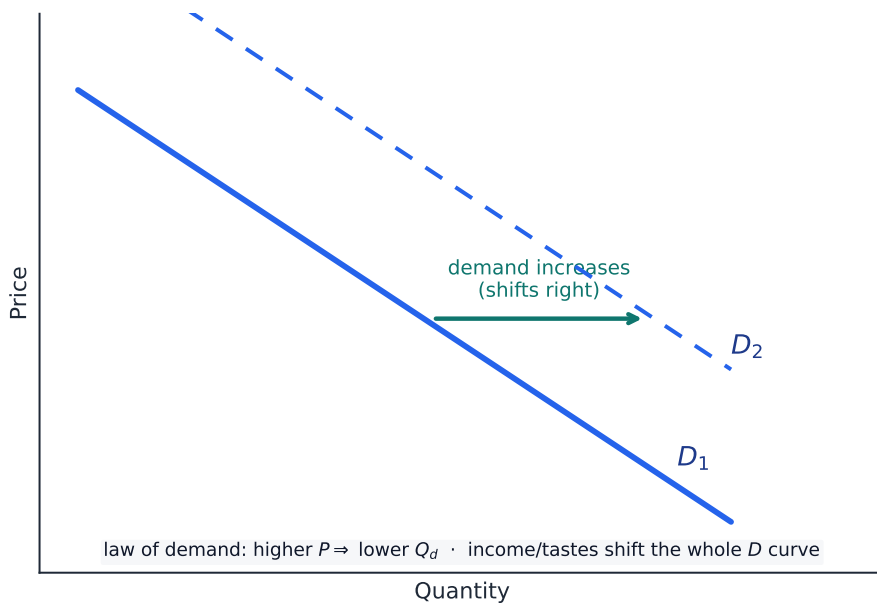
Container shipping: comparative advantage and trade let countries specialise and gain

Demand

Demand 需求 relates price to the quantity buyers will buy. The **law of demand** 需求定律 makes the curve slope **downward**. A change in the good's **own price** is a movement along the curve; the **determinants** (income, tastes, prices of **substitutes** 替代品 and **complements** 互补品, number of buyers, expectations) **shift** the whole curve.



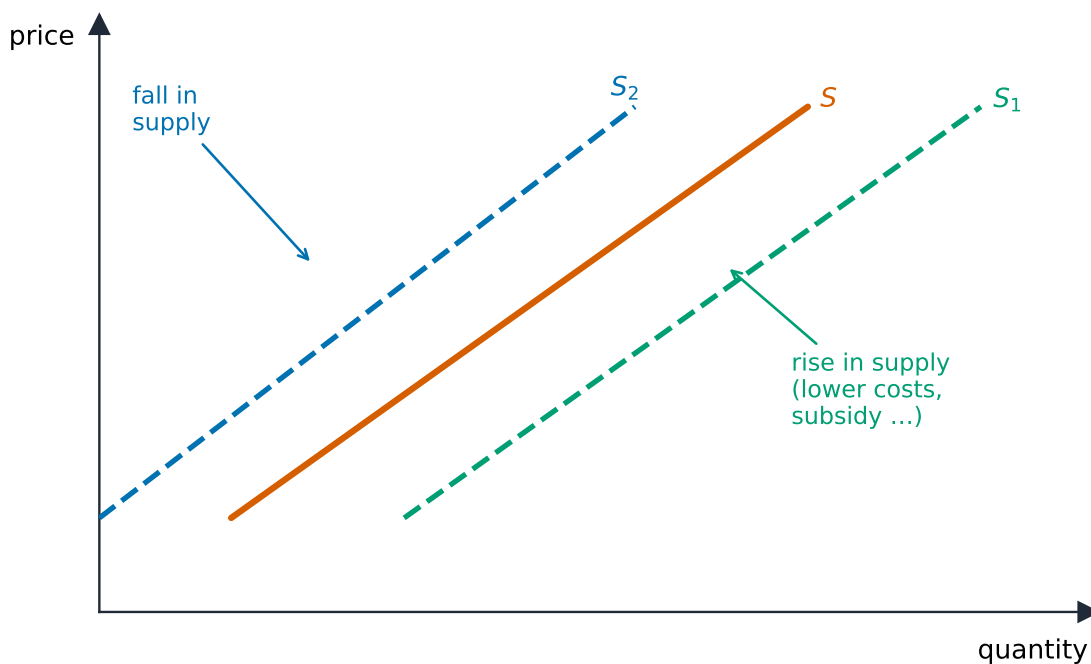
The demand curve slopes down; income, tastes, and related prices shift it



The law of demand slopes the curve downward; a determinant shifts the whole curve

Supply

Supply 供给 relates price to the quantity sellers will offer; the **law of supply** 供给定律 makes it slope **upward**. Its determinants – input prices, technology, taxes and **subsidies** 补贴, number of sellers, expectations – shift the curve, while the good's own price moves along it.



The supply curve slopes up; costs, technology, tax, and subsidy shift it

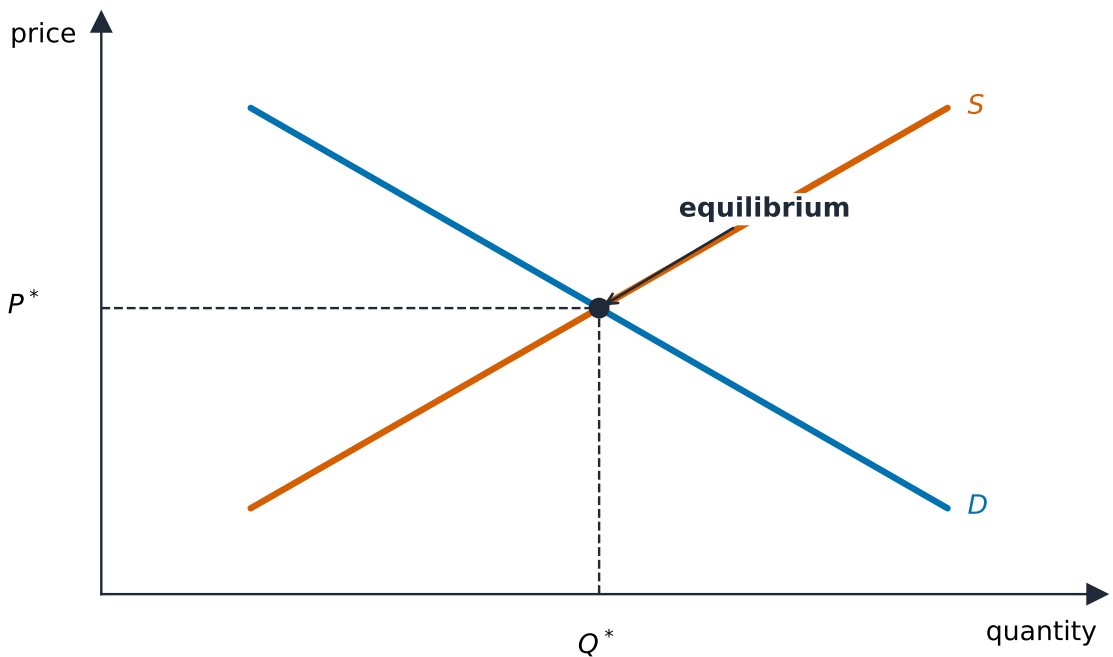
Market Equilibrium, Disequilibrium, and Changes in Equilibrium



A busy market: demand and supply meet where buyers and sellers agree a price

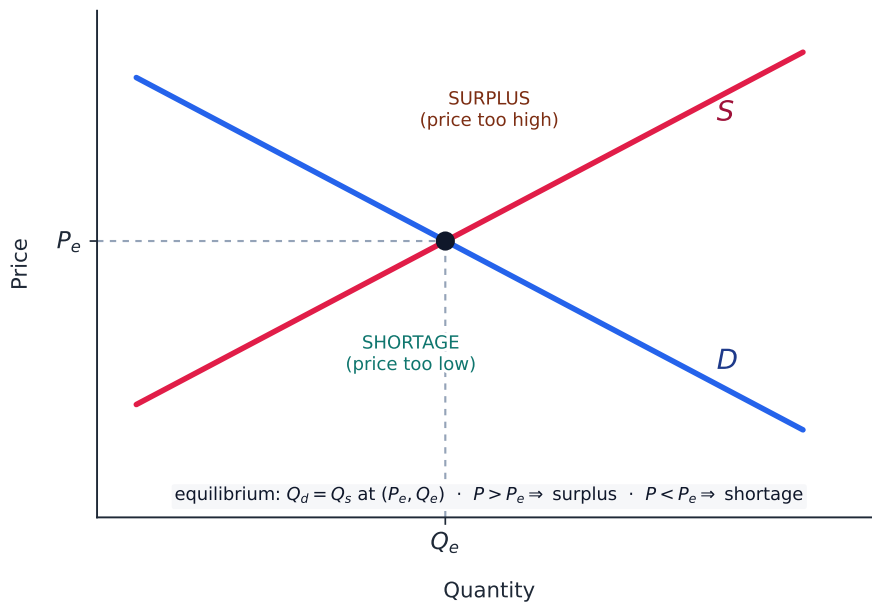
Equilibrium 均衡 is where supply meets demand, clearing the market. Above the equilibrium price a **surplus** 过剩 pushes price down; below it a **shortage** 短缺 pushes price up. When a determinant shifts one curve, price and quantity move predictably; when both shift, one of them is **indeterminate**.

Worked example. A new technology lowers producers' costs, shifting **supply right**. Along the unchanged demand curve, the equilibrium **price falls** and the equilibrium **quantity rises**. If instead a rise in incomes shifts **demand right** at the same time, quantity clearly rises but the effect on price depends on which shift is larger – the “both shift” indeterminate case.



Equilibrium price and quantity where demand meets supply

Exam skill: macro builds on these micro tools – you must draw and shift supply-and-demand and PPC graphs correctly, because the same shift logic drives the aggregate (whole-economy) models later in the course.



Market equilibrium sits where supply meets demand; away from it lie surplus and shortage

Exam tips

- Opportunity cost is what you **give up** — read it off a PPC as the slope; a bowed-out PPC shows increasing opportunity cost.
- **Comparative advantage** (lower opportunity cost), not absolute advantage, decides who should specialise and trade.
- Points inside the PPC are inefficient, outside unattainable; more resources/technology shift it out (growth).
- Distinguish a **movement along** a demand/supply curve (own price) from a **shift** (a determinant).
- These micro tools drive the aggregate models later — draw and shift the correct curve in the correct direction.