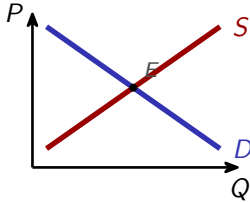


Basic Economic Concepts

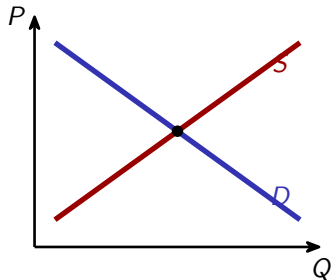
AP Macroeconomics ■ Unit 1

AP Macroeconomics



What we will cover

- 1 Scarcity and the factors of production
- 2 Opportunity cost and the PPC
- 3 Comparative advantage and trade
- 4 Demand
- 5 Supply
- 6 Market equilibrium



Scarcity: the starting point of economics

Every economy faces the same basic problem:

wants
unlimited

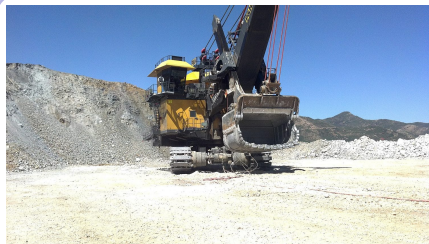
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resources
limited

⇒

Three questions – and every choice has a cost:

- **what** to produce?
- **how** to produce?
- **for whom?**



Limited resources force every society to choose

The four factors of production

The scarce **resources** 资源 an economy uses to make everything:

Land 土地

natural resources

Labour 劳动

human effort and skill

Capital 资本

tools, machines, factories

Entrepreneurship 企业家才能

initiative and risk-taking

Entrepreneurs combine the other three and bear the risk of the venture.

Opportunity cost

The **opportunity cost** 机会成本 of a choice is the value of the **single best alternative** you give up.

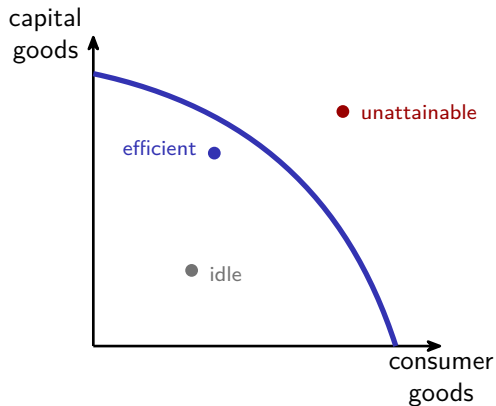
- measured in what you *sacrifice*, not only in money
- every choice has one – because resources are scarce

A new road's real cost is the schools or hospitals the **same resources** could have built.



Every choice gives up the next-best option

The production possibilities curve

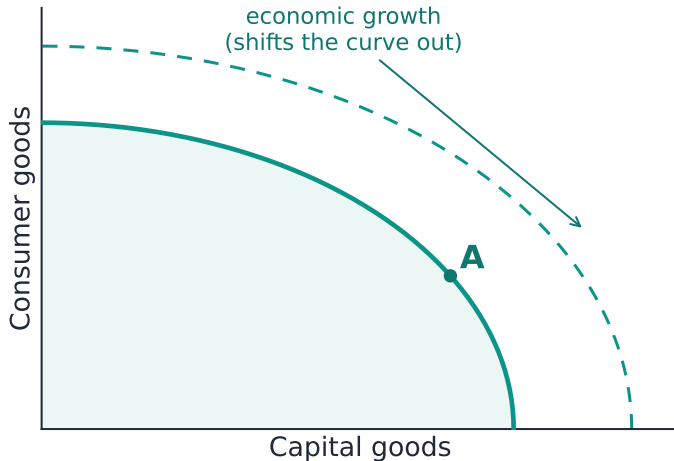


The **PPC** 生产可能性曲线 shows every efficient mix of two goods:

- **on** the curve – **efficient**, all resources used
- **inside** – resources lie idle (a recession)
- **outside** – unattainable today

Its outward *bow* = **increasing opportunity cost** 机会成本递增.

The production possibilities curve



Worked example – reading a trade-off

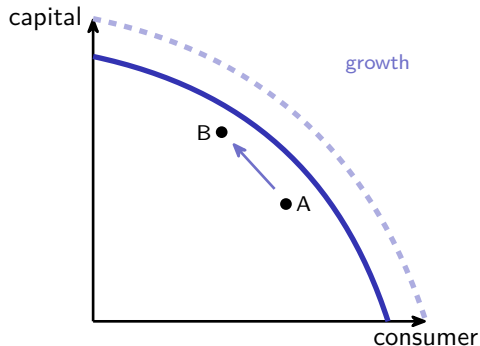
A → B along the curve

A: 60 consumer, 10 capital. B: 50 consumer, 25 capital.

give up 10 consumer $\Rightarrow$ gain 15 capital

cost of 1 capital = $\frac{10}{15} \approx 0.67$ consumer

Building **capital** today shifts the whole curve outward later – **economic growth** 经济增长.



Absolute vs comparative advantage

Absolute 绝对优势

make *more* with the same
resources

Comparative 比较优势

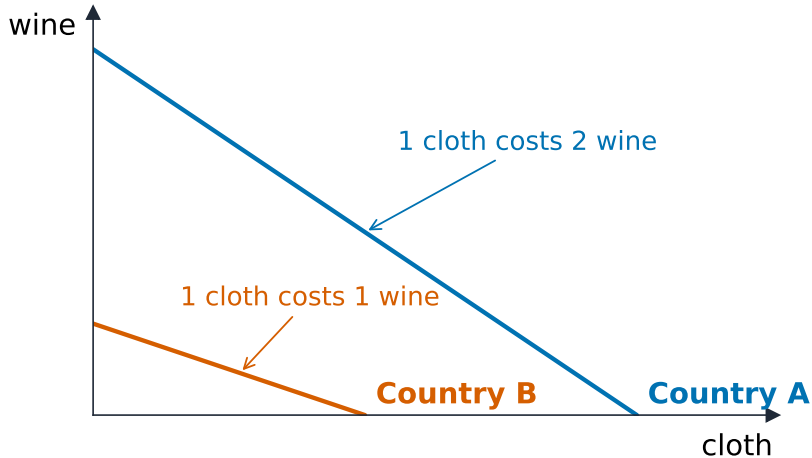
make it at a *lower opportunity
cost*



Specialize, then trade – both sides can gain

Both sides gain even if one is better at everything – as long as costs differ.

Absolute vs comparative advantage



Gains from trade – worked example

per day	wheat	cloth
Country A	12	6
Country B	4	4

A → wheat



B → cloth

Compare opportunity costs

Cost of 1 cloth: $A = \frac{12}{6} = 2$ wheat, $B = \frac{4}{4} = 1$ wheat.

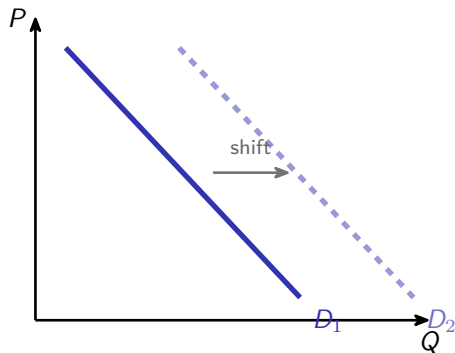
⇒ B is cheaper at cloth

Cost of 1 wheat: $A = 0.5$ cloth, $B = 1$ cloth.

⇒ A is cheaper at wheat

The **terms of trade** 贸易条件 must fall *between* the two costs for both to win.

The law of demand

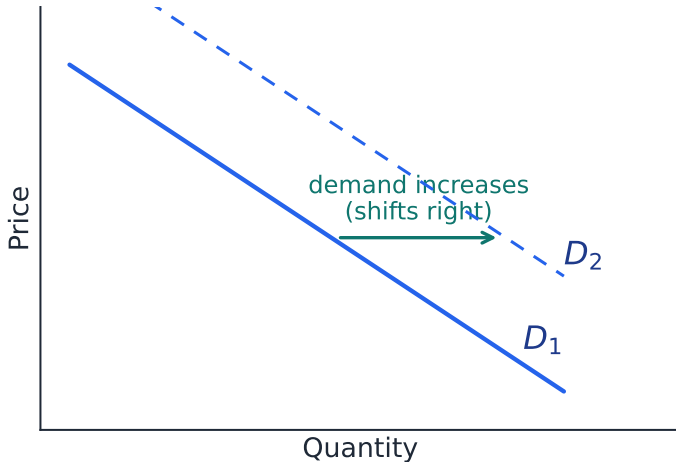


Demand 需求: how much buyers will buy at each price. Higher price $\rightarrow$ lower **quantity demanded** 需求量 – the curve slopes **down**.

Own price changes $\Rightarrow$ move **along**.

Anything else $\Rightarrow$ the whole curve **shifts**.

The law of demand



What shifts demand? Remember TRIBE

Tastes

Related prices

Income

Buyers

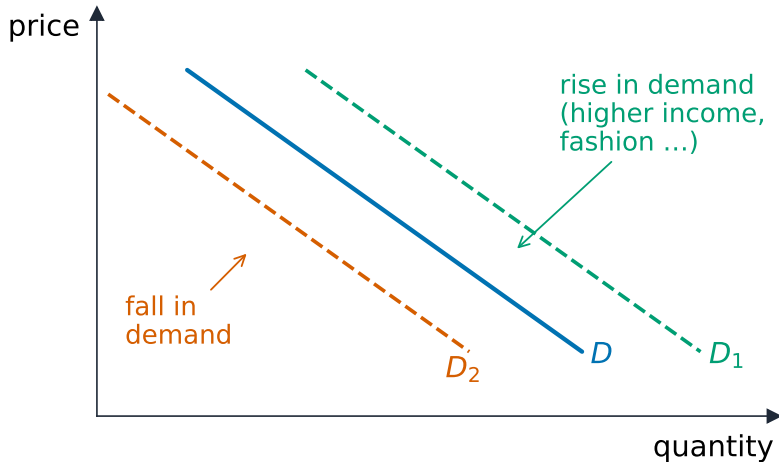
Expectations

Substitutes 替代品: coffee up
⇒ demand for tea up

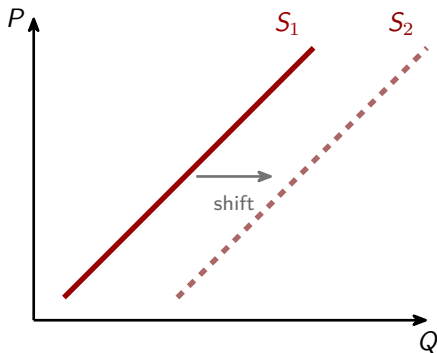
Complements 互补品: petrol
up ⇒ demand for cars down

Normal good 正常品: more income ⇒ more demand. **Inferior good** 低档品: more income
⇒ less demand.

What shifts demand? Remember TRIBE



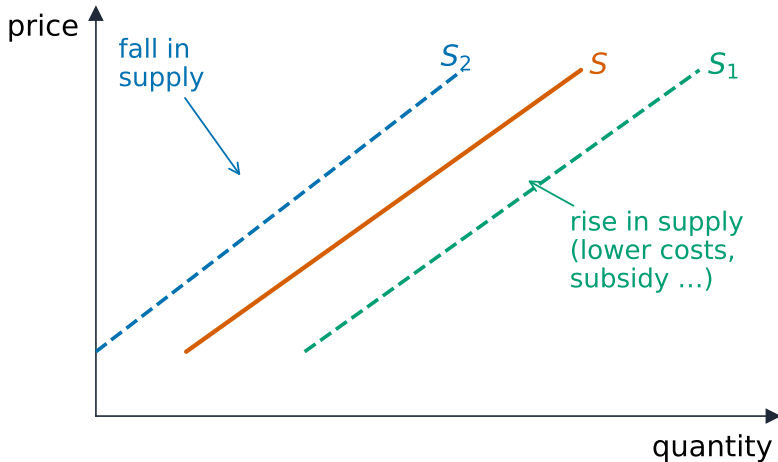
The law of supply



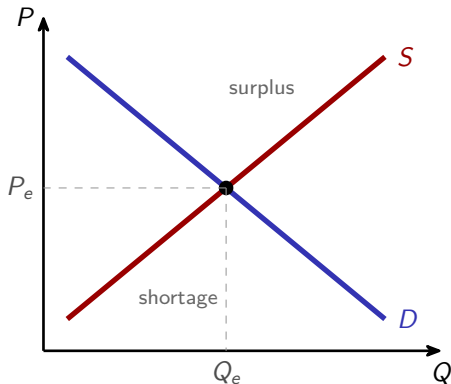
Supply 供给: how much sellers will sell at each price. Higher price $\rightarrow$ higher **quantity supplied** 供给量 – the curve slopes **up**. Shifters: input **costs** 成本, technology, number of sellers, taxes, **subsidies** 补贴.

- lower costs / better tech $\Rightarrow$ shift **right**
- a new tax $\Rightarrow$ shift **left**

The law of supply



Market equilibrium



Equilibrium 均衡: where supply meets demand – no pressure to change.

- price **above** P_e : a **surplus** 过剩 $\Rightarrow$ sellers cut price
- price **below** P_e : a **shortage** 短缺 $\Rightarrow$ buyers bid it up

Both push the market back toward P_e .

Four cases – how a shift moves equilibrium

Demand rises

$P \uparrow$ $Q \uparrow$

Demand falls

$P \downarrow$ $Q \downarrow$

Supply rises

$P \downarrow$ $Q \uparrow$

Supply falls

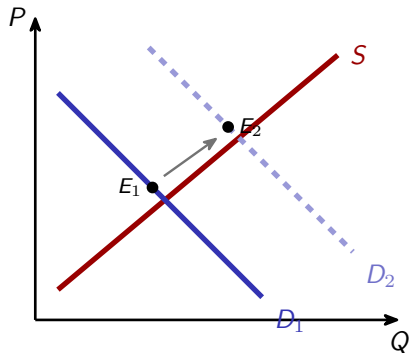
$P \uparrow$ $Q \downarrow$

Worked example – a hot summer

Demand for ice cream rises

The curve shifts **right** ($D_1 \rightarrow D_2$). At the old price a **shortage** appears, so the price rises to a new equilibrium at a **higher price and higher quantity**.

If input costs *also* rise (supply shifts left), price rises even more – but the effect on quantity becomes **ambiguous**.



Unit 1 – key takeaways

1

Scarcity

limited resources force choice;
every choice has an opportunity
cost

2

PPC

efficient points on the curve; the
bow shows rising opportunity cost

3

Comparative advantage

specialize at your lowest cost,
then trade – both gain

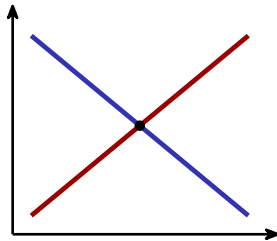
4

Supply & demand

equilibrium clears the market;
shifts move price and quantity

Check yourself

- 1 A point *inside* the PPC means what about resources?
- 2 Who has the comparative advantage – lower cost or more output?
- 3 Coffee's price rises. What happens to demand for tea?
- 4 Demand rises and supply falls. What happens to price?



Answers 1. some lie idle (inefficient) 2. lower opportunity cost 3. it rises (substitutes) 4. price rises