A-LEVEL ECONOMICS • EXERCISE SHEET

1.5 Production possibility curves

Name: ____________ Class: ________ Date: __________ **Total: 26 marks**

KEY WORDS opportunity cost 机会成本 • capital goods 资本品 • consumer goods 消费品 • economic growth 经济增长 • goods 物品

Objective

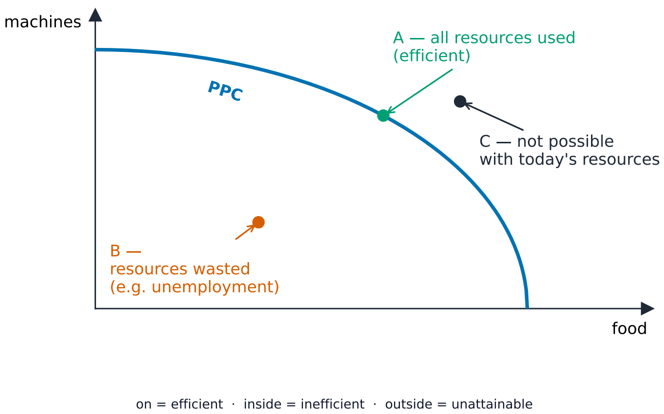
Build the skills to answer exam questions on the **production possibility curve** 生产可能性曲线 (PPC) — points on, inside and outside the curve, **opportunity cost** 机会成本 along it, and **shifts** for growth and decline.

You must be able to:

- draw and label a PPC and interpret points on, inside and outside it
- explain opportunity cost and the shape of the curve
- analyse PPC shifts (economic growth, capital vs consumer goods)

1 Worked examples

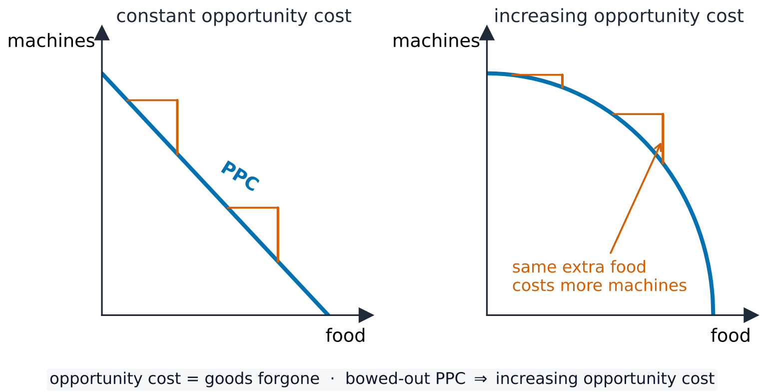
■ Reading a PPC



The PPC shows the maximum output of two goods when resources are fully used

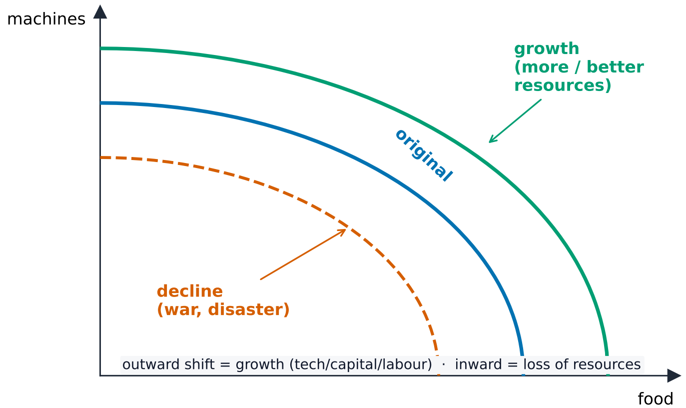
- **On** the curve: all resources used efficiently. **Inside:** waste (e.g. **unemployment** 失业). **Outside:** impossible today (scarcity).

- Moving along the curve shows **opportunity cost** 机会成本 — more of one good means less of the other.
- A **bowed-out** curve = *increasing* opportunity cost; a **straight** curve = *constant* opportunity cost.



The shape of the PPC shows whether opportunity cost is constant or increasing

- The whole PPC shifts **outward** for **economic growth** 经济增长 (more/better resources).



An outward shift of the PPC is economic growth; an inward shift is decline

Answer shapes: an **Explain** [**up to 8**] answer should include a labelled diagram (AO3); **Discuss/Evaluate** [**12**] adds a judgement (AO4).

2 Practice

2.1 State what a point **inside** the PPC shows. [1]

2.2 Define the term *production possibility curve.* [2]

2.3 State two causes of an outward shift of the PPC. [2]

3 Exam-style questions

3.1 A point **outside** a country's PPC represents output that is: [1]

- **A** efficient
- **B** wasteful, with unemployment
- **C** not possible with current resources
- **D** the optimum allocation

3.2 Using a PPC diagram, explain the opportunity cost of a country producing more capital goods. [8]

3.3 Discuss whether producing more capital goods today is always the best choice for an economy. [12]

Solutions

Economics answers are marked by **level of response** against the assessment objectives: award **AO1** knowledge, **AO2** application, **AO3** analysis and **AO4** evaluation.

2.1 that resources are not fully or efficiently used (e.g. unemployment) — the economy could produce more (1).

2.2 a curve showing the maximum combinations of two goods an economy can produce when all its resources are fully and efficiently used (2 for a clear definition; 1 for a partial idea).

2.3 any two of: more resources; better resources / new technology; a larger or more skilled workforce (1 + 1).

3.1 **C**. Outside the PPC is unattainable with current resources.

3.2 *[8]* AO1 1–2 (define PPC/opportunity cost) + **AO3 diagram up to 4** (correctly labelled PPC, axes capital goods vs consumer goods, a movement along the curve) + AO2/AO3 up to 2 — producing more capital goods means moving along the curve, so fewer consumer goods can be made now; that forgone output is the opportunity cost.

3.3 *[12]* AO1/AO2/AO3 up to 8 + AO4 up to 4. **For:** more capital goods raise future productive capacity → the PPC shifts out further → faster growth and more of both goods later. **Against:** fewer consumer goods now means lower living standards today, which may be hard on a poor population. Judgement: investing in capital goods aids long-run growth, but the best balance depends on current living standards and how urgently people need consumer goods now.