Exercise walk-through

1.1 Choice, models and market adjustment

Pearson Edexcel · International A-Level · Economics

Introductory concepts (2)

- The frontier is bowed outward because resources are not equally good at everything. Moving more resources into **capital goods** means using workers and land that are worse and worse at making them, so the **opportunity cost** of each extra unit rises.
- The whole frontier shifts **outward** with more resources, better education or new technology, and **inward** after a war or a natural disaster.
- In a **free market economy** , prices answer them. Incentives are strong, but the result can be very unequal, and markets fail to provide some goods.

Elasticities of demand (4)

- the time period and how durable the good is.
- YED between 0 and 1: a **normal good** that is income inelastic, such as rice in a middle-income country (income up 10%, quantity up 3%: YED $= 0.3$).
- YED above 1: income elastic, such as foreign holidays and cars. As Chinese incomes rose, outbound tourist trips grew from about 10 million in 2000 to about 155 million in 2019.
- YED below 0: an **inferior good** , bought less as people get richer, such as long-distance bus tickets once families can afford a car or a high-speed rail fare.

Price determination, surplus and the price mechanism (4)

- The supply curve meets $P = 0$ at $Q = 20$: sellers would supply the first 20 items even at a price of zero. **Producer surplus** is the rectangle plus the triangle below the price and above supply:
  $PS = 20 \times 20 + \frac{1}{2} \times (100 - 20) \times 20 = 400 + 800 = 1200$ yuan per day.
- **Rationing**: a higher price limits buying to those who value pork most; others switch to chicken.
- **Incentive**: higher profits encourage farmers to restock and invest.
- **Signalling**: the price change tells everyone where resources are now most valued.

Exercise 2.1

2.1 Classify each statement as positive or normative: (a) ”A unit tax of 6 raised the price consumers pay by 4.“ (b) ”The government should not tax necessities.” [2]

positive normative

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positive normative

2.1 (a) Positive – it can be tested against data. (b) Normative – it contains a value judgement (“should”).

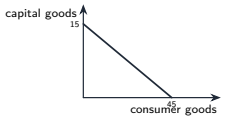
Setup for exercise 2.2

2.2 State one difference between a renewable and a non-renewable resource, and between a free good and an economic good. [2]

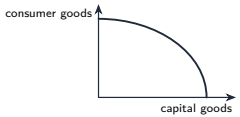
renewable | non-renewable | free good | economic good

2.3 An economy can make 15 capital goods or 45 consumer goods per period on a straight PPF.

(a) What is the opportunity cost of one more capital good? (b) What does a point inside the frontier show? [3]



2.4 For each event, state whether it is a movement along or a shift of the PPF: (a) unemployment falls and unused land returns to production; (b) a new technology improves yields in both sectors. [2]



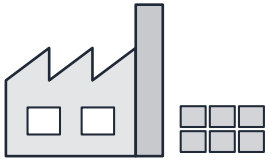
2.5 List the four functions of money. [2]



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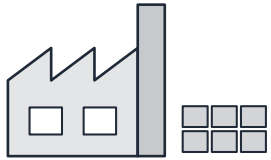
Exercise 2.2

2.6 Why does producing more capital goods today tend to raise future growth? [2]



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2.2 Renewable resources regenerate (timber); non-renewable stocks are finite (coal). A free good needs no sacrifice (air); an economic good requires giving something up.

2.3 (a) $45 \div 15 = 3$ consumer goods per capital good. (b) Feasible but inefficient – resources are unused or misallocated.

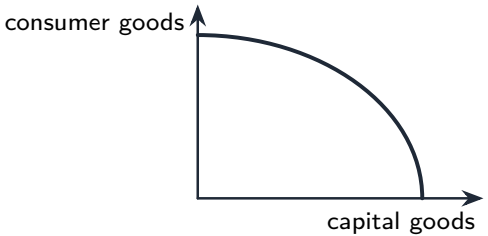
2.4 (a) Movement towards the frontier (from inside) – not a shift, because capacity is unchanged. (b) A shift outward of the whole frontier.

2.5 Medium of exchange; measure of value; store of value; method of deferred payment.

2.6 Capital goods raise the productivity of future production, so more output is possible from the same resources and the frontier shifts outward; the cost is the consumer goods forgone today.

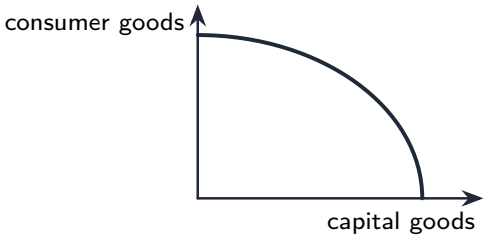
Exercise 3.1

3.1 *(Original.)* Using a PPF diagram, explain how an economy that chooses more capital goods today can achieve economic growth, and state one opportunity cost of that choice. [4]



Exercise 3.1

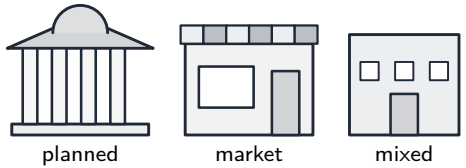
3.1 *(Original.)* Using a PPF diagram, explain how an economy that chooses more capital goods today can achieve economic growth, and state one opportunity cost of that choice. [4]



3.1 Diagram: PPF with capital goods on one axis; a point near the capital axis moves the future frontier outward (growth shown as a second, outer curve). Mechanism: more capital goods raise productivity per worker. Cost: the consumer goods forgone at the chosen point (the opportunity cost along the original frontier). Judgement: the growth is potential, not guaranteed – it assumes the capital is productive and maintained.

Exercise 3.2

3.2 *(Original.)* Give two advantages of a free market economy and two disadvantages of a command economy. [4]

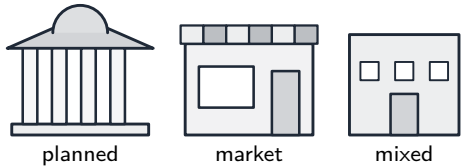


3.3 *(Original.)* Explain one advantage and one disadvantage of the division of labour for a pin factory, with reference to Adam Smith. [3]



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Full solution on next slide

Full solution 3.2

3.2 Free market advantages: the price mechanism allocates without a planner; consumer sovereignty and incentives drive efficiency and innovation. Command disadvantages: the state misreads preferences (no price signals); weak incentives and shortages follow from planning errors.

3.3 Advantage: each worker repeats one task, so speed and skill rise – Smith's pin factory raised output per worker enormously. Disadvantage: work becomes repetitive and skills narrow, and output depends on smooth co-ordination of all tasks.

Local review guidance: positive/normative by the presence of a testable claim vs a value judgement; PPF answers name the margin (cost of ONE more unit) and inside/outside correctly; definitions give the contrast pair, not one side. This is authored classroom guidance.