

Exercise walk-through

6.1

The reasons for international trade

A-Level Economics

Absolute advantage is not the rule for specialisation

International trade lets residents exchange goods and services across borders. To **specialise**, compare what production gives up.

Same resources in each country; maximum outputs

A can make 20 wine or 10 cloth; B can make 5 wine or 5 cloth. Assume straight-line PPCs and unchanged technology. Which country has an absolute advantage? Which should specialise in cloth?

Absolute advantage is not the rule for specialisation

International trade lets residents exchange goods and services across borders. To **specialise**, compare what production gives up.

Same resources in each country; maximum outputs

A can make 20 wine or 10 cloth; B can make 5 wine or 5 cloth. Assume straight-line PPCs and unchanged technology. Which country has an absolute advantage? Which should specialise in cloth?

A has an **absolute advantage** in both goods: it can produce more with the stated resources. But **comparative advantage** means lower **opportunity cost**. Work out both ratios before choosing a product.

Calculate what one extra unit costs

With straight-line PPCs, divide output forgone by output gained:

$$OC_A(\text{cloth}) = \frac{\text{wine forgone}}{\text{cloth gained}} = \frac{20}{10} = 2 \text{ wine/cloth}$$

$$OC_B(\text{cloth}) = \frac{\text{wine forgone}}{\text{cloth gained}} = \frac{5}{5} = 1 \text{ wine/cloth}$$

$$OC_A(\text{wine}) = \frac{\text{cloth forgone}}{\text{wine gained}} = \frac{10}{20} = 0.5 \text{ cloth/wine}$$

$$OC_B(\text{wine}) = \frac{\text{cloth forgone}}{\text{wine gained}} = \frac{5}{5} = 1 \text{ cloth/wine}$$

B gives up less wine per cloth, so has comparative advantage in cloth. A gives up less cloth per wine, so has comparative advantage in wine. A's absolute advantage in both does not remove possible gains from trade.

Find an exchange ratio both sides can accept

Exchange cloth for wine

B gives up 1 wine to produce 1 cloth. A gives up 2 wine to produce 1 cloth. Would exchanging 1 cloth for 1.5 wine benefit both compared with producing that extra unit at home?

Find an exchange ratio both sides can accept

Exchange cloth for wine

B gives up 1 wine to produce 1 cloth. A gives up 2 wine to produce 1 cloth. Would exchanging 1 cloth for 1.5 wine benefit both compared with producing that extra unit at home?

B receives 1.5 wine for cloth that costs it 1 wine: a gain of 0.5 wine per cloth. A pays 1.5 wine for cloth that would cost it 2 wine to make: a saving of 0.5 wine per cloth.

The strict gain range is $1 < \text{wine per cloth} < 2$. At an endpoint one country is indifferent in this model. Real gains also require transport and other trading costs to fit inside the saving.

Exercises 2.1-2.3

2.1 Define the term *comparative advantage*. [2]

2.2 A country can make 30 units of food **or** 10 units of cloth. State the opportunity cost of 1 unit of cloth. [1]

2.3 State one limitation of the theory of comparative advantage. [1]

Exercises 2.1-2.3

2.1 Define the term *comparative advantage*. [2]

2.1

- the ability to produce a good at a lower opportunity cost than another country (2 for a clear definition; 1 for a partial idea)

2.2 A country can make 30 units of food **or** 10 units of cloth. State the opportunity cost of 1 unit of cloth. [1]

2.2

- 1 unit of cloth costs 3 units of food ($30 \div 10 = 3$) (1)

2.3 State one limitation of the theory of comparative advantage. [1]

2.3

- any one of: ignores transport costs; ignores trade barriers; assumes constant costs; specialising is risky if the price falls (1)

Exercises 3.1·3.2

3.1 A country has a **comparative** advantage in a good if it can produce it at a: [1]

- ☐ A higher money price than other countries
B lower opportunity cost than other countries
C larger total quantity than other countries
D higher quality than other countries

3.2 Explain how specialisation according to comparative advantage can raise total world output. [6]

Exercises 3.1-3.2

3.1 A country has a **comparative** advantage in a good if it can produce it at a: [1]

- ☐ A higher money price than other countries
☐ B lower opportunity cost than other countries
☐ C larger total quantity than other countries
☐ D higher quality than other countries

3.1 B

- Comparative advantage means a lower opportunity cost

3.2 Explain how specialisation according to comparative advantage can raise total world output. [6]

3.2

- [6] AO1 1 + AO3 up to 5 – if each country makes the good it gives up least to produce and trades for the rest, resources are used where they are most productive
- total output of both goods rises
- trade lets both countries consume beyond their own PPC

Exercise 3.3

3.3 Discuss whether a country should always specialise in the goods in which it has a comparative advantage. [12]

Exercise 3.3

3.3 Discuss whether a country should always specialise in the goods in which it has a comparative advantage. [12]

3.3

- [12] AO1/AO2/AO3 up to 8 + AO4 up to 4. **For:** specialisation raises efficiency, output and living standards. **Against:** over-reliance on one good is risky if its world price falls; it can cause structural unemployment and the loss of strategic industries; the theory ignores transport costs and barriers. Judgement: specialising on comparative advantage usually raises welfare, but some diversification reduces risk – it depends on the good's price stability and the country's flexibility