



Growth, Trade, Monopoly and Macro Equilibrium

Name: _____

Class: _____

1. Real GDP of an economy rises by 6% while its population rises by 2% in the same year. Other things being equal, which statement is correct?
 - A. Real GDP per capita must fall.
 - B. Real GDP per capita must rise.
 - C. Nominal GDP must fall.
 - D. The HDI must rise.

2. Which of the following would lead to a higher price level and a lower employment level in the short run?
 - A. The government reduces the profits tax rate.
 - B. The Hong Kong dollar appreciates against the currencies of major trading partners.
 - C. The government increases spending on worker retraining that raises labour productivity only in the long run, with no short-run demand effect.
 - D. The prices of imported raw materials increase.

3. In the money market, money demand increases because transactions rise, while the central bank conducts an open-market sale of government bonds. What happens to the nominal interest rate and the equilibrium quantity of money?
 - A. Interest rate decreases; quantity of money increases.
 - B. Interest rate increases; quantity of money may increase or decrease.
 - C. Interest rate may increase or decrease; quantity of money decreases.
 - D. Interest rate decreases; quantity of money decreases.

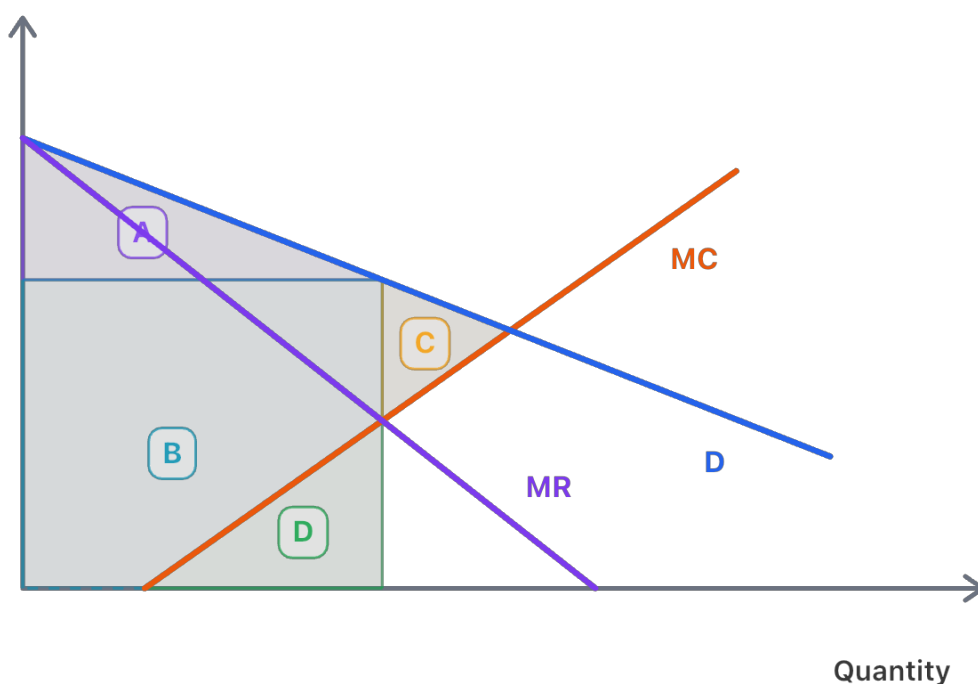
4. A small open economy imports Good X. Under free trade, the domestic price equals the world price P_w . The government now imposes a per-unit tariff on imports of Good X, raising the domestic price to P_t , where $P_t > P_w$. Which of the following is correct after the tariff, compared with the free-trade situation?
 - A. Domestic consumers face a lower price of Good X than under free trade.
 - B. Domestic production of Good X is higher than under free trade.
 - C. Import quantity of Good X is higher than under free trade.
 - D. Tariff revenue is zero because world price is unchanged.

5. A monopoly maximises profit where marginal revenue equals marginal cost. Which statement about simple monopoly pricing is correct?

- A. Price is set equal to marginal cost at the profit-maximising output.
- B. Price is read from the demand curve at the output where MR equals MC.
- C. Marginal revenue is always equal to price for every unit sold.
- D. The monopolist produces the output at which MB equals MC for the last unit.

6. The diagram shows welfare areas for a simple monopoly. Which labelled area is the deadweight loss caused by monopoly output being below the efficient output?

Price



- A. Area A
- B. Area B
- C. Area C
- D. Area D

7. The table shows the amount of shirts or computers that Economy M and Economy N can produce with one unit of resources.

Economy	Shirts	Computers
M	40	10
N	30	15

Which of the following statements are correct?

- I. Economy M has an absolute advantage in producing shirts.
- II. Economy N has a comparative advantage in producing computers.
- III. A mutually beneficial terms of trade can be 1 computer = 3 shirts.

- A. I and II only
- B. I and III only
- C. II and III only
- D. I, II and III

8. Which of the following is NOT a component used in calculating the Human Development Index (HDI)?

- A. Life expectancy at birth
- B. Mean years of schooling
- C. GNI per capita
- D. Income equality

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Answers

1 B

Real GDP per capita is real GDP divided by population.

Approximate growth in real GDP per capita:

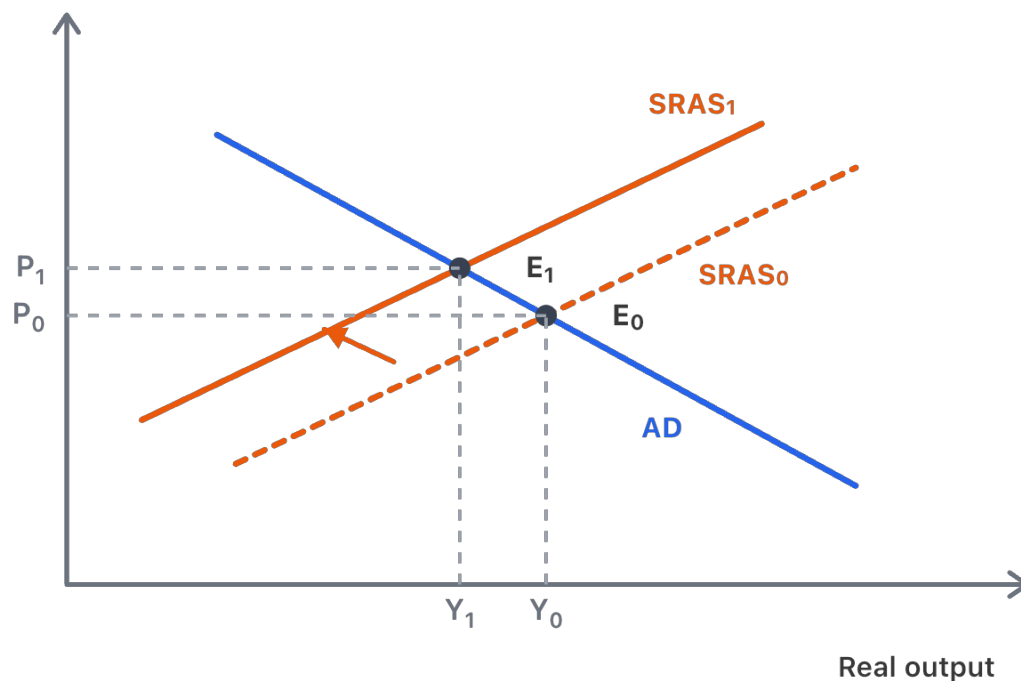
$$6\% - 2\% = 4\%$$

Since real GDP grows faster than population, average real output per person rises. This does not by itself prove that HDI rises, because HDI also includes health and education.

2 D

Employment moves with real output in the short run. A rise in imported raw-material prices raises firms' production costs, shifting SRAS leftward. The leftward SRAS shift raises the price level and reduces real output. Therefore, employment falls.

Price level

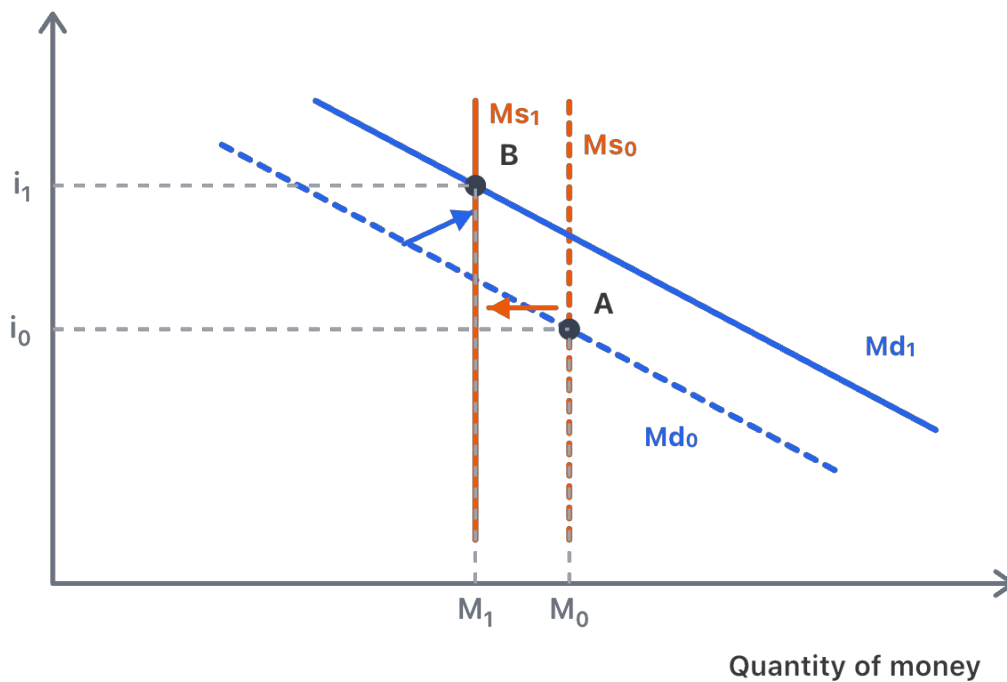


The nominal interest rate is determined where money demand meets money supply

Higher transactions shift money demand rightward, tending to raise both the interest rate and equilibrium money quantity.

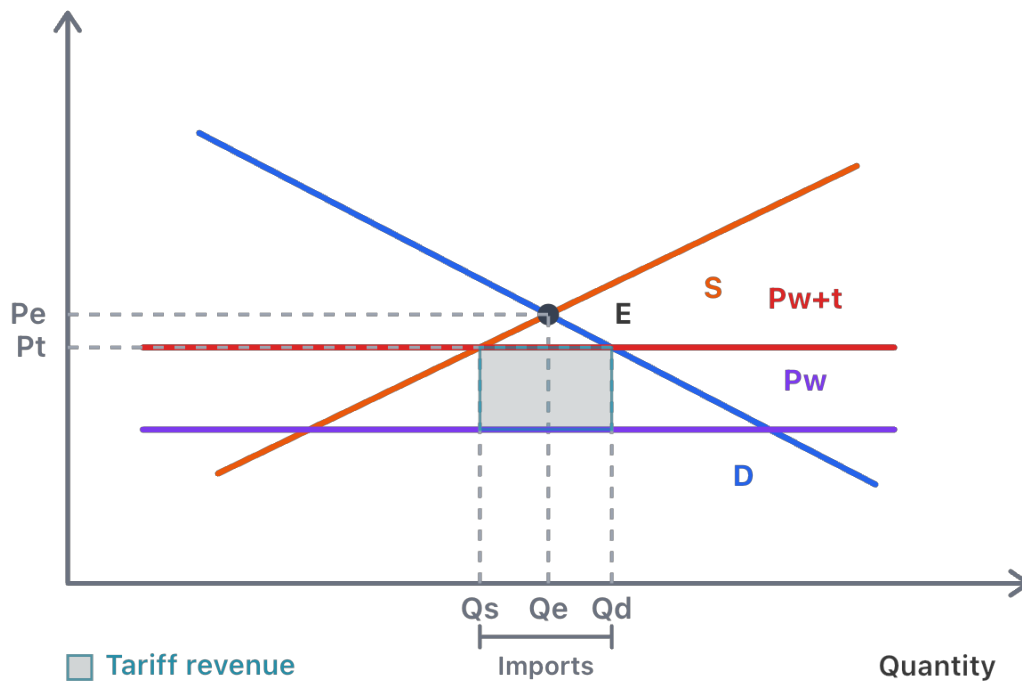
An open-market sale withdraws money from circulation and shifts money supply leftward, tending to raise the interest rate and lower equilibrium money quantity. Both changes raise the nominal interest rate. However, their effects on the equilibrium quantity of money oppose each other, so its final change is indeterminate.

Nominal interest rate

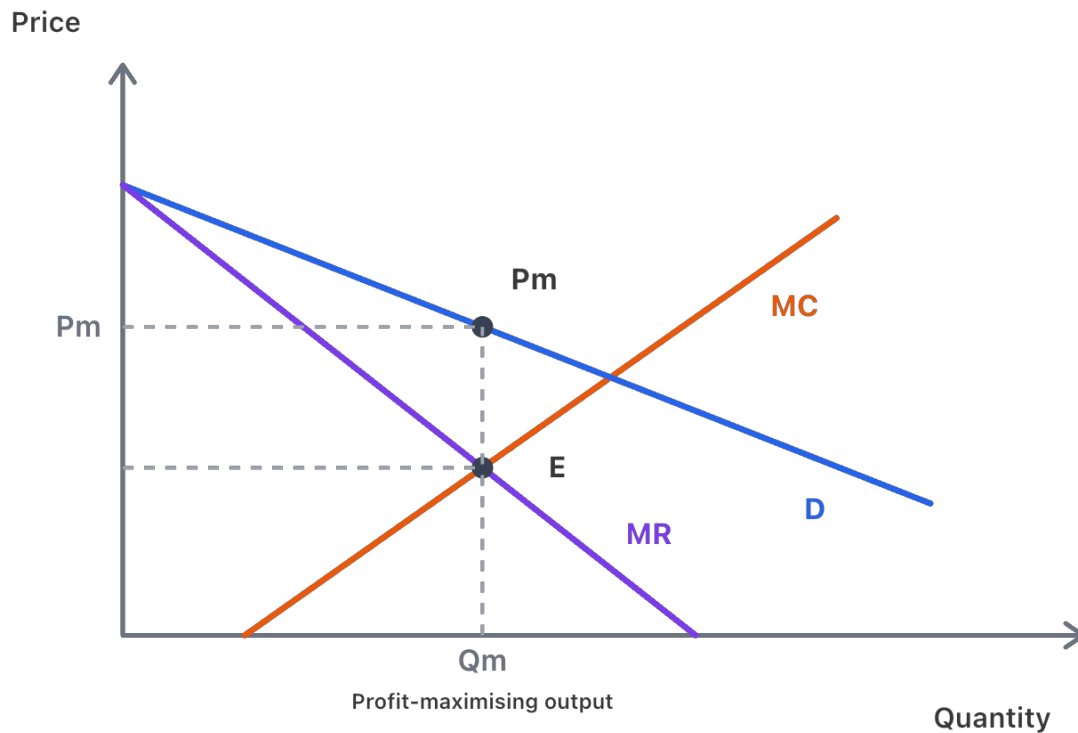


A per-unit tariff raises the domestic price above the world price. At the higher price, domestic producers supply more, consumers demand less, and imports fall. The government collects tariff revenue equal to the tariff per unit multiplied by the quantity imported.

Price



A profit-maximising monopolist first chooses the output where MR equals MC. It then reads the price from the demand curve at that output. For a downward-sloping demand curve, demand lies above MR. Thus, monopoly price is above MR and normally above MC at the profit-maximising output.



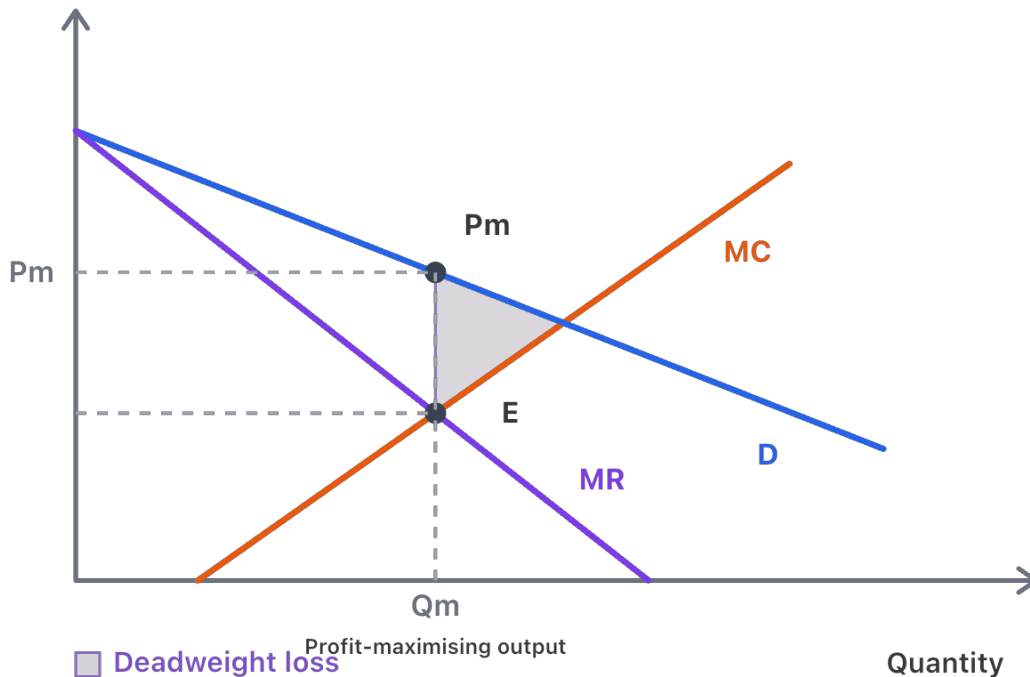
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C

Deadweight loss is the loss of total surplus from units that would create benefits greater than costs but are not produced.

A monopoly restricts output to where MR equals MC, while the efficient output is where demand equals MC. The area between the demand curve and MC over these unproduced units is labelled Area C.

Price



7

D

Absolute advantage means producing more with the same resources. Economy M produces 40 shirts, compared with Economy N's 30, so statement I is correct.

Opportunity cost of one computer:

$$\text{Economy M: } \frac{40}{10} = 4 \text{ shirts}$$

$$\text{Economy N: } \frac{30}{15} = 2 \text{ shirts}$$

Economy N has the lower opportunity cost of computers, so statement II is correct.

Mutually beneficial terms of trade must lie between 2 and 4 shirts per computer.

Therefore, 1 computer for 3 shirts makes statement III correct.

The HDI measures average achievement in three dimensions:

Dimension	Example indicator
Health	Life expectancy at birth
Education	Mean years of schooling
Standard of living	GNI per capita

Income equality is important when evaluating development, but it is not an HDI component.