

3.1 Government microeconomic intervention: reasons

Name: _____ Class: _____ Date: _____

Total: 26 marks

KEY WORDS demerit good 劣值品 • merit good 优值品 • externality 外部性
 • market failure 市场失灵 • negative externality 负外部性

Objective

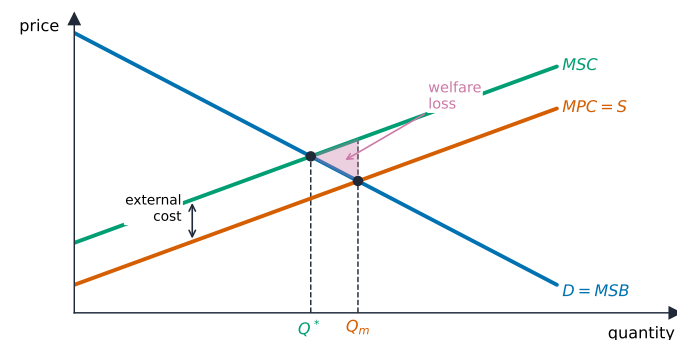
Build the skills to answer exam questions on the **reasons for government intervention** 政府干预的原因 — **market failure** 市场失灵 from **externalities** 外部性, **public goods** 公共物品, **merit/demerit goods** 优值品/劣值品, **monopoly power** 垄断势力 and **asymmetric information** 信息不对称.

You must be able to:

- define market failure and externalities (private, external and social cost/benefit)
- draw the externality diagram and identify the welfare loss
- explain the other sources of market failure

1 Worked examples

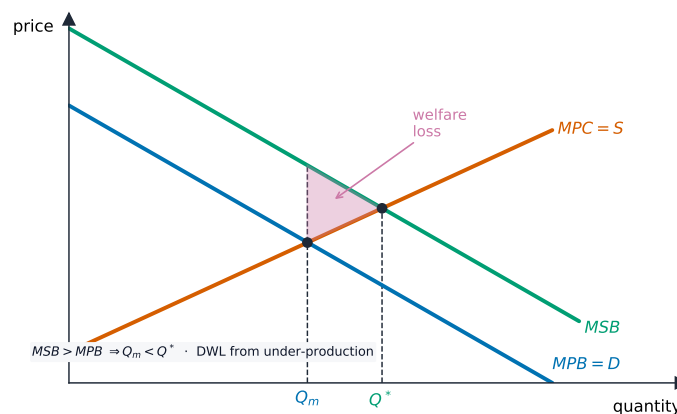
■ Externalities and market failure



$$MSC > MPC \Rightarrow Q_m > Q^* \cdot \text{DWL from over-production}$$

A negative externality: the market produces Q_m , above the social optimum Q^* ; the triangle is the welfare loss

- **Negative externality** 负外部性: **social cost** 社会成本 > **private cost** 私人成本 → market makes **too much**.
- **Positive externality** 正外部性: **social benefit** > **private benefit** → market makes **too little**.



$$MSB > MPB \Rightarrow Q_m < Q^* \cdot \text{DWL from under-production}$$

A positive externality: the market under-produces, below the social optimum Q^*

- Other failures: **public goods** (free-rider), **merit/demerit goods** (information failure), **monopoly power**, **asymmetric information** 信息不对称.

Answer shapes: an **Explain** [up to 8] answer should use a labelled externality

diagram (AO3); **Discuss [12]** adds a judgement (AO4).

2 Practice

2.1 Define the term *negative externality*. [2]

2.2 State the relationship between social cost and private cost when there is a negative externality. [1]

2.3 State two sources of market failure other than externalities. [2]

3 Exam-style questions

3.1 A negative externality of production means that: [1]

- A marginal social cost is below marginal private cost
- B marginal social cost is above marginal private cost
- C marginal social benefit is above marginal private benefit
- D the good is under-produced

3.2 Using a diagram, explain why a good with a negative externality is over-produced by a free market. [8]

3.3 Discuss whether externalities are the most serious cause of market failure. [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 a cost imposed on a third party who is not the buyer or the seller (2 for a clear definition; 1 for a partial idea).

2.2 social cost is greater than private cost (1).

2.3 any two of: public goods (free-rider problem); merit/demerit goods (information failure); monopoly power; asymmetric information; inequality (1 + 1).

3.1 B. A negative externality means marginal social cost is above marginal private cost.

3.2 [8] AO1 1 + **AO3 diagram up to 4** (MPC, MSC above it, Q_m where MPC = MPB, Q^* where MSC = MSB, welfare-loss triangle) + AO2/AO3 up to 3 — the market produces where private cost meets private benefit (Q_m), but the true social cost is higher, so the optimum Q^* is lower → the market over-produces and there is a welfare loss.

3.3 [12] AO1/AO2/AO3 up to 8 + AO4 up to 4. **For:** externalities (pollution, congestion) impose large costs on third parties and are widespread. **Against:** public goods cause *complete* market failure (none supplied), and monopoly or information failures can be just as damaging. Judgement: the most serious failure depends on the market — externalities matter hugely for the environment, but public-good and information failures dominate elsewhere.