

Week 12

A-Level Economics

Homework bundle for this week

本周作业合集

exercises.lol

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3. Government microeconomic intervention

Starter Quiz · 课前小测

A-Level Economics

Name: _____ Score: _____

1. Market failure means the free market:
 - ☐ allocates resources inefficiently
 - ☐ always sets prices too high
 - ☐ has no buyers
 - ☐ is illegal
2. A public good is under-provided by markets because of:
 - ☐ the free-rider problem
 - ☐ high prices
 - ☐ too much competition
 - ☐ government bans
3. An indirect tax on a good shifts the supply curve:
 - ☐ left (supply falls)
 - ☐ right (supply rises)
 - ☐ not at all
 - ☐ downward and right
4. A maximum price (price ceiling) set below equilibrium causes a:
 - ☐ shortage
 - ☐ surplus
 - ☐ higher equilibrium price
 - ☐ fall in demand
5. A Gini coefficient of 0 represents:
 - ☐ perfect equality
 - ☐ perfect inequality
 - ☐ high inflation
 - ☐ full employment
6. A positive externality (like vaccination) tends to be under-produced by the free market.
 - ☐ True ☐ False

7. Asymmetric information means one party in a transaction knows more than the other.
- ☐ True ☐ False
8. Government failure occurs when intervention creates unintended consequences that worsen welfare.
- ☐ True ☐ False
9. A progressive tax takes a larger percentage of income from higher earners.
- ☐ True ☐ False
10. Marginal social cost = marginal private cost plus the _____.
- _____

3. Government microeconomic intervention

Answers · 答案

A-Level Economics

1. allocates resources inefficiently

It produces too much or too little of a good for society — an inefficient allocation.

2. the free-rider problem

Non-excludability lets people free-ride, so private firms can't profit from supplying it.

3. left (supply falls)

A tax raises firms' costs, reducing supply at every price — a leftward shift.

4. shortage

Below equilibrium, demand exceeds supply → a persistent shortage.

5. perfect equality

Gini runs from 0 (perfect equality) to 1 (one person has all income).

6. True

Social benefit exceeds private benefit, so the market produces too little.

7. True

E.g. a used-car seller knows the car's faults better than the buyer.

8. True

E.g. rent caps can reduce the supply of housing over time.

9. True

Progressive taxation is a key tool for reducing income inequality.

10. externality

$MSC = MPC + \text{the external cost imposed on third parties.}$

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

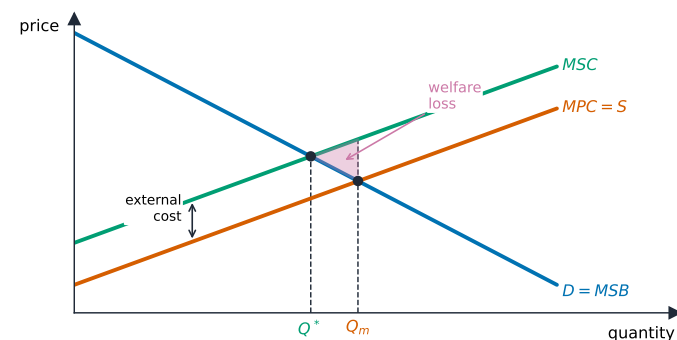
Build the skills to answer exam questions on the **reasons for government intervention** 政府干预的原因 — **market failure** 市场失灵 from **externalities** 外部性, **public goods** 公共物品, **merit/demerit goods** 优值品/劣值品, **monopoly power** 垄断势力 and **asymmetric information** 信息不对称.

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

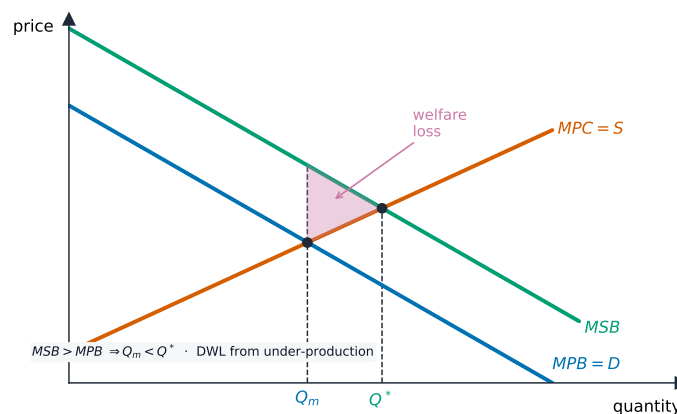
■ Externalities and market failure



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

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.

Name:

A-Level Economics: **w25 13**

16 A government intervenes in the market for good X. It fixes a minimum price above the market equilibrium.

Which situation explains why the government would do this?

	good X	reason for intervention
A	demerit good	to decrease consumption
B	demerit good	to increase consumption
C	merit good	to decrease consumption
D	merit good	to increase consumption

A-Level Economics: **w25 14**

29 In which economic context is the term 'protectionism' usually applied?

- A** the protection of consumers against excessive prices
- B** the protection of employees against exploitation by multinational companies
- C** the protection of local producers against international competitors
- D** the protection of the foreign exchange rate against currency speculators

3.2 Government microeconomic intervention: methods

Name: _____ Class: _____ Date: _____

Total: 25 marks

KEY WORDS subsidy 补贴 • indirect tax 间接税 • minimum price 最低限价
• buffer stock 缓冲库存 • stock 存量

Objective

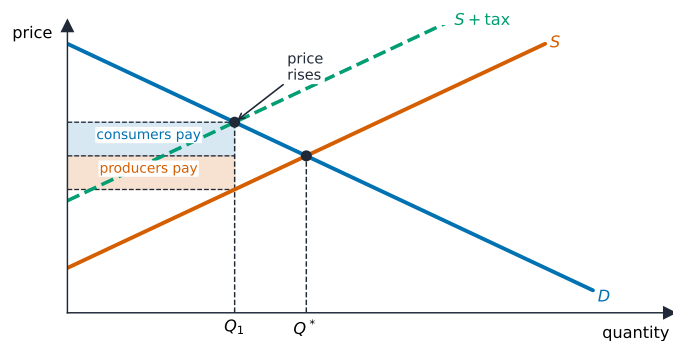
Build the skills to answer exam questions on the **methods and effects of government intervention** 政府干预的方法与效果 — **indirect taxes** 间接税, **subsidies** 补贴, **maximum and minimum prices** 最高/最低限价, **buffer stocks** 缓冲库存, **regulation** 管制, and **government failure** 政府失灵.

You must be able to:

- draw the effect of an indirect tax and a subsidy
- explain maximum/minimum prices and the **incidence of a tax** 税收归宿
- analyse government failure

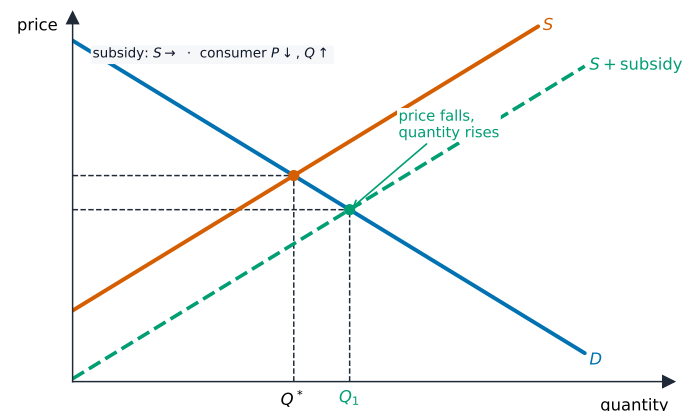
1 Worked examples

■ Taxes, subsidies and price controls



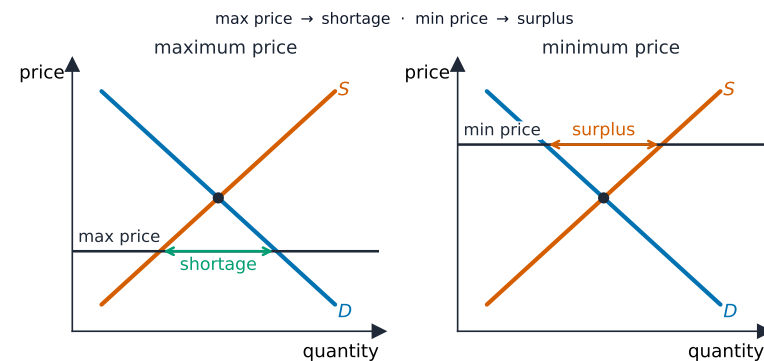
The tax burden is shared between consumers and producers, depending on elasticity

- **Indirect tax** 间接税: shifts supply **left** → higher price, lower quantity (used on demerit goods).
- **Subsidy** 补贴: shifts supply **right** → lower price, higher quantity (used on merit goods).



A subsidy: supply shifts right, price falls and quantity rises

- **Max price** (below equilibrium) → **shortage**; **min price** (above equilibrium) → **surplus**.



Price controls: a maximum price (shortage) and a minimum price (surplus)

- **Tax incidence**: if demand is inelastic, consumers pay most of the tax.
- **Government failure** 政府失灵: intervention makes resource use worse (e.g. a black market).

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

2 Practice

2.1 Define the term *indirect tax*. [2]

2.2 State the effect of a **maximum price** set below the equilibrium price. [1]

2.3 State who bears most of an indirect tax when demand is **inelastic**. [1]

3 Exam-style questions

3.1 A government subsidy to producers will: [1]

- **A** shift supply left, raising the price
- **B** shift supply right, lowering the price
- **C** shift demand right, raising the price
- **D** have no effect on price

3.2 Using a diagram, explain how an indirect tax on a demerit good affects its price and quantity. [8]

3.3 Discuss whether an indirect tax is the best way for a government to reduce consumption of a demerit good. [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 tax on spending that raises a firm's costs and so shifts the supply curve to the left (2 for a clear definition; 1 for a partial idea).

2.2 a shortage (excess demand), because quantity demanded exceeds quantity supplied (1).

2.3 consumers bear most of the tax (1).

3.1 B. A subsidy shifts supply right and lowers the price.

3.2 [8] AO1 1 + **AO3 diagram up to 4** (supply shifts up to $S + \text{tax}$, new higher price, lower quantity) + AO2/AO3 up to 3 — the tax raises producers' costs → supply shifts left → price rises and quantity falls → consumption of the demerit good falls; the burden splits by elasticity.

3.3 [12] AO1/AO2/AO3 up to 8 + AO4 up to 4. **For tax:** cuts consumption, raises revenue, internalises the external cost. **Against:** if demand is inelastic (addiction), consumption falls little; it is regressive, and a black market may form. **Alternatives:** regulation, education, advertising bans. Judgement: a tax helps but works best combined with information and regulation — its success depends on the PED of the good.

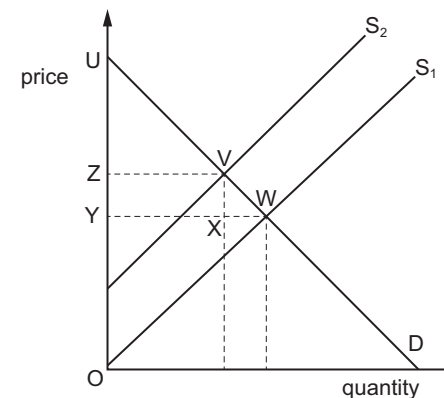
Name: _____

A-Level Economics: **w25 11**

14 Why might a government introduce a minimum price for a product?

- A** to benefit poorer consumers
- B** to encourage consumption of a merit good
- C** to encourage production of a public good
- D** to support the incomes of producers

15 An indirect tax is imposed on a product.



What is the change in consumer surplus?

- A** UWY
- B** UVZ
- C** ZVWY
- D** ZVXY

A-Level Economics: **w25 12**

14 The income Gini coefficient of a country changes from 0.29 to 0.33 over time.

What might explain this change?

- A** an increase in food and energy subsidies
- B** an increase in structural unemployment
- C** an increase in the national minimum wage
- D** an increase in the top rate of income tax

24 What is the most likely reason for a government to introduce a progressive tax?

- A** to discourage the consumption of a particular good
- B** to distribute disposable income more evenly
- C** to increase the disposable income of households
- D** to reduce demand for healthcare services

A-Level Economics: **w25 13**

4 Which change in the way resources are allocated in an economy is consistent with moving from a planned economy to a market economy?

- A** A minimum price guarantee for apple producers is removed.
- B** A new government authority is established to monitor inefficiencies in apple production.
- C** The production of apples is subsidised to increase output.
- D** The sale of apples has a maximum price imposed.

12 The market for good X is in equilibrium when its price is \$10. The government decides to set a maximum price for good X.

Which maximum price will cause the largest change in consumer surplus?

	maximum price for good X (\$)
A	9
B	10
C	11
D	12

A-Level Economics: **w25 14**

12 A government imposes a specific indirect tax on a product that has an inelastic demand curve.

What is the incidence of tax in this case?

- A** The tax falls entirely on the consumer.
- B** The tax falls entirely on the producer.
- C** The tax falls to a greater extent on the consumer than on the producer.
- D** The tax falls to a smaller extent on the consumer than on the producer.

- 2** (a) Explain what is meant by the incidence of an indirect tax **and** consider the extent to which it is possible for the incidence to pass from a producer of a good to a consumer of that good. [8]
- (b) Assess the extent to which a government should subsidise the production of merit goods to increase the consumption of these goods. [12]

OR

A-Level Economics: **s25 11**

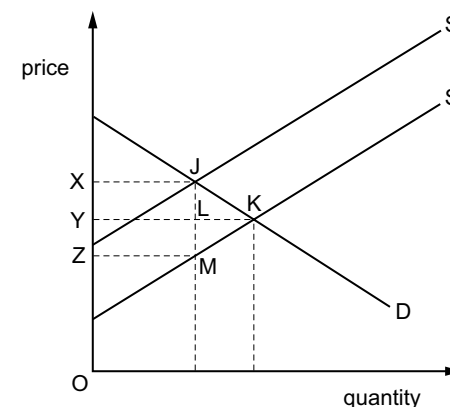
13 A1..... price set below the market equilibrium will cause a2..... of the product, and a3..... price set above the market equilibrium will cause a4..... of the product.

Which words complete gaps 1, 2, 3 and 4?

	1	2	3	4
A	maximum	shortage	minimum	surplus
B	maximum	surplus	minimum	shortage
C	minimum	shortage	maximum	surplus
D	minimum	surplus	maximum	shortage

A-Level Economics: **Specimen 1**

14 The diagram illustrates the effects of placing a specific indirect tax equal to JM on a good.



Which area represents total tax receipts?

- A** JKM
- B** XJKY
- C** XJLY
- D** XJMZ

3.3 Addressing income and wealth inequality

Name: _____ Class: _____ Date: _____ Total: 25 marks

KEY WORDS income 收入 • wealth 财富 • benefits 福利金 • progressive tax 累进税
• income and wealth inequality 收入与财富不平等

Objective

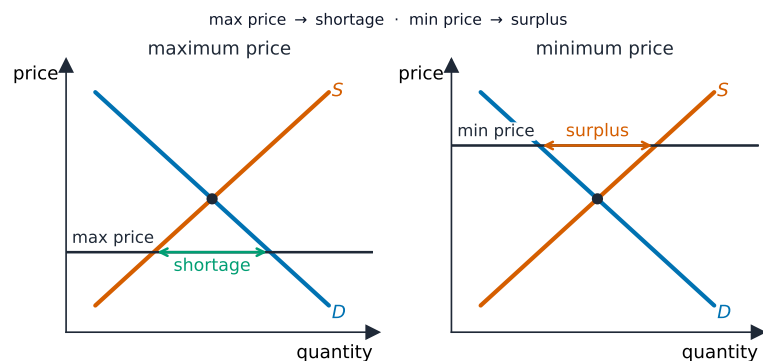
Build the skills to answer exam questions on **income and wealth inequality** 收入与财富不平等 — the difference between **income** 收入 (a flow) and **wealth** 财富 (a stock), the causes of inequality, and the **policies** to reduce it.

You must be able to:

- distinguish income from wealth
- explain the causes of inequality
- analyse policies (progressive tax, benefits, state provision) and the trade-off with incentives

1 Worked examples

■ Reducing inequality



A minimum wage is one policy that affects the income of low-paid workers

- **Income** 收入 = a **flow** 流量 (wages, rent, interest over a period); **wealth** 财富

= a **stock** 存量 (assets owned at a point in time).

- **Causes:** differences in skills/wages, ownership of wealth, inheritance, unemployment.
- **Policies:** **progressive tax** 累进税 (higher % from higher incomes), **benefits/transfer payments** 转移支付, **state provision** 政府提供 of free services → **redistribution** 再分配.
- **Trade-off:** very high taxes and benefits may weaken the **incentive** 激励 to work.

Answer shapes: AO1 + AO2 + AO3 (analysis) + AO4 (a supported judgement *in context*).

2 Practice

2.1 State the difference between *income* and *wealth*. [2]

2.2 Define the term *progressive tax*. [2]

2.3 State two policies a government can use to reduce inequality. [2]

3 Exam-style questions

3.1 A tax is **progressive** if, as income rises: [1]

- **A** the percentage paid in tax rises
- **B** the percentage paid in tax falls
- **C** the percentage paid in tax stays the same
- **D** the amount paid in tax falls

3.2 Explain two policies a government could use to reduce income inequality. [6]

3.3 Discuss whether reducing income inequality always benefits 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 income is a flow of money received over a period (wages, rent); wealth is the stock of assets owned at a point in time (houses, shares) (2 for a clear difference; 1 for a partial idea).

2.2 a tax that takes a larger percentage of income from those on higher incomes than from those on lower incomes (2 for a clear definition; 1 for a partial idea).

2.3 any two of: progressive taxation; benefits / transfer payments; state provision of free services (1 + 1).

3.1 A. A progressive tax takes a rising percentage as income rises.

3.2 [6] For **each** of two policies: AO1 1 + AO3 up to 2 — e.g. *progressive tax*: higher earners pay a larger share → after-tax incomes are closer together → the gap narrows. *Benefits*: cash transfers raise the income of the poorest → less poverty. Maximum 3 each.

3.3 [12] AO1/AO2/AO3 up to 8 + AO4 up to 4. **For:** less inequality can raise consumption (the poor spend more of their income), improve health and reduce social problems. **Against:** high taxes and generous benefits may weaken the incentive to work and invest, and can be costly. Judgement: some redistribution helps, but going too far risks lower growth — the best level depends on how the policies are designed and the size of the incentive effects.

2 A country with a market economy changes to a mixed economy.

When is this change likely to achieve the largest improvement in resource allocation?

	number of demerit goods in the country	Gini coefficient value for the country
A	many	0.4
B	many	0.7
C	few	0.4
D	few	0.7

9 What is a major function of the price mechanism?

- A** providing incentives for government intervention to reduce income inequality
- B** removing shortages by creating incentives for market prices to fall
- C** removing surpluses by creating incentives for market prices to rise
- D** signalling changes in market conditions to producers and consumers

3 (a) The Gini coefficient for South Korea was estimated to be 0.39 in 2019 and 0.33 in 2022.

Explain what this data means, how it might be used by the government of South Korea **and** consider its usefulness. [8]

(b) Assess why it is easier for a government such as that of South Korea to redistribute income rather than redistribute wealth. [12]

Section C

Answer **one** question.

EITHER