

Exercise walk-through

Market failure ■ 2.9

eXercise

You must be able to

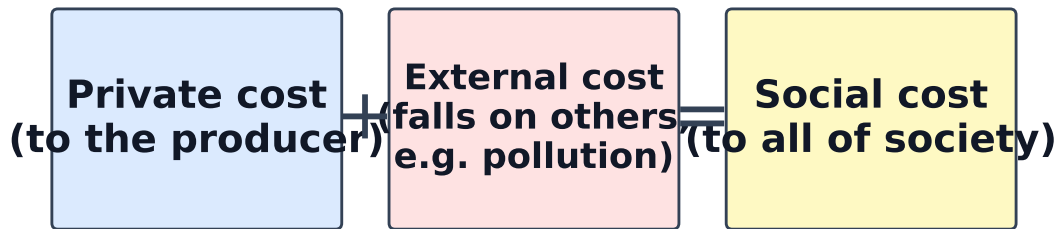
- define private, external and social costs and benefits
- distinguish merit, demerit and public goods
- analyse the causes of market failure

Method — Why markets fail

- **Private cost** 私人成本: to the person acting. **External cost** 外部成本: paid by others (pollution). **Social cost** 社会成本 = private + external.
- **Merit goods** 有益物品 (education): under-produced. **Demerit goods** 有害物品 (cigarettes): over-produced. **Public goods** 公共物品 (street lights): the market makes none.
- **Monopoly** 垄断: one firm $\rightarrow$ high prices, poor quality.

Answer shapes: $K + App + An + Ev$ (a justified judgement, for discuss questions).

Method — Why markets fail



An external cost falls on third parties, so social cost > private cost

Private good

rival + excludable
firms supply it for profit
(e.g. an apple, a phone)

Public good

non-rival + non-excludable
free-rider problem, so the
government must supply
(e.g. street lighting)

Private goods are rival and excludable; public goods are neither, so the market makes none

Practice 2.1 ■ 2 marks

Define the term *external cost*.

Solution 2.1

Method: Why markets fail

Worked steps

a cost of an activity that falls on a third party (others), not the person doing it (2 for a clear definition; 1 for a partial idea).

Practice 2.2 ■ 2 marks

State the difference between a *merit* and a *demerit* good.

Solution 2.2

Method: Why markets fail

Worked steps

a merit good is under-consumed because people undervalue its benefit (education);
a demerit good is over-consumed because people underestimate its harm (cigarettes)
(2 for a clear difference; 1 for a partial idea).

Practice 2.3 ■ 2 marks

Define the term *public good*.

Solution 2.3

Worked steps

a good that everyone can use and no one can be stopped from using, so the market provides none (e.g. street lighting) (2 for a clear definition; 1 for a partial idea).

Exam-style 3.1 ■ 1 mark

A factory that pollutes a river is an example of:

A an external benefit

B an external cost

C a public good

D a merit good

Solution 3.1

A an external benefit

B an external cost 

C a public good

D a merit good

Worked steps

B. Pollution from a factory is an external cost.

Exam-style 3.2 ■ 4 marks

Explain why a free market produces too much of a demerit good.

Solution 3.2

Method: Why markets fail

Worked steps

[4] K 1 + An up to 3 — buyers of a demerit good think only of their private benefit, not the harm to themselves or others → they value it too highly → so they consume too much → the market over-produces it.

Exam-style 3.3 ■ 6 marks

Analyse why public goods are not provided by a free market.

Solution 3.3

Method: Why markets fail

Worked steps

[6] K/App/An — a public good is non-excludable (no one can be stopped from using it) and non-rival (one person's use does not reduce another's) → because non-payers cannot be shut out, people can use it without paying (free riders) → a firm cannot make buyers pay, so earns no revenue → it makes no profit and supplies none → the government must provide public goods instead.