6 Externalities – Part 1

Name: ____________ Class: ________ Date: __________

Vocabulary 词汇

Write each word three times. 把每个单词抄写三遍。

English	中文	Write it 3 times (English)		
externality	外部性			
negative externality	负外部性			
positive externality	正外部性			
Pigovian tax	庇古税			

Recall

Markets usually work well, but not always:

- A factory's pollution harms people who had nothing to do with it.
- A vaccination protects not just you but everyone around you.
- Sometimes the government steps in to fix a problem.

This sheet lines up externalities. Each idea has a worked example.

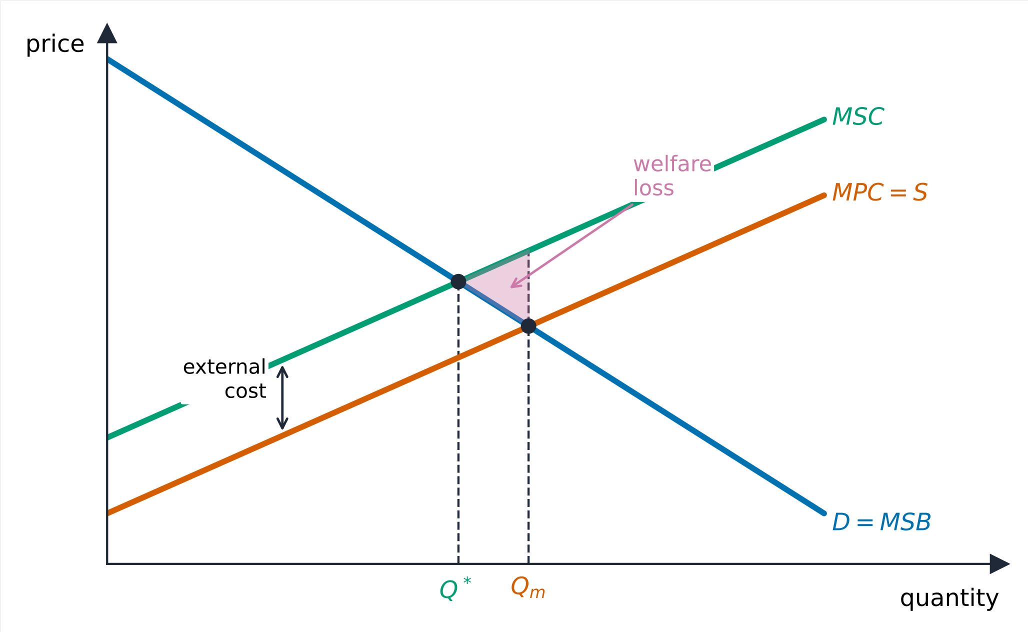
New ideas

1 Externalities

An **externality** 外部性 is a cost or benefit that falls on a **third party** not involved in a transaction –so buyers and sellers ignore it.

2 Negative externalities

A **negative externality** 负外部性 (like pollution) means the true cost to society is **higher** than the private cost, so the market **over-produces**.



3 Positive externalities

A **positive externality** 正外部性 (like vaccination or education) means society benefits **more** than the private buyer, so the market **under-produces**.

4 Fixing them

- A **Pigovian tax** 庇古税 on a negative externality makes producers pay for the harm, cutting output to the right level.
- A **subsidy** on a positive externality encourages more of it.

Worked example. A factory's private cost is $8 per unit, but each unit also causes $3 of pollution. A tax of $3 per unit raises the firm's cost to the true social cost of $11, so it produces the efficient amount.

Watch out: with a negative externality the market makes **too much** (it ignores the harm); with a positive externality it makes **too little** (it ignores the extra benefit). The fixes go in opposite directions.

Practice

Try these in order. The methods are all above.

2.1 State what an externality is. [2]

2.2 Give one example of a negative and one of a positive externality. [2]

2.3 State whether the market over- or under-produces a good with a negative externality. [1]

2.4 A factory's private cost is $10 per unit and it causes $4 of pollution per unit. State the Pigovian tax that would correct this. [2]

2.5 State the tool a government uses to encourage a good with a positive externality. [1]