

2.1 Market failure

Name: _____ Class: _____ Date: _____ Total: 26 marks

KEY WORDS externality • public good • moral hazard

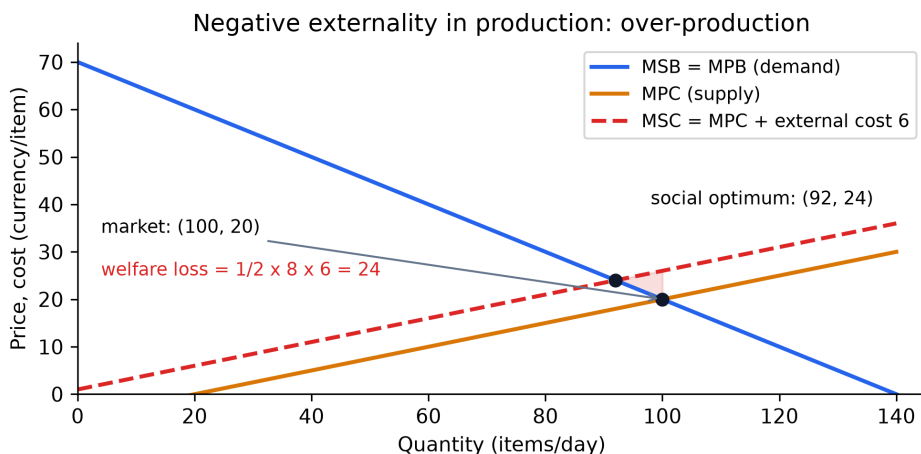
Market failure

Objective

Identify the sources of market failure, analyse positive and negative externalities with marginal analysis diagrams and welfare areas, and explain public goods, information gaps, moral hazard and bubbles (spec 1.3.5, rows 1–6).

1 Key knowledge and worked examples

Failure and externalities. Market failure is output above or below the social optimum. Social cost = private cost + external cost; social benefit = private benefit + external benefit; the social optimum sits where $MSB = MSC$. On the shared model (demand $P = 70 - Q/2$, supply $P = Q/4 - 5$, market (100, 20)), an external cost of 6 per unit makes $MSC = MPC + 6$ and the optimum $Q^* = 92$: the market over-produces by 8 and the welfare-loss triangle is $\frac{1}{2} \times 8 \times 6 = 24$ per day. An external benefit of 6 makes $MSB = MPB + 6$ and $Q^* = 108$: under-consumption of 8 with the same 24 available as a welfare gain.



Original model; the welfare-loss area is computed in the worked examples.

2 Practice

2.1 Define market failure and name any three of its five sources. [3]

2.2 Distinguish a private good from a public good using rivalry and excludability, with one example of each. [2]

2.3 Explain the free-rider problem and its consequence for the private provision of flood defences. [2]

2.4 Give one example of asymmetric information in the used-car market and one in insurance. [2]

2.5 Define moral hazard and state one example from banking. [2]

2.6 In two sentences, describe how a speculative housing bubble forms and how it ends. [2]

3 Exam-style questions

3.1 (Original.) With demand $P = 70 - Q/2$, supply (marginal private cost) $P = Q/4 - 5$ and an external cost of 6 currency units per unit produced, draw and fully label a marginal analysis diagram showing the market equilibrium, the social optimum and the welfare loss, and calculate that loss.

[5]

3.2 (Original.) The same market instead carries an external BENEFIT of 6 per unit consumed. Explain, with a diagram, why the market under-consumes and calculate the welfare gain available.

[4]

3.3 (Original.) Name the externality (positive/negative, production/ consumption) in each context: (a) factory emissions; (b) vaccination; (c) congestion from car use; (d) worker training that other firms can use.

[4]
