

Market failure and equity

IB DP Economics SL Unit 2 sections 2.8-2.9 and the equity question full package

1. Unit 2 market failure at a glance

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IB Economics SL syllabus 2.8-2.9 and the equity question (2.12, assessed at SL through 3.4): externalities and common pool or common access resources, public goods, and the market's inability to achieve equity - all on the shared diagram with external cost or benefit 6, read not solved.

Must-know: $MSC = MPC + \text{external cost}$; $MSB = MPB + \text{external benefit}$; social optimum where $MSB = MSC$ - (92, 24) against the market (100, 20) with a welfare-loss triangle of 24, or (108, 16) with a benefit; public goods non-rival and non-excludable; quintiles 5/10/15/20/50 draw a Lorenz curve with Gini 0.40.

2. Externalities and common pool resources

Externalities and common pool resources

Negative production externalities put MSC above MPC; positive consumption externalities put MSB above MPB. With cost 6: market (100, 20), social optimum (92, 24), over-production 8, welfare loss 24. With benefit 6: optimum (108, 16), under-consumption 8. Pigouvian tax or subsidy at exactly the marginal external value; regulation caps quantity; permits fix the total.

Common pool resources - fisheries, groundwater, atmosphere - are rival but non-excludable: each user costs the others, so without property rights or quotas the resource is over-used, the tragedy of the commons; sustainability frames the long run.

3. Public goods

Public goods

Non-rival: one person's use does not reduce another's. Non-excludable: no one can be stopped from using. Together: the free-rider problem - benefit without paying, so no private revenue, so the market under-provides or never provides.

The state provides from taxation, valuing the good at society's willingness to pay. Contrast pair: common pool resources are non-excludable but RIVAL; public goods are both non-excludable and non-rival.

4. Equity

Equity

Markets answer for whom? by willingness AND ability to pay - they reward resource ownership, not need, so an allocation can be efficient and still deeply unequal.

The Lorenz curve plots cumulative income from the poorest; the Gini is the area between it and the equality line over the whole triangle - quintiles 5/10/15/20/50 read as 0.40: the top fifth takes half. Poverty may be absolute (basic needs unmet) or relative (against the social norm). Progressive taxes, transfers, education and health buy equity at possible incentive cost - the efficiency-equity trade-off every essay evaluates.

Check yourself

Check yourself

Externality definitions with both optima and the 24 welfare-loss triangle drawn; Pigouvian tax and subsidy at the marginal external value; permits and regulation.

Common pool resources against public goods by rivalry and excludability; the free-rider and the tragedy.

The equity failure; Lorenz and Gini read at 0.40; absolute vs relative poverty; the three instruments and their trade-off.