

The mixed economy and externalities

Pearson Edexcel · International GCSE · Economics

Pearson Edexcel International GCSE in Economics (4EC1), specification Issue 3, February 2026. This topic covers spec sections 1.1.5–1.1.6 in full: the mixed economy (11 lettered rows) and externalities (5 rows). The externality diagram reuses the shared model (demand $Q_d = 140 - 2P$, supply $Q_s = 20 + 4P$) with an external cost of 6 per unit.

Must-know for this topic:

Family	Content
sectors	public (state-owned) vs private; ownership, control, aims
three questions	what, how, for whom – answered by market AND state in a mixed economy
public goods	non-excludable + non-rival → free-rider problem → private non-provision
social cost	social cost = private cost + external cost; social benefit = private benefit + external benefit

The mixed economy

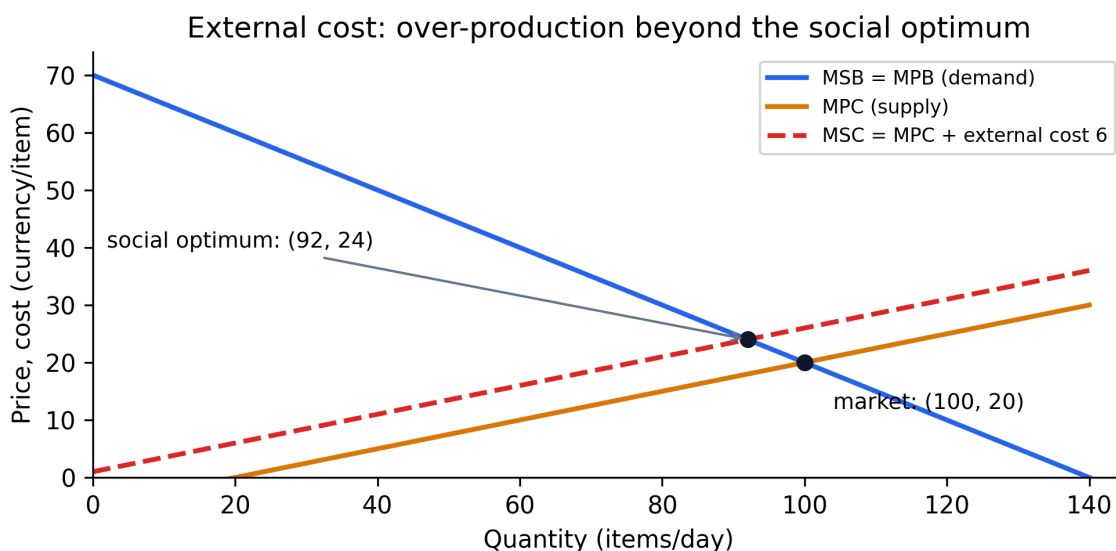
A **mixed economy** contains both a private sector and a public sector (1.1.5a–b). The **private sector** is owned and controlled by individuals and firms aiming (mostly) for profit; the **public sector** is owned and controlled by the state, aiming at welfare and service provision – the difference is ownership, control and aims (1.1.5c). The three questions (WHAT to produce, HOW to produce and FOR WHOM) are answered by BOTH mechanisms in a mixed economy: prices and profit signal the market part; government directs resources to health, education and public goods (1.1.5d).

Market failure is the inefficient allocation of resources – the market produces too much or too little of a good compared with the social optimum (1.1.5e); because of it governments intervene – to correct externalities, provide public goods, and protect consumers (1.1.5f). **Public goods** are non-excludable (no one can be stopped from using them) and non-rival (one person's use does not reduce another's) – street lighting, flood defence. Non-excludability creates the FREE-RIDER problem: no one pays, so no private firm supplies them, so the public sector must (1.1.5g). Both sectors produce goods and services (1.1.5h); their relative importance differs across economies – Cuba against the USA against Sweden (1.1.5i). **Privatisation** is the transfer of ownership from the public to the private sector (1.1.5j); its effects on consumers (lower prices if efficiency is passed on, but higher if a monopoly results), workers (job losses from efficiency drives), businesses (new profit opportuni-

ties) and government (a one-off sale receipt, then lost dividends and possible subsidy savings) (1.1.5k).

Externalities

External costs of production are costs falling on THIRD PARTIES, not on the producer or consumer – pollution, congestion, environmental damage (1.1.6a–b). **External benefits** of consumption are benefits falling on third parties – education, healthcare, vaccinations (1.1.6c–d). The formulae (1.1.6e): $\text{SOCIAL COST} = \text{PRIVATE COST} + \text{EXTERNAL COST}$; $\text{SOCIAL BENEFIT} = \text{PRIVATE BENEFIT} + \text{EXTERNAL BENEFIT}$. Worked model: with demand $Q_d = 140 - 2P$ (marginal private benefit) and supply $Q_s = 20 + 4P$ (marginal private cost), the market trades at (100, 20); if production carries an external cost of 6 per unit, the social optimum sits at (92, 24) – the market OVER-PRODUCES by 8 units because buyers and sellers never see the externality.



Original model: $MSC = MPC + 6$ crosses MSB at (92, 24); the market equilibrium (100, 20) over-produces.

Checklist

- Mixed economy definition; public and private sectors; ownership, control and aims (1.1.5a–c).
- The three questions answered by both mechanisms (1.1.5d).
- Market failure as inefficient allocation; why it forces intervention (1.1.5e–f).
- Public goods: non-excludability, non-rivalry, the free-rider problem and non-provision (1.1.5g).
- Both sectors produce; relative importance differs by economy (1.1.5h–i).

- Privatisation definition and its effects on consumers, workers, businesses, government (1.1.5j–k).
- External costs with three examples; external benefits with three examples (1.1.6a–d).
- The two social-cost/benefit formulae with the $(100, 20) \rightarrow (92, 24)$ worked model (1.1.6e).

Boundary notes: definitions carry one mark each – non-excludable, non-rival, free-rider and privatisation are the most examined. Diagram marks want MSC/MSB curves labelled and the over-production gap identified. All worked numbers are original on the shared model.