

Market Failure

Matthew Williams • Economics • May 17, 2026

Market Failure

Markets are powerful, but they sometimes produce outcomes that are socially undesirable.

Market failure occurs when the free market mechanism misallocates resources — producing too much of some goods, too little of others, or distributing them in ways that reduce overall welfare. Understanding why markets fail explains why governments intervene.

Definition

Market failure is the failure of free markets to allocate resources efficiently, resulting in an outcome that is either allocatively inefficient, inequitable, or damaging to social welfare.

Causes of Market Failure

The syllabus identifies three main causes: public goods, merit goods and externalities, and monopoly.

Public Goods

A **public good** is one that is:

- **Non-excludable:** once provided, it is impossible to prevent any individual from consuming it, whether or not they have paid.
- **Non-rival (non-diminishable):** one person's consumption does not reduce the amount available for others.

Classic examples: national defence, street lighting, flood control systems, public fireworks displays.

The Free-Rider Problem

Because a public good cannot be withheld from those who do not pay, rational individuals have an incentive to **free-ride** — to consume the good without contributing to its cost, hoping others will pay. If everyone reasons this way, no one pays and the good is not provided at all, even if it is highly valued by the community.

This is why public goods must be provided by the government, funded through taxation. The private market fails entirely to supply them.

Remember

A free rider is a person or organisation that benefits from a public good without contributing to its cost. The free-rider problem is the reason public goods cannot be profitably sold in a market — the provider cannot exclude non-payers.

Pure Public Goods vs Mixed Goods

Not all goods fit cleanly into one category. Some goods are **quasi-public** — they have some characteristics of public goods but are not perfectly non-excludable or non-rival. Education and healthcare are sometimes described this way because, while they can be provided privately, underinvestment would occur without public provision.

Merit Goods

A **merit good** is one that would be under-consumed if left entirely to the market because individuals underestimate its benefit to themselves and to society.

Examples: education, healthcare, vaccination programmes, public libraries.

Individuals may not buy enough education or healthcare because:

- They do not fully appreciate the long-term personal benefits.
- The social benefits (a healthier, better-educated workforce benefits everyone) are greater than the private benefits.
- Cost prevents lower-income households from purchasing adequate amounts.

Governments typically subsidise or directly provide merit goods to correct this underproduction.

The opposite — a **demerit good** — is one that is over-consumed because individuals ignore its social costs. Tobacco and alcohol are standard examples. Governments tax demerit goods or restrict their sale to reduce consumption toward the socially optimal level.

Externalities

An **externality** is a cost or benefit that affects a third party — someone who is not directly involved in the transaction between buyer and seller. Externalities are not reflected in market prices, so the market over- or under-produces relative to the social optimum.

Negative Externalities

A **negative externality** imposes a cost on third parties. The social cost of production (or consumption) exceeds the private cost, so the market produces more than is socially optimal.

Negative production externalities: A factory discharges chemical waste into a river, damaging fishing communities downstream. The factory's costs include raw materials and labour, but not the cost imposed on fishing communities. The market overproduces relative to the social optimum.

Negative consumption externalities: A person driving a car creates traffic congestion and pollution borne by others. These costs are not included in the fuel price.

Government responses to negative externalities:

- Taxation (e.g. carbon tax) — raises private cost to equal social cost
- Regulation and legal limits on emissions
- Tradeable pollution permits
- Education campaigns

Positive Externalities

A **positive externality** provides a benefit to third parties. The social benefit exceeds the private benefit, so the market under-produces relative to the social optimum.

Positive consumption externalities: Vaccination against infectious disease benefits the vaccinated individual, but also reduces the risk of transmission for the entire community (herd immunity). The private market will underprovide vaccines because buyers pay only for the personal benefit, not the social benefit.

Positive production externalities: A firm trains workers who then take their skills to other firms across the economy. The training firm bears the full cost but does not capture all the benefit.

Government responses to positive externalities:

- Subsidies — reduce the price to increase consumption/production

- Direct provision by government
- Regulation requiring consumption (e.g. compulsory schooling)

Summary: Externalities and Market Outcomes

Type	Private vs social cost/benefit	Market outcome	Government response
Negative production externality	Social cost > private cost	Overproduction	Tax, regulation
Negative consumption externality	Social cost > private cost	Overconsumption	Tax, restriction
Positive production externality	Social benefit > private benefit	Underproduction	Subsidy, direct provision
Positive consumption externality	Social benefit > private benefit	Underconsumption	Subsidy, compulsion

Monopoly as Market Failure

A **monopoly** is a source of market failure because the profit-maximising monopolist produces at a lower output and charges a higher price than would result under competitive conditions. This means:

- Consumers pay more than they would in a competitive market.
- Output is restricted below the allocatively efficient level (where price = marginal cost).
- Deadweight welfare loss arises — transactions that would be mutually beneficial do not take place.
- The monopolist earns supernormal profit at the expense of consumer welfare.

Governments may respond with: antitrust regulation, breaking up monopolies, price controls, or nationalisation of natural monopolies.

Consequences of Market Failure

The syllabus identifies the following consequences when markets fail to function properly:


Macro-level consequences:

- Unemployment — industries contract, workers are displaced
- Recession and economic depression — reduced economic activity across multiple sectors
- Rise in poverty levels — lower incomes and reduced access to goods and services

- Decline in provision of societal welfare — public services become underfunded

Micro-level consequences:

- Over- or under-pricing of goods and services
- Inefficiency in production — overproduction of harmful goods, underproduction of beneficial ones
- Inefficient use of resources — wrong allocation between sectors

 **Exam Tip**

A common exam question pairs market failure with government intervention. Always explain why the market fails first (which specific cause applies), then explain what the government does to correct it, and consider whether the intervention fully solves the problem or creates new inefficiencies.

Study Vault