

Economics Revision

AS Economics

Market failure

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Market Failure

Market failure – occurs when the price mechanism causes an inefficient allocation of resources and a net welfare loss in society, so resources are not allocated to their best/optimum use. Identifying market failure is difficult because it involves making a value judgement about what is good and what is bad for an economy. However, it can be decided what is good or bad to society. Goods may be bad because of the nature of the good or because some goods are overprovided and over consumed whereas others are underprovided and under consumed.

Externalities

Externalities are costs or benefits which are external to a transaction – third party effects ignored by the price mechanism.

They are known as **indirect costs** and **benefits** or as spillovers from production or consumption of a good or service.

External costs are **negative externalities** and external benefits are **positive externalities**.

Social optimum equilibrium:

- Social optimum equilibrium occurs where the MSC equals MSB.
- The social cost of producing the last unit of output equals the social benefit from consuming it.
- At this point, welfare is maximised.

Private Costs:

- Producers concerned with the private costs of production.
- Costs – wages, rent, payment for raw materials, machinery costs, electricity and gas costs, insurance, packaging, transport costs etc.
- Determines supply.
- Private costs may also refer to the market price a consumer pays for a good/service – cost to the individual.

Social Costs:

- Private costs + external costs = social costs.
- External costs are the difference between private and social costs, or the vertical distance between the two curves.
- The MSC and MPC curves often diverge – external costs increase disproportionately with output.

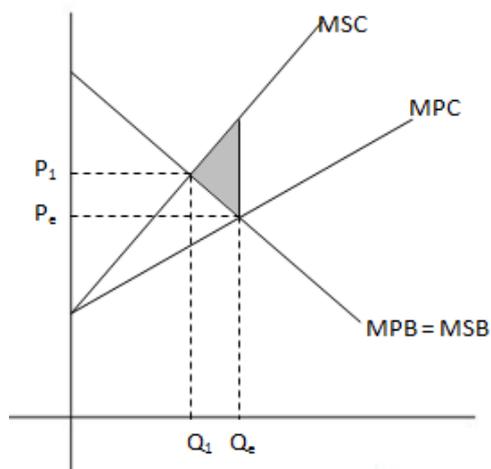
Private Benefits:

- Consumers only concerned with the private benefits or utility from consuming a good or service.
- This is measured by the price consumers are prepared to pay for a good/service – determines demand.
- Private benefits may also refer to the revenue a firm obtains from selling a good/service.

Social Benefits:

- Social benefits = private benefits + external benefits.
- External benefits are the difference between private and social benefits.
- External benefits increase disproportionately with output consumed.

External costs and the triangle of welfare loss:



They may occur in the production/consumption of a good or service, e.g. pollution. On the graph they are represented by the vertical difference between the MSC (marginal social cost) and MPC (marginal private cost) curves.

Free market ignores negative externalities – when external costs are ignored there is underpricing and over-production.

Where negative externalities exist, the MSC of supply is greater than the MPC – thus at the free market equilibrium there is an excess of social costs over social benefits for the marginal output

between Q_e and Q_1 .

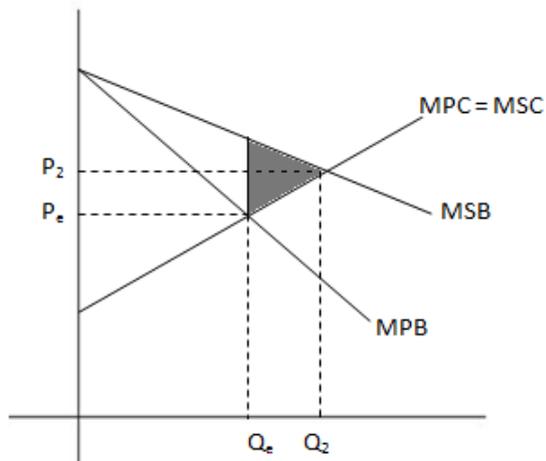
The range of output where social costs exceed the private benefits is shown by the shaded region or 'deadweight welfare loss'.

If a good with external costs is left to market forces, it is likely that welfare would be reduced due to the failure of market forces to account for the impact of its consumption.

Policies to tackle negative externalities:

- Bans – however in reality the good is still consumed e.g. on the black market and the range of output where it would have been socially beneficial (where MPB exceeds MSC) to produce the good is eliminated. A ban is only justified if the MSC always exceeds the MPB (the MSC curve is always above the MPB curve).
- Taxes – indirect taxation shifts the supply curve to the left, limiting output and pushing up the price. Thus, if the tax is set at a level equal to the external cost per unit then the supply curve becomes the marginal social cost rather than the marginal private cost curve SO the equilibrium becomes the social optimum equilibrium. The externality is *internalised*.
- Subsidising alternatives – decreases price of substitutes with less external costs.
- Compulsory consumption – making alternatives compulsory e.g. enforced recycling BUT policing, monitoring, legal enforcement etc. may be expensive.
- Regulation – regulated by government legislation – e.g. alcohol and cigarettes have age limits.
- Cap and trade/pollution permit trading – solution to limiting carbon dioxide emissions (on a local, national or global level) is to use a scheme of permit trading.
- Personal carbon allowances – individuals allocated a maximum level of emissions with any surplus being tradable.

External Benefits and the triangle of welfare gain:



under-production.

External benefits may occur in the production/consumption of a good/service, e.g. recycling of waste materials promoting sustainable, economic growth (less in landfills etc.) They aren't accounted for by the producer/consumer – this tends to lead to underproduction and consumption in a free market, with MSB exceeding MPB. This under allocation is a form of market failure.

Free market ignores positive externalities – when external benefits are ignored there is

The excess of social benefits over social costs is shown by the shaded triangle.

Policies to increase positive externalities:

- Subsidies – government increases the incentive to supply goods with positive externalities through the use of subsidies. This internalises the externality by including the full social benefits in the market price of the good.
- Regulation and compulsory consumption – compulsory minimum school leaving ages and compulsory motor insurance – increase demand for the good forcibly.
- Property rights – patent system allows inventors and innovators to enjoy exclusive use of new ideas for financial gain – without enforcement of such laws, entrepreneurs have little incentive to develop technology which would easily be copied by competitors.

Merit and Demerit Goods

Merit Goods:

1. Associated with positive externalities in consumption.
2. Suffer from information failure – consumers don't realise the long run benefits.
3. Underprovided due to information failure and positive externalities.

e.g. healthcare, education

Demerit Goods:

1. Associated with negative externalities.
2. Information failure – customers don't realise the long run costs.
3. Overprovision due to the previous characteristics.

e.g. smoking, alcohol, junk food

Signalling function of price:

- Merit and demerit goods can be explained with a breakdown of the signalling mechanism.
- Information inaccurate – supply and demand is based on inaccurate information therefore the output equilibrium is unlikely to be socially desirable.

Value judgements:

- Extent to which a market fails under merit and demerit goods involves value judgements – putting a numerical value on externalities isn't easy and different groups will value them differently.
- Governments may have different views on how much they should intervene too.

Policies:

- Indirect taxation – reduces quantity of demerit goods.
- Subsidies – increase quantity of merit goods.
- Regulation – enforces more/less consumption.
- Direct provision – e.g. with education.
- Provision of information – overcomes information failure.

Public Goods

Some goods aren't produced at all through the markets despite offering benefits to society – this is known as a **missing market** and goods of this type are called **public goods**.

Examples: national defence, criminal justice system, lighthouses, lampshades.

Public goods are:

- **Non Excludability** – once a good has been produced for one person, its consumption by someone else can't be prevented (they can't be excluded from consumption).
- **Non Rivalry** – as more people consume a good/enjoy its benefits the amount available for others isn't reduced – non-diminishing.

Private Goods:

- Rivalry and excludability in consumption.
- E.g. a mars bar – others are directly prevented from consuming that particular bar.
- Owners of private goods can use private property rights which prevent others from consuming them.

Under provision of public goods:

For two reasons:

- 1) **Free Rider problem** – automatically provided for all – not possible for firms to withhold the good from consumers who refuse to pay for it. The rational consumer would wait for someone else to provide the goods then reap the rewards by consuming it for free. However, if everyone waits it may never be provided. Non excludability – price mechanism can't develop as free riders won't pay.
- 2) **Valuation problem** – difficult to measure the value obtained by consumers of public goods – hard to establish a market price. In the interests of consumers to under-value the benefit so they pay less, and in the interests of producers to over-value the benefit in order to charge more for it. Uncertainty over valuation may deter firms from providing public goods.

Government provision of public goods:

- Mixed economy – government tends to provide public goods in order to correct market failure.
- Raises funds from taxation to pay for their provision.
- Actual quantity provided will be less than the amount required for achieving the socially optimum position.

Quasi or non-pure public goods:

- Elements of both public and private goods.
- Partially provided by the free market.
- E.g. roads – it is possible to exclude people from driving on them (e.g. tolls) but they have public good elements because they are non diminishable except during rush hour.

Imperfect Market Knowledge

Symmetric Information:

- It is assumed in a transaction that consumers and producers have perfect market information on which to make their economic decisions.
- This is known as **symmetric** information – consumers and producers have perfect and equal market information on a good/service.
- It leads to an efficient allocation of resources.

Asymmetric Information:

- Realistically – consumers/producers have imperfect and unequal market knowledge – could lead to a misallocation of resources – **asymmetric information**.
- Producers may know more than consumers e.g. doctors.
- Consumers may have more market information e.g. a consumer may conceal information about himself while purchasing insurance policies.

Labour immobility

Mobility of Labour is the ability of workers to change from one job to another. The fact that unemployment exists indicates that labour markets don't often work efficiently.

Some unemployment may exist while people search for jobs and fill them, and this is called **frictional unemployment**.

A more serious type of unemployment is **structural unemployment**, where there is a mismatch of skills and location between job seekers and employers. This causes labour immobility.

Geographical immobility refers to the obstacles which prevent labour from moving between areas to find work e.g. family/social ties, financial costs involved with moving, imperfect market knowledge on available work, regional variations in house prices and living costs, lack of affordable housing in many UK areas.

Occupational immobility refers to the obstacles which prevent labour from changing their type of occupation to find work. There are several causes, e.g. insufficient education, training, skills, work experience.

Government measures to increase labour mobility:

Geographical:

- Relaxation of planning laws – enable construction firms to build housing (especially in green belt areas in SE England.
- Increasing construction of social housing (council properties, housing associations etc.)
- Offering housing subsidies to groups of workers where acute shortages exist, e.g. teachers, nurses, fire fighters in SE England. Subsidies may include mortgage relief, shared ownership and relocation grants.
- Improving operation of Job Centres – more information available on job vacancies in any area.

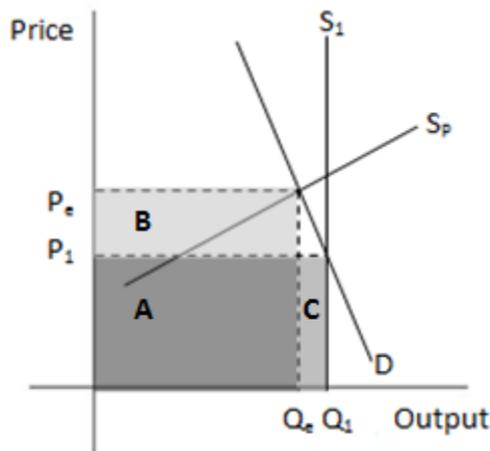
Occupational:

- Increased provision of training schemes, especially for the unemployed – includes subsidies to private sector companies to offer training schemes.
- Increased provision of further education – vocational education courses/apprenticeships.
- Increased provision of higher education – increasing access to student loans/limiting tuition fees.

Unstable Commodity Markets

Commodities are raw materials used in the production of goods.

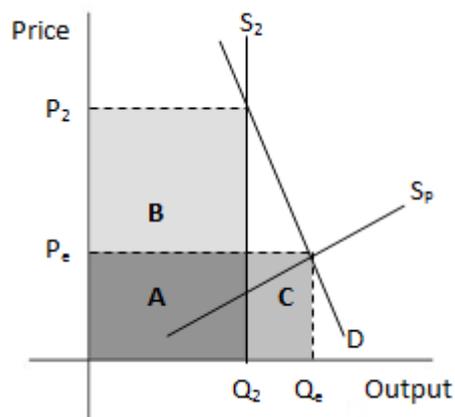
Commodity markets have fluctuating prices and producer incomes which make it difficult to plan for future investment programmes/production due to external shock factors e.g. weather. This is most prevalent in agricultural markets where climate can affect supply.



Planned output is Q_e and price P_e, leading to planned revenue of AB.

However ideal weather increases supply to S₁ – price falls to P₁ (supply is drawn as perfectly price inelastic as the length of the growing season means no more can be produced until the following year).

Revenue falls to AC – ‘good’ harvest actually decreases revenue and profits.



Planned output is Q_e and planned price is P_e, with a planned revenue of AC.

However poor weather decreases supply to S₂ – price rises to P₂.

Revenue rises to AB – ‘bad’ harvest actually increases revenue and profits as demand for agricultural commodities tends to be price inelastic.

Significance of PED and XED:

- Uncertain supply – goods tend to be price inelastic – farmers may make huge profits one year and huge losses the next – market failure.
- Long run – supply of agricultural commodities has increased due to technology – e.g. GM crops – however increase in demand isn't so big – commodities become inelastic since each individual has a limited food intake.
- Implications – further decreases in the real price of commodities and decreases in revenue for farmers.
- Rapid economic growth in China/India – increased demand for commodities pushes up prices and revenues. Use of biofuels also led to higher food prices.

Significance of time lags:

- Length of the growing season – time lags between farmers making the decision to sow seeds/raise livestock and the actual harvest of crops/sale of meat.
- Free market – may cause cyclical fluctuations in prices and farm incomes.