WJEC (Eduqas) Economics A-level

Microeconomics

Topic 7: Market Failure

7.1 Understanding market failure

Notes

- Market failure occurs when the free market fails to allocate resources to the best interests of society, so there is an **inefficient allocation of scarce resources.**
- Economic and social welfare is not maximised where there is market failure.
- Efficiency occurs when consumer and producer surplus are maximised at the free market equilibrium output.

Types of market failure:

- **Externalities**

  An externality is the cost or benefit a third party receives from an economic transaction outside of the market mechanism. In other words, it is the spill-over effect of the production or consumption of a good or service.

- Externalities can be **positive** (external benefits) or **negative** (external costs).

- Negative externalities are caused by **demerit goods.** These are associated with information failure, since consumers are not aware of the long run implications of consuming the good, and they are usually overprovided. For example, cigarettes and alcohol are demerit goods. The negative externality to third parties of consuming cigarettes is second-hand smoke or passive smoking.

- Positive externalities are caused by **merit goods.** These are associated with information failure too, because consumers do not realise the long run benefits to consuming the good. They are underprovided in a free market. For example, education and healthcare are merit goods. The positive externality to third parties of education is a higher skilled workforce.

- The extent to which the market fails involves a value judgement, so it is hard to determine what the monetary value of an externality is. For example, it is hard to decide what the cost of pollution to society is. Different individuals will put a different value on it, depending on their own experiences with pollution, such as how polluted their home town is. This makes determining government policies difficult, too.

- **Private costs**

- Producers are concerned with private costs of production. For example, the rent, the cost of machinery and labour, insurance, transport and paying for raw materials are private costs.
- This determines how much the producer will supply.
- It could refer to the market price which the consumer pays for the good.
- **Marginal private cost** is the cost to a firm of producing one extra unit.

- **Social costs**

- This is calculated by private costs plus external costs
- On a diagram, external costs are shown by the vertical distance between the two curves. In other words, external costs are the difference between private costs and social costs.
- It can be seen that marginal social costs (MSC) and marginal private costs (MPC) diverge from each other. External costs increase disproportionately with increased output.
- **Marginal social cost** is the extra cost on society derived per extra unit consumed.
- **Marginal social cost = marginal external cost + marginal private cost**

- **Private benefit**

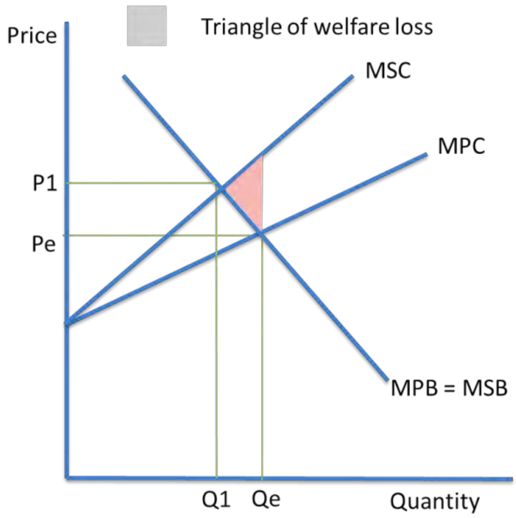
- Consumers are concerned with the private benefit derived from the consumption of a good. The price the consumer is prepared to pay determines this.
- Private benefits could also be a firm’s revenue from selling a good.

- **Social benefit**

- Social benefits are private benefits plus external benefits.
- On a diagram, external benefits are the difference between private and social benefits.
- Similarly to external costs, external benefits increase disproportionately as output increases.
- **Marginal social benefit** is the extra benefit on society derived per extra unit consumed.
- **Marginal social benefit = marginal external benefit + marginal private benefit**

- **Social optimum position:**

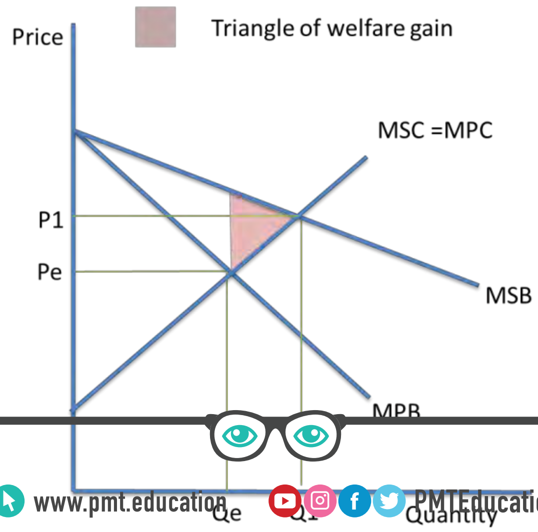
- This is where MSC = MSB and it is the point of maximum welfare.
- The social costs made from producing the last unit of output is equal to the social benefit derived from consuming the unit of output.



External costs of production:

- External costs occur when a good is being produced or consumed, such as pollution.
- They are shown by the vertical distance between MSC and MPC.
- The market equilibrium, where supply = demand at a certain price, ignores these negative externalities. This leads to over-provision and under-pricing.
- With negative externalities, MSC>MPC of supply. At the free market equilibrium, therefore, there are an excess of social costs over benefits at the output between Q1 and Qe.
- The output where social costs > private benefits is known as the area of **deadweight welfare loss**, shown by the triangle in the diagram.
- The market fails to account for the negative externalities that occur from the consumption of this good, which would reduce welfare in society if it was left to the free market.

External benefits of production:



- An example of an external benefit from the production or consumption of a good or service could be the decline of diseases and the healthier lives of consumers through vaccination programmes.
- Since consumers and producers do not account for them, they are underprovided and under consumed in the free market, where MSB>MPB. This leads to market failure.
- The triangle in the diagram shows the excess of social benefits over costs. It is the area of **welfare gain.**

- **The under-provision of public goods**
  Public goods are non-excludable and non-rival, and they are underprovided in a free market because of the free-rider problem.
- Public goods are missing from the free market, but they offer benefits to society. For example, street lights and flood control systems are public goods.

- They are **non-excludable** so by consuming the good, someone else is not prevented from consuming the good as well, and they are **non-rival,** so the benefit other people get from the good does not diminish if more people consume the good.

- The non-excludable nature of public goods gives rise to the **free-rider** problem. Therefore, people who do not pay for the good still receive benefits from it, in the same way people who pay for the good do. This is why public goods are underprovided by the private sector: they do not make a profit from providing the good since consumers do not see a reason to pay for the good, if they still receive the benefit without paying.

- Public goods are also underprovided because it is difficult to measure the value consumers get from public goods, so it is hard to put a price on the good. Consumers will undervalue the benefit, so they can pay less, whilst producers will overvalue, so they can charge more.

- Governments provide public goods, and they have to estimate what the social benefit of the public good is when deciding what output of the good to provide. They are funded using tax revenue, but the quantity provided will be less than the socially optimum quantity.

- **Private goods** are rival and excludable. For example, a chocolate bar can only be consumed by one consumer. Moreover, private property rights can be used to prevent others from consuming the good.

- **Information gaps**
  It is assumed that consumers and producers have perfect information when making economic decisions. However, this is rarely the case, and this imperfect information leads to a misallocation of resources.

- **Monopolies**
  Since the consumer has very little choice where to buy the goods and services offered by a monopoly, they are often overcharged. This leads to the under-consumption of the good or service, and therefore there is a misallocation of resources, since consumer needs and wants are not fully met.

- **Inequalities in the distribution of income and wealth**
  There is an unequitable distribution in income and wealth. Income refers to a flow of money, whilst wealth refers to a stock of assets. This can lead to negative externalities, such as social unrest.

- **An absence of private property rights**
  Consumers and producers have a right of ownership of the goods they produce where there are property rights. This encourages entrepreneurship and inventions, since ideas are protected. However, without these rights, markets become inefficient. Resources could be over-exploited or misused, which can lead to market failure.

- **Volatile prices**
  Commodity prices are usually unstable, especially in the short run. The changes in supply affect the price of commodities, which is due to weather patterns and growing conditions. For example, food producers face unstable prices. This can mean incomes are fickle and unreliable, which can make it hard to make investments. It can lead to a misallocation of resources.