5 Revision – Market failure

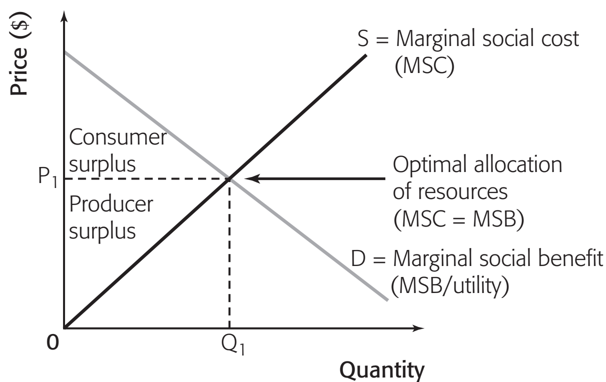
Community surplus: The welfare of society that is made up of consumer surplus plus producer surplus.

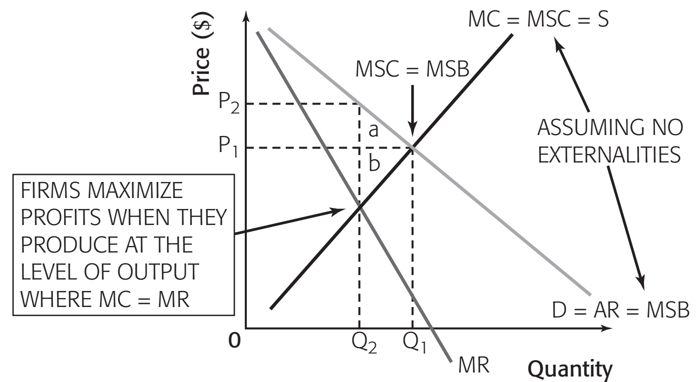
Social efficiency: Exists when community surplus is maximized. It is where MSC = MSB.

Market failure: A market is said to be failing when it produces at a level where community surplus is not maximized, i.e. where MSC does not equal MSB.

Market failure – imperfect competition

Monopolists, and other imperfect markets, restrict output in order to push up prices and maximize profits. The result is that they do not produce at the socially optimum level of output, Q_1, where MSC = MSB, as we see below on the left. Instead, they produce at Q_2, as shown on the right. There is a loss of community surplus of a + b.





Consumer surplus + Producer surplus = Community surplus

Governments may try to reduce this market failure by intervening to reduce the power of the monopoly by:

- using legal measures to make the market more competitive, by making mergers and takeovers more difficult to achieve
- setting up regulatory bodies, monopolies watchdogs, to take action if they feel that the public interest is being harmed.

Market failure public goods, merit goods and demerit goods

Public goods are goods that would not be provided at all in a free market. Since they are goods that are considered to be of benefit to society, this lack of provision is considered to be a market failure.

The reason for non-provision is because public goods have two characteristics.

1. They are non-excludable – it is impossible to stop other people consuming them once they have been provided.
2. They are non-rivalrous – one person consuming them does not prevent another person consuming them as well.

Governments may try to reduce this market failure as follows.

- They may provide the goods themselves, for example national defence or flood barriers. The use of taxes to fund the provision spreads the cost over a large number of people, who would not be prepared to pay individually.
- They may subsidize private firms, covering all of the costs, to provide the goods.

Merit goods are goods that would be under-provided by the free market, and so would be under-consumed. Since they are goods that are considered to be of benefit to society, this under-provision is considered to be a market failure. Examples would be education, health care, sports facilities and the opera. All public goods are merit goods.

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Governments may try to reduce this market failure by:

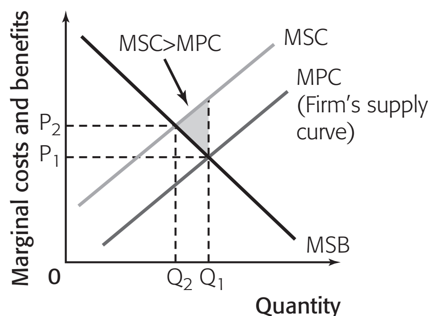
- direct provision of more-important merit goods, such as education or health care
- subsidization of less-important merit goods, such as sports facilities and the opera.

De-merit goods are goods that would be over-provided by the free market, and so over-consumed. Since they are goods that are considered to be harmful to society, this over-provision is considered to be a market failure. Examples would be child pornography, hard drugs, cigarettes and alcohol.

Governments may try to reduce this market failure by:

- completely banning the worst of these goods, for example child pornography and hard drugs
- taxing relatively less-damaging goods, such as cigarettes and alcohol. The level of the tax reflects the level of the damage.

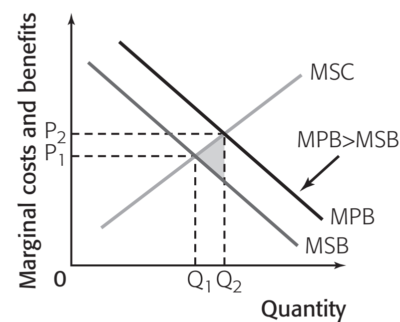
Market failure – negative externality of production



These happen when the production of a good or service creates external costs that are harmful to **third parties**, e.g. when a factory pollutes a river with waste. The costs to society are the costs of the firm plus the external costs that the firm creates, but does not pay for. The good or service is over-produced and so there is a **welfare loss**. The government could:

- tax the firm to recover the external costs
- legislate to ban the firm or to set environmental standards
- issue tradable emission permits.

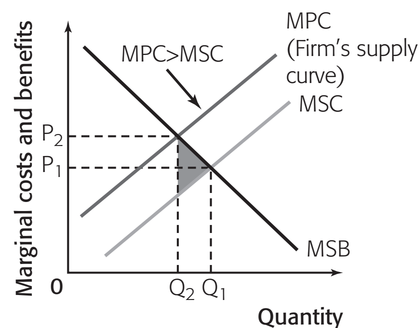
Market failure – negative externality of consumption



These happen when the consumption of a good or service creates external costs that are harmful to **third parties**, e.g. through secondary smoking or cars and air pollution. The benefits to society are less than the benefits to the consumer, because there is negative utility suffered by the third parties. The good or service is over-consumed and so there is a **welfare loss**. The government could:

- ban consumption of the good or service
- impose indirect taxes on the good or service
- provide education and negative advertising to reduce demand for the good or service.

Market failure – positive externality of production



These happen when the production of a good or service creates external benefits that are good for **third parties**, e.g. when a factory provides training for employees. The costs to the firm are production costs plus the external costs of training, which society does not have to pay for. The good or service will be under-produced and so there is a **potential welfare gain**, if output is increased to the point where MSC = MSB. The government could:

- subsidize the firm to reduce the firm's costs
- provide the training itself.

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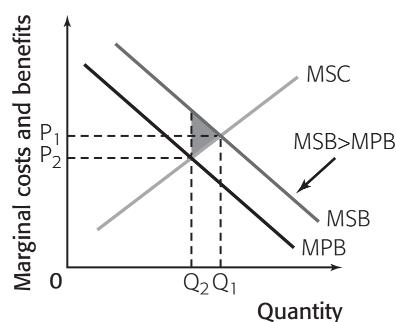
Market failure – positive externality of consumption



These happen when the consumption of a good or service creates external benefits that are good for **third parties**, e.g. having vaccinations or using deodorant. The benefits to society are greater than the benefits to the consumer, because there is positive utility gained by the third parties. The good or service will be under-consumed and so there is a **potential welfare gain**, if consumption is increased to the point where MSC = MSB. The government could:

- subsidize the supply of the good or service
- use positive advertising to increase demand for the good or service
- pass laws making consumption of the good or service obligatory.

Market failure – other causes

The immobility of factors of production

In a perfect market, in theory, resources move easily between uses, attracted by higher factor payments. In reality, this does not happen so easily and there are shortages of factors and time lags, e.g. coal miners may not quickly become software engineers or workers in eastern Austria may not move to jobs in western Austria. To correct this type of market failure, governments adopt policies that either take work to the workers or take the workers to the work. They will also have to encourage retraining schemes.

Problems of information

Theory tells us that in a perfect market, both consumers and producers have perfect knowledge of the market. In reality, of course, this is not the case and so decisions are often being made based upon incomplete information. This makes it very hard for marginal costs and marginal benefits to be equated and this leads to market failure. Consumers make decisions to purchase goods that they do not buy often, and so have little knowledge of, such as cars and houses. Producers have to estimate demand over a period of time and so often set an average price to cover a range of possibilities. Governments may try to improve the flow of information to correct this market failure, but this is expensive and may not be possible for all markets.

The creation of inequality

The free market often leads to the existence of large differences in income and wealth between different groups of people in the economy. It may be that society sees the creation of inequality as a failure of the market and may then attempt to use progressive taxation to redistribute income from one group of the population in order to benefit a less fortunate group.

a. Short-termism

Sometimes, short-term decisions are made that may have severe long-term implications. Let us consider two examples.

Firstly the private sector is often blamed for pursuing short-term profit-based objectives at the cost of long-term problems. Firms may use up resources in the short-term at a rate that means that development in the future will not be able to be sustained at the present rate. This reduces the potential for sustainable development.

The second example concerns the public sector – the government. Governments may intervene in the workings of markets in the short-term in order to gain results that will lead to re-election, even though this intervention may go against the long-term best interests of society. They are, in effect, causing a market failure in these markets by their intervention.

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