

# Public and Private Goods

- There are four categories of goods in economics, which are defined based on two attributes.
- The first attribute is **excludability**, or whether people can be prevented from using the good.
- The second is whether a good is **rival in consumption**: whether one person's use of the good reduces another person's ability to use it.
- Combinations of these two attributes create four categories of goods:
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	Excludable	Non-Excludable
Rivalrous	<b>Private Goods</b> food, clothing, cars, personal electronics	<b>Common Goods</b> fish stocks, timber, coal
Non-Rivalrous	<b>Club Goods</b> cinemas, private parks, satellite tv	<b>Public Goods</b> air, national defense

- **Public goods:** Public goods are non-excludable and non-rival. Individuals cannot be effectively excluded from using them, and use by one individual does not reduce the good's availability to others.
- Examples of public goods include the air we breathe, public parks, and street lights. Public goods may give rise to the “free rider problem.”
- A free-rider is a person who receives the benefit of a good without paying for it. This may lead to the under-provision of certain goods or services.

- Public goods can be pure or impure. Pure public goods are those that are perfectly non-rivalrous in consumption and non-excludable. Impure public goods are those that satisfy the two conditions to some extent, but not fully.

		Is the good rival in consumption?	
		Yes	No
Is the good excludable?	Yes	Private good (ice cream)	Impure public good (Cable TV)
	No	Impure public good (crowded sidewalk)	Public good (defense)

- The production of public goods results in positive externalities for which producers don't receive full payment.
- Consumers can take advantage of public goods without paying for them. This is called the “free-rider problem.”
- If too many consumers decide to “free-ride,” private costs to producers will exceed private benefits, and the incentive to provide the good or service through the market will disappear.
- The market will thus fail to provide enough of the good or service for which there is a need.

- Private goods are the products or services which are manufactured or produced by the companies owned by entrepreneurs who aim at meeting customer's requirement to earn profits through the trading of such goods in the free market.
- The private products involve rivalry or competition among the consumers for its usage since the consumption by one person will restrict its use by another.
- **Rival:** The private products involve rivalry or competition among the consumers for its usage since the consumption by one person will restrict its use by another.
- **Excludable:** These goods involve cost, and therefore the non-payers are excluded from the consumption.

- **Mixed good:** final goods that are intrinsically private but that are produced by the individual consumer by means of private and public good inputs. The benefits enjoyed from such a good for any one individual may depend on the consumption of others, as in the cases of a crowded road or a congested national park.
- A **social good** is something that benefits the largest number of people in the largest possible way, such as clean air, clean water, healthcare, and literacy. They are also known as common goods.
- A **merit good** can be defined as a good which would be under-consumed (and under-produced) in the free market economy. This is due to two main reasons:
  1. When consumed, a merit good creates positive externalities. This means that there is a divergence between private benefit and public benefit when a merit good is consumed (i.e. the public benefit is greater than the private benefit). However, as consumers only take into account private benefits when consuming merit goods, it means that they are under-consumed (and so under-produced).
  2. Individuals are short-term utility maximisers and so do not take into account the long term benefits of consuming a merit good and so they are under-consumed.

- Health Care – people underestimate the benefits of getting a vaccination. If people do get a vaccination, then there will be a personal benefit in protecting against diseases. Also, there will be external benefits to the rest of society because it will help reduce the prevalence of disease in the rest of society.
- Education – People may undervalue the benefits of studying, and decide to leave school early or not get good grades.

- Demerit Good
- A demerit good has two characteristics:
  1. A good which harms the consumer.
  2. Usually, these goods also have negative externalities. Therefore in a free market, there will be overconsumption of these goods.
- **Examples of Demerit Goods include:**
  - Alcohol, tobacco and tobacco based products.
  
- **Role of Government** - Public, merit, demerit goods

# Externalities

- An externality is a cost or benefit of an economic activity experienced by an unrelated third party.
- The external cost or benefit is not reflected in the final cost or benefit of a good or service.
- Therefore, economists generally view externalities as a serious problem that makes markets inefficient, leading to market failures.

- **1. Negative externality**

- A negative externality is a negative consequence of an economic activity experienced by an unrelated third party.
- The majority of externalities are negative.
- Some negative externalities, such as the different kinds of environmental pollution, are especially harmful due to their significant adverse effects.
- Negative externalities are divided into production and consumption externalities.

- Examples of negative production externalities include:
  - **Air pollution:** A factory burns fossil fuels to produce goods. The people living in the nearby area and the workers of the factory suffer from the deteriorating air quality.
  - **Water pollution:** a tanker spills oil, destroying the wildlife in the sea and affecting the people living in coastal areas.
  - **Noise pollution:** People living near a large airport suffer from high noise levels.
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- Some examples of negative consumption externalities are:
  - **Passive smoking:** Smoking results in negative effects not only on the health of a smoker but on the health of other people.
  - **Traffic congestion:** The more people that use cars on roads, the heavier the traffic congestion becomes.

- **2. Positive externality**

- Positive externality is a benefit from an economic activity experienced by an unrelated third party.
- Despite the benefits of economic activities that involve positive externalities, the externality also creates market inefficiencies.
- Positive externalities can also be distinguished as production and consumption externalities.
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- Positive production externalities include:
  - **Infrastructure development:** Building a subway station in a remote neighborhood may benefit real estate agents who transact properties in the area. Real estate prices would likely increase due to better accessibility, and the agents would be able to earn higher commissions.
  - **R&D activities:** A company that discovers a new technology as a result of research and development (R&D) activities creates benefits that help society as a whole.

- Examples of positive consumption externalities are:
- **Individual education:** The increased levels of an individual's education can also raise economic productivity and reduce unemployment levels.
- **Vaccination:** Benefits not only the person vaccinated but other people in the community because the probability of being infected decreases.

- **Solutions to Externalities**

- **1. Defining property rights**

- A strict definition of property rights can limit the influence of economic activities on unrelated parties. However, it is not always a viable option since the ownership of particular things such as air or water cannot be unambiguously assigned to a particular agent.

- **2. Taxes**

- A government may impose taxes on goods or services that create externalities. The taxes would discourage activities that impose costs on unrelated parties.

- **3. Subsidies**

- A government can also provide subsidies to stimulate certain activities. The subsidies are commonly used to increase the consumption of goods with positive externalities.