

Explain externalities and public goods



**ASSIGN
BUSTER**

With the aid of examples explain the terms: i) Externality ii) Public Good

Externality Externalities, or transaction spillovers, arise when a third party who is not involved in the consumption of a product incur certain costs and benefits that are not compensated for by the generators of those externalities. They exist due to the price system's (The Invisible Hand) inability to deal with products that have no market or price, such as clean air, peace, quiet, pollution and more. In a broader sense, externalities involve interdependence of utility due to the fact that one person's action will affect the welfare of another.

Externalities can be classified into two types: positive externalities and negative externalities. Positive externalities exist when an externality-generating activity raises the production or utility of the third party receiving these externalities. These economic activities provide incidental benefits to others for whom they aren't specifically intended. Negative externalities exist when an externality-generating activity decreases the production or utility of the third party receiving these externalities.

These economic activities impose a cost onto others for whom they aren't specifically intended. The undesirable effects on the allocation of resources by an externality can be explained by using the concept of Marginal Social Cost (MSC). In Economics, the MSC is defined as the sum of Marginal Private Cost (MPC), the marginal cost caused by an activity that is compensated for by the generators, and Marginal External Cost, which is the share of external effects borne by the rest. When a firm's activities generate negative externalities, its MSC is greater than its MPC.

In equilibrium, the Marginal Private Benefit (MPB) will be equal to the firm's MPC, and hence the $MPB < MSC$. Hence, the final output for the consumer yields less to the society than what it costs to society. Thus, it can be deduced that production is inefficient and that these externalities can be reduced if the production of that particular product is reduced. For example, the construction of roads to facilitate the transport of goods for a factory that produces staplers will benefit residents in that area because they now have greater road accessibility.

This is said to be the positive externality arising from this economic activity. On the flip side, this same factory that instigated the construction of roads may discharge a toxic amount of by-products such as soot and toxins into the air and rivers, hence greatly reducing the quality of air and water in that area. This is because factory owners wish to maximize profits and hence will only take into account their MPC and ignore the wider social costs of their activities – MSC will be greater than MPC .

In conclusion, it can be said that when positive externalities exist, the $MSB > MPB$, and when negative externalities exist, the $MSC > MPC$. Public Good In economic theory, a good is a tangible or intangible item that gives utility to people when consumed. Goods can be classified into free and economic goods. The former entails no opportunity cost to the consumer, meaning that no one is made worse off by the consumption of a free good. Examples are desert sand, air and seawater. An economic good, on the other hand, entails an opportunity cost.

This is because some other good has to be forgone in order to produce an economic good. The root of this opportunity cost is scarcity – a situation in

which unlimited human wants exceed the lack of resources that we have in order to meet that demand. Economic goods can then be further subdivided into two: public and private goods. Public goods are collectively consumed and the market may simply not supply them. Examples of public goods are such as defense of the country (a police force and army), a fire brigade, street lighting, or lighthouses. The market system does not work well in this area.

One of the jobs of government, both central and local, is to supply public goods or services that are needed but otherwise would not be made available by the market. Some goods are “ semi-public goods”, “ quasi public goods” or “ collective consumption goods”, for instance roads. These are often supplied by the state, but in principle they can be privately supplied, and sometimes are. Examples include the British Toll Roads in the Nineteenth Century or the peage motorways in France today; when you use them, you pay. In some countries, such as Thailand, the fire brigade falls in this area.

People insure with a private fire brigade and call them when the house is burning. If you are not insured and you still call them, the market swings into action and they negotiate a rate on the spot for putting out the fire - given the urgency of the event, the demand by the burning house owner is highly inelastic and the price can be very high. There are two key characteristics of a public good. Firstly, public goods are non-excludable, meaning that the producer is unable to separate the non-paying consumers from the paying consumers that are benefitting from the good.

As a result, the payer will eventually refuse to pay for the good too. Consequently, markets will refuse to produce public goods and this will result in a market failure. For example, if an entrepreneur stages a fireworks show, people can watch the show from their windows or backyards. Because the entrepreneur cannot charge a fee for consumption, the fireworks show may go unproduced, even if demand for the show is strong. To illustrate the public good's inability to exclude, here's an example: In the provision of national defense, if one citizen is defended, so are the rest of the citizens. Secondly, public goods are non-exhaustible.

This means that the use of the good by one person does not reduce the amount available to others. Hence, rivalry does not exist in the consumption of this product and another consumer will incur no opportunity cost. For example, the exchange of MP3 music files on the Internet. The use of these files by any one person does not restrict the use by anyone else and there is little effective control over the exchange of these music files and photo files. In a nutshell, public goods are economic goods that are non-excludable and non-exhaustible, and can be subdivided into public goods and "semi" public goods.