

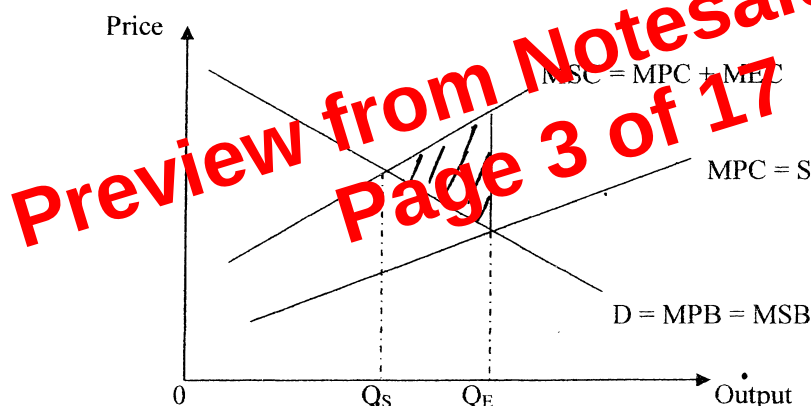
SOCIALLY OPTIMUM LEVEL OF OUTPUT AND MARKET FAILURES:

If $MSB > MSC$, then it is said to be socially efficient to produce more (or to consume) more. • On the other hand, if $MSC > MSB$, then it is socially efficient to produce (or consume) less. It follows, therefore, that if $MSB = MSC$, then the current level is optimum (socially equilibrium).

Hence, the socially optimum level of output occurs where $MSB = MSC$.

However, in the real world, the market rarely leads to social efficiency. The Marginal Social Benefit of most goods and services do not equal the Marginal Social Cost. This is due to externalities, whether adverse or beneficial, which cause market failure because they lead to allocation of resources that are non-optimal from the society's point of view.

As noted, the price system considers only private costs and private benefits, and ignores any external costs and benefit. Hence, private producers produce too much of commodities that generate harmful externalities because they bear none of the costs suffered by others. In other words, external costs result in a level of output greater than the social optimum. This can be illustrated as follows:



The MPC curve represents the supply curve of the industry, and assumes no external benefit, MSB is also the MPB and the demand curve for the industry. As the private producers reach equilibrium where Demand = Supply (consider only their private costs and private benefits), the equilibrium output of the industry is thus $0Q_E$. MSC lies above MPC as MSC includes both MPC and MEC. The socially optimum output would be $0Q_S$, where $MSB = MSC$. Thus, in terms of social efficiency, there is an overproduction of goods which generate negative externalities. By summing the excess of MSB and MSC for the units between Q_S and Q_E , a monetary measure of the welfare loss to society is occurred (shaded area).

In the same sense, activities which generate positive externalities can also bring welfare loss. Private producers will tend to produce too little of commodities that generate beneficial externalities because they bear all the costs, while others reap part of the benefits. This is illustrated as follows:

PRIVATE GOODS AND PUBLIC GOODS:

A private good possesses the twin characteristics of diminishability and excludability. The amount of private good in a shop or elsewhere is limited. Once bought by someone for consumption purposes, the amount available to others is reduced or diminished. In other words, private goods are said to be rival in consumption. On the other hand, a good which is privately owned must not be legally shared with other individual. Thus, others can be excluded from its use. For instance, a good consumed by Mr X must not be necessarily consumed by Mr Y. X's consumption is only possible if X pays the price, while Y, who does not pay, is excluded. In other words, private goods have property rights.

However, public goods such as street lightning, defence, law and order possess the characteristics of non-diminishability and non-excludability. The consumption of public goods by additional consumers does not reduce the quantity consumed by existing consumers. In other words, public goods are said to be non-rival in consumption. The benefits of public goods are enjoyed by more than one person at the same time. For example, both Mr X and Mr Y can simultaneously enjoy the benefits of street lightning. Mr X's consumption of the light does not significantly reduce the quantity of light available to Mr Y. In this case, Mr X consumption and Mr Y consumption are said to be non-rival.

Besides, public goods are meant for all individuals or population as a whole. There is no group of individual who is excluded from consuming the public goods. This means that it is difficult to create property rights over the public goods. Non-excludability is said to exist when a person is likely to enjoy the benefits of the public goods whether or not payment is made for its use. Those who have already paid for the provision of the public goods have no means of preventing those who refuse to pay from benefiting from their purchase (free-rider).

There is indeed no additional cost associated with the supply of an additional quantity of public goods to an extra user. Hence, the marginal cost of production for an extra person is zero. In other words, the benefits it confers on consumers can be extended to others at zero cost (the cost of providing the same level of public goods, say defence, to an extra person is zero). As such, this makes public goods unattractive to private sectors. The characteristics of non-excludability suggests that private enterprise would find it difficult to persuade people not to consume the product. Therefore, not only is it impossible to charge for the consumption of public goods, it is also undesirable. These considerations obviously make public goods unsuitable for provision through price mechanism.