Market Failure

IGCSE

Social Cost

- Social Cost is the total cost to the society of any transaction.

Social Cost = Private Cost + External Cost

- Private Cost is the cost faced by the first party; someone who is directly part of the transaction.
- External Cost is the cost faced by 3rd party; someone who is not directly related to the transaction.

Example of Social Cost

- Private Cost: For instance the car owner who pays for the car fuel and maintenance.

- External Cost / Negative Externality: For instance the pedestrians who suffer from the pollution caused by someone else car.

Social Benefit

- Social Benefit is the total benefit to the society of any transaction.

  Social Benefit = Private Benefit + External Benefit

- Private benefit is the benefit received by the first party; someone who is directly part of the transaction.
- External benefit is the benefit faced by 3rd party; someone who is not directly related to the transaction.

Example of Social Benefit

- **Private Benefit:** For instance the convenience someone gets from using their car instead of public transport.

- **External Benefit / Positive Externality:** For instance if the car owner decides to provide free ride to his / her friend then the friend being a 3rd party received a benefit without having to pay for it.

Social Cost & Social Benefit

Social Benefit = Private Benefit + External Benefit

Social Cost = Private Cost + External Cost

How does Government decide whether to undertake the project?

- The government will decide whether to undertake the project or not on the basis of its Social Costs and Social Benefits.
- If the value of Social Benefits is greater than the value of Social Cost then government will take up the project otherwise not.

Cost-Benefit Analysis

- Government decision to construct a highway will not only consider its financial cost of construction but it will also account for external cost incurred in the process like adverse effect on environment from cutting trees for highway construction. Some people getting displaced due to construction etc.
- Similarly reduced accidents and lesser traffic congestion will be project's external benefits that will also be counted as external benefit.

Cost-Benefit Analysis

- By assigning value to each of the four components namely private benefit, external benefit, private cost and external cost the government decides whether a project is worth undertaking or not.
- If Social Benefits are greater than Social Costs the project is undertaken by governments otherwise not.

How do individuals decided whether to undertake a transaction or not?

- Individuals decision about a transaction like using a private car or public transport is solely based on their private benefit and private cost.

What is Market Failure?

- Market Failure refers to a situation in which market / private sector is doing something that is harmful for others.

Examples of Market Failure

1. Deforestation – increases air pollution and chances of flooding
2. Use of Private Cars – causes air pollution
3. Smoking – due to passive smoking adversely affect the health of people around
4. Rash Driving – increases the chances of road accidents
5. Kite Flying – kite flying in congested cities can increase the chances of fatal accidents.

Why Market Failure occur?

- Since individuals only consider their private cost and private benefit they are very likely to engage in transactions that have positive or negative effect on 3rd party which we have so far referred to as external benefit and external cost.

Smoking Example of Market Failure

- For instance, anyone's decision to smoke will be based upon his comparison of financial cost of purchasing cigarettes plus expected health problems against the pleasure experienced from smoking.
- However, no one will ever include the damage caused to society from smoking like passive smoking and pollution caused.

Smoking Example of Market Failure

- Since individuals' decision to smoke adversely affect other people around them government would want to regulate tobacco market.

- Negative externalities like smoking and rash driving will always be over-consumed and therefore government makes regulations to control consumption of goods with negative externalities.

Vaccination – Example of Positive Externality

- Similarly some products have positive externality like planting a tree or use of vaccination against transferable disease like flu.

- For instance getting vaccinated against transferrable diseases like flu will protect others from catching the disease and so is defined as positive externality.

Vaccination – Example of Positive Externality

- However, knowing that flu is not very harmful some people might prefer not to get themselves vaccinated against it and so their chances of transmitting flu to other people increase.

Vaccination –of Positive Externality

- As explained in the last slide, goods with positive externalities will always be under-consumed therefore government provides incentives to encourage people to increase their consumption.

Government Regulation

- To prevent over-consumption of goods with negative externality governments often impose indirect taxes. Higher prices because of indirect taxes discourage consumers to excessively consume goods with negative externalities like cigarettes etc.

Government Regulation

- Similarly to encourage greater consumption of goods with positive externality governments provide subsidies. Lower prices from provision of subsidies encourage people to consume greater quantity of goods with positive externality.