

Unit: 11.4B-1

MARKET FAILURE

The concepts/terms learnt:

- Inefficiency
- Misallocation of resources

Activity 1

(6.47 min)

Topic of the Day



Market Failure

Market failure occurs when freely-functioning markets, fail to deliver an efficient allocation of resources.



The social costs of producing the good or service (all of the opportunity costs of the input resources used in its creation) are not minimized, and this results in a waste of some resources.

Group Division

GROUP 1:

Animal World
(3- 4 members)

GROUP 2:

Plant World
(3- 4 members)

GROUP 3:

Human world
(3- 4 members)

GROUP WORK-
PRESENTATION :
GROUP DISCUSSION

Activity 2-Critical Thinking (25 min)

Preparation Time: 10 min

Presentation: 15 min

Explain how the given areas are affected due to environmental destruction.

Give real world examples to support your answer.

ASSESSMENT
(CRITERIA)

Табыс критерийлері:

2 балл

Уақытты ұтымды пайдалануы
(2 минут)

1 балл

Креативтілігі

2 балл

Reflection

❖ What did you learn today ?
Чему вы научились сегодня?



Unit: 11.4B-2

Externalities

Spill over effect

The cost or benefit that affects a party (third party) who did not choose to incur that cost or benefit.

The concepts/terms learnt:

- Inefficiency
- Misallocation of resources
- Market Failure

Word Search

Positive externalities/ External benefits

Negative externalities/ External costs

Private Cost

Private Benefits

Social Cost

Social Benefits

Public Goods

Merit Goods

Property Rights

Factor immobility

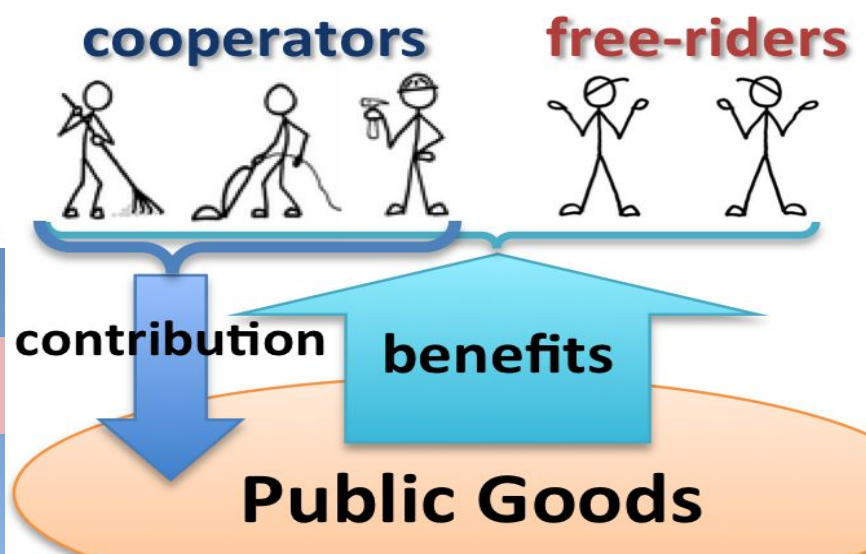
Public Goods

Non- Excludability + **Non- Rivalry**



	Excludable	Non-excludable
Rival	Private goods Examples: Big Macs Running shoes	Common resources Examples: Tuna in the ocean Public park
Non-rival	Quasi-public goods Examples: Cable TV Toll road	Public goods Examples: National defence Street lighting

The Public Goods Game



Free rider problem

Formula

Marginal Social Cost = Marginal Private Cost + External Cost

$$\text{MSC} = \text{MPC} + \text{XC}$$

External Cost = Marginal Social Cost > Marginal Private Cost

$$\text{XC} = \text{MSC} > \text{MPC}$$

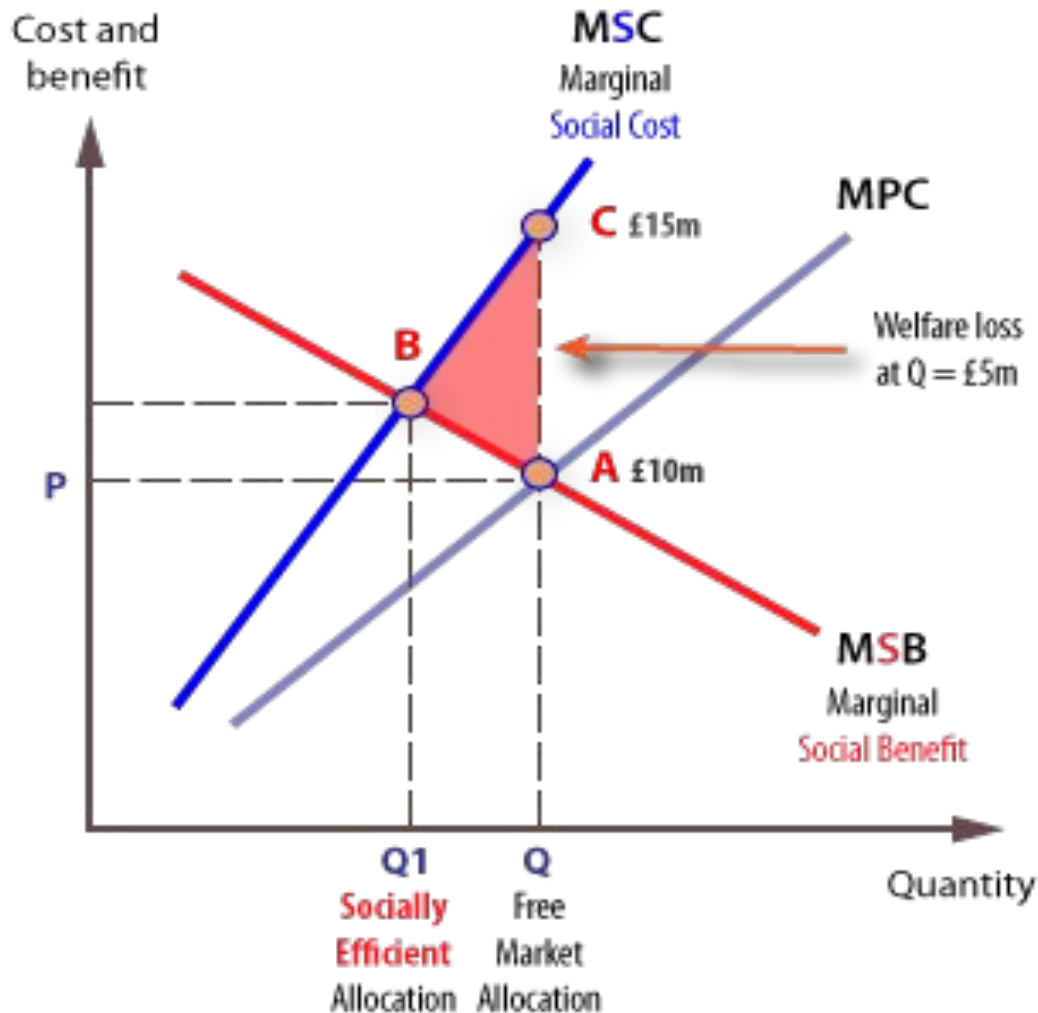
Marginal Social Benefit = Marginal Private Benefit + External Benefit

$$\text{MSB} = \text{MPB} + \text{XB}$$

External Benefit = Marginal Social Benefit > Marginal Private Benefit

$$\text{XB} = \text{MSB} > \text{MPB}$$

Negative Externalities



Copyright: www.economicsonline.co.uk

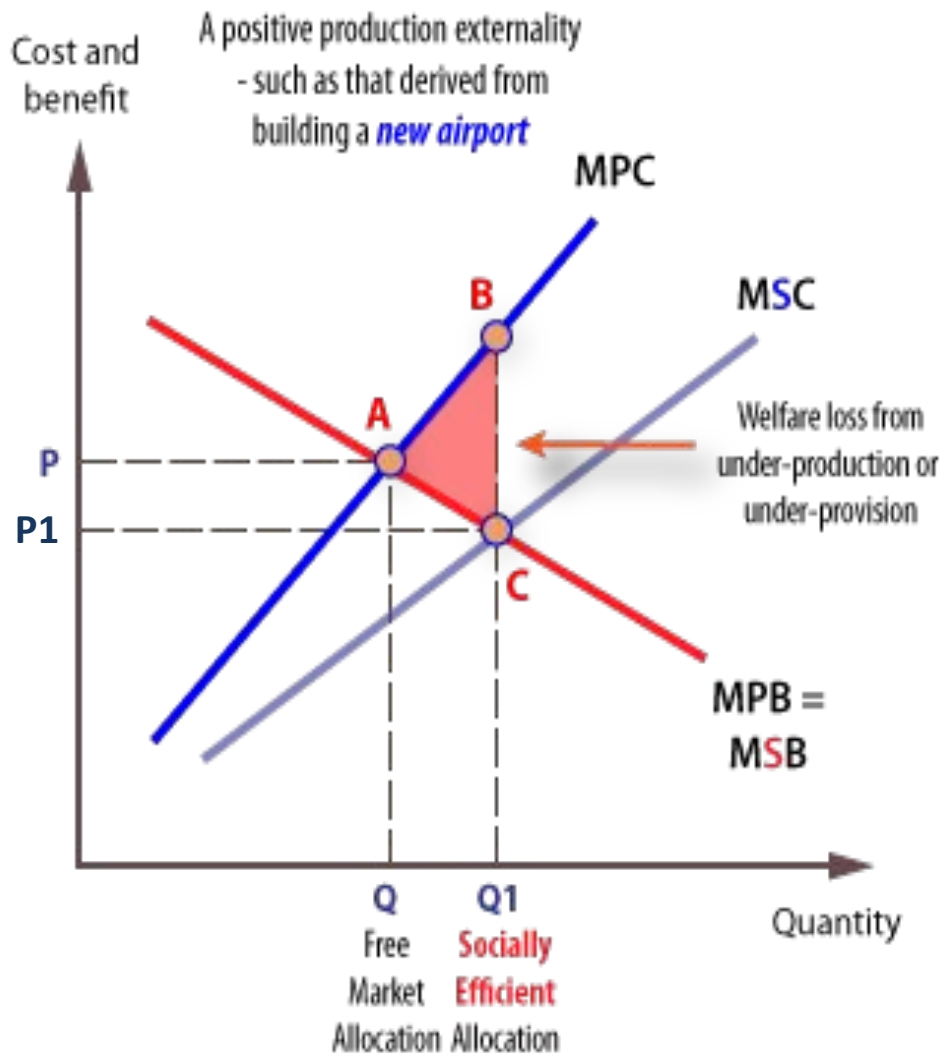
A manufacturer of computers which emits pollutants into the atmosphere, the free market equilibrium will occur when marginal private benefit = marginal private costs, at output Q and price P.

The market equilibrium is at point A. However, if we add *external costs*, the socially efficient output is Q1, at point B.

MSB at A is £5m,
MSC at C is £10m
net welfare loss = £10m -
£5m = £5m
Area for welfare loss = ABC.

Therefore, in terms of welfare, markets over-produce goods that generate external costs.

Positive Externalities



The market will end up at price P and quantity Q as before, instead of the more efficient price P_1 and quantity Q_1 . These latter again reflect the idea that the marginal social benefit should equal the marginal social cost, i.e., that production should be increased as long as the marginal social benefit exceeds the marginal social cost. The result in an unfettered market is inefficient since at the quantity Q_1 , the social benefit is greater than the societal cost, so society as a whole would be better off if more goods had been produced.

vaccination for Small pox:

The $MPB < MSB$

(for example, society as a whole is increasingly protected from smallpox by each vaccination, including those who refuse to participate).

Group Division

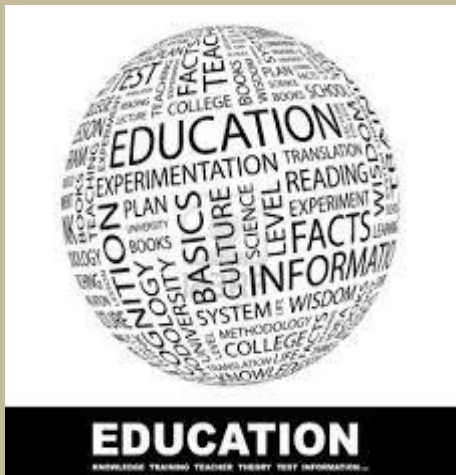
GROUP 1:



GROUP 2:



GROUP 3:



GROUP 4:



**GROUP WORK-
PRESENTATION :
GROUP DISCUSSION**

Activity 2-Critical Thinking (25 min)

Preparation Time: 10 min

Presentation: 15 min

Identify the private costs , external costs and social costs from overfishing & smoking.

Identify the private benefits, external benefits and social benefits from education and health care.

Табыс критерийлері:

**ASSESSMENT
(CRITERIA)**

Уақытты ұтымды пайдалануы
(2 минут)

2 балл

1 балл

Креативтілігі

2 балл

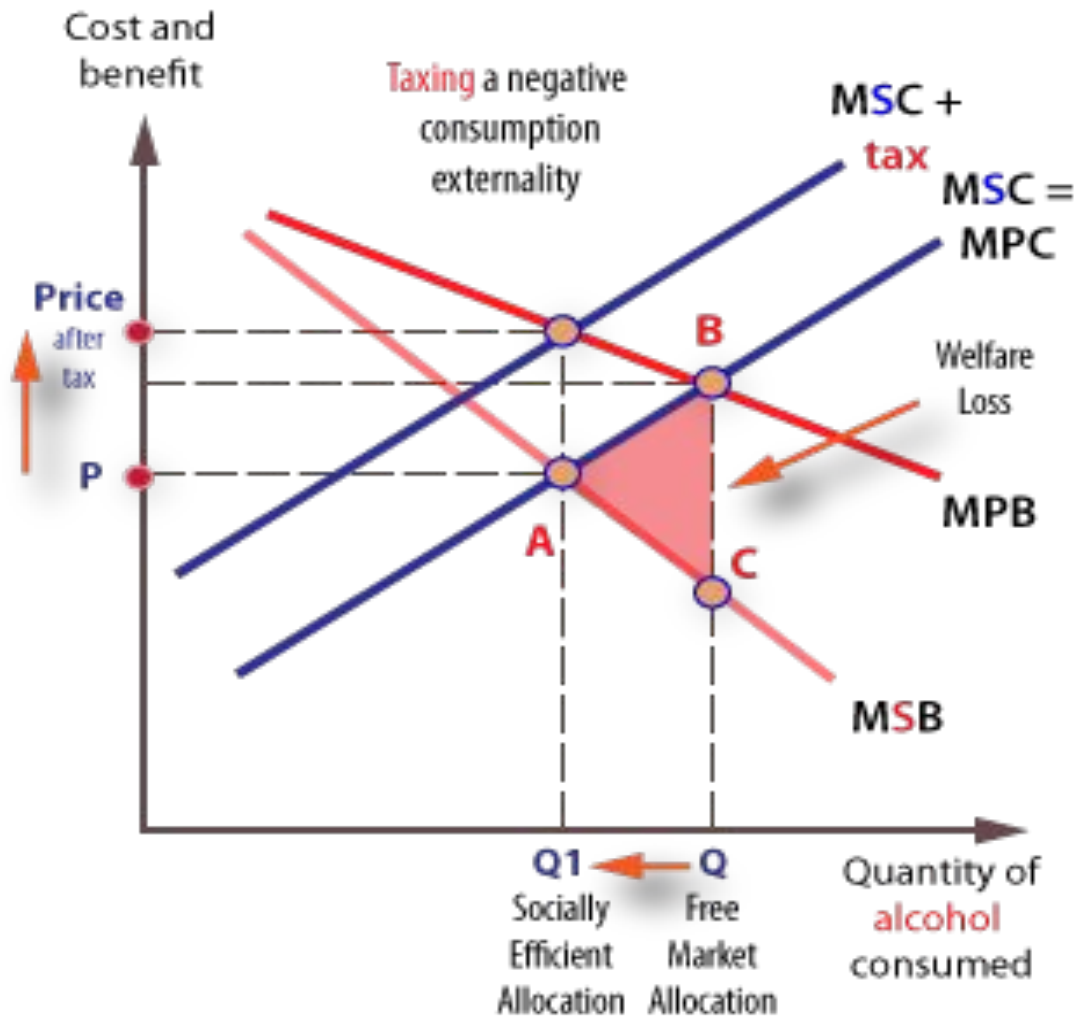
Unit: 11.4B-3

Government Intervention

The concepts/terms learnt:

- Negative externality
- Positive externality
- Taxes
- Subsidies

Pigovian tax to correct Negative externalities



A tax shifts the marginal private cost curve up by the amount of the tax. If the tax is placed on the quantity of emissions from the factory, the producers have an incentive to reduce output to the socially optimum level. If the tax is placed on the percentage of emissions per unit of production, the factory has the incentive to change to cleaner processes or technology

Property Rights to correct Negative externalities

For some negative externalities, such as, pollution, if somebody had ownership rights to the air, sea etc., then they could take the polluters to court for compensation. The provision of property rights would give individuals ownership rights on the sea, air etc.,

Extend property rights so that third parties can negotiate with those individuals or organisations that cause the externality.

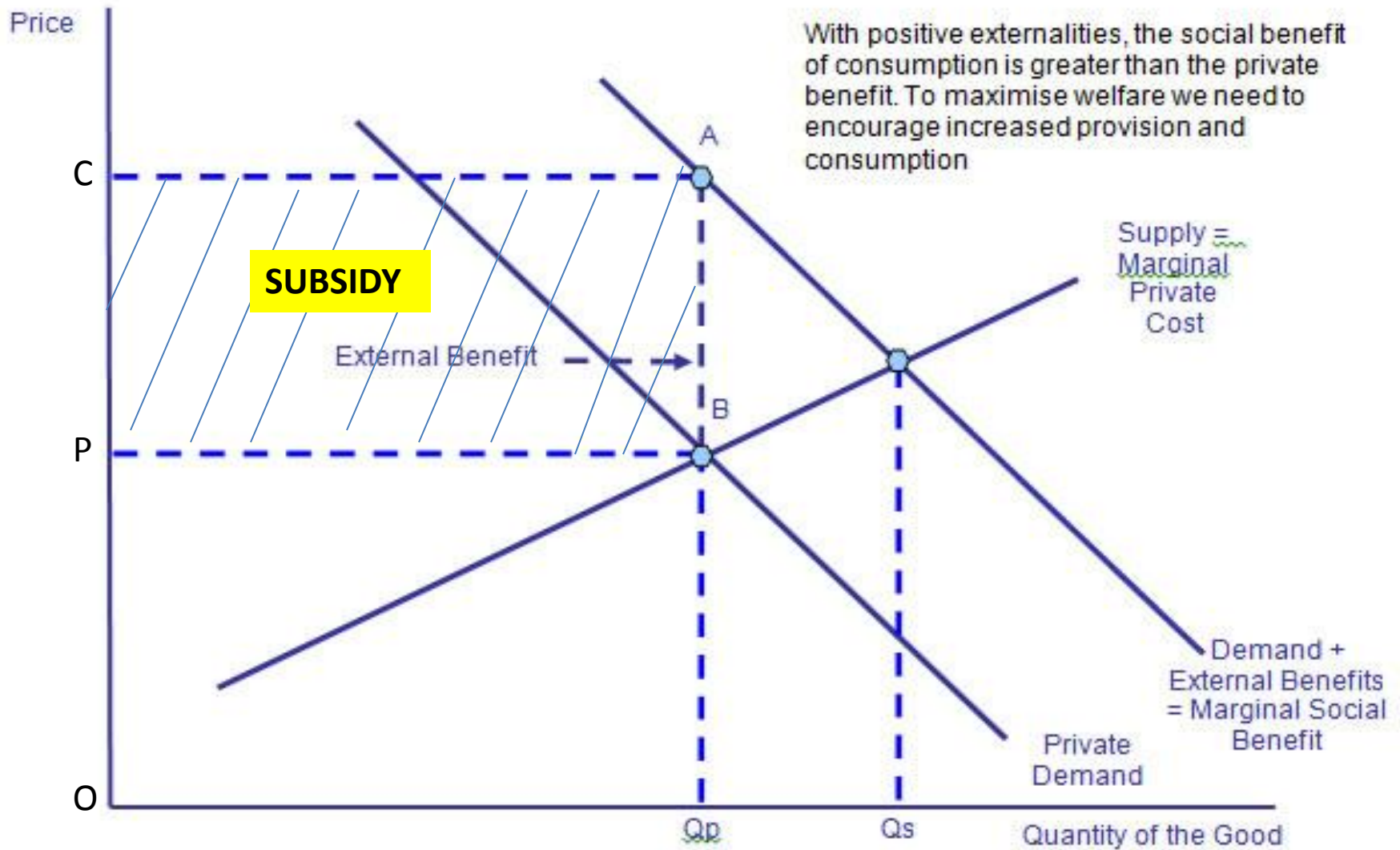
British economist and Nobel Prize winner, [Ronald Coase](#) argued that the establishment of property rights would provide an efficient solution to the problem of externalities.

As long as one party can establish a property right, there will be a bargaining process leading to an agreement in which externalities are taken into account.

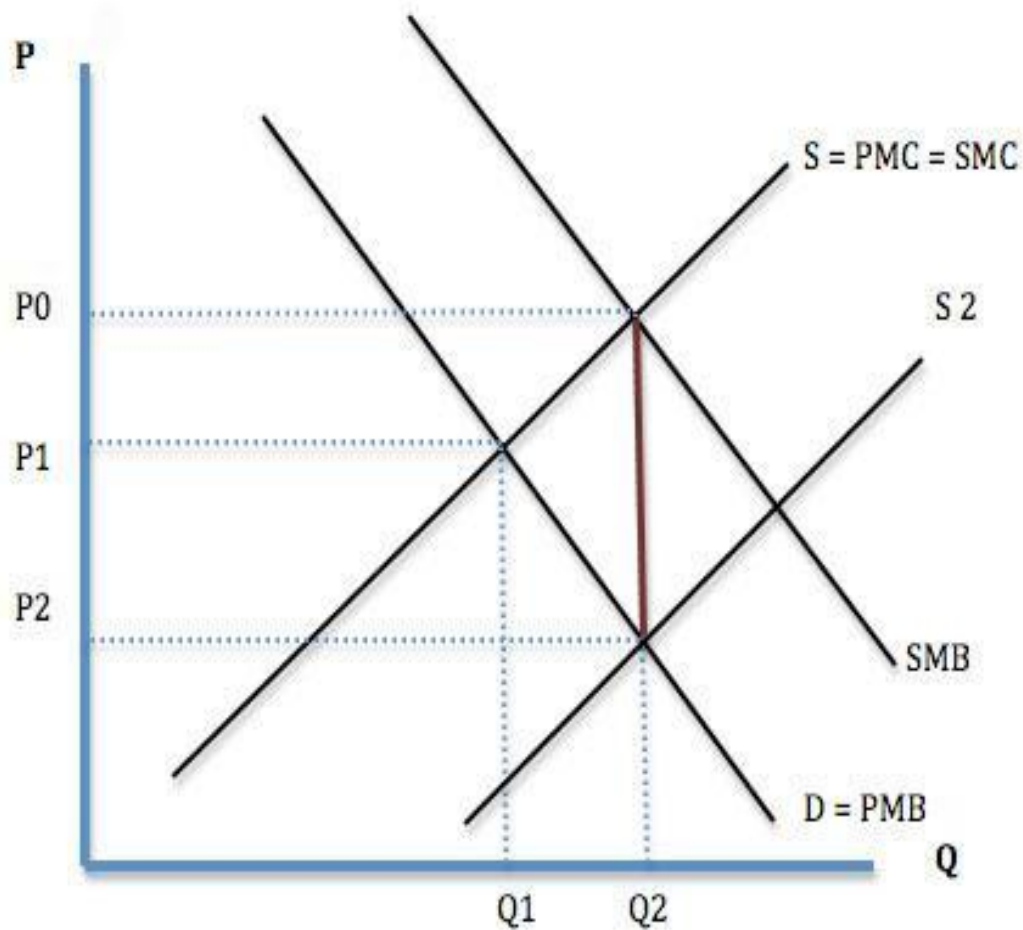


Property
Rights

Subsidies to encourage Positive Externalities



Subsidies to encourage Positive Externalities



www.economicshelp.org

Subsidy per unit = $P0 - P2$
The supply curve shifts to $S2$ and price falls from $P1$ to $P2$.

People will now consume more, the quantity increases from $Q1$ to $Q2$. Hence, the economy will shift from $Q1$: Market optimum quantity $MPC = MPB$ to $Q2 =$ Social Efficiency: because $MSC = MSB$

Practice- Real World Scenario



Explain the private costs/benefits , external costs/benefits and social costs/benefits of using Car.