

"Defining Public Sector Responsibilities"

From birth to death, our lives are affected in countless ways by the activities of Government.

For example, in the United States

- i) We are born in hospitals that are publicly subsidized.
- ii) Most of us attend public schools.
- iii) Virtually all of us, at some time in our lives, receive money from the government, through programmes such as student loans, scholarships and etc
- iv) All of us pay taxes to the government.
- v) More than 60% of the work force is employed by the government.
- vi) In many areas of production, profit and employment opportunities

- are greatly affected by whether the government allows the foreign competitors to sell goods in US without tariff or quota
- vii) What we eat and drink, where we live are all regulated by government agencies.
 - viii) When there is a dispute b/w two individuals, they may turn to the courts to adjudicate the dispute.
 - ix) Industries that pollute the environment are regulated by government
 - x) Other laws such as safety regulations, such as those requiring seat belts.
- Mixed Economy
- A mixed economy system is a system that combines aspects

of both government and private firms. A mixed economic system protects private property and allows a level of economic freedom, but also allows governments to interfere in economic activities in order to achieve social aims.

→ Different perspectives on the Role of Government :-

→ An Impetus (Push) For Government action : Market failure

Page 17 - 19. (These topics are related to Government action in the United States in the past.)

→ Thinking Like a Public Sector Economist

Economists study scarcity - how society make choices

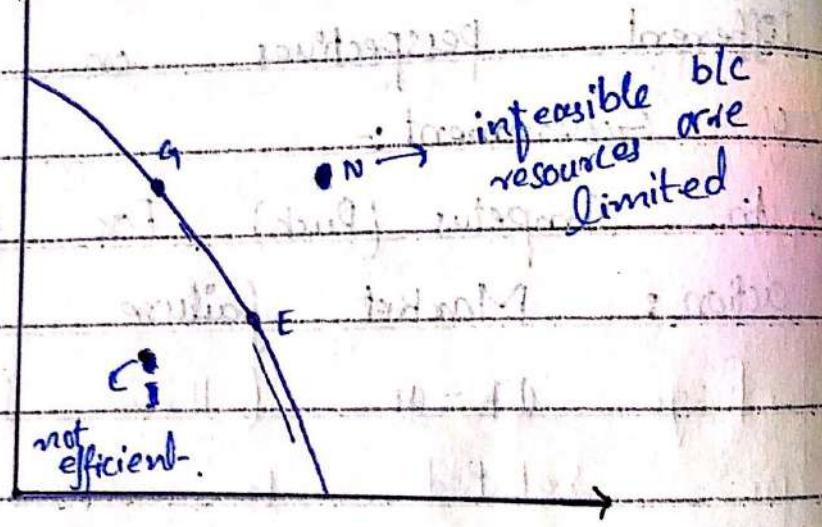
Concerning the use of limited resources they inquire into four central economic questions:

- i) What is to be produced?

Private or public Goods

We often depict this choice in terms of the production possibilities schedule.

Private Goods



- ii) How should it be produced?
- ↳ Within the public sector or private sector
 - ↳ OR, use more capital and less labor or vice versa
 - ↳ OR, to employ energy-efficient

technologies

(3) For whom should it be produced?

(the question of distribution)

Due to production some groups will benefit from the production of one public Good, others from another.

(iv) How are decisions made?

Choices are made collectively.

Collective choices are the choices that a society must make together.

→ Analyzing the Public Sector

In addressing each of the fundamental economic decision questions, there are four general stages of analysis:-

→ knowing what activities the public sector engages in and

how are they organized.

- ↳ Understanding and anticipating the full consequences of these government activities.
- ↳ Evaluating alternative policies.
- ↳ Interpreting the political process.

→ Economic Model

To analyze the economic consequences of various policies, economists make use of what are called economic models.

All analysis involves the use of models, of simple hypothesis concerning how individuals and firms will respond to various changes in government policy, and how these policies / responses will interact to determine the total impact on economy.

→ Normative vs Positive economics

The term positive economics

referring to the objective analysis

in the study of economics.

Most economists look at what has happened and what is currently happening in a given economy to form the basis of predictions for the future.

This investigative process is called positive economics.

Positive economics refers to a science which is based on data and facts.

4) Normative economics is a perspective on economics that reflect normative, or ideologically perspective judgements toward economic development, investment projects, statements, and scenarios.

Normative economics is described as a science based opinions, values, and Judgements.

→ Disagreements among economists

Economists disagree because each of them value economic terms and variables differently. They might agree ~~principally~~ about the result but will disagree about the magnitude.

Disagreements arise in two broad areas. Economists disagree about the consequences of the policies (about the positive analysis) and about values (about the normative analysis).

(Chapter # 03)

"Market Efficiency"

If private markets are efficient, why should there be an economic role for government? To answer this question, a precise understanding of the meaning of economic efficiency is needed.

That is the aim of this chapter. The next chapter will consider why private markets may fail to achieve efficient outcome and how government may respond to these market failures.

⇒ Economic efficiency

Economic efficiency is when all goods and factors of production in an economy are distributed or allocated to their most valuable user and waste is eliminated or minimized.

→ The invisible hand of competition

market &

The unobservable market force
that helps the demand
and supply of goods in
a free market to
reach equilibrium automatically
is the invisible hand.

The phrase invisible hand
was introduced by Adam
Smith in his book
"Wealth of Nation".

The first major work of
modern economics - argued that
competition would lead
individuals in the pursuit
of his or her private
interests to pursue the
public interest as well if by
an invisible hand.

Smith argued that it
was not necessarily to

rely on government or on
any moral sentiments to
do good. The public interest,
he maintained, is served when
each individual simply does what
is in his or her own self
interest.

Smith argued that no government
committee needs to decide
whether a commodity should
or should not be produced.
It will be produced if it
meets the market test —
that is, if what individuals
are willing to pay exceeds
the cost of production. Nor does
any government oversight committee
need to check whether a
particular firm is producing
efficiently. Competition will
drive out inefficient competi-
tors / producers.

4 Welfare Economics And Pareto Efficiency &

Welfare economics is the branch of economics that focuses on what where we termed Normative issues in Chapter 1. The most fundamental normative issue for welfare economics is the economy's organization -

- (i) What should be produced?
- (ii) For whom should be produced?
- (iii) How it should be produced?
- (iv) Who should make decisions?

4 Pareto Efficiency & Resource allocation that have the property that no one can be better off without someone being made worse off are said to be Pareto efficient, or

Pareto optimal.

→ Pareto improvement

A change that makes some individuals better off without making anyone worse off. e.g. a toll plaza on a new bridge, the one who is willing to pay will pass the bridge and the one who doesn't want to pay will simply take the alternative way.

"packages" of changes together may constitute a pareto improvement, when each change alone might not. e.g. Reducing a tariff and giving a subsidy to home producers is simply a pareto improvement.

→ Pareto principle

Economists are always on a lookout for pareto improvements. The belief that

any such improvements should be instituted is referred to as the paxto principle.

→ Pareto Efficiency And Individualism

The criterion of paxto efficiency has an important property that requires comment. It is individualistic, in two sense.

- (1) The paxto principle is based on individualistic values. Whenever a change can make some individuals better off without making others worse off, it should be adopted. Most public policies choices, however involve tradeoffs under which some individuals are better off and others are worse off.

- (2) The principle of consumer sovereignty holds that individuals are the best judges of their own needs and pleasures.

The Fundamental theorems of welfare Economics & Two of the most important results of welfare economics describe the relationship b/w competitive markets and pareto efficiency. These results are called the fundamental theorems of welfare economics.

- 1) The first theorem tells us that if economy is efficient competitive (and satisfy certain other conditions), it is pareto efficient.
- 2) The 2nd theorem asks the reverse question. There are many pareto efficient distributions. By transferring wealth from rich to poor to make poor better off and rich worse off. After we make the

redistribution of wealth, if we let the forces of competitive freely play themselves out, we will obtain a pareto efficient allocation of resources.

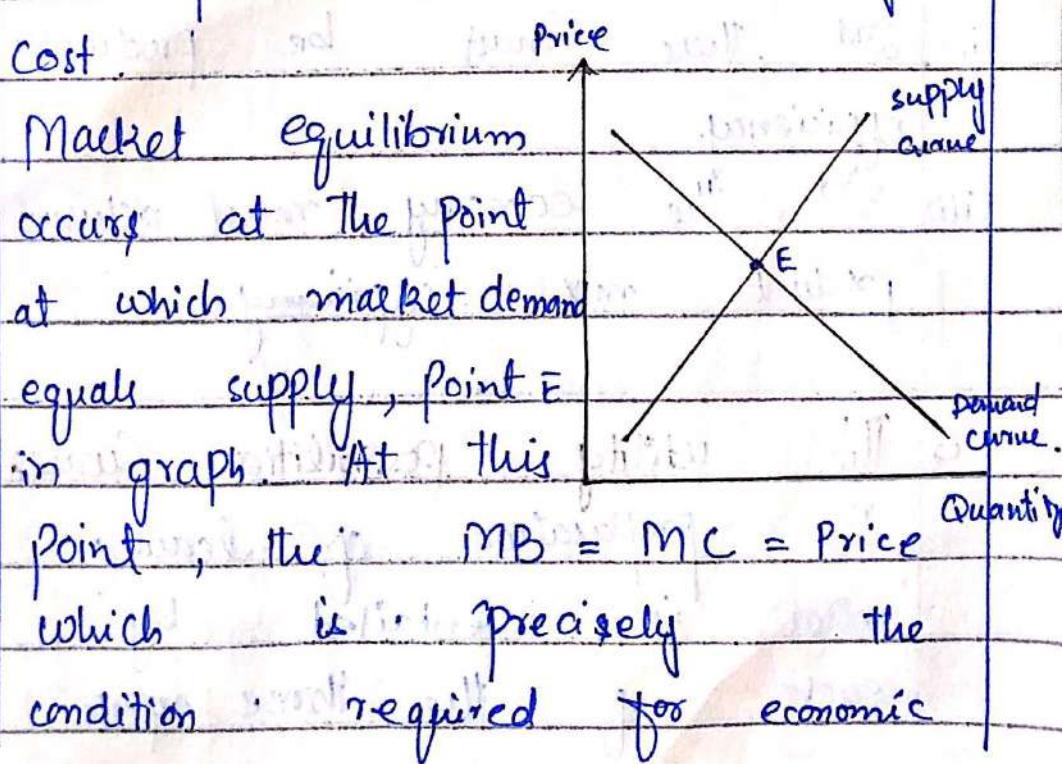
The second fundamental theorem of welfare economics has the remarkable implication that every pareto efficient allocation can be attained by means of decentralized market mechanism.

In the decentralized system, decisions about production and consumption are carried out by firms and individuals that make up the economy.

In contrast, in a centralized allocation mechanism, all such decisions are concentrated in the hands of a single agency. Individual, who is referred to as the

central planner.

→ Efficiency From the perspective of a single market & In deciding how much to demand, individuals equate the marginal benefit they receive from consuming an extra unit with the marginal cost, the price they have to pay. In deciding how much to supply, firms equate marginal benefit they receive, which is just the price, with the marginal cost.



efficiency

↳ Analyzing Economic Efficiency

Economist consider three

aspects of efficiency, all of which are required for pareto efficiency

(i) First the economy must achieve exchange efficiency Good which

(ii) are produced have to go to the individuals who value them most

(iii) 2nd there must be production efficiency.

(iv) 3rd, the economy must achieve product mix efficiency

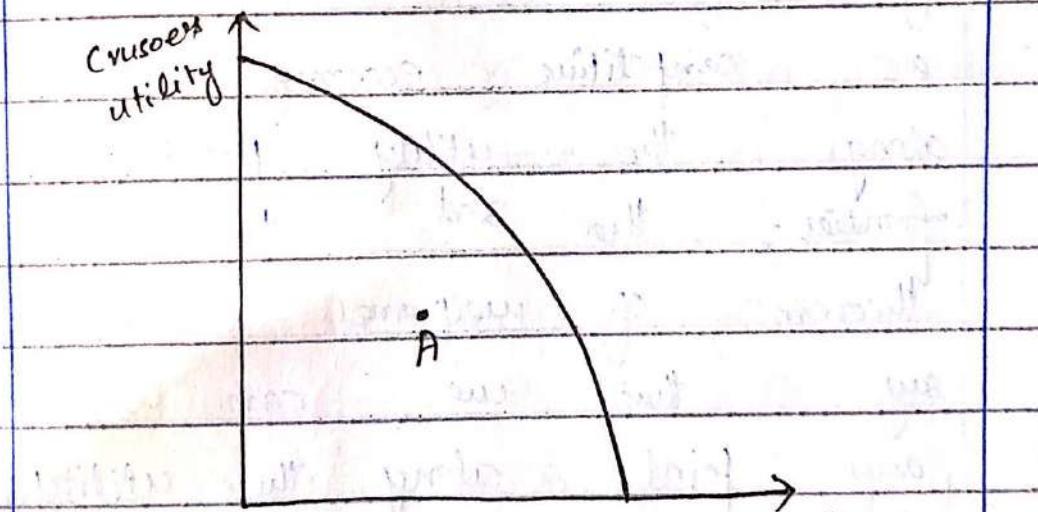
↳ The utility Possibility Curves

In preparation of leaving

what is entailed by

each of the three aspects

of Pareto efficiency, the concept of utility possibilities' curve is useful. Economists sometimes refers to the benefits that an individual gets from consumption as the utility that the individual gets from the combinations of goods he or she consumes.



Consumer's utility

A

Fridays

The utility possibilities curve gives the maximum level of utility that one individual can achieve, given the level of utility of the other individual. Along the frontier,

It is not possible for one individual to consume more unless another consumes less. Therefore the utility possibilities curve is downward sloping.

If an economy is Pareto efficient it must be operating along the utility possibilities frontier.

v The 1st fundamental theorem of welfare economics says that a competitive economy operates along the utility possibilities frontier; the 2nd fundamental theorem of welfare economics says that we can attain any point along the utility possibilities frontier using a competitive markets, provided we redistribute initial endowment appropriately.

⇒ Now we will explain all three conditions for

pain efficiency separately:-

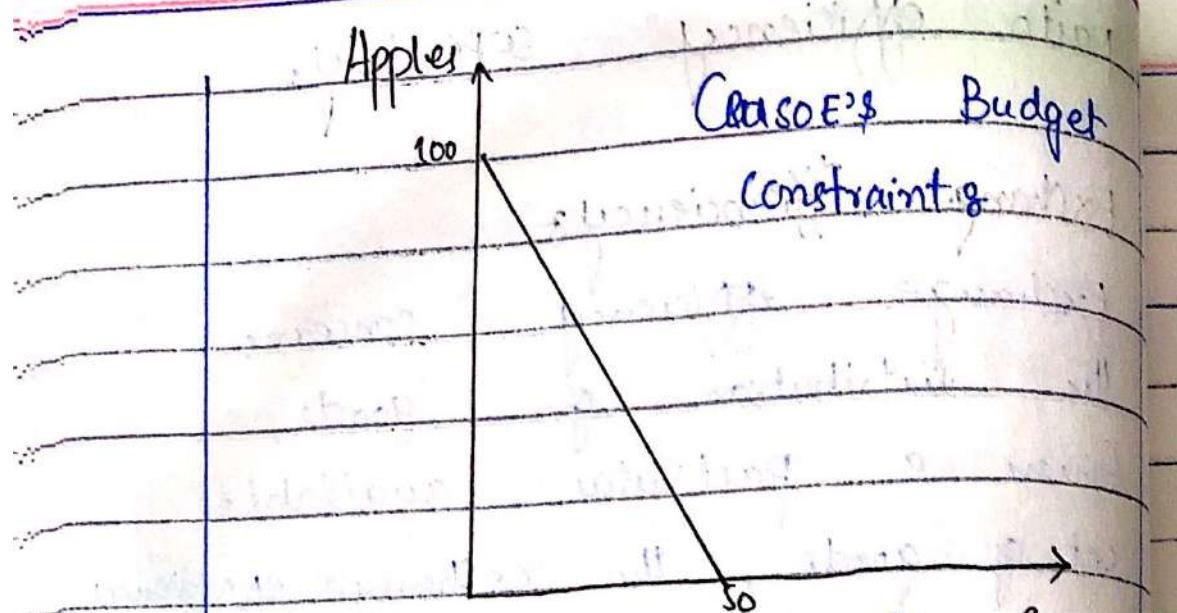
(1) Exchange Efficiency :-

Exchange efficiency concerns the distribution of goods.

Given a particular available set of goods, the exchange efficiency requires that these goods are distributed in such a manner that no one can be made better off without someone else being worse off. Exchange efficiency thus requires that there is no scope for trades, or exchanges that would make both parties better off.

↳ Explaining with the help of Graphs of Budget constraint and Consumer Choice problem :-

↳ Budget Constraint :-

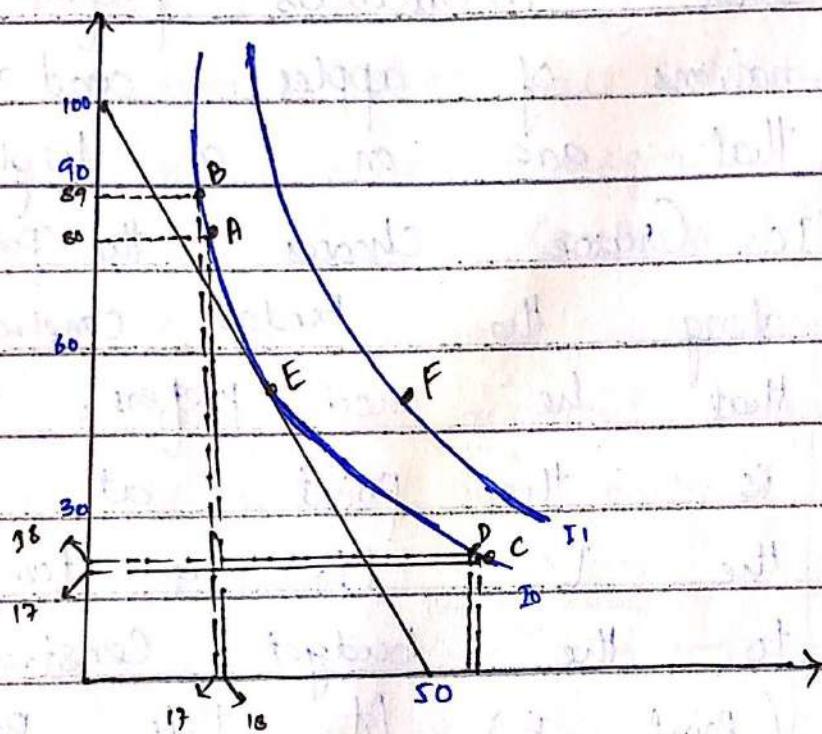


Given income of \$100, Orange the price of oranges of \$2 and the price of apple of \$1, an individual can purchase any combination of apples along or left of the BC. Any combination to the right is unaffordable. The slope of the Budget line is based on the relative price of oranges and apples.

The amount of one commodity that an individual is willing to give up in exchange for the unit of another commodity

is called the marginal rate of substitution.

→ The Consumers Choice Problem



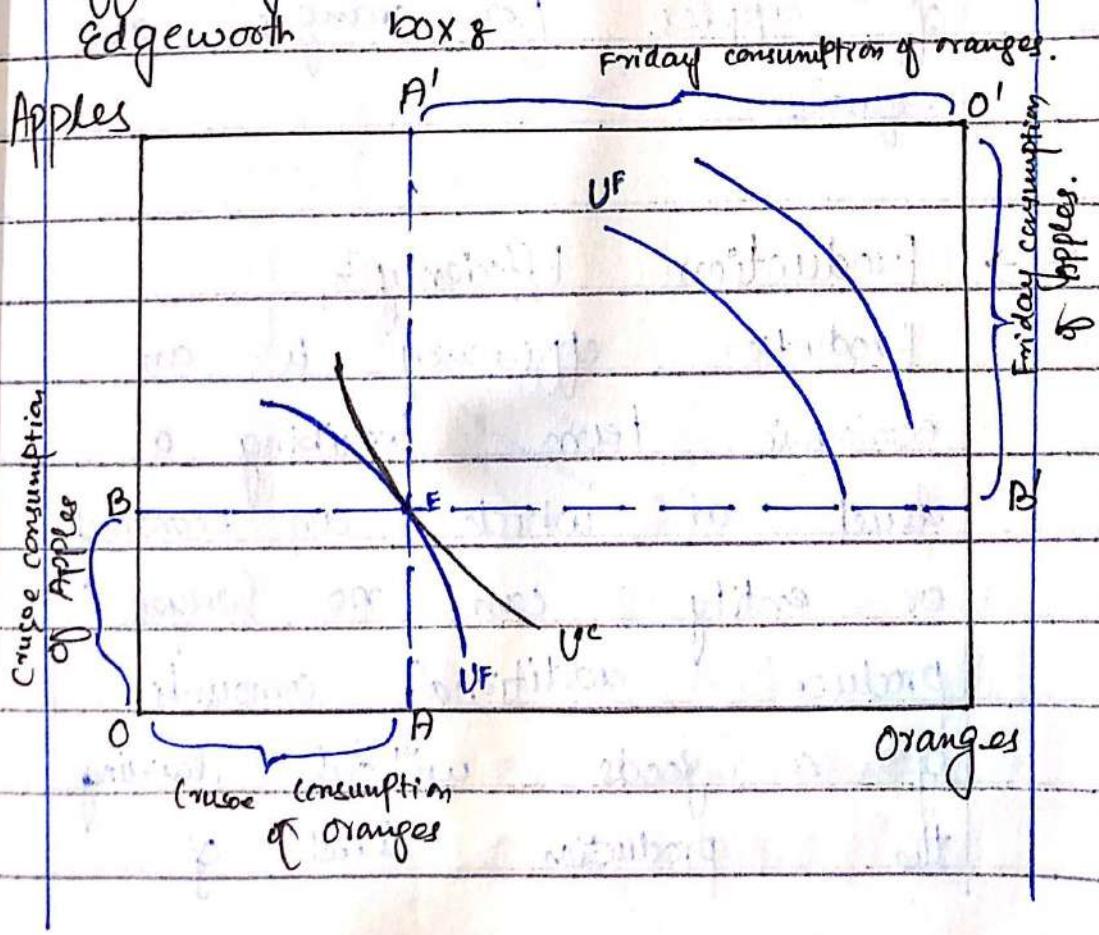
The budget constraint gives the combination of Apples and Oranges that Crusoe can buy, given his income and given the prices of apples and oranges. The indifference curve gives the combinations of apples and

Crusoe among which Crusoe
is indifferent A and B
are on the same IC;
Crusoe is indifferent b/w them.
Other individuals prefer combi-
nations of apples and oranges
that are on a higher
IC. Crusoe chooses the point
along the budget constraint
that he most prefers; that
is the point at which
the IC (I_0) is tangent
to the budget constraint
(Point E). At this point
the slope of Budget
constraint $(-\frac{P_1}{P_2})$ is equal to
the slope of the IC (MRS)

- Because all consumers have
the same price in competitive
market and each sets his
or her own marginal rate of

substitution equal to the price ratio, they all have the same Marginal rate of substitution. Earlier, we showed that the Condition for exchange efficiency was that all individuals have the same marginal rate of substitution. Thus competitive markets have exchange efficiency.

Another way to represent exchange efficiency is with the help of Edgeworth box.



The sides of Edgeworth box give the available supplies of apples and oranges. OA and OB give Crusoe's consumption of the two commodities. Friday gets what Crusoe does not consume; that is O'B' and O'A'.

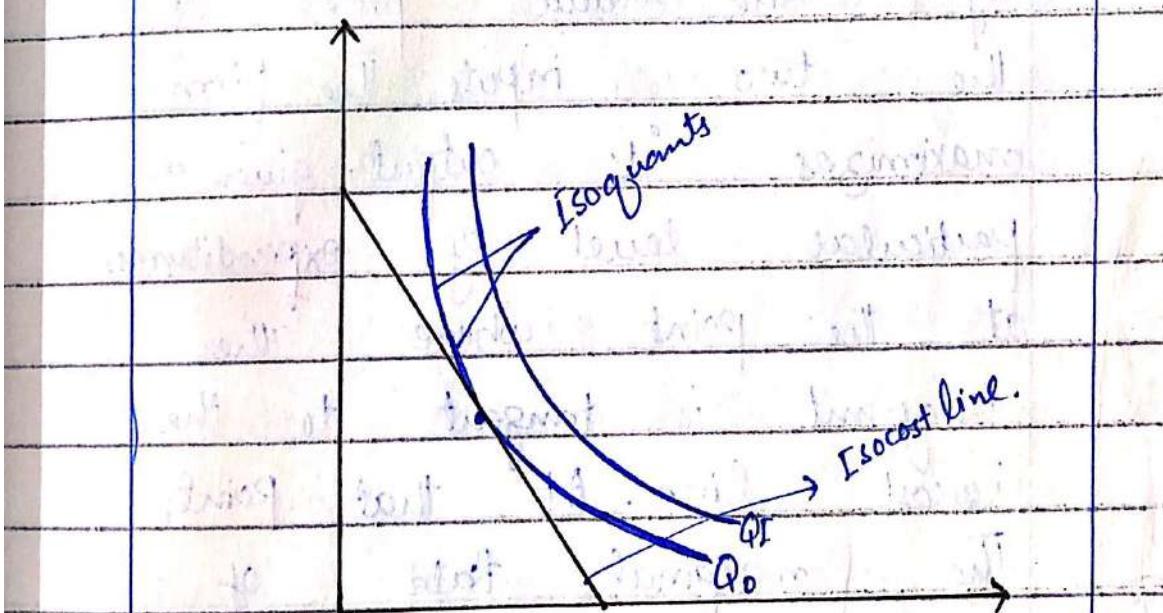
Pareto efficiency requires the tangency of the two IC (one such point E). where the marginal rate of substitution of apples for oranges are equal.

(2) → Production Efficiency

Production efficiency is an economic term describing a level at which an economy or entity can no longer produce additional amounts of a goods without lowering the production level of

another good. This happens when production is reportedly occurring along the production possibility frontiers.

The analysis used to determine whether an economy is productively efficient is similarly to the one we used above for exchange efficiency. Consider the graph.

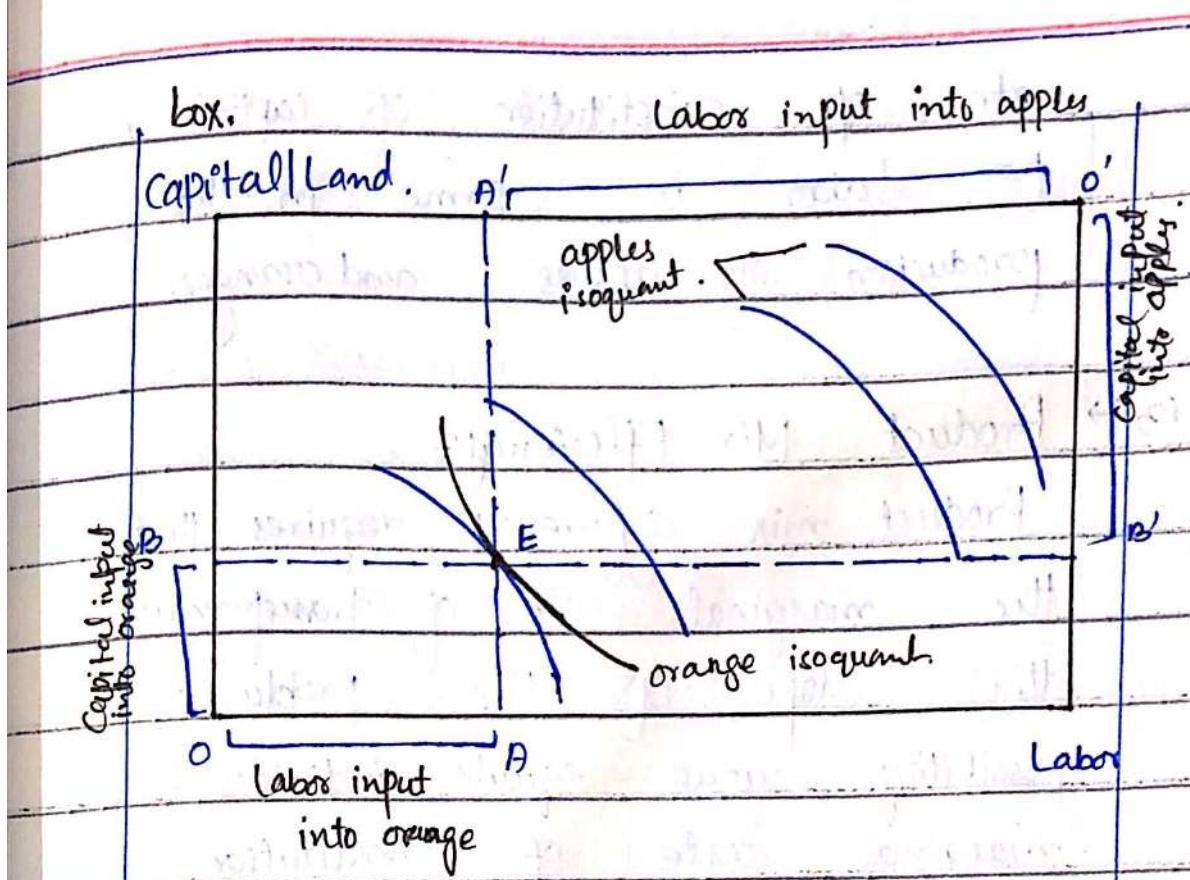


An Isoquant gives combinations of inputs (labor and capital) that yields the same output.

The isoquant labeled Q_1 ,

represents a higher level of output than the isoquant labeled Q₀. The slope of the isoquant is the marginal rate of technical substitution. The isocost line gives the combinations of inputs that costs the same amount. The slope of the isocost line is given by the relative prices of the two inputs. The firm maximizes its output, given a particular level of expenditures, at the point where the isoquant is tangent to the isocost line. At that point, the marginal rate of technical substitution equals relative price.

Another way to represent is with the help of Edgeworth



The sides of this Edgeworth box give the available supply of resources. Resources used in the production of oranges are given by OA and OB; resources not used in the production of oranges are used in the production of apples, O'A' and O'B'. Production efficiency requires the tangency of the isoquants. At tangency point, such as E, the marginal

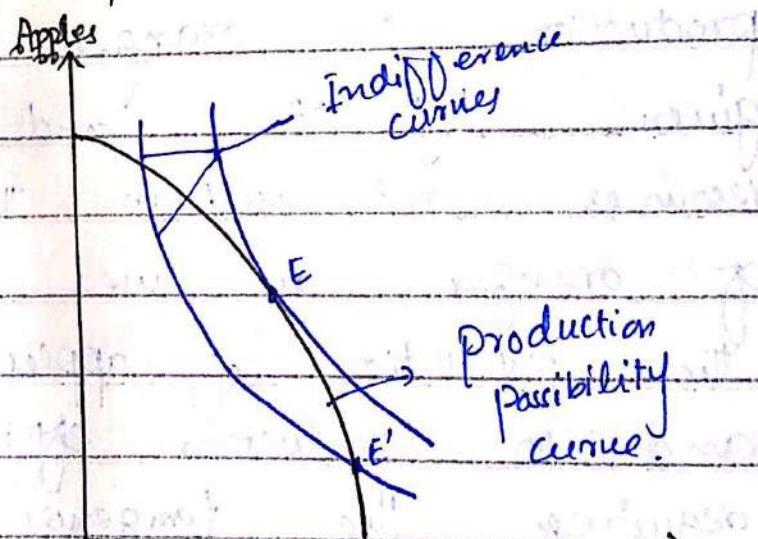
rate of substitution of capital
for labor is same in the
production of apples and oranges.

(3) \hookrightarrow Product Mix Efficiency

Product mix efficiency requires that
the marginal rate of transformation
the slope of the production
possibility curve equals individual
marginal rate of substitution.

Competitive markets have product
mix efficiency.

Graphically:



To reach the highest level
of consumer utility, the Ic

and the Production Possibilities
schedule must be tangent (point E).

At any other point, such as
E', consumers' utility is lower
than at E.

→ Summary &

* Basic Conditions For Pareto Efficiency

(i) Exchange efficiency: The MRS is the same

for all two goods for all individuals.

(ii) Production efficiency: The MRTS is the same

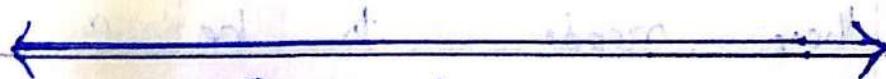
for all two inputs for all firms.

(iii) Product mix efficiency: The MRT

must equal MRS.

Competitive economies satisfy all

three conditions:-



→ (Completed) →

mc(Chapter # 04) Bus

"Market Failure"

Market failure occurs when there is a state of disequilibrium in the market due to market distortion. It takes place when Quantity supplied is not equal to Quantity demanded. Some of the distortions that may affect the free market may include monopoly power and etc.

This chapter looks both at these market failures and at the reasons why governments intervene in markets even when they are efficient.

→ Property Rights and Contract Enforcements

For markets to work, however, there needs to be a government to define property rights and enforce contracts.

In the former Communist countries property rights were not well defined, so people had insufficient incentive to maintain or improve their apartments.

Similarly, if individuals are to engage in transactions with each other, the contracts they must be enforced.

Government activities aimed at protecting citizens and property, enforcing contracts, and defining property rights can be thought of as providing the foundations on which all market economies rest.

⇒ Market Failures and the role of Government.

Markets are not Pareto efficient under six important conditions referred to as market

failures, which provide a rationale for market activity.

(1) Failure of Competition &

For markets to result in

Pareto efficient, there must be perfect competition. However, in

some industries, for instance -

there are relatively few firms, or one or two firms have a large share of market.

When a single firm supplies the market, economists refer to

it as Monopoly, but if few firm do it's called

Oligopoly and if many firms produce a slightly different good, economists refers to such situation

as Monopolistic Competition. In

all these situations, competition deviates from the ideal

of PC in which each firm is price taker.

Reasons why competition may be limited

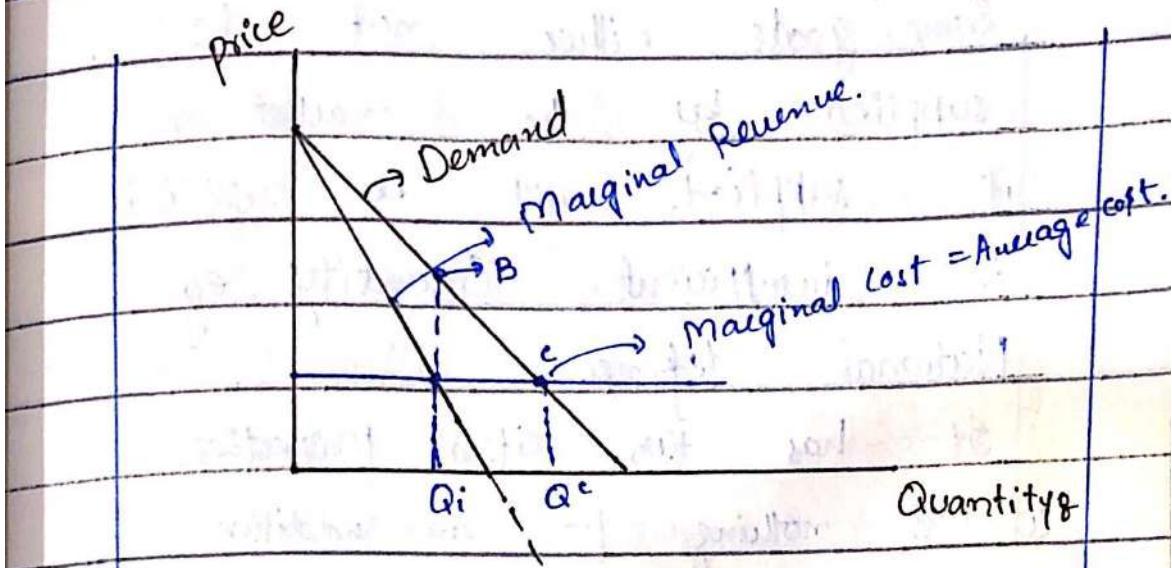
- Natural Monopoly & when average cost of production declines as the firm produces more, a larger firm will have a competitive advantage over a smaller firm.
- High transportation Cost & means that goods sold by a firm at one location are not perfect substitutes for goods sold at another location.
- Imperfect information means that if a firm raises its price it will not lose its consumers (firm view); it only faces a downward-sloping demand curve.
- Strategies:
 - Firms may also discourage competition by threatening to cut prices if potential rivals enter.
- Government Grant Patents

when govt give exclusive right to an incentive/invention to innovators. They make competition in product market less than perfect.

Under Competition Markets are efficient because firm are price takers and set it equal to marginal cost of production. Price can be thought as marginal benefit of consuming an extra unit of the good. Thus, with competition $MB = MC$.

Under imperfect competition, firms set the extra revenue they obtain from selling one unit more - the marginal Revenue equal to the marginal Cost.

Graphically &



↳ Shows the demand curve facing a firm and the marginal revenue, which lies below the demand curve.
 Competitive equilibrium occurs at Q_c , whereas the imperfect competition equilibrium occurs at Q_i , a much lower level of output. This reduction in output is the inefficiency associated with imperfect competition.

(a) Public Goods

(Not Rivals)

(Not excludable)

Some goods either not be supplied by the market or if supplied, will be supplied in insufficient quantity eg National defense. It has two critical properties.

- (i) Cost nothing for an individual to enjoy their benefits (zero marginal cost)
- (ii) It is difficult to exclude individuals from the enjoyment of pure public goods

The fact that private markets will not supply, or will supply too little of, public goods provides a rationale for many government activities.

Public goods are discussed in detail in the next chapter.

(3) Externalities

Whenever externalities

exist, the resource allocation provided by the market will not be efficient. Because individuals do not bear the full cost of the negative externalities they generate, they will engage in an excessive amount of such activities; conversely, because individuals do not enjoy the full benefits of activities generating positive externalities, they will engage in too little of these. Thus for example, with government interventions of some kind, the level of pollution would be too high. So the govt. intervene to minimize or expel such activities from the market.

(4) Incomplete Markets

Whenever a private market fail to provide a good

or service even though the cost of providing it is less than what individuals are willing to pay, there is a market failure that refers to as ~~inf~~ incomplete markets.

e.g.: Some economist believe that private markets have done a particularly poor job of providing insurance and loans, and thus provide a rationale for govt activities in these areas.

Insurance And Capital markets

The private markets does not provide insurance for many important risks that individuals face.

The question that why Capital and insurance market are imperfect.

At least 3 different have

been put forward.

(i) Innovations &

Innovations in new govt insurance policies

(ii) Transaction Costs of it is costly to run market, to enforce contract and new government policies. will face trouble to design a new insurance policy.

(3) Asymmetries of information &

The insurance companies is often less informed about the nature of some risks than the person purchasing insurance.

So, Due to these problems

the markets may not exists, so after these problems

the govt might intervene with similar problems.

→ Complementary markets

The market of complementary goods is referred as complementary

market. So if one good is produced and the other not then there will be no sales for the one which is produced and vice versa. If two produced together will have good market for each, but if produced alone will have no sales.

(5) Information Failure

It is also a market failure where individuals or firms have a lack of information about economic decisions. There are different types of information failure: Information asymmetries - where one party has access to information that another party doesn't.

So, if a consumer or seller does not have enough information, they make a

decision based on incomplete information and arrive at an inefficient outcome, which leads to market failure.

(6) Unemployment, Inflation, And Disequilibrium

Perhaps the most widely recognized symptoms of market failure are the periodic episodes of high unemployment.

Most economists take the high levels of unemployment as a prime evidence that something is not working well in the market. To some economists, high unemployment is the most dramatic and most convincing evidence of market failure.

⇒ Redistribution And Merit Goods &

The sources of market failure discussed here do result in economic inefficiency in the absence of govt intervention. Even if the economy is efficient, though, there are two further arguments for government intervention.

- (i) The first is income distribution. Competitive market may give rise to very unequal distribution, which may leave some individuals with insufficient resources on which to live. One of the most important activities of the govt is to redistribute income.
- (ii) The second argument for government intervention in a Pareto efficient economy arises from concerns that

individual may not act in their own best interest, so due to this the government intervenes. So,

- ↳ Goods that the government compels individuals to consume, such as seat belts and elementary education, are called merit goods.
- ↳ The view that government should intervene b/c it knows what is in the best interest of individuals better than they do themselves is referred to as Paternalism.
- ↳ The view that governments should not interfere with the choices of individuals is sometimes referred to as Libertarianism.

⇒ Two Perspectives on the Role of Government

There are two aspects of analysis of public sector activities. the Normative Approach! And the Positive Approach!

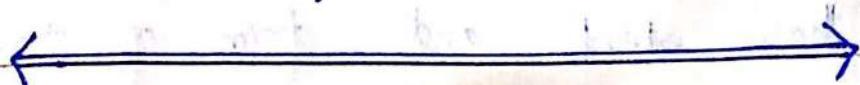
→ Normative Analysis & The normative approach to the role of government asks: How can government address market failures and other perceived inadequacies in the market's resource allocation?

Normative Approach focuses on what the government should do?

→ Positive approach
The positive approach, which focuses on describing and explaining both what the govt actually does and what its consequences.

The Positive approach asks: What is it that the government does, what are

its effects, and how does the nature of the political process, including the incentives it provides bureaucrats and politicians, help explain what the government does and how it does it?



→ not completed →

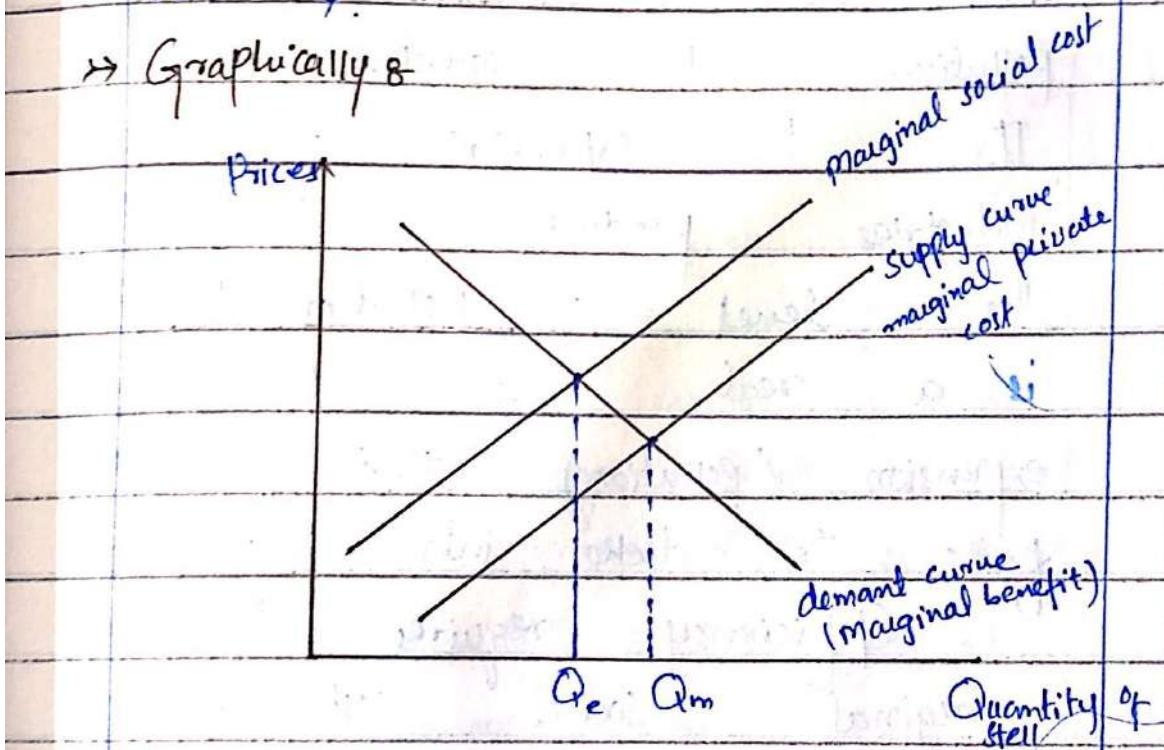
The Federal Government has long had an interest in environment policy - it is increasingly agreed that government actions are required to preserve our environment, the extent and form of those actions remain a subject of debate. This chapter describes the economic rationale for govt interventions in the environment and reviews the major government programs and policy issues related to environmental intervention.

⇒ The Problem of Externalities
As we know that when there is no externality the market is efficient, but with the presence of externality the market is not efficient.

Air and water pollution are the two examples of externalities.

Markets affected by externalities result in inefficient resource allocations.

→ Graphically &



We argued that, in the absence of externality, the resulting market equilibrium Q_m is efficient, where the demand = Supply which simply means that $MB = MC$ at the intersection of demand and supply curve.

But with externalities, the

industries supply curve will not reflect marginal social cost, but only "m" private cost. And here the firms fails to take the cost of pollution into account.

If the expansion of the industries production increases the level of pollution, there is a real cost to that expansion (pollution) that industry fails to take into account.

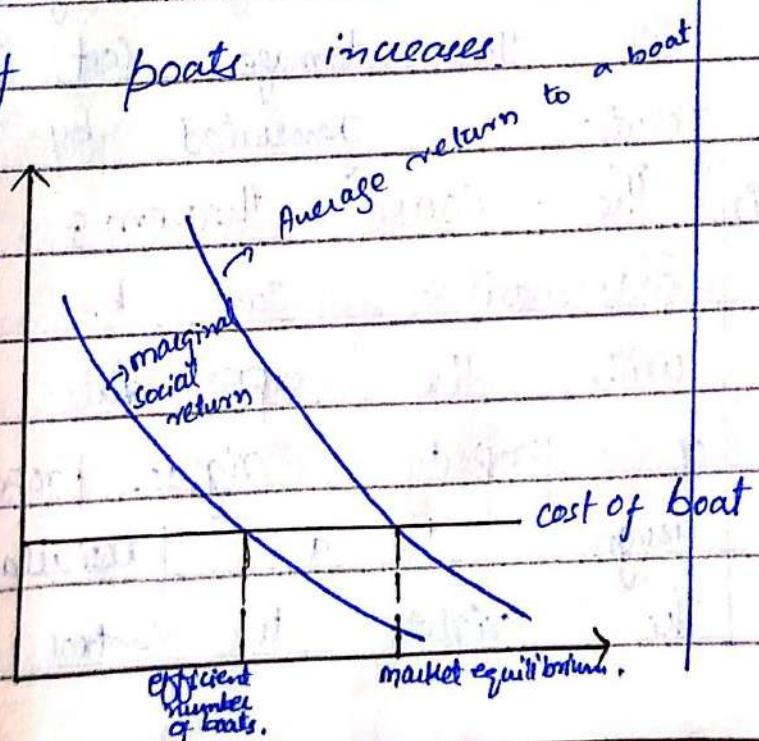
Efficiency requires the marginal social cost equal the marginal benefit of increasing output, production should occur at Q_e , the intersection.

of the marginal social cost curve and the demand curve So, the efficient level of production is lower than the market equilibrium level.

⇒ Common Resource Problem

It is an important class of externalities; their central characteristic is that they pertain to a pool of scarce resources to which access is not restricted.

Consider a lake in which the total number of fish caught increases with the number of fishing boats, but less than proportionately, so that the number of fish caught per boat decreases as the number of boats increases.



Each additional boat decreases the catch of the other boats. This is externality. The marginal social benefit of a additional boat is thus less than the average catch of each boat.

⇒ Private Solutions to Externalities

Under some circumstances, private markets can deal with externalities without govt assistance.

(i) Internalizing Externalities

In narrow sense, internalization is achieved by charging polluters with the damage cost of the pollution generated by them.

(ii) The Coase theorem

Externalities can be dealt with the appropriate assignments of property rights. Property rights assign to a particular individual the right to control some

assets and to receive fees
for the property use.
The assertion holds that whenever there are externalities the parties involved can get together and make some sets of arrangements by which the externality is internalized and efficiency is ensured. This is referred to as the Coase theorem.

(iii) Using the legal system

By using the legal system, imposers of externalities can be forced to compensate victims. Our system of common law does not allow one party to injury another.

⇒ Failures of Private Solutions

There are several reasons

that why government intervention

is required

- (i) Public Good problem, because no one can be excludable. (Free Rider)
- (ii) Asymmetric information, because of which markets are inefficient
- (iii) Not well developed market, Problem of 'no' unitization.
- (iv) Transaction Costs
 - Cost to expel externality through Judiciary system.
- (v) Uncertainty about the extent of injury.
- (vi) Additional problems with litigation
 - ↳ Uncertainty about outcomes.
 - ↳ Differential access.

⇒ Public Sector Solutions to Externalities & Public sector solutions to environmental externalities fall into two broad categories

(i) Market - based solutions

(ii) Direct Regulations.

→ Market - Based solution:-

It take three forms.

(i) Fines and taxes.

(ii) Subsidies for pollution abatement.

(iii) Marketable permits.

ii) Fines and taxes :-

A properly calculated fine or tax presents the individual or firm with the true social costs and benefits of its actions. Fines of this sort designed to make

marginal private cost,

equal marginal social

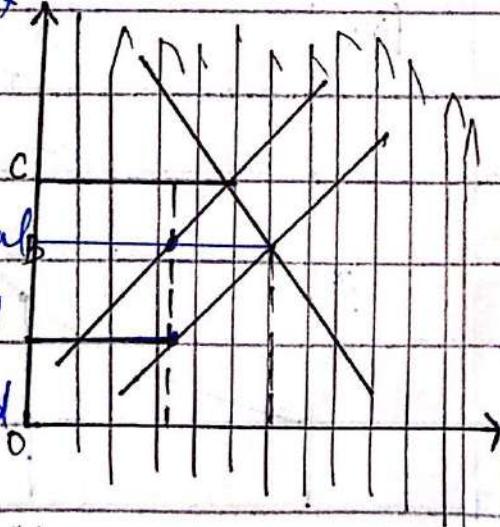
cost and marginal c

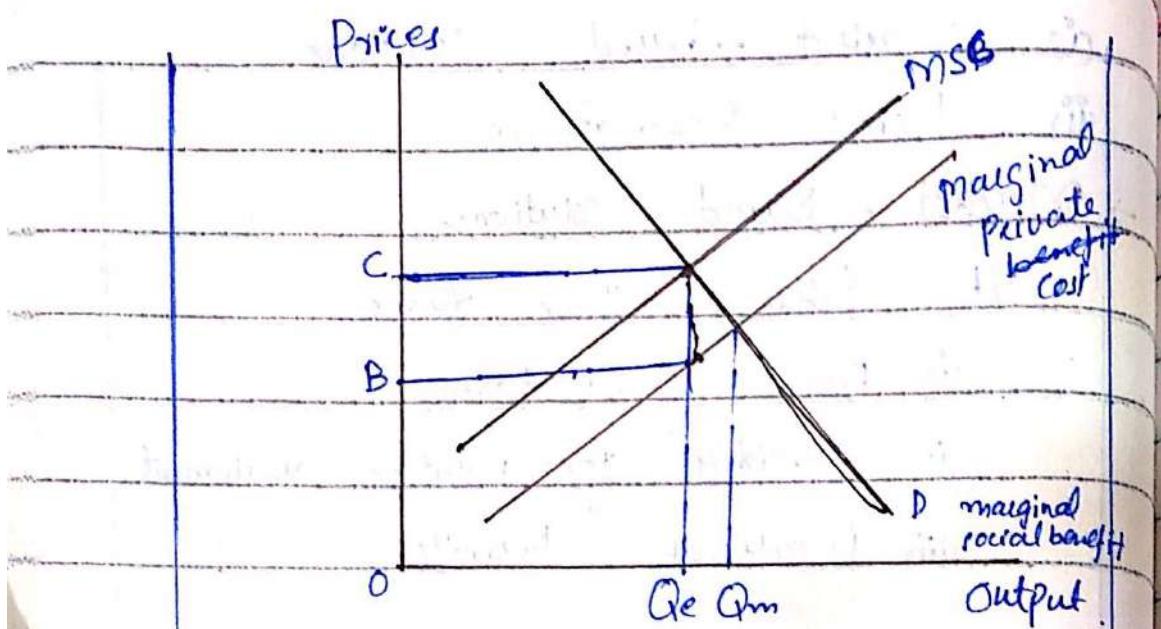
private benefits equal

to marginal social

benefit - are called

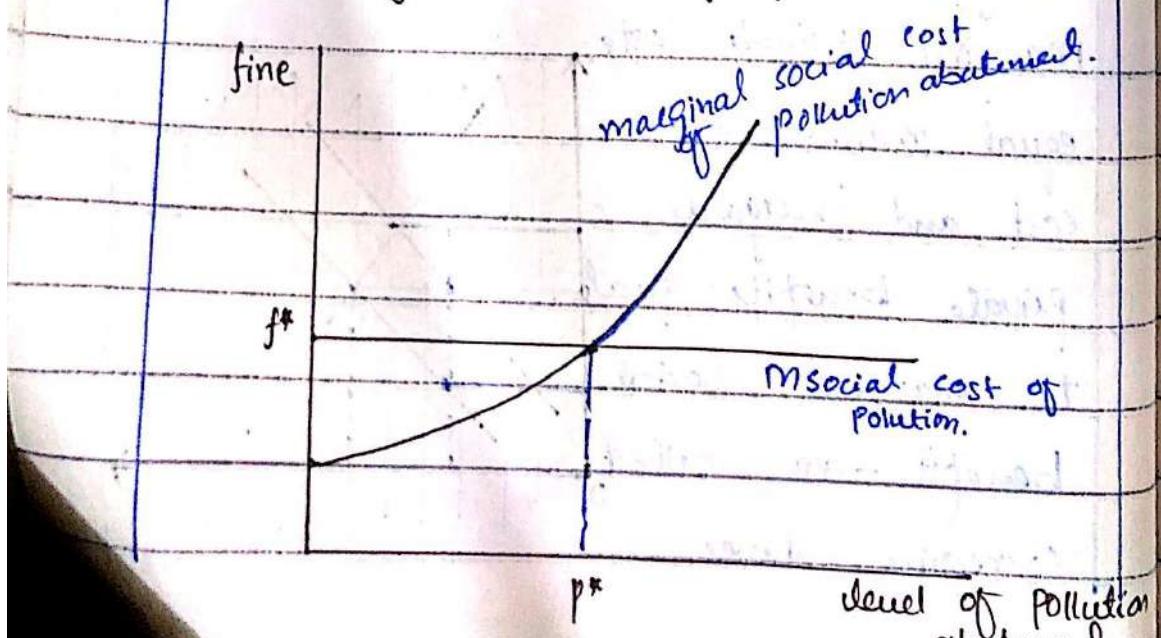
Corrective taxes.





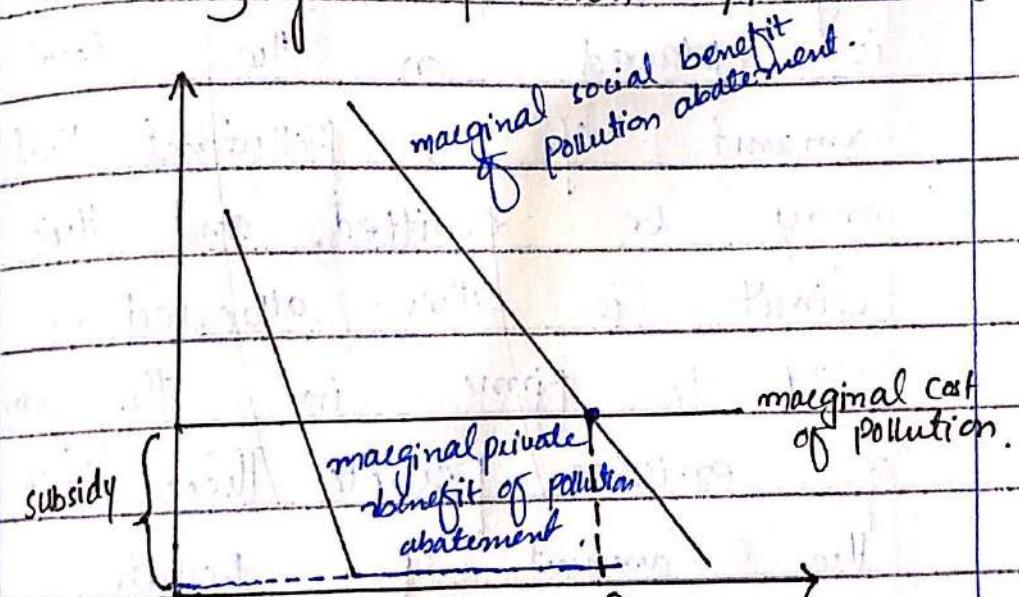
In the absence of tax on pollution, firms will set price equal to MPC. There will be excessive production (Q_m). By setting a tax equal to the marginal pollution cost, efficiency is obtained.

Efficiency Control of Pollution.



The efficient level of pollution can be attained either by charging firms a fine of F\$ per unit of pollution or by imposing a regulation that firms have a pollution abatement level of p*.

(ii) Subsidizing Pollution Abatement



By subsidizing the purchase of pollution abatement equipment (by the difference b/w marginal social benefit of pollution abatement and marginal private benefit), an efficient level of expenditure on pollution abatement can be

attained.

(iii) Marketable permits

Popular market-based solution involves marketable permits, commonly referred as a tradeable permits, which operate under a Cap and trade system. A limit, or cap is placed on the total amount of a pollutant that may be emitted, and this limit is either allocated or sold to firms in the form of emission permits. These limit the amount of pollution that any single firm may emit.

(2) Regulations

Regulations focusing on inputs or standards are likely to result in efficiency.

4. The clean air act has

greatly reduced the level
of pollution in the air.
The clean water act has
greatly reduced water pollution.

→
kind (completed) form

~(Chapter # 05)~

"Public Goods And Publicly Provided Private Goods"

This Chapter asks:

What is distinctive about the goods typically provided by governments? What prevents them in many cases from being provided privately? And if they are provided privately, why is the private supply likely to be inadequate?

→ Public Goods

↳ Not rival

↳ Not excludable.

e.g. National defense

↳ Pure Public Good.

⇒ Public Goods And market Failures

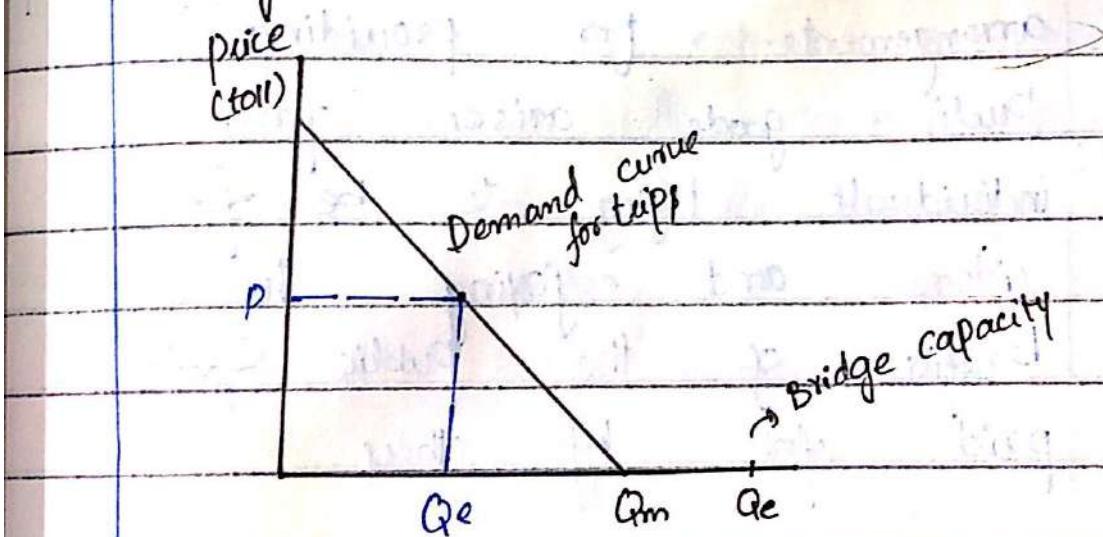
There are two basic forms of market failure associated with Public Goods

Underconsumption and Undersupply.

In the case of non-rival Goods, exclusion is undesirable b/c it results in Underconsumption.

Without exclusion, however, there is problem of undersupply.

→ Paying For Public Goods.



If the capacity is large enough, the bridge is non-rival good.

Although it is possible to exclude people from using the bridge by charging a toll, this results in Underconsumption of the good, Q_e , below the no toll level of Consumption, Q_m .

→ The free rider - problem

The reluctance of individuals to contribute voluntarily to the support of public goods is referred to as the free rider problem.

The problem with voluntary arrangements for providing public goods arises from individuals trying to be free riders and enjoying the benefits of the public goods paid for by others.

→ Pure and impure Public Goods

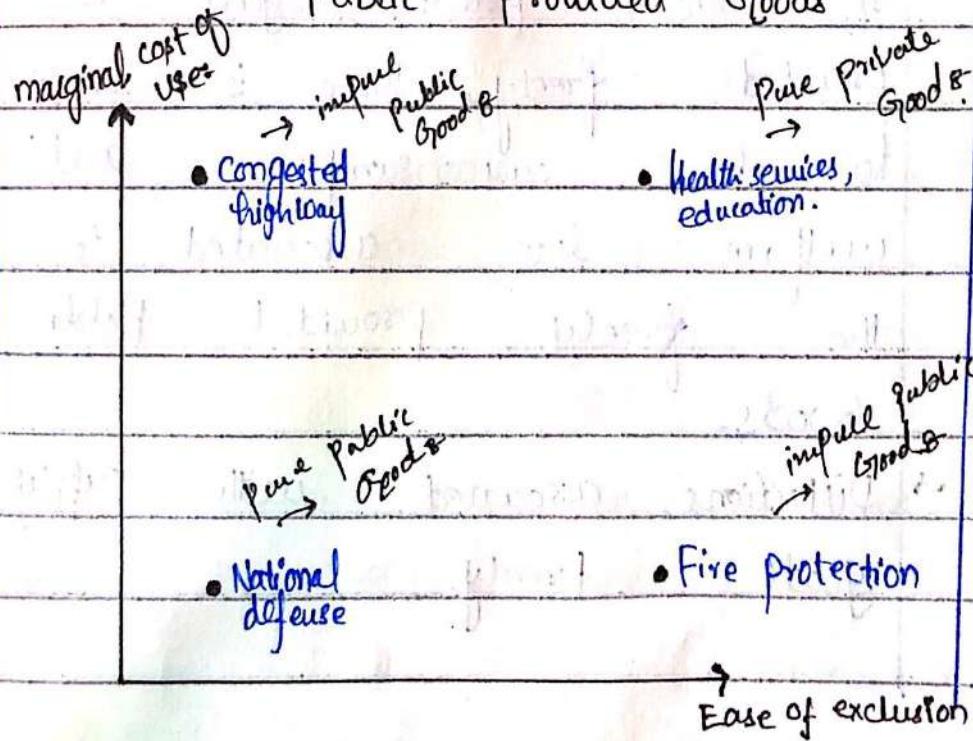
A pure public good is a public good for which the marginal cost of providing it to an additional person are strictly zero and for which it is impossible to exclude people from receiving the good.

National defense is one of the few examples of a pure public good.

→ Impure Public Goods

A good that has some of the characteristics of a public good but is not entirely non-rivalrous or non-excludable. An impure good may be non-excludable but can become congested, or it may be non-rivalrous but exclusion may be possible.

Public Provided Goods



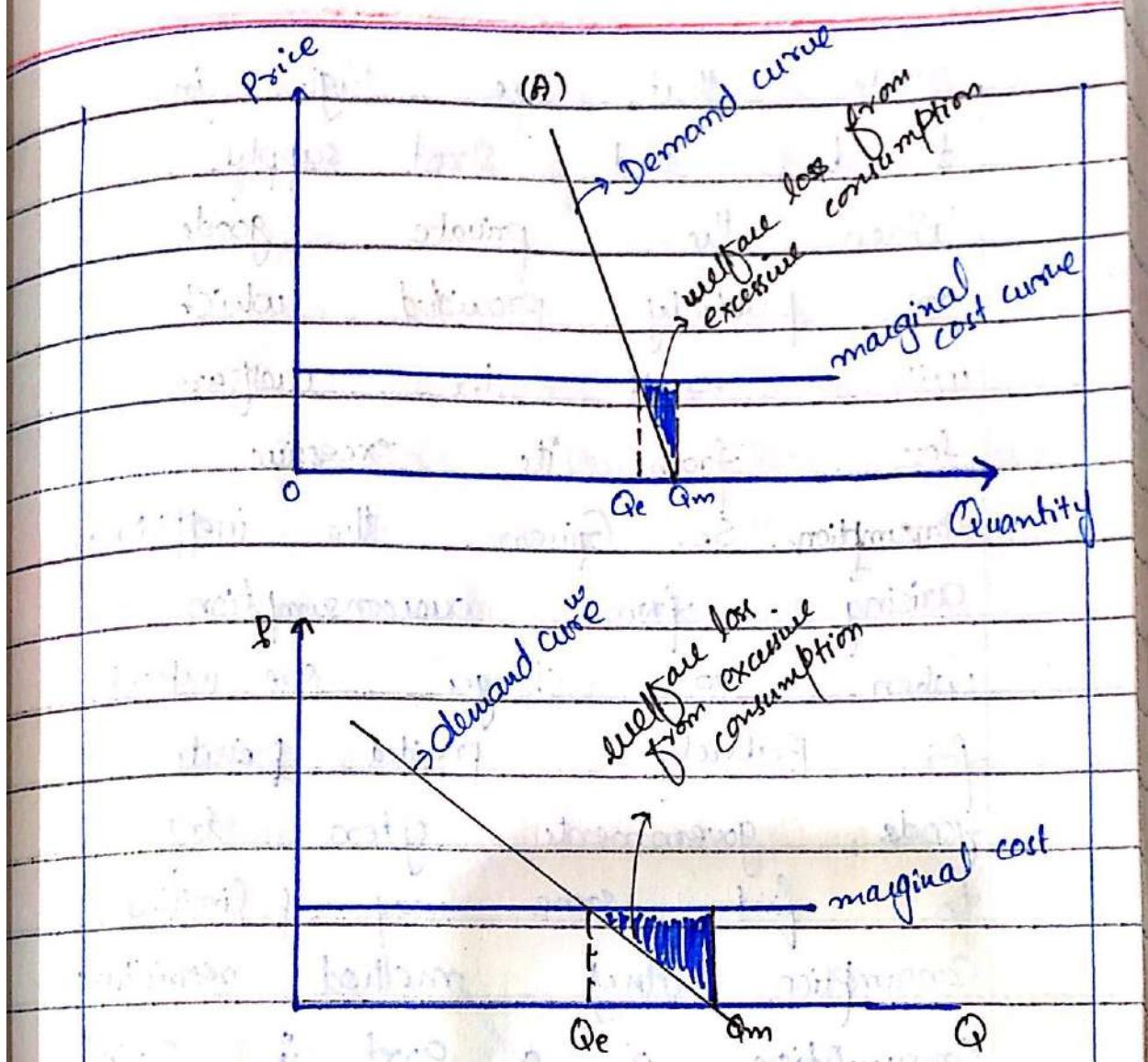
→ Publicly Provided Private Goods

Publicly provided goods for which there is a large marginal cost associated with supplying additional individuals are referred to as publicly provided private goods.

e.g. education is a publicly provided private good in a sense defined as - if the number of students enrolled doubles, costs will roughly double.

If the private good is provided freely, there is likely to be overconsumption, and welfare loss associated to the freely provided public goods.

→ Distortions associated with supply goods freely.



If the good is publicly provided (freely), the size of the welfare loss is associated with what type of a good it is.

⇒ Rationing devices for Publicly provided private goods.

Rationing is the limiting of

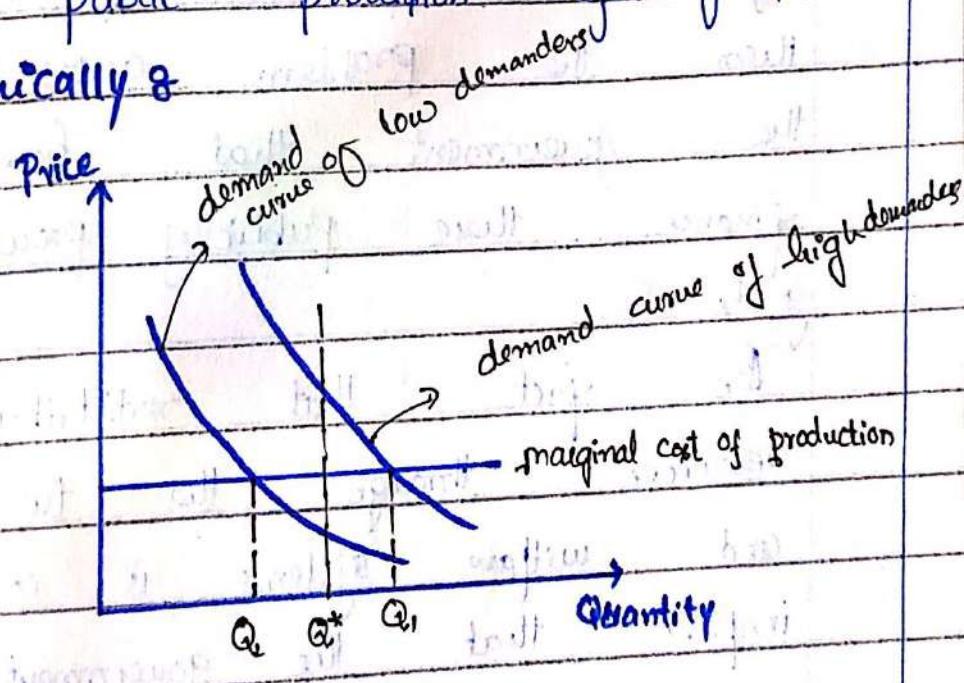
goods that are high in demand and short supply.

When the private goods are publicly provided which will result in welfare loss from its excessive consumption. So, Given the inefficiencies arising from overconsumption when no changes are imposed for Publicly provided private goods, governments often try to find some way of limiting consumption. Any method restricting consumption of a good is called a rationing system.

- (i) Prices provide one rationing system, we have already discussed how user fees may be employed to limit demand.
- (ii) Second commonly employed way of rationing publicly provided

goods is uniform provision: supplying the same quantity of the good to everyone, thus we typically provide a uniform level of free education to all individuals, even though some individuals would like to have more and some less, this, then, is the major disadvantage of the public provision of goods.

Graphically 8



iii) A third method of rationing that is commonly employed by the government is queuing: rather than charging individuals money for access to the publicly

Providing goods or services, the government requires that they pay a cost in waiting time

Limitations of income redistribution and the efficient supply of public goods

As we know that when the goods are provided publicly there the problem arise for the government that how to finance these publicly provided goods So,

The fact that redistributing resources through the tax and welfare systems is costly implies that the government may look for alternative ways to achieve its redistributive goals;

One way is to incorporate redistributive considerations into its evaluation of public

projects.

⇒ Efficient Government as a public goods

Efficient management of the government is a public good in itself.

← →
and completed. ↗