MARKET FAILURE AND GOVERNMENT INTERVENTION

funding faire information buffer externalities equilibrium fairness consequences demerit equity goods failure failure failure failure faisez maximum price state

ECONOMY AND MARKET

- Objective of an economy is to generate wealth and welfare for the society, using the available resources.
- These resources are scarce and there are multiple claims over them due to unlimited human wants.
- Some institution is required to facilitate this resource allocation process across alternative uses.
- This involves trade offs and opportunity costs.
- Two such institutions are: Market and Government

WHAT IS MARKET

- Market facilitates exchange and transaction of goods and services.
- Seeks efficient resource allocation across alternative uses.
- Adam Smith's "Invisible Hand"
- Rational individuals acting to maximise self interest.



ROLE OF MARKET: EFFICIENCY

Efficiency is best defined in terms of Pareto Efficiency

An efficient outcome in the market is such that all agents have maximised their personal gains and no further gain is <u>mutually</u> possible.

(No one can be made better off without making someone worse off)

Allocation is said to be inefficient if the gains from market transactions have not been exhausted and there is further scope for improvement.

Efficiency in resource allocation is vital for socially desirable outcomes.



MARKET FAILURE



- According to mainstream economics, efficient resource allocation is outcome of:
 - Rational choices/decisions by economic agents
 - Free and competitive market structure
- Market failure occurs when the market fails to give

efficient

- allocation of resources, due to non-fulfilment of any of above
- conditions.
- It is a scenario where individual pursuit of self-interest leads to
- inefficient results which can be improved upon from societal point
- of view.
- Government can play a crucial role to improve the inefficient market
- outcomes.

CAUSES OF MARKET FAILURE



IMPERFECT MARKETS:

- Monopoly leads to imbalance of power in market- monopolist restrict Quantity supplied and increase prices in market to make superprofit.
- Oligopoly consists of few big firms/suppliers dominating the market. (Like petroleum exporters) cartelization leads to monopoly behaviour.
- Restricted output and jacked up prices reduces consumer welfare and leads to suboptimal outcome.







ASYMMETRIC INFORMATION

- Transactions where one party has access to more or better information than the other and chooses not to share it with others.
- This creates an imbalance of power in market which can lead to market failures.



Suppose information doesn't want to be free? Suppose what information really wants is to be meted out in tiny, controlled doses at an outrageously high price?





MORAL HAZARD

It is the lack of incentive on the part of an individual to behave rationally because the costs of her irrational behaviour are not internalised due to hidden nature of action or characteristics.



EXAMPLES OF MORAL HAZARD: CASE 1

- Insurance industry: People tend to make irrational choices w.r.t. insurance and end up with either too little insurance or no insurance- bearing a lot of risk.
- As a corrective measure government may intervene to make insurance compulsory (automobile insurance) or
- Government may provide insurance related subsidy (tax-free life insurance) to encourage proper insurance coverage.

EXAMPLES OF MORAL HAZARD

- On the other hand too much insurance means that people will take inadequate care
- As a result insurance companies restrict the amount of insurance to shift some burden of damage on the insuree.



CASE 2. : FINANCIAL CRISIS AND BAIL OUTS: MORAL HAZARD INVOLVED









"Turning our dismal performance around might be easier if we eliminated our ethics committee."

ADVERSE SELECTION

This form of market failure basically happens due to lack of proper information about the quality of product or clients due to hidden information.

Economic agents end up either selecting a substandard product or leaving the market all together.

ADVERSE SELECTION: CASE 1

- George Akerlof's example of defective car market called lemons.
- This situation arises when buyers and sellers have different information about the quality of good.
- The risk of purchasing a lemon would lower the price buyers are willing to pay for all kinds of second-hand cars.
- Price of all second-hand cars will go down and those with non-lemon cars would be driven out of the market.



CASES: SUB-PRIME LENDING



"I can't foresee any problems with your loan, Mr Davis."





ADVERSE SELECTION AND MORAL HAZARD



CORRECTIVE INTERVENTION

- Signalling
- Banks become selective in lending
- Financial sector Regulation like Basel Norm's and Capital Adequacy Ratio.
- Nationalization of banks and priority sector lending.

EXTERNALITIES

- An externality is defined as the uncompensated impact of one person's actions on the well being of another who is not involved in the activity.
- If the impact on the bystander is adverse, it is called a negative externality. If it is beneficial, it is called a positive externality.

For example, automobile exhaust, R &D of new technologies.

Buyers and sellers neglect the external effects of their actions when deciding how much to demand and supply. As a result, the market equilibrium leads to either over or under production/consumption.



POLICY RESPONSE & EXAMPLES:

- Policy response may include regulation, taxation, subsidies and legislation, assigning property rights.
- Negative externality: exhaust from automobiles.

Policy response: emission standards/ clean fuel legislations/ taxes.

Case: DTC buses in New Delhi.

 Positive externality: Research and Development of new technologies.
 Policy response: Patents, IPRs, Copyrights.



PUBLIC GOODS

Public goods possess two characteristics: non-rivalry and non-excludability in consumption. Public goods involve free rider problem. A free rider is a person who enjoys the benefit of a public good without paying for it. Since public goods are jointly consumed, private benefits accruing to an individual cannot be assessed, neither the individual has any incentive to reveal his true preference. As a result, either the good would not be provided or a suboptimal amount would be provided.

PUBLIC GOOD AND FREE RIDER PROBLEM AT MCRHRD











- Most the goods and services provided by the government are in the nature of public goods or merit goods. Merit goods are socially desirable and individual expenditure on it my be socially inadequate.
- To finance its provisioning, government sets progressive tax structures.









FREE RIDERS PROBLEM

Tax evasion (lack of resources leads to sub-optimal provisioning of public services).





FREE RIDERS PROBLEM: GROUP ACTIVITY





© The Tough Love Angel

TRAGEDY OF COMMONS

- Common resources are those which are rival in use but non-excludable.
- Depletion of a common resource by the action of individuals acting in their self interests may lead to over exploitation of the resource.
- Illustrations: Common pastures, fishing



TRAGEDY OF THE GLOBAL COMMONS

TRAGEDY OF COMMONS: CASE

- Defining property rights can be a possible solution to the tragedy of commons.
- But sometimes it becomes difficult to assign the rights properly. In such a situation, agreements between the parties involved can be a possible option.





For example, Grand Banks fishing case. (U.S and Canada subsequently agreed to limit the amount of fish that their fishermen can take away from the Grand banks.)

How the world's oceans are running out of fish

The future of our seas has never been more precarious. Ninety years of industrial-scale overfishing has brought us to the brink of an ecological catastrophe and deprived millions of their livelihoods. As scientific guidelines are ignored and catches become ever bigger, Alex Renton tells why the international community has failed to act

CASE: TRAGEDY OF COMMONS

Case: Bio-diversity convention, Kyoto Protocol, Montreal $\mathbf{\mathbf{\hat{v}}}$ Protocol, Vienna convention etc







XI Conference of Parties CONVENTION ON BIOLOGICAL DIVERSITY **HYDERABAD INDIA 2012**

MONTREAL PROTOCOL





EQUITY V/S EFFICIENCY

- Efficiency is but one social objective. Another is equity- fairness in the distribution of goods and services in a society.
- The market system does not have any inherent mechanism to attain equity in its operation. Market outcomes can be highly unequal and skewed.
- Equity can be brought about by redistribution of endowments with which economic agents enter the market.
- Redistribution of resources an economic, social and political processrequires government intervention.
- Some common policy interventions include taxes, transfers and subsidies; social security schemes, land reforms etc.

MARKET FAILURE THUS PROVIDES ECONOMIC RATIONALE FOR FOLLOWING GOVERNMENT INTERVENTIONS...

- Direct provisioning of goods and services (public goods, merit goods).
- Legislations defining property rights and responsibilities.
- Tax collection and subsidization.
- Price control and regulation.
- Quality and quantity control, and regulation.
 For example, electricity and railways; setting product standardization like clean air, worker safety, licensing requirement for doctors.



- Regulating information about products and forms. For example:
 (i) SEBI requires certain information be provided to prospective buyers of new stocks.
 (ii) Tobacco products must be labeled 'dangerous to health'.
- Redistribution measures by the government.
- Incentive building and creating new markets where there are none.



Thank You