Market Inefficiencies

Externalities has 3 costs:

Market equilibrium when internal costs == price

Internal costs - costs of an activity paid by individual participating

decisions of consumers and firms

External costs - cost of an activity paid by someone else not participating (3rd party)

Social costs - Internal + External

'cost of activity paid for by individual, the 3rd party == social cost

3rd party Problem

Externalities occur when private cost/benefit diverges from social cost/benefit

People not involved in activity experience positive or negative externalities

Positive externalities exists when internal benefits < social benefits
- Education, vaccines
- Benefits experienced by 3rd parties
- "Not enough" of the good is consumed and produced

Negative externalities
- Pollution, 2nd hand smoke
- Costs experienced by 3rd parties
- "Too much" of the good is consumed and produced

Correcting for Externalities

For positive externalities
- Help individuals realise external benefits
- Finance/subsidize production + consumption of the good
- Laws requiring consumption
- Overall consumption increased, right-shift in demand
  ↳ social optimum

For negative externalities
- Force individual to pay for external costs
- Tax production
- Regulate production
- Overall output reduced, left-shift in supply
  ↑ due to too much of good produced

Pecuniary Externalities

- Externality of prices, not resources

e.g. People move to city and buy houses
Housing prices go up
3rd party hurt later by price increase
However, loss is exactly offset by additional gain received by house sellers

Property Rights

Externalities often arise due of lack of clearly defined property rights

Private property - Incentives to: maintain
protect
conserve
trade

Coase Theorem

2 adjacent farmers, no fences. One cattle, one wheat

Scenario 1:
Cattle rancher liable for damages

Options
1) Put up a fence
2) Pay damages to wheat farmer

Rancher will consider costs of both to make a choice

Scenario 2:
Wheat farmer does not have a legal right to cattle-free farms

Options
1) Put up a fence
2) Accept occasional cattle damage

Result - a fence will be built

If no barriers to negotiations, interested parties will begin to correct any externality

4 types of Goods

Excludable	Private Good	Club Good
Non excludable	Common Pool Resource	Public Good
	Rival	Non-rival

All sold in markets except public goods

rival quantity output is high

Private goods - excludable must be purchased before use
- rival can only be enjoyed by one person at same time

Majority of goods purchased/consumed is private

Public goods (provided by government) - consumed by many
- difficult to exclude non-payers from consumption

not in market due to free-rider problem

Free-rider problem - someone recieves benefit of good for free

e.g. free meals, free shelter
copyright laws exist to eliminate

tv, gym membership
Club goods - Non-rival, excludable

low market price, high quantity
Common Resource goods - Rival, non-excludable Quantity ↓, overproduction
Fishing, public campsites, national parks, driving

Cost benefit analysis
Costs - known amount, easy to compute
Benefits - difficult to quantify, different for all people
Private goods - benefits and willingness expressed through prices

Tragedy of the Commons
- occurs when rival, non-excludable good becomes depleted/ruined

Incentives - to neglect
overuse
ignore

Solutions - general proactive management taxes, laws, rules
e.g. Crab fishing: 1) Limit length of fishing season
2) Regulate how many crabs harvested
3) Only adult males harvested

Cap and Trade - a system of pollution "permits" that are traded on an open market
Purpose → to reduce pollution