Why we need a Public Sector

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WHAT ARE WE TALKING ABOUT TODAY

PROPERTY RIGHTS

CONTRACT ENFORCEMENT

MARKET FAILURES

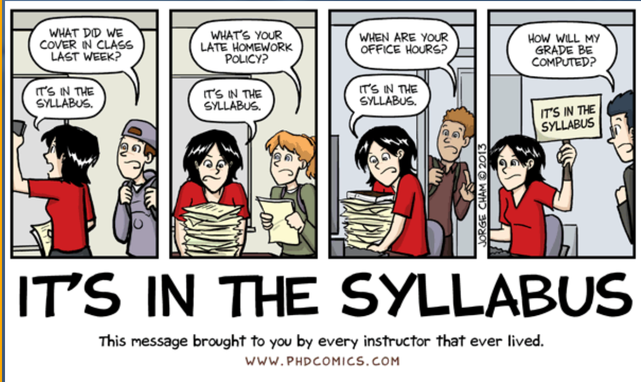
INCOME DISTRIBUTION

MERIT GOODS

DISCLAIMER

This is a new Course, and although I have spent an awful lot of time to develop it, it has not been tested on real students - even worse on real Hult students.

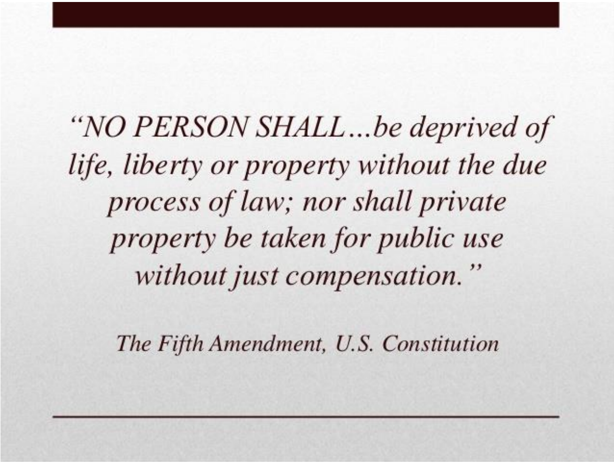
Don't forget!



Property Rights

Tragedy of the commons and tragedy of the anticommons

Property Rights



Property rights are necessary for any market. The absence of property rights or non well-defined property rights mean that there are no adequate incentives of taking care the commonly owned resources.

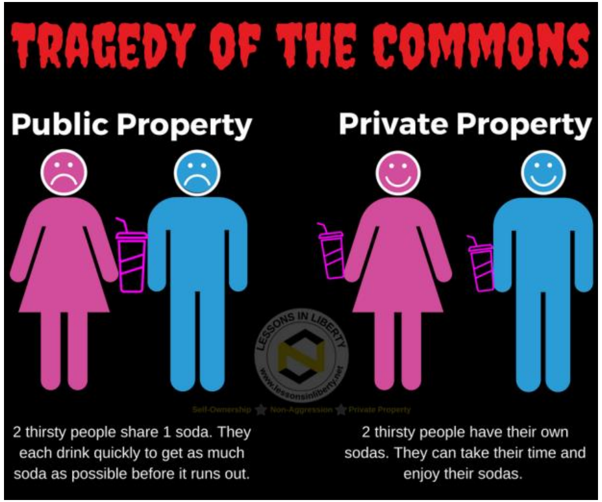
Example:

In the former communist countries, property rights were not well defined and people had insufficient incentives to maintain and/or improve their apartment.

In market economies, the benefits of such improvements are reflected in the market price of the properties.

The tragedy of the commons

The **tragedy of the commons**, is term used to describe a situation within a shared-resource system where individual users acting independently according to their own self-interest behave contrary to the common good of all users by depleting or spoiling that resource through their collective action.



LESSONSWORTHSHARING

Proposed Solutions

For a long time the common response to the problem of the commons was either conversion of common resources to private or the external regulation of these common resources.

- If the resource is converted to private property, the owner should have both the profit incentives and the property rights to manage the resource responsibly.

- If the resource is regulated by the government, rules could be imposed on individual users for the common good.

In 1999, Nobel Prize-winning economist Elinor Ostrom revisited these solutions as private control over previously public resources could create the usual problems of monopoly business practices, whereas external oversight could generate inappropriate and poorly implemented regulations.

- She noted a third response to the tragedy of the commons: Utilization of community social capital to devise creative and effective local solution.

The tragedy of the anticommons

Michael Heller used the term **tragedy of the anticommons** to describe a problem where is not the lack of property rights, but the excessive private ownership of a community resource that prevents achievement of a desirable outcome for society.

Example:

Patenting of genes

"Your problem is in the gene that makes antibodies, but since the Biophase Corp. now has a patent on that gene, I can't do anything for you."

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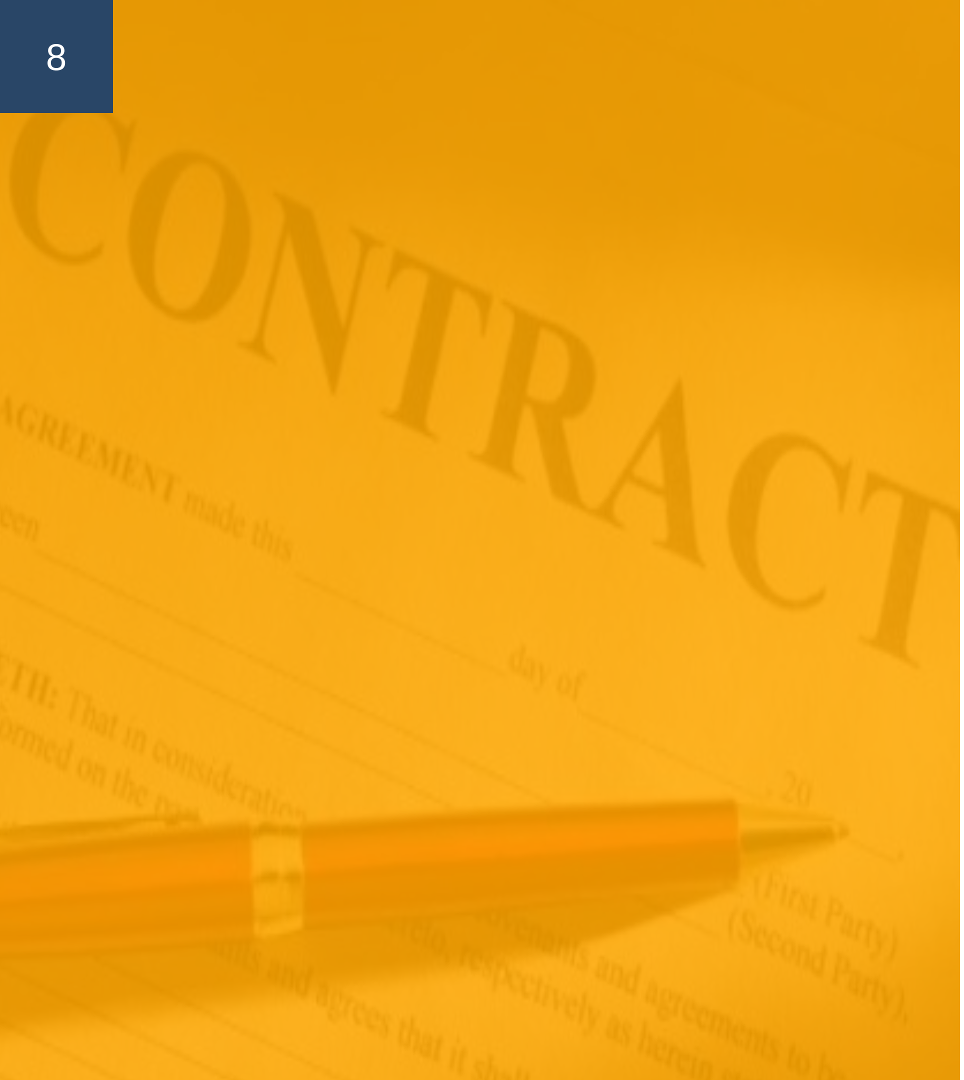


Contract Enforcement

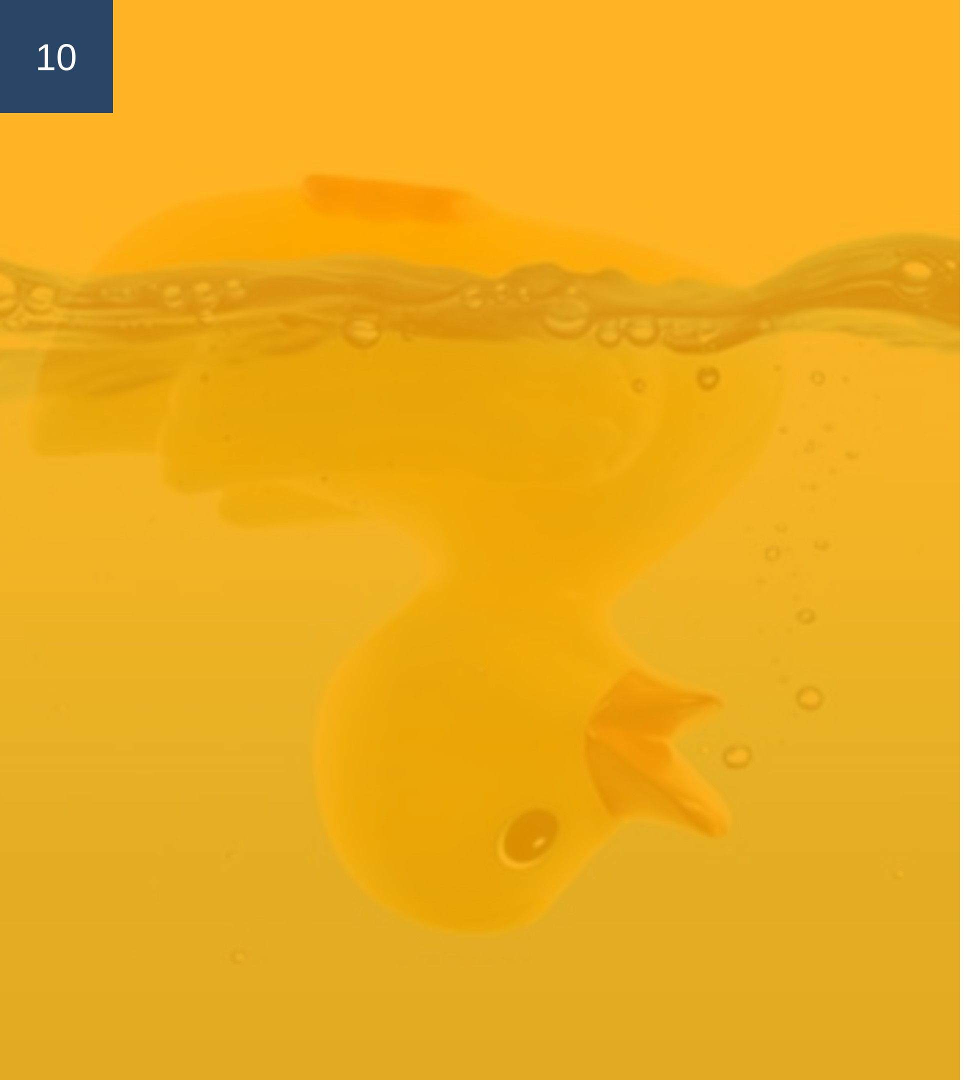
Rights need protection

Contract Enforcement

If individuals are engaged in transactions with each other, the contracts they agree on must be enforced.

If they are not and there are no consequences for breaking a contract then there will be no trust in the market.

Government activities aiming at protecting citizens and property, enforcing contracts, and defining property rights provide the foundations on which market economies rest.



Market Failures

When there is no invisible hand, or when the invisible hand is broken, or when the invisible hand points to the wrong direction, or…

Markets are not Pareto efficient under six important conditions, which are known as **market failures**, and provide a rationale for government intervention.

1. Failure of competition
2. Public Goods
3. Externalities
4. Incomplete Markets
5. Information Failures
6. Unemployment, Inflation, and Disequilibrium

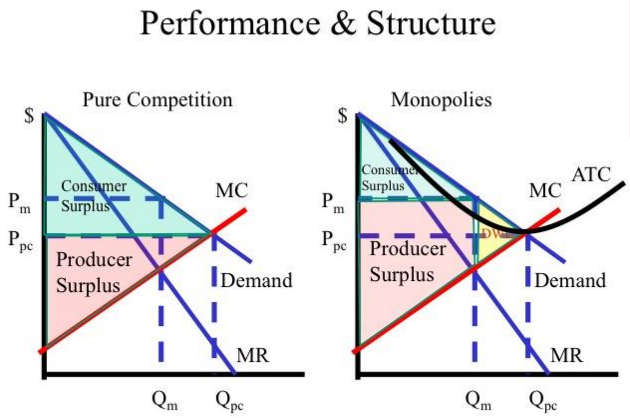
1. Failure of Competition

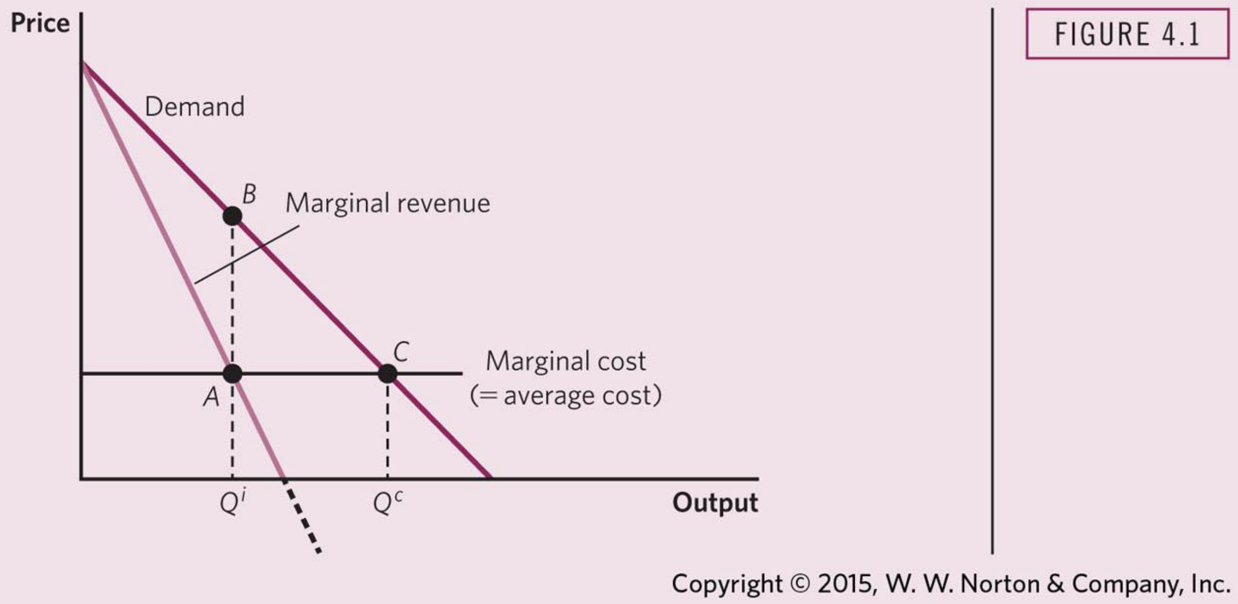
For markets to result in Pareto efficiency, there must be **perfect competition**, in other words a sufficiently large number of firms that each believes it has no effect on prices (price-takers). However perfect competition is not always the prevailing norm.

Overview of Imperfect Competition

Characteristic	Monopoly	Oligopoly	Monopolistic Competition
No of firms	Pure: One Working: >25%	Few dominant sellers	Many competing sellers
Type of product	Branded	Branded	Differentiated – many similar products
Barriers to entry	High especially with natural monopoly	High – protecting market power of established firms	Low – ease of entry and exit in the long run
Pricing power	High – limited by market demand	Strong – but interdependent	Some pricing power but high price elasticity
Supernormal profits in long run	High monopoly profits possible	High	Profits competed away by entry of new products

Imperfect competition leads to economic inefficiency

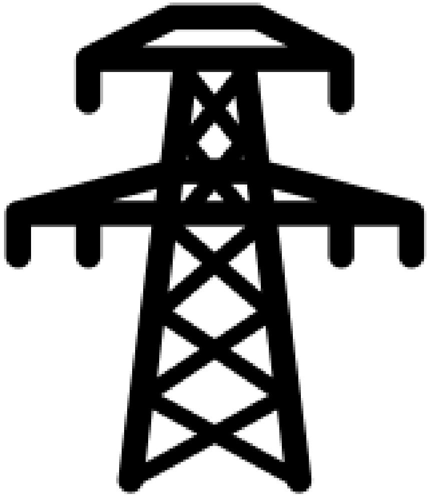




Under imperfect competition, firms set the marginal revenue from one extra unit equal to the marginal cost. With a downward-sloping demand curve, when a firm sells an extra unit receives the price of the unit (+) but must lower the price it charges on that and all previous units (-). Thus marginal revenue is less than the price.

Thus, monopoly output is lower than competitive output.

What about natural monopolies?

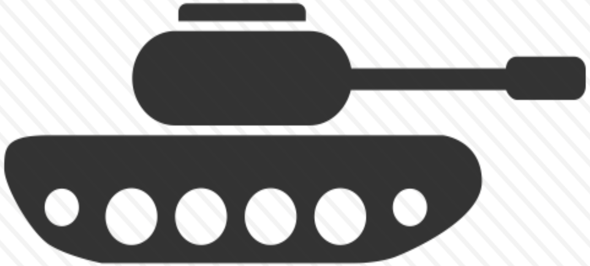


A situation in which is cheaper for a single firm to produce the entire output than for each of several firms to produce part of it is described as **natural monopoly.**

If there is a natural monopoly, with declining average costs, and with marginal costs below average costs, competition is not viable. If a firm charged a price equal to the marginal cost it would operate at a loss (marginal cost < average cost).

Even then, a private monopoly would typically charge more than a government monopoly, as the private one seeks to maximize profitability, whereas the government-run monopoly would only seek to break even.

2. Public Goods



Some goods either will not be supplied by market or, if supplied, will be supplied in insufficient quantity e.g. national defence, lighthouses. These goods are known as **pure public goods**.

Pure public goods have two critical properties:

I. It costs nothing for an additional individual to enjoy their benefits (MC=0, the cost of a lighthouse is not affected by the number of passing by ships)

II. It is generally difficult or even impossible to exclude an individual from the enjoyment of a pure public good (If I put a lighthouse on a rock, I can't exclude other ships from taking advantage of its presence).

Market will not supply enough public goods

A ship owner with many ships might decide that the benefit of a lighthouse is more than its construction cost.

However when deciding how many lighthouses to build he will only take into consideration his own benefit, and not that of other ship owners.

Thus there will be some lighthouses for which the total benefits (taking into account all ships that make use of them) exceed the costs, but for which the benefits of any single ship owner are less than the cost.

Such lighthouses will not be constructed which is inefficient.

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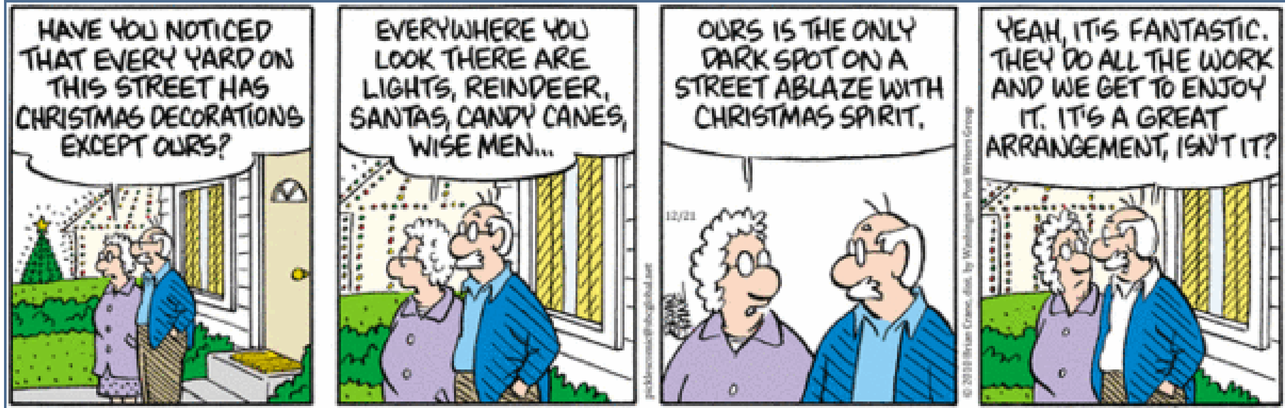
3. Externalities

Some times the actions of an individual or firm affect other individuals or firms (third parties). We refer to such instances as **externalities.**

When the actions of an individual or firm impose a cost on others for which they are not compensated we have **negative externalities**.

When the actions of an individual or firm conferring a benefit to others for which they don't pay we have **positive externalities**.



Production Externalities

Consumption Externalities

Negative Production Externalities

The production of a good/service has a negative effect on others

Positive Production Externalities

The production of a good/service has a positive effect on others

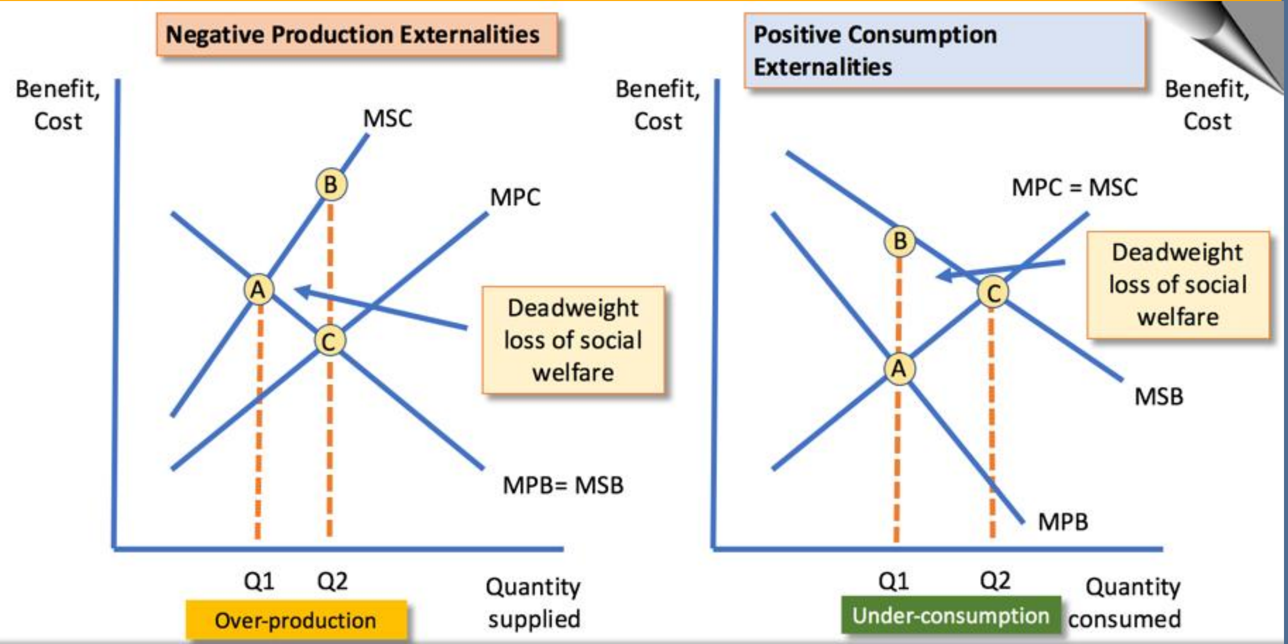
Negative Consumption Externalities

The consumption of a good/service has a negative effect on others

Positive Consumption Externalities

The consumption of a good/service has a positive effect on others

Market ignores externalities



Whenever such externalities exist, the resource allocation provided by the market will be inefficient:

- Individuals do not bear the full cost of negative externalities they generate and will engage in an excessive amount of such activities.
- On the other hand, individuals do not enjoy the full benefits of activities with positive externalities and will engage in too little of these.

4. Incomplete and Missing Markets

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Whenever private markets 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 referred to as **incomplete markets**. E.g. Health insurance for the elder, student loans

A complete market would provide all goods and services for which the provision cost is less than what individuals are willing to pay.

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Why do we have incomplete markets?

At least three answers have been proposed:

1. Innovation

There is often an undersupply of innovative new products in the insurance and security industries, which is why there is an important role for government in research.

2. Transaction Costs

It is costly to run markets, to enforce contracts, and to introduce new insurance policies. A private firm may be reluctant to do so if unsure whether everyone will buy the policy or whether will be able to reap the reward as competitors enter the market.

3. Asymmetries of Information and Enforcement Costs

The insurance company is often less informed about the nature of some risks than the person purchasing insurance. If risj is overestimated, the premium will be too high and the policy will not be purchased, if the risk is underestimated the premium will be too low and the insurer will lose money. It is a heads-you-win-tails-I-lose situation.

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Asymmetric information and adverse selection

Adverse selection is a term used to describe the situation that arises when the customers we have are the ones we would like to avoid. It is a result of asymmetric information.

Example:

In capital markets, lenders are not able to tell which borrowers will repay them (especially when there are no collaterals – eg. student loans).
If the bank increases the interest rate to reflect that many loans are not repaid, it may find that the default rate (percentage of loans not repaid) increases.
Those who know that they are not going to pay anyway care less about the level of the interest rate.

Similarly, people in good health with healthy lifestyles are less likely to buy health insurance compared to those who are in bad shape and have unhealthy or even risky lifestyles.

Missing Markets

Another reason for incomplete or missing markets is the absence of certain complimentary markets.

Assume that everyone drinks coffee with sugar. If sugar is not produced then an entrepreneur considering producing coffee would not do so, as he would realize that he would have no sales.

In many cases, particularly in less developed countries, large-scale coordination is required. Similarly urban renewal programs require coordination among factories, retailers, landlords, and other businesses.

5. Information Failures

Government activities, in many occasions, are motivated by imperfect information on the part of the consumer, and by the belief that the market will supply too little information.

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Information, in many respects, is a public good. Offering information to one more individual does not reduce the available information to the rest.

DCAMP Durham Centre for Ancient and Medieval Philosophy

Resources devoted to producing new knowledge – **research and development -** can be considered a particularly important expenditure on information however market on its own might engage in an insufficient amount of certain R&D activities.

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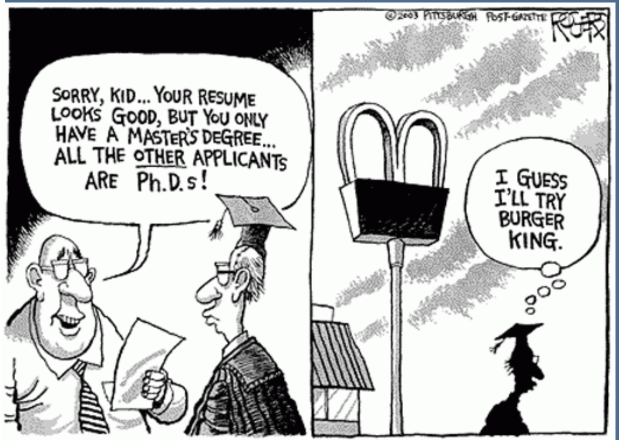
6. Unemployment, Inflation, and Disequilibrium

For many economists, the high levels of unemployment are taken as prima facie evidence that something is not working well in the market.

The recent global economic crisis hit several countries in Europe, with unemployment rates of 25% and youth unemployment in excess of 50%.

In a Pareto efficient market there should be no unemployment (unutilized resources).

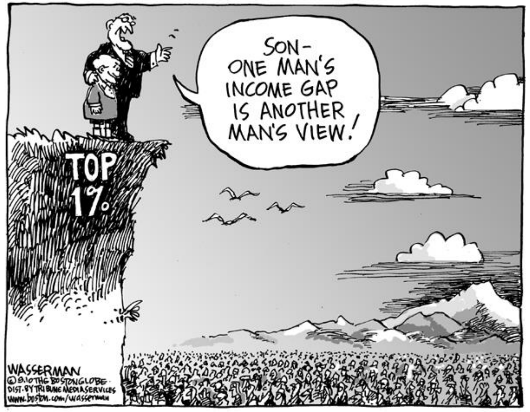


Redistribution

Even when market is Pareto efficient…

Redistribution

Even if the market is Pareto efficient (unlike with the six market failures mentioned earlier), government intervention might be required for a fairer distribution of income.



Competitive markets may give rise to very unequal distribution, leaving some individuals with insufficient resources on which to live.

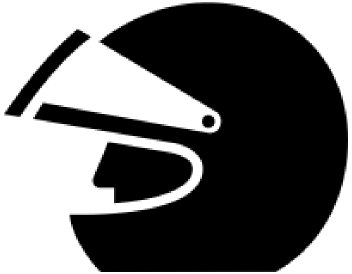
Merit goods

When the society wants you to consume them…

Merit Goods

Individuals may not act in their best interest. Even fully informed consumers make “bad” decisions. For example, they smoke or drive without wearing seat belts / helmets.

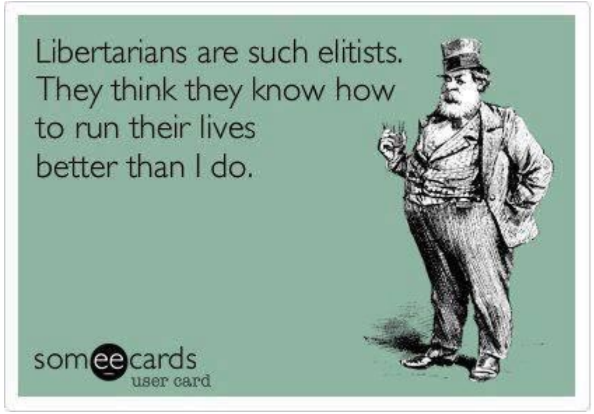
Goods that the government compels individuals to consume, such as seat belts and education, are called **merit goods**.

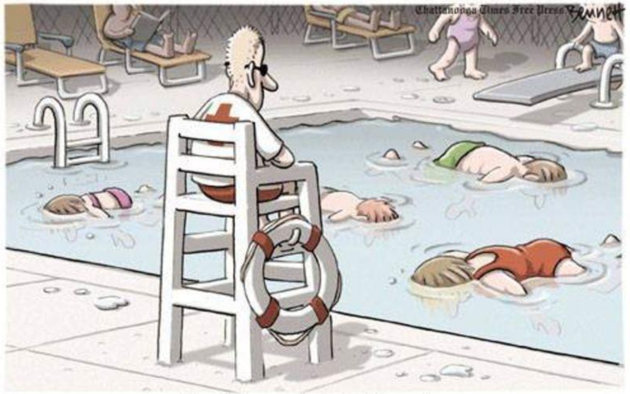


Paternalism vs Libertarianism

The view that government should intervene because it knows what is in the best interest of individuals better than they do themselves is referred to as **paternalism.**

The view that government should not interfere with the choices of individuals is often referred to as **libertarianism.**





Libertarians make bad lifeguards

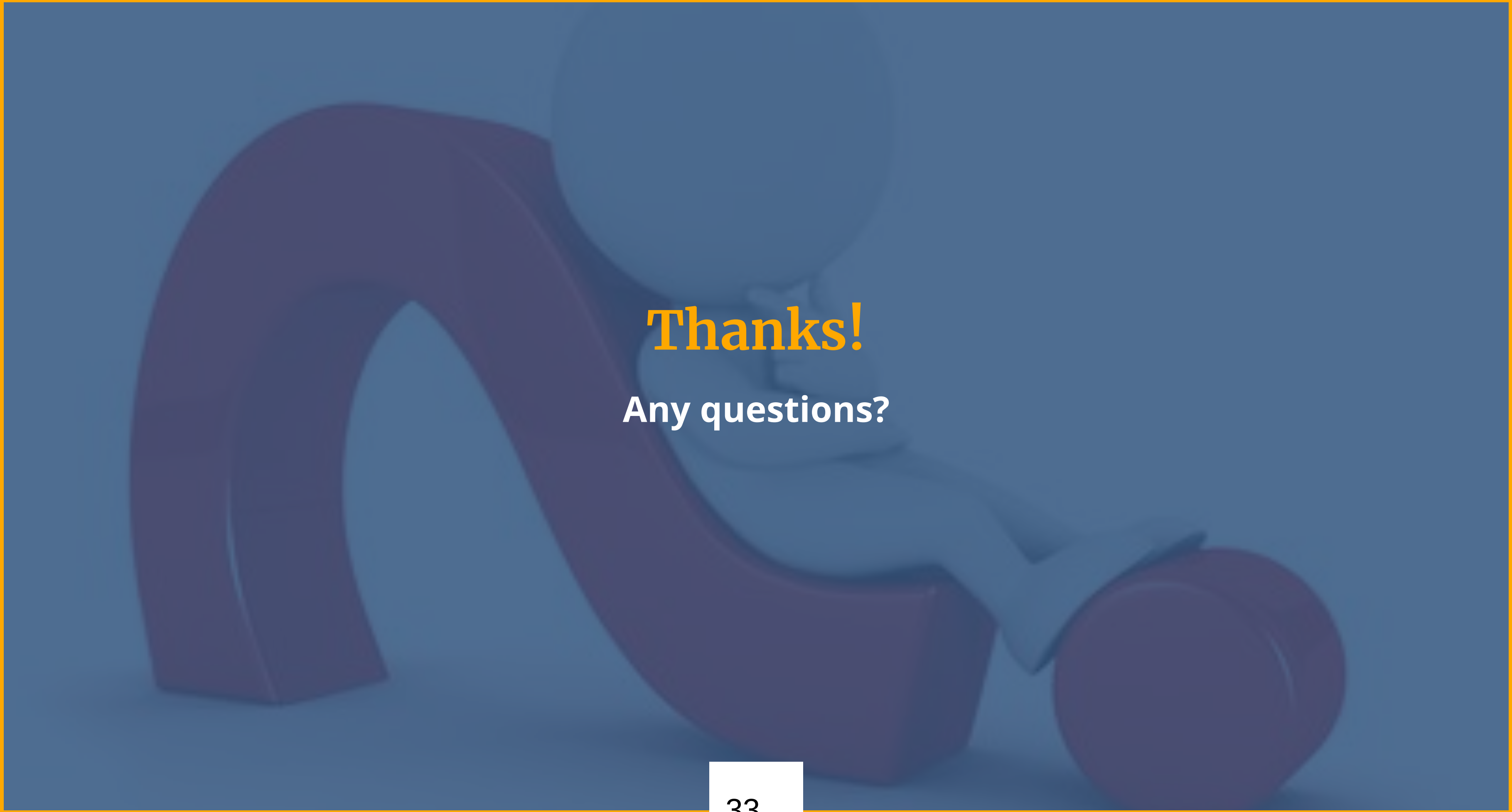
Two important caveats to economists’ general presumption against government's paternalism

Children. Someone, either the parents or the state must make paternalistic decision on behalf of the children. There is an ongoing debate concerning the proper division of responsibility.

Situations in which the government cannot easily commit itself to refrain from helping individuals who made poor decisions. Examples: individuals who don’t save for their retirement, or individuals who neither buy earthquake insurance nor build homes that can withstand the effects of an earthquake.

To summarize, we need a public sector to…

- Protect our property rights
- Enforce contracts
- Make-up for market failures such as
  - Failure of competition
  - Public Goods
  - Externalities
  - Incomplete Markets
  - Information Failures
  - Unemployment, Inflation, and Disequilibrium
- Redistribute income and wealth
- Incentivize the consumption of merit goods



Thanks!

Any questions?