

Chapter 4. Economic Theory, Markets, and Government

- Economic Theory
- Market Failure
- The Role of Government

I. Economic Theory

- Elements
 - objectives
 - constraints
 - choices

objectives

- what do we want to do?
 - people: maximize satisfaction
 - firms: max. profits
 - gov't: max. re-election or budget

constraints

- limits on how we achieve objectives
 - physical (PPC)
 - financial (budget constraint)
 - legal (property rights)

choices

- a statement about likely choice
 - law of demand
 - law of supply

key assumption

- people are **rational**
 - people make best decision give their objectives and constraints
- rational decisions are
 - consistent
 - forward-looking

rationality

- full
 - use all available info when making decisions
- bounded
 - limited ability to process information

rationality & objectives

- self-regarding preferences
 - maximize own satisfaction
- other-regarding preference
 - max. own and others' satisfaction
 - care what others think

Theory vs. observation

- combine theory with observation
 - **simplest theory,**
 - **consistent with observation**
 - **(Ockham's razor)**

What if observations do not match theory?

- modify theory
 - have we allowed for all constraints?
 - are the objectives correct?
- reluctant to change
 - preferences
 - rationality assumption

II. Market failure

- **Usually** market allocates resources optimally
 - directs resources to best uses
 - market outcome is efficient

- market failure results when
 - market outcome is not efficient
 - too little of good is produced OR
 - too much of good is produced

When does this happen?

- externalities
- public goods
- lack of competition

Externalities

- 3rd party gets costs or benefits from good
 - **production or consumption**
 - **OTHER than buyer/seller**

- External benefit =
positive externality
- External cost =
negative externality

example: flu shot

Flu shot

- I pay \$10 for a flu shot
- I am less likely to get the flu
- AND
- **you are less likely to get the flu**
 - external benefit



So what's the problem?

- My decision to get flu shot based on only MY benefits
 - underestimate total benefits of shot
 - too few people get shots
- **markets under-produce goods with external benefits**

So what's the solution?

- Government subsidy of flu shot
 - price is cheaper
 - more people get flu shots

Other goods with external benefits

- education
- antilock brakes
- landscaping



Example: electricity production

- Profits for utility company
- costs to utility company
- external costs
 - air pollution
 - water pollution



So what's the problem?

- Electricity cost reflects production cost
- not pollution costs
 - underestimate total costs
 - electricity is too cheap
- markets over-produce goods with external costs

So what's the solution?

- Government pollution regulation
 - increase costs of electricity
 - less power generated

Other goods with external costs

- Cigarette smoking
- loud music
- drunk driving



Public goods

- nonexclusive
 - cannot exclude those who do not pay from getting benefits
- nonrival
 - my consuming good does not prevent you from consuming it

- Private good: candy
- if I eat it, you cannot



- Public good: missile defense shield over CNY
- everyone here can use it



So what's the problem?

- If I buy the shield, you benefit
- so I wait, hoping you buy the shield....
- nobody buys the shield
- free rider problem
- market alone will fail to produce the public good

So what's the solution?

- Gov't levies taxes to fund production of public good
- society better off

Other public goods:

- law enforcement
- fire protection
- roads, bridges
- flood control



Lack of Competition

What is it?

- Firm is large or only supplier
- firm is able to influence price

With no market power

Perfect competition

- many firms
 - max output at lowest price
- example:

- dairy farmers



Monopoly

- one firm is only supplier

examples:

- Microsoft (Windows)
- National Grid (distribution)
- Pfizer (Lipitor)



Oligopoly

- a few firms

examples:

- automobile companies
 - GM, Ford, Chrysler
- cereal companies
 - General Mills, Post, Kellogg
- soft drinks



Cartels

- A few firms get together and act like a monopoly

examples

- OPEC (oil)
- DeBeer's (gemstones)



So what's the problem?

- Firms w/ market power restrict output
 - increasing prices
- anti-competitive behavior
- no incentive to improve quality

So what's the solution?

- Antitrust laws
- regulate BEHAVIOR not size
 - case against Microsoft

Not all monopolies are bad!

1. Natural monopolies

- efficient to have only one producer

example:

- electricity distribution

2. Gov't - created monopolies

- Use patents to give firm exclusive right to supply
 - allows firm to recoup research costs

example:

- drug companies

III. Role of Government

- dealing with market failures
 - regulation
 - subsidies/taxes
 - anti-trust laws
 - provision of goods/services

problems

- rent-seeking
- government failure

rent-seeking

- parties lobby gov't for laws to protect their interest at expense of others
 - tariffs/quotas
 - tax credits
 - patent/copyright extension

government failure

- law of unintended consequences
 - policies have other effects
 - is the cure worse than the disease?