To do today

Efficiency, market failure and then on to public goods

- Course information
  - Homework due this Sunday night, 11:59 PM
  - Emails for the course: I sent review questions for the first midterm

  Midterm next Wednesday during class time here. Bring #2 pencils and calculator (no telephone calculators allowed)
Externalities

An *externality* is a cost or benefit that affects someone other than the seller or the buyer of a good.

An electric utility creates an *external cost* by burning coal that creates acid rain.

The utility *doesn’t consider* this cost when it chooses the quantity of power to produce. Overproduction results.

\[ \downarrow \text{COSTS} \]
A *common resource* is **owned by no one** but used by everyone.

It is in everyone’s self interest to ignore the costs of their own use of a common resource that fall on others (called *tragedy of the commons*).

This leads to overproduction.
High Transactions Costs

Transactions costs are the *opportunity costs* of making trades in a market.

Some markets are just too costly to operate.

When transactions costs are high, the market might underproduce.

Society wants more than Q, eqp
Two broad and generally conflicting views of fairness are:

- It’s not fair if the *rules* aren’t fair
- It’s not fair if the *result* isn’t fair.
Should Price Gouging be Illegal?

If a strict price gouging law requires the price after the hurricane to be $20.

A deadweight loss shown by the gray triangle arises.

The price gouging law is inefficient, but is it fair?
Public goods: types we need to know

- **Excludable:**
  possible to prevent a person benefiting.

- **Nonexcludable**
  impossible to prevent a person from benefiting from it.
CLASSIFYING GOODS AND RESOURCES

- **Rival**: use by one person decreases the quantity available to someone else.

- **Nonrival**: use by one person does not decrease the quantity available to someone else.
Private goods

Can be consumed by only one person at a time and only by those people who have bought it or own it.

Both rival and excludable.
Public goods

Can be consumed *simultaneously* by everyone. No one can be excluded.

Non rival and non excludable
Common resources

Can be used **only once**

No one can be **prevented** from using what is available.

Both **rival** and **nonexcludable**.
Mixed Goods

A private good, the production or consumption of which creates an externality.

Externalities

A cost (external cost) or a benefit (external benefit) that arises from production or consumption of a private good that falls on someone other than the producer or the consumer of the good.
CONSUMPTION EXTERNALITIES

**Negative Consumption Externalities**

Smoking tobacco in a confined space
Noisy parties

**Positive Consumption Externalities**

A flu vaccination
Restoration of an historic building
Education and research
Mixed goods with external benefits

■ Flu Vaccine

A private good.

Excludable: possible to sell vaccinations and exclude those not willing to pay from benefiting from them.

Rival: providing a flu vaccination to one person means that there is one fewer for everyone else.
A **free rider** is a person who enjoys the benefits of a good or service without paying for it. Market produces **too small** a quantity of a public good.

For the **efficient** quantity, **government action** is required.
No one would have an incentive to buy his or her share of the satellite system—the free-rider problem.

So a private firm would not supply satellites.

The political process determines the quantity of a public good provided—this quantity might be efficient or inefficient.
1. Market equilibrium is at a tuition of $15,000 a year and 7.5 million students and is inefficient because ...

2. Marginal social benefit exceeds ...

3. Marginal cost.
What to do about health care?

With health-care vouchers, buyers are willing to pay $MB$ plus the value of the voucher.

The $MSB$ curve becomes the demand for health care.

The market would move to an efficient equilibrium and the deadweight loss would be eliminated.
Does Health care Need Fixing?

In the United States, 47 million people have no health insurance and another 25 million have too little insurance.

Of those who do have health insurance, nearly 40 million are covered by Medicare and Medicaid programs.

Medicare covers people age 65 or older and some people under age 65.

Medicaid helps people with limited income.

The rest of the population is covered by private health insurance, most of which is provided as an employment benefit.
Economist Laurence Kotlikoff’s proposed voucher solution, which is not currently on the U.S. health-care reform agenda. Of the alternative ways of coping with external benefits, only vouchers combine the efficiencies of private provision with the benefits of public financing.