2nd Half of the Semester

- Essays due Thursday
  - Read instructions
  - Read examples
  - Read grading rubric
Classroom Participation

• 1/6 of your grade

• Participation is needed in order for our discussions to function properly. Please be courteous to others and help to encourage participation by as many students as possible. Your grade will be based on my evaluation of your contribution to the classroom over the entire semester. You can participate by raising issues or volunteering to answer questions in class. **Those who do not participate can expect to receive no credit.**
Today’s Topics

- Gilded Age
- Economics of Monopolies
- Standard Oil
- Mergers
- Trust Busting
Gilded Age (Gold-covered)

- 1870-1920
- Industry surpassed agriculture in size (measured by value added)
  - Populist movement, Grangers
- Time of great fortunes
  - JP Morgan, Ford, Carnegie, Rockefeller
- Rise of American Industry
- By 1900, U.S. industry #1 in world and U.S. GDP per capita #1 (note: we ended the century as #1 too)
- Quick increase in size of companies
Parallels between 1890s and today

• New technologies in 1890—railroads, oil, cars, phone
• New technologies today—Internet, computers, biotech
• Both generally “booming” economies
  – Although major recessions in 1873, 1893 and 2009!
• Deflation
  – Steady annual price drop of about 2% after Civil War
  – Concern today about deflation
Parallels between 1890s and today

• Rising income inequality
  – Rising after Civil War through 1929
  – Rising today since 1975

• Merger waves and increased market power (today: cars, oil, computers, dot.coms, satellite radio)
Why are monopolies “bad?”
Why are monopolies “bad?”

- Monopoly means only ONE seller
- Monopolist is a **price setter**
- Opposite is Perfect Competition (many sellers who are **price takers**)
- With less competition, monopolist can **pick a higher price and less output** along consumers’ demand curve
Quantity

Monopolist

Demand

Price

Perfect Competition

Marginal Cost

Demand

Quantity
• This is “bad” because **less is produced** and the price is higher
  – Economists like more produced at a lower price!
• Note: monopolist can’t force people to buy *more* at a higher price
• Monopolist creates Dead Weight Loss
How do Monopolists Start and Persist?

• If a monopolist is making large profits (Rich Uncle Pennybags), this encourages new competitors
How do Monopolists Start and Persist?

• **Barriers to Entry:**
  – Predatory Pricing
  – Product Differentiation
  – Tariffs
  – Licensing (medical school)
  – Exclusive rights (cable TV companies)
Economies of Scale

- Average cost falls as size of production rises, where:

\[
\text{Average Cost} = \frac{\text{Total Cost}}{\text{#units sold}}
\]

- “Bigger is better”
- Due to large fixed costs
Economies of Scale

• Due to large fixed costs, it may be impossible for more than one firm to make a profit in the industry
• Called a natural monopoly
• Examples: local phone service, power service, satellite radio(?)
• Natural monopoly cannot be avoided
Standard Oil Company

• Video of Standard Oil and Microsoft
Standard Oil Company

• Oil refining
  – 1863 300 firms
  – 1870 150 firms

• In many industries, number of firms fall early (cars, computers)

• This might be due to economies of scale OR to anti competitive behavior
  – Hard to tell which
Standard Oil Company

- Standard Oil Company of Ohio 1869
- John D. Rockefeller
- By 1878, around 90% of refining capacity owned by Standard Oil
- In 1879, organized into a **Trust**
  - One company operated the smaller companies. Owners gave up control to the trust. Profits of the whole trust were split.
- A Trust is a way to act like a monopolist
- The Trust reduced incentive for firms to “cheat” (lowering prices below agreed upon rates)
Two Waves of Mergers

• Between 1879-1904, half of all production involved in some merger activity
Two Waves of Mergers

Horizontal Mergers (1879-1893)

– Firm size grows in one area of production (largest refinery, tobacco firm)

– Advantage is paying low price for inputs and getting high price for outputs (exploiting market power)

– Economies of scale too

• This was better attempt to control market than 1865-79 which carved out exclusive territories for competitors and used agreed upon output quotas

• But Sherman Anti Trust (1890) meant increasing government intervention
Two Waves of Mergers

Vertical Mergers (1898-1904)

• Firm controls many aspects of production
• (Carnegie’s US Steel owned iron ore, rail lines, steel plants)
• Good way to maintain barriers to entry
• Example: Swift Meat Company owned Cattle Ranches ↓ Slaughterhouses ↓ Distributors ↓ Wholesalers
• A *potential* new distributor may find few slaughterhouses to buy from and few wholesalers to sell to
Trust Busting

• Sherman Anti-Trust Act 1890
  – Tried to break up trust, but may have led to MORE mergers, since Supreme Court interpretation was that monopoly was allowed as long as interstate trade was not affected

• 1892 Standard Oil Trust split itself up
  – Then formed a holding company, where stocks were simply held (not managed) by Standard Oil of New Jersey
Trust Busting

• In 1911 government split Standard Oil and American Tobacco Company
• Courts adopted “Rule of Reason,” which said simply being a large company was not illegal, but anti-competitive behavior was illegal
• **Clayton Act 1914** tried to list specific anti-competitive behavior (exclusive contracts, price discrimination, etc.) but the law had little bite
Trust Busting

- FTC (Federal Trade Commission) created in 1914 to enforce anti-trust acts and bring to court monopolies
Trust Busting

• Early anti-monopoly legislation was aimed at protecting competing businesses, NOT protecting consumers (very different from today)

• U.S. is historically more “anti-trust” than Japan and Europe, which allow more collusion and monopoly
Trust Busting

• Example of Trust-busting today is the Microsoft case (1998)
• Microsoft found guilty of using operating system (Windows) dominance to gain dominance in browser (Internet Explorer)
• Final settlement was mainly a slap on the wrist
• Note that “browser” is not very important today!
Trust Busting

• Today some argue that firms need to earn monopoly profits in order to innovate
  – This is true with high Research and Development costs
Did Increasing Industry Concentration 1879-1904 lead to more efficiency or was it just about gaining monopoly profits?

- **Efficient** if achieving economies of scale (natural monopoly) or other improvements (such as continual process techniques)
- **Inefficient** if exerting monopoly market power
- Very difficult to tell (even today)
Did Increasing Industry Concentration lead to more efficiency?

• O’Brien looked at factory plant size
  – Economies of scale should show up as increases in plant (factory) size

• Plant size increased much more in decades before 1890

• Since plant size was not growing during vertical integration wave, it seems that the vertical integration merger wave was NOT about increased efficiency (it was about increased profits)