Class 12b: Secondary economic activity

- Site and situation for industry
- Weber’s locational triangle
- Globalization and manufacturing
Secondary economic activity

• Adding value to primary products
• Manufacturing, processing, energy, construction
• Where? culture and economy > physical environment
Industrial Revolution

- 1750s in Great Britain
- From cottage industry to factories
- Technological change: steam engine
  - Iron: blast furnaces stay hot
  - Coal needed as fuel
  - Steam locomotive (1812)
Industrial Revolution and geography

- Clustering of industrial activity
- New or old cities
- Rapid population growth
- Social changes
- New industries: chemicals, food processing
Where does industry locate?

- Situation factors
  - Cost of carrying inputs vs. outputs
  - Accessibility to different modes
- Site factors
  - Cost of land
  - Cost and skill of labor
  - Availability of capital
Agglomeration economies

- Economies of scale: producing additional units costs less than producing the first few
- Benefits of concentrating many firms in one place
- Benefits of concentrating many firms in *one industry* in one place
Five location factors

• Raw materials
  – From primary activity or manufactured goods
  – Most important when:
    • Bulky or heavy inputs
    • Lose weight in processing
    • Perishable inputs
Five location factors

• Market
  – Final consumer or another firm
  – Most important when:
    • Bulky or heavy outputs
    • Weight added in processing
    • Perishable outputs
Five location factors

• Energy
  – More important historically than today
  – Mills in Britain, New England, etc.

• Labor
  – Price, skill, availability
  – Usually not mobile

• Transportation
  – Costs vary by mode, distance, transfers
Globalization

- Increasing interconnection of the world
- Economic
  - Stock markets, international finance
  - Transnational corporations
- Political
- Cultural
From Fordism...

• Henry Ford’s Model T assembly line
• Large batches of a standardized product
• Large inventory in warehouse
• Workers could afford to buy product
From Fordism...

• Certain places concentrate in certain products
  – E.g., cars in Detroit, steel in Pittsburgh, chemicals in New Jersey

• Considerable multiplier effects

• Strong industrial regions
…to flexible production

• Cheap long-distance transportation
• Separate out production processes
• More flexible production
  – Small batches, not mass production
  – Workers forced to be flexible
  – Just-in-time: minimize warehousing
…to flexible production

• The five location factors matter at *each stage* of production
• One production line, many continents
• Rapid growth where labor is cheap
• “Race to the bottom”
...to flexible production

- Places specialize by *function*, not product
  - New York: “command and control”
  - India, Ireland: call centers
  - Jamaica, Dakotas: data processing
Five location factors: textiles

- Labor: largest percentage of cost (and low-skilled)
- Raw materials: cotton, other fibers
- Market: population concentrations
- Energy: moderately important
- Transportation: not too important
Five location factors: textiles

• Spinning fiber into yarn
  – Close to cotton, fiber production
• Weaving yarn into fabric
  – Low labor costs
• Designing clothing
  – Skilled labor needed
• Cutting and sewing
  – Unskilled labor
Five location factors: textiles

- Where is labor cheapest?
- High unemployment
- Few or weak unions
- Immigrants and/or women
Five location factors: textiles

- **Stage 1: Early industrial cities**
  - Lowell, MA; Manchester, UK
- **Stage 2: Underdeveloped regions**
  - Southern U.S.
- **Stage 3: Underdeveloped countries**
  - Mexico and southwards
  - East Asia and westwards
Transnational corporations (TNCs)

- Firms operating in more than one country
- Exploiting spatial differences
- But are they global?
  - 90% headquarters in Europe-US-Japan
  - 75% of investment, too