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