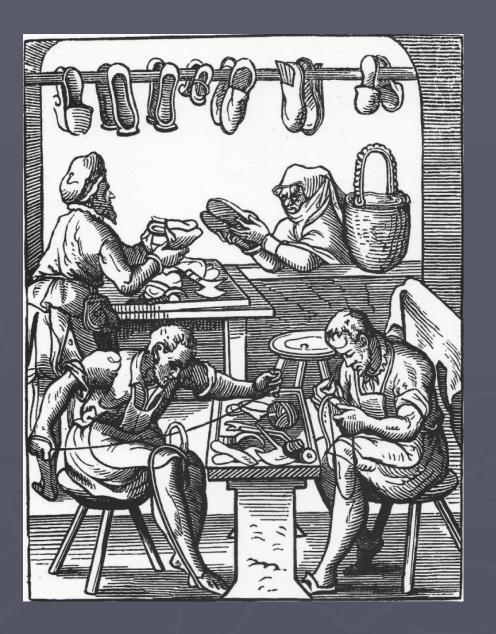
# Systems of Industrialization

### Pre-Industrialization

- Workshop and Guild System
  - Products made by hand
    - Low Productivity
    - Varied Quality
  - Guild system created monopoly
    - Set standards for quality and price
    - Established training for new members



#### Resources needed for Industrialization

- Semi-Reliable Market
- Effective Central Bank
- Easy sources of Transportation
  - Rivers
  - Roads
  - Development of Railroads
- Cheap Labor

- Natural Resources
  - Coking Coal
  - Iron Ore
- Means of Shipping products to foreign Markets
  - Interlinked Rail Systems
  - Merchant Marine

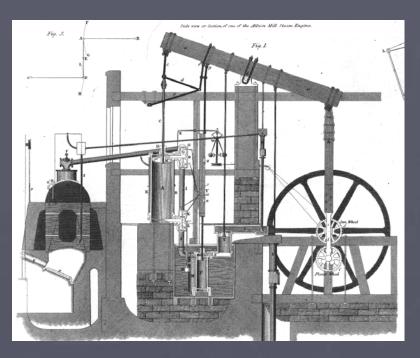
### Pre-Industrialization

- Cottage Industry
  - Goods made at home
    - Sold locally
    - Workers paid by the piece
    - Responsible for production, marketing, and sale of products
  - Dispersed industry
    - Varied availability of goods



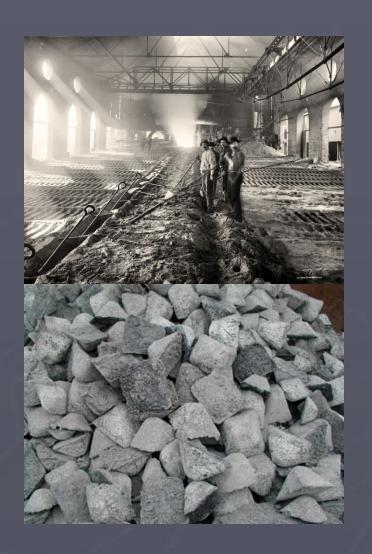
### The First Industrial Revolution

- James Watt's Steam Engine
  - Changes industrial landscape
    - Industry no longer needs to be located next to water
      - Wood now main power source
  - Used to pump water out of coal mines initially



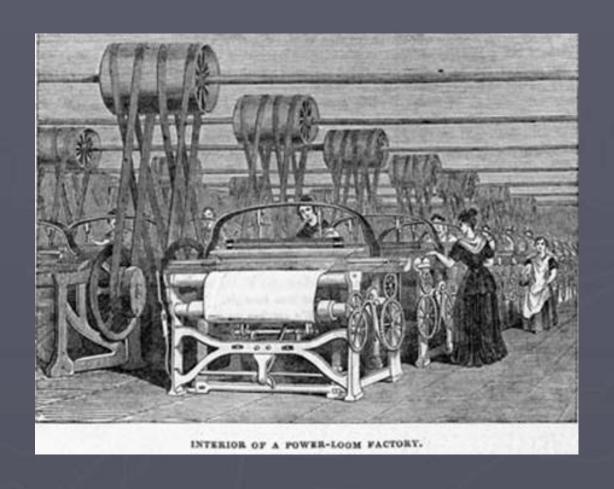
### Adaptations of Steam Engine

- Iron Industry
  - Steam Engine used to supply steady supply of air to blast furnace
  - Allowed for easier smelting of iron into "pig iron"
    - Basic ingredient for all industry



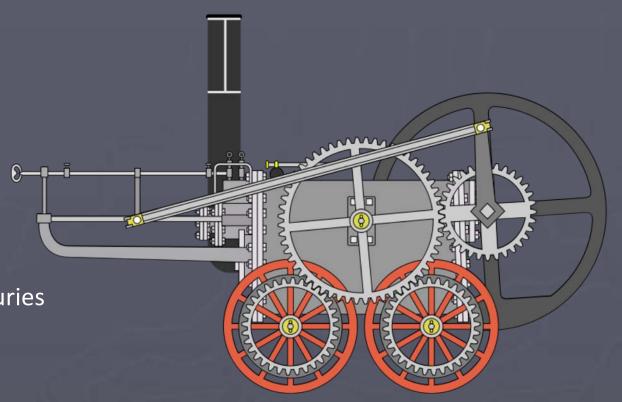
### Adaptations of Steam Engine

- Textile Industry
  - Power loom 1785
    - Steam Engine powered spinning of cotton into thread
  - Cotton Gin invented in 1794
    - More efficient refinement of cotton
  - Causes Britain to more heavily pursue imperialism
    - Egypt and India



# Adaptations of the Steam Engine

- Transportation
  - Steam Locomotive
    - Wide-scale use begins 1804
      - Increased demand for coal
    - Took lots of modifying
  - Steam Ship
    - Developed in late 18<sup>th</sup>-Early 19<sup>th</sup> Centuries
      - Drastically decreased travel times
    - Trans-Atlantic Voyages began 1838



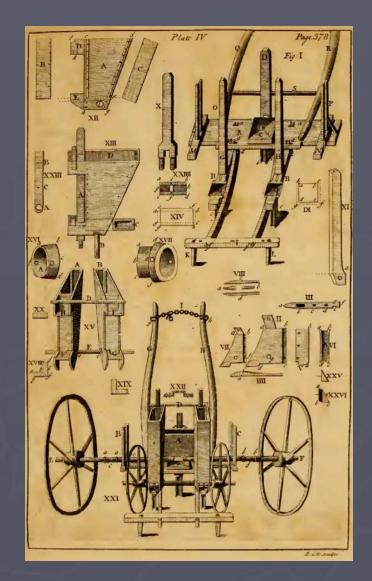
### Origins of Industrialism: Britain

#### 1. Capitalist System

- Entrepreneurship
  - Heritage of people taking risks for economic gain
- Middle-Class
  - Growing through guilds and trading systems
- Patent System
  - Projection for ideas

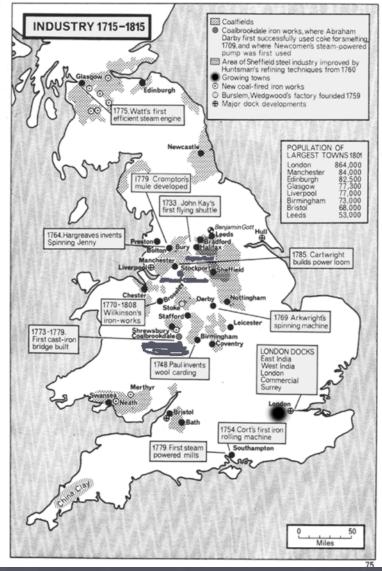
#### 2. Labor

 Jethro Tull's seed drill and enclosure movement forced people to cities to look for jobs



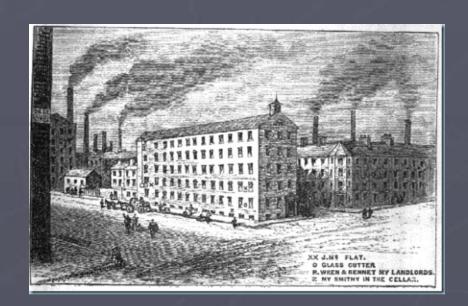
Origins of Industrialism: Britain

- 3. Easy access to resources
  - Iron and Coal
- 4. Transportation infrastructure
  - Ports, Roads, Canals
- 5. Location of resources
  - Close to rivers
- 6. Mature banking system
- 7. Stable political system
- 8. Colonies
  - Sources of raw materials



#### Effects of Industrialization

- Economic: Supply and Demand
  - More goods available at cheaper price
- Social: Urbanization
  - Labor clustering in cities
- Political: Ideology
  - Socialism/Communism
  - Capitalism
  - Liberalism



#### Effects of Industrialization

- Environment: Industrial Waste
  - Increased pollution
- Technological: Mechanization
  - Transportation
  - Manufacturing
- Economic: Agricultural
  - Second Agricultural Revolution
    - Mechanization of Agriculture
- Social: Demographics
  - Transition to second level of Demographic Transition Model





# Types of Industries

- Primary Industries
  - Responsible for the mining and harvesting of natural resources
- Secondary Industries
  - Takes natural resources and uses them to manufacture consumer goods
- Tertiary Industries
  - Provide services to the Primary and Secondary services as well as the community and individuals





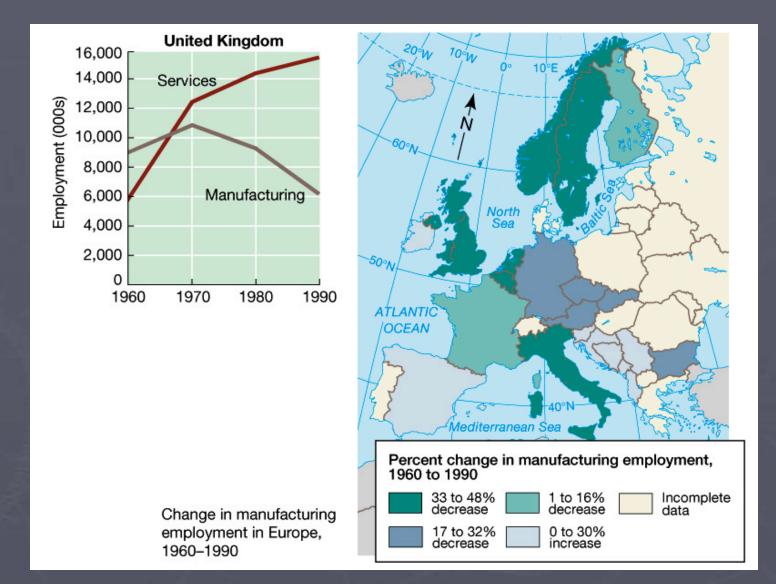


### Decline of Secondary Industries in MDCs

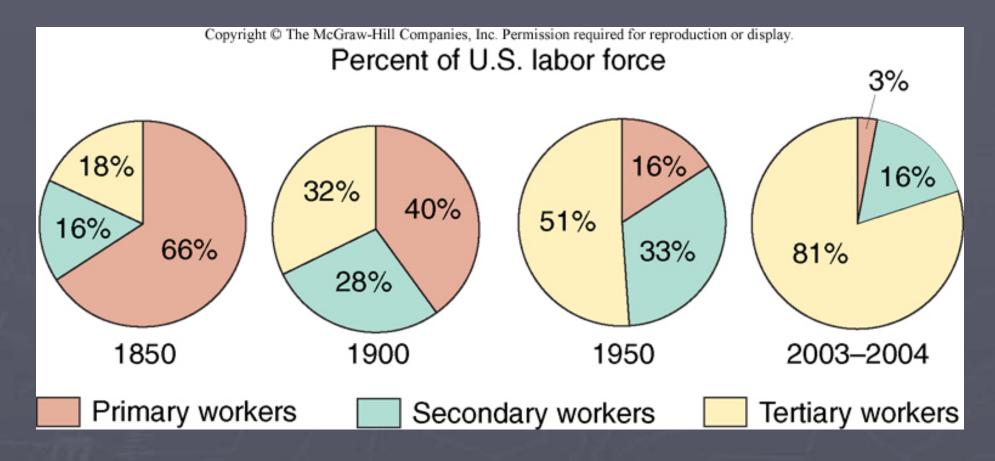
- Deindustrialization
  - Transition of primary economic activity of a country to shift from Secondary to Tertiary industries
    - Especially in MDCs since 1950s
    - Otherwise known as the postindustrial era
  - Changes in manufacturing in MDCs
    - Increased automation
    - High-Technology production



### Case Study: Deindustrialization in Europe



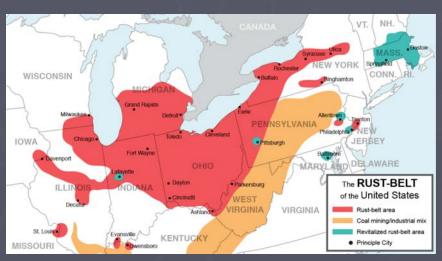
### Case Study: The United States



### Impacts of Deindustrialization

- Transnational Corporations
  - Increasing trend of corporations having entities in different countries
    - Offshoring and Outsourcing used to maximize profits
- Industrial Decay
  - Decline of traditional manufacturing centers
    - The Ex. Rust Belt





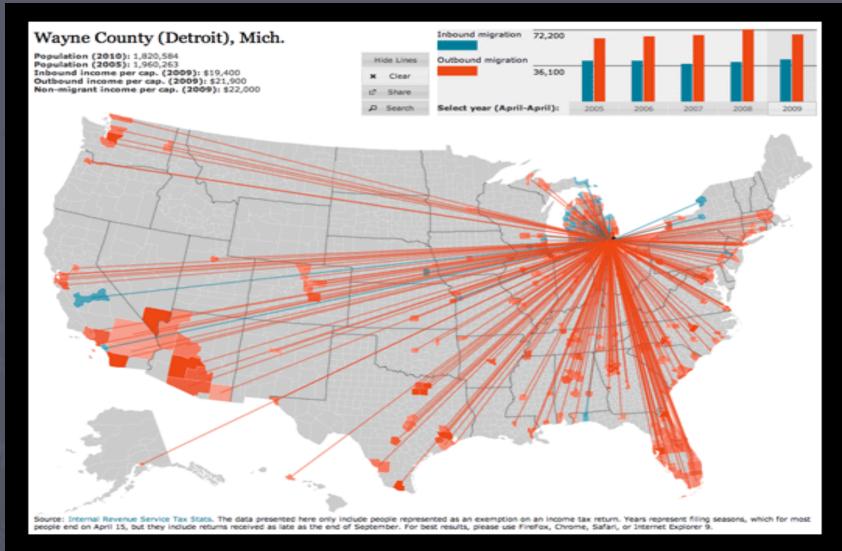
### Impacts of Deindustrialization

- Industrialization of LDCs
  - Corporations moving production centers to LDCs in favor of lower land and Labor costs
    - Leading to unemployment in MDCs
    - Development of Trading Blocs to increase trade between neighboring countries
      - Ex. NAFTA





# Case Study: Detroit, Michigan



# Case Study: Maquiladoras

