

# Spread of Industrialization

## Origins

- Starts in Great Britain
  - o Around 1760s
- New Methods of production
  - o Manmade to machines
- Reasons for spread
  - o Expanding agricultural base
    - More land under cultivation
      - Swamps drained
      - New farming methods
      - Fertilizers
  - o Transportation
    - Railroad led to expansion of markets
      - Decreasing shipping costs
      - Catalyst for investment
      - Middle class travel
        - o Spas, resorts, casinos
        - o Liberalism
          - “The locomotive is the hearse which will carry absolutism and feudalism to the graveyard”
    - Steamships improve intercontinental transportation
      - Quicker travel between continents
      - Colonial control
        - o Easier to move around armies and supplies
    - Improved roads
  - o Increasing population

## Spread of Industrialization

- Affected Northwestern Europe more than southern
- Highly regionalized
  - o Impacted area but not whole country

## England

- Industrial Revolution began in England
  - o Second half of 18<sup>th</sup> Century
  - o “Workshop of the World”
- Advantages
  - o Growing populations
  - o Easy access to resources
    - Coal, iron, tin
  - o Strong Agriculture
  - o Near water
    - Good transport of raw materials and finished products
    - Liverpool becomes merchant center
  - o Rich colonial trade
  - o Commercial domination
- Entrepreneurs willing to take risks
  - o Self-finance
    - Government encouraged banking



- Government Assistance
  - Easier to start business in England than on continent
    - Just by registering with government
  - Laissez Faire economics
    - Government keeps hands off business
      - Except tariffs on goods
- Fewer social barriers
  - Toleration of social classes and religion
- Enclosure Act
  - Common land taken
  - Commercialization of agriculture
- **Cotton Manufacturing**
  - Became mechanized
    - First industry to be revolutionized
  - High demand for cotton clothing
    - Easily cleaned and less expensive
  - Raw cotton from colonies spun in England
    - Half of all exports
- Combination Acts repealed in 1824
  - Strikes legal

## Belgium

- Modern industries
  - Densely populated and urbanized
    - Easy access to labor supply
  - Resources
    - Coal deposits
  - Rapid railroad construction
- Netherlands on decline
- North Sea ports expanding

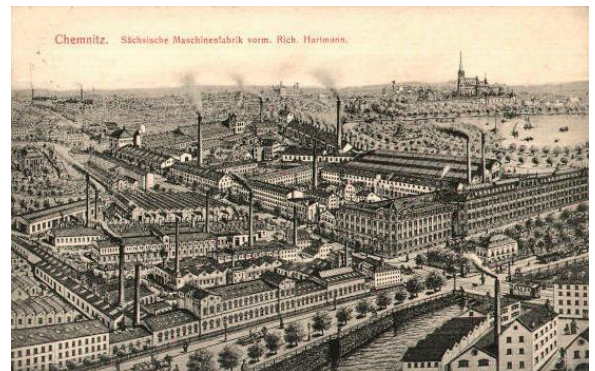
## France

- Worlds' 2<sup>nd</sup> largest economy
  - Almost completely agricultural
    - Small family farms still common
    - Investments still made in land
    - People suspicious of big business
      - 'Mississippi bubble'
  - Late to industrialize
  - Slower population growth
- Political revolution helped business
  - Undermined power of agricultural elites
  - Extremely high protective tariffs
    - Difficult to get raw materials
- High transportation costs
  - Less raw materials
  - Less railroads
- Economic Weakness
  - Bank of France
    - Primarily loaned money to the state not the people
    - Nobody trusted it
  - Private Banks
    - Loaned to government as well

- Currency
  - 90% of payment in specie
  - Smallest banknote is 500 Francs
    - A year's work for a commoner
- Limited number of Joint Stock Companies
- Difficult to raise capital
- Resources
  - Limited access to cotton
    - Textiles is catalyst of Industrial Revolution
  - Mining increased
    - Mostly located in the east
- "Articles of Paris"
  - Luxury goods still valued worldwide
    - Jewelry
    - Gloves
    - Haute Couture
    - Bronze
    - Saddlery
    - Musical instruments
  - Workshop products
    - Barrels
    - Pipes
    - Watches
- July Monarchy
  - Louis Philippe
    - 1830-1848
  - Helped businesses
    - Protected special interests
    - Government built many railroads
    - Government purchased land to build roads and bridges
    - Bankruptcy laws less harsh
    - Easier to invest and start businesses
- Strikes legalized
  - 1864

### Germanic States

- Industry severely lacking
  - Powerful guilds
  - Many tolls and customs barriers
  - Too spread out
    - Mostly rural, agricultural based economy
  - Textiles slowly developing
    - By mid-1830s on the rise
- Once Germany began to industrialize they went very fast
- Zollverein
  - 1834
  - Customs Union
    - Developed by **Friedrich List**
      - 4/5 of Germanic states



- Krupp manufacturing company
  - o Slow at first
    - Became very large by 1878
  - o Made steel goods

### Eastern and Southern Europe

- Sparsely industrialized
- Spain
  - o Very poor transportation
  - o Investment discourage
  - o State interference too much with economy
  - o Commercial code
    - Stricter laws on businesses
  - o After economic crisis Government forbade new business
- Austria
  - o Elites too powerful
    - Prevented too much change
    - Society remained mostly agricultural based
      - Developments in Austrian holdings of North Italy
  - o Slow development
    - Very few railroads
- **Russia**
  - o Tiny middle class
    - Too many serfs
  - o Huge
    - Difficult for transportation
      - Too expensive
  - o Church opposed progress
  - o Strong growth in first half of 19<sup>th</sup> century
    - Volga river to the Black Sea
    - Baltic
      - Trade and exports coming out of St. Petersburg

### Evils of Industrialism

1. Low Wages
  - Workers paid very low wages
    - o Barely livable
    - o Entire family had to work
2. Long Hours
  - 15-16 hours a day in a factory
    - o No breaks
    - o Worked entire week
3. Unsafe conditions
  - No precautions
    - o Accidents meant no more work
    - o Crippling damage to people
  - No ventilation
    - o Sweat shops
4. Child Labor
  - Began work around 6-7 years old
  - Hard Work
    - o Because they are small



- Less pay
  - For same or better work
  - “Child workers were often beaten, abused, hungry, and tired. Their childhood was over before it had begun.”
- 5. Exploitation of Women
  - Same jobs
    - Paid less
  - Still had to take care of home
- 6. Insecure Employment
  - Could get fired for anything
    - Accidents
    - Sickness
    - Promiscuity
      - Women
  - Could not count on steady income
- 7. Slums
  - Tenement
    - Multi-story apartment building
    - Cheaply made housing around factory
    - Not planned developments
      - Low sanitation

All addressed eventually

### Responses to Industrialism

1. Unions
  - Workers banded together
    - Collective bargaining
2. Socialism
  - Economic systems
    - Mix between unions and parliamentary system
3. Parliamentary System
  - Government regulation
    - Slow but reliable

