

# INDUSTRY:

THE MANUFACTURING OF GOODS IN A FACTORY



# Economic geography

- Study of how people support themselves, with the *spatial patterns of production, distribution, and consumption* of goods & services,

# Economic Power Shift

- The recent success of **Japan, South Korea, Taiwan, China** and other Asian states has ended the industrial dominance of the Western World (USA, Western Europe)
- This unit answers why this has happened



# Key Issues (don't write this)

- 1. Where did industry originate?
- 2. Where is industry distributed?
- 3. Why do industries have different distributions?
- 4. Why do industries face problems?



# Factory Locations

- Function of factories: make stuff to sell to people who need stuff
- Therefore, two factors determine where factories will be located:
  - **location factors:**
    - where the markets for the products are
    - where the resources needed to make the products are

# Where would you put your Bieber assembly factory?

Market

**Beliebertville**



Resources

**Lame Lyrics**

*Swag on you, chilling by the fire  
while we eatin' fondue*

**Sweet dance moves**



**This hair cut**

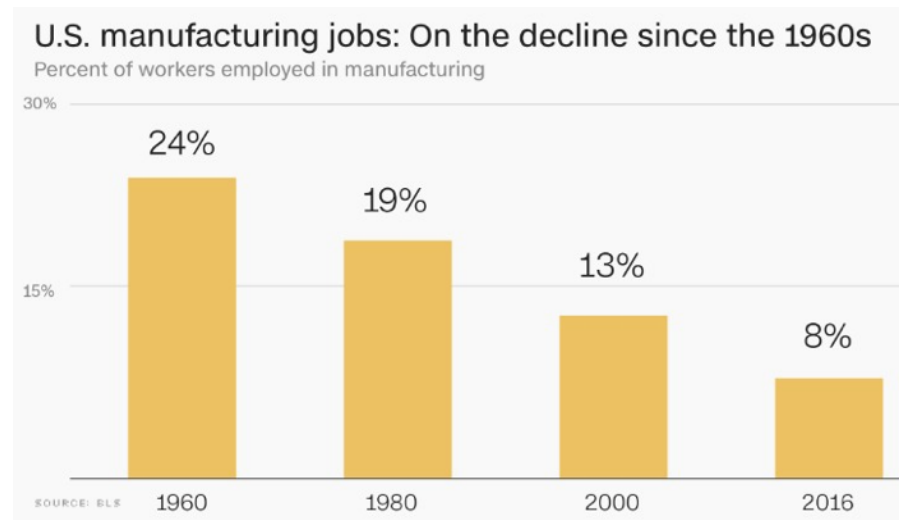
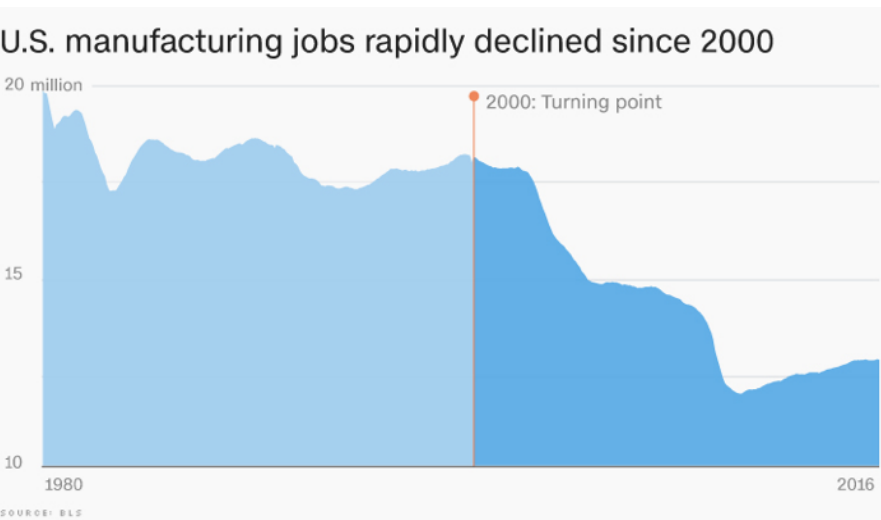


# Every community has industrial assets and challenges

- **Geographers identify:**
  - **assets that make it competitive with other communities**
  - **challenges/handicaps that make it more difficult to compete**
- What are some industrial assets that the Triangle has?
- What are some challenges/handicaps?

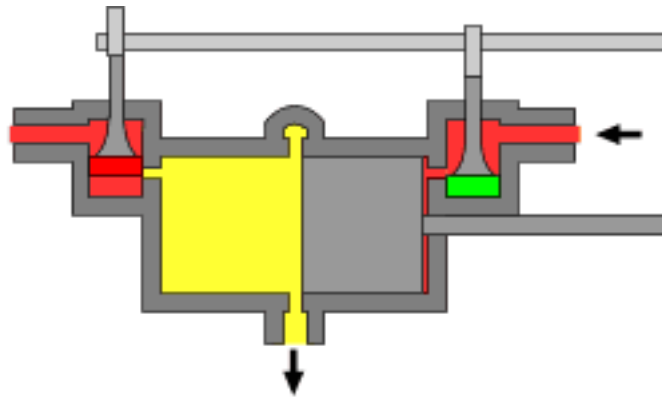
# Changing industrial landscape

- **A generation ago, industry was highly clustered in a handful of more developed countries, but industry has diffused to less developed countries.**
- How has this changed American life and the US economy?



# Industrial Revolution

- **Industrial Revolution - the social and economic changes in agriculture, commerce and manufacturing that resulted from tech. innovations and specialization in late 18th century Europe**



# IR Birth and Diffusion

- **Began in England around 1750, diffused to W. Europe & USA in the 19th century, rest of the world in the 20th century**
- **Effects:**
  - **new tech replaced human labor**
  - **changed the role of government in economics (industrial capitalism/communism)**
  - **ended the cottage industry**
  - **changed geopolitics**
  - **urbanization**



Products, like textiles,  
were no longer made in the home

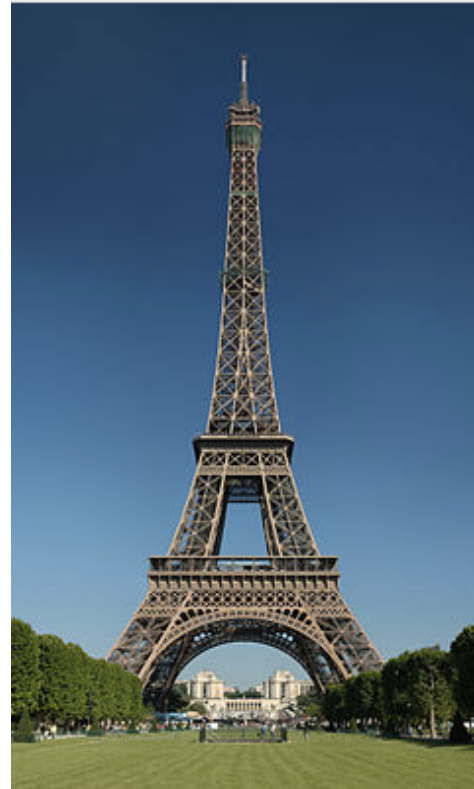
# Why did the Industrial Revolution begin when and where it did?

- **IR began in England because of**
  - **the availability of**
    - **capital (money)**
    - **natural resources**
      - **water power**
      - **coal**
      - **iron ore**
  - **new technologies were engineered**
    - **steam engine - James Watt**



# Increased Availability of Resources - Iron Ore

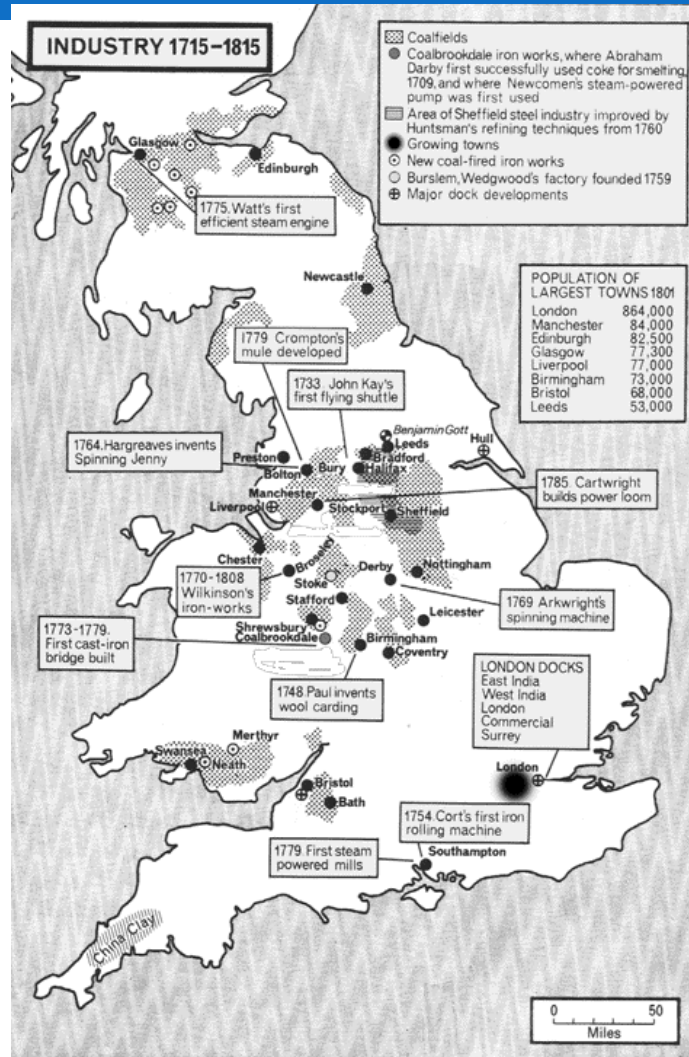
- Iron ore is a metal mined from the ground, but it's not useful until it is **smelted (melted down in a coal furnace)**
- **Henry Cort** patented “puddling and rolling” which removes impurities from the ore, creating **wrought iron**
- Wrought iron was used in building materials and in construction of **steam engines**



This pointy tower thing is made from wrought iron

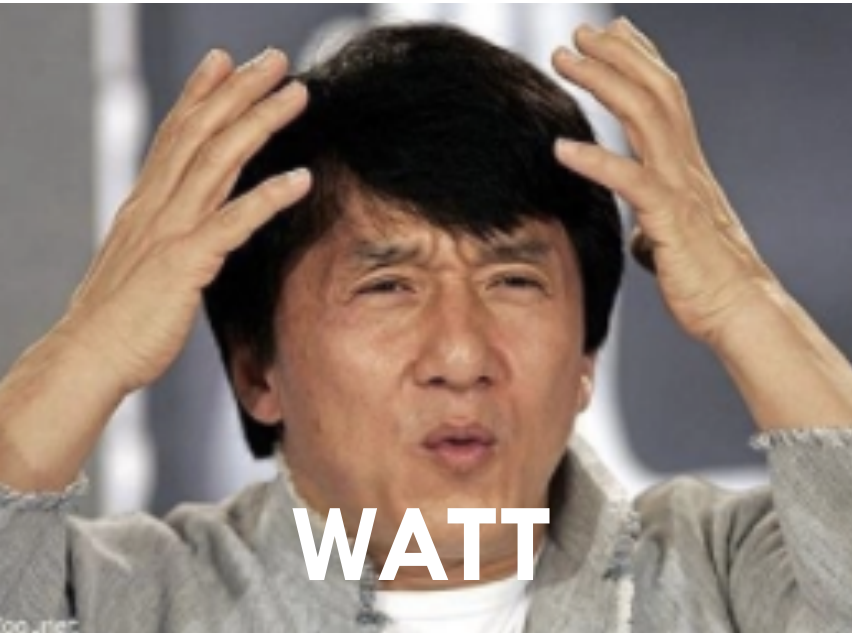


# Coal energy replaces wood energy



- Wood was the primary energy source before the IR, but it became scarce from over harvesting/overuse
- Coal was plentiful and produced more energy than wood.
- **Coal was the most important ingredient in producing iron, but it was difficult to transport**
- As a result, the iron industry went from dispersed to clustered near coal fields.

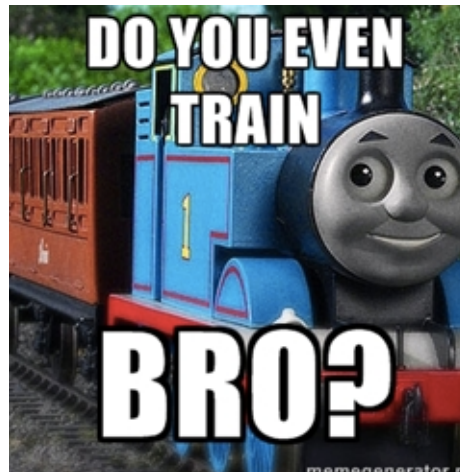
# Say Watt?



- **James Watt** did not invent the steam engine
- By his birth (1736) Newcomen steam engines were widely used to pump water from coal mines
- Watt was paid to repair a Newcomen engine in 1764 and discovered many inefficiencies with its design. **He began manufacturing a new and improved steam engine in 1775**
- **His steam engine was made of iron, run by coal and was used in:**
  - **mining, paper mills, flour mills, cotton mills, iron mills, distilleries, and canals**
- He also invented the rotary engine

# Transportation advances

- **Two types: canals and railways**
- **Canals were dug between major manufacturing cities so that products could be shipped via barge**
- **Canals were superseded by the railway or “iron horse”**
- **The first railway was opened in 1825**



# Textiles

- A series of inventions between 1760 and 1800 transformed textile production from a dispersed cottage industry into a concentrated factory system.
- **Richard Arkwright** invented a spinning frame in 1768 (it spun yarn used in textiles more quickly) BUT it needed more power than humans could supply.
- Guess Watt it used instead...



# A system began to perpetuate itself

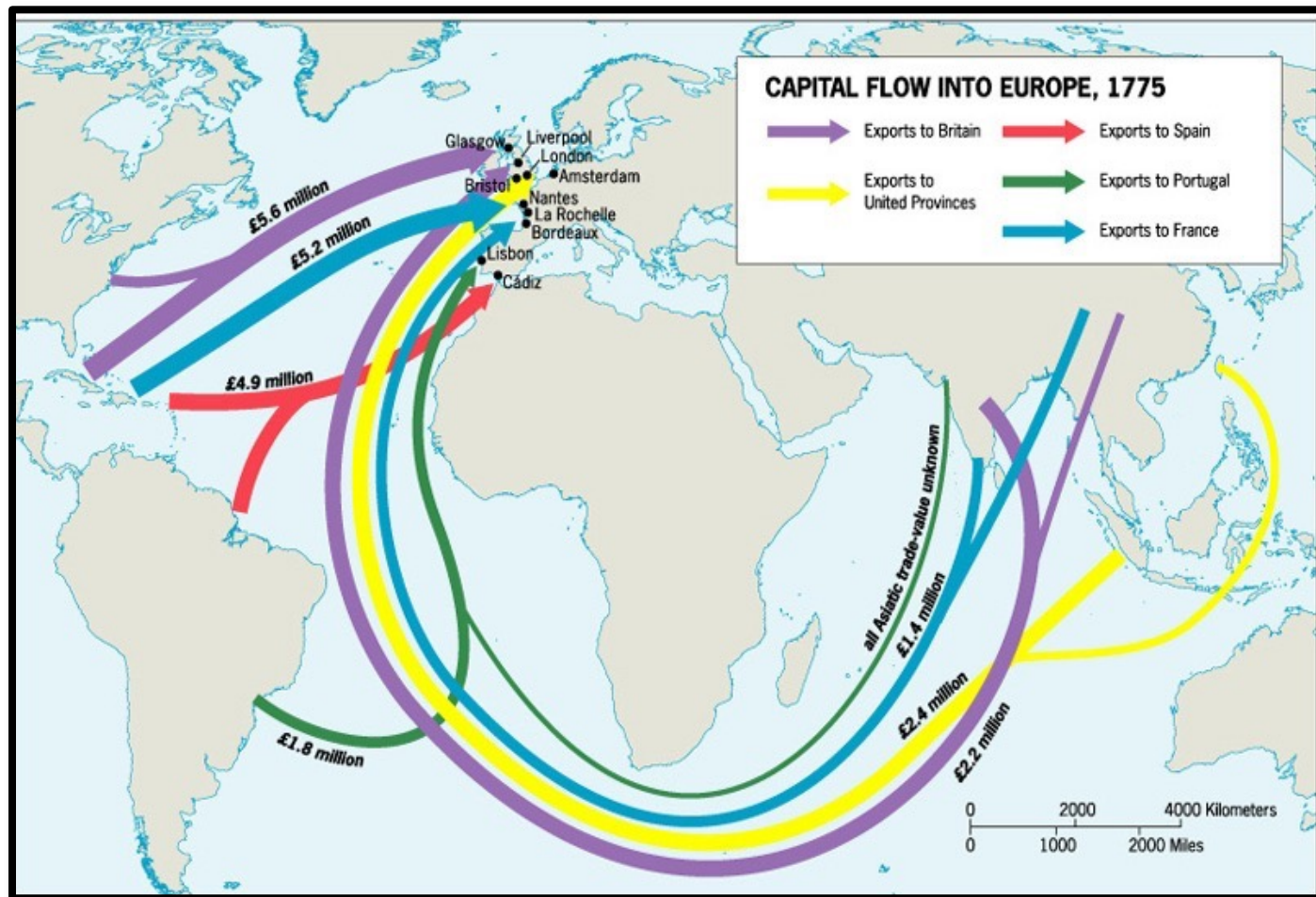
- Coal was needed to smelt iron, which was used in steam machines for mining coal. Steam engine locomotives made of iron and running along iron tracks were powered by coal which was mined by steam engines.
- Each industry fed off of the others industries.



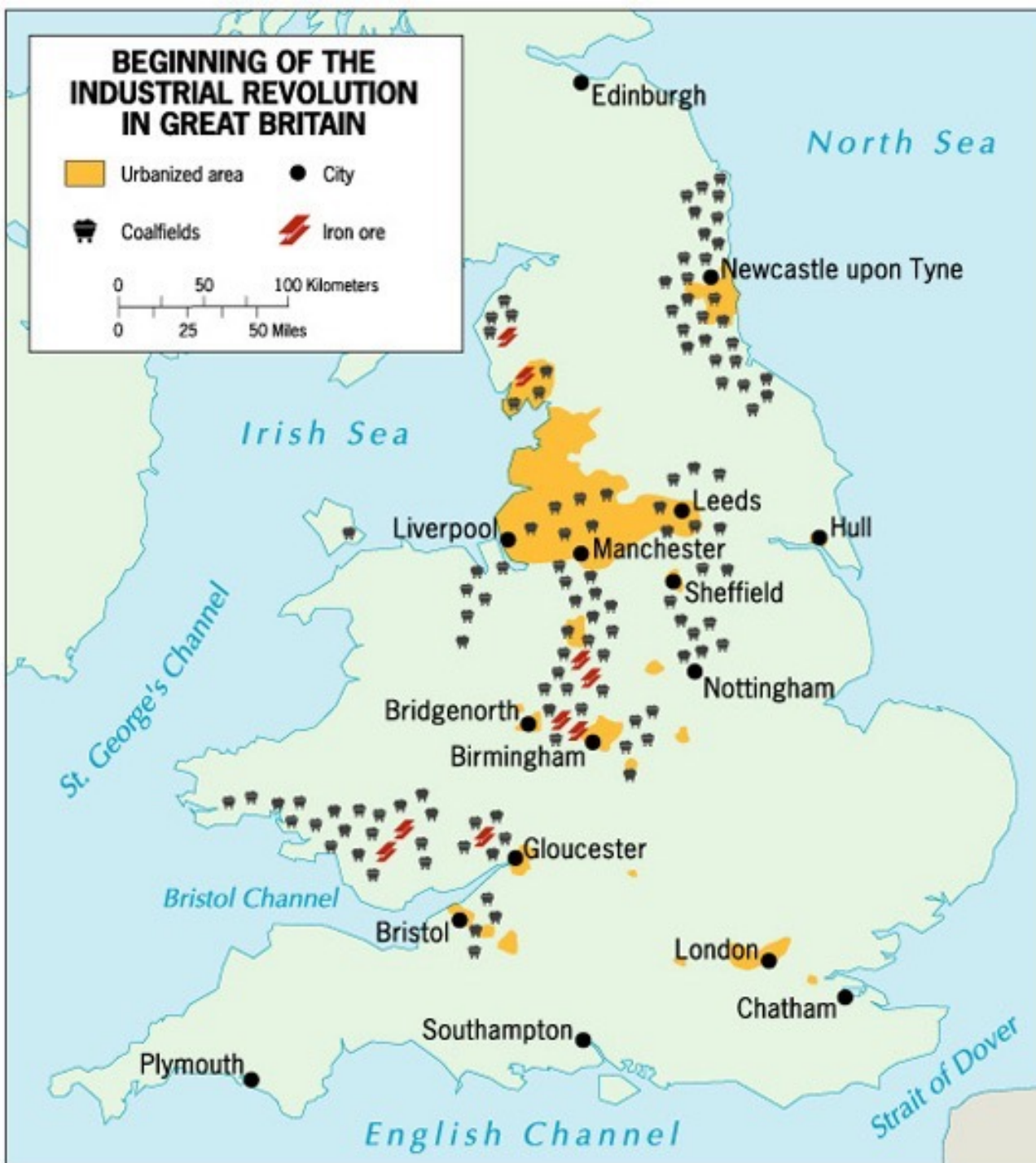
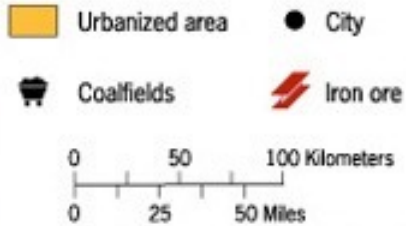


# Flow of Capital into Europe, 1775

Needed flow of capital in order to fuel the industrial revolution.



## BEGINNING OF THE INDUSTRIAL REVOLUTION IN GREAT BRITAIN



**10 min: Fill in  
your maps this  
early IR  
resources:**

**Textiles  
Production:  
Liverpool and  
Manchester**

**Iron  
Production:  
Birmingham**

**Coal Mining:  
Newcastle**

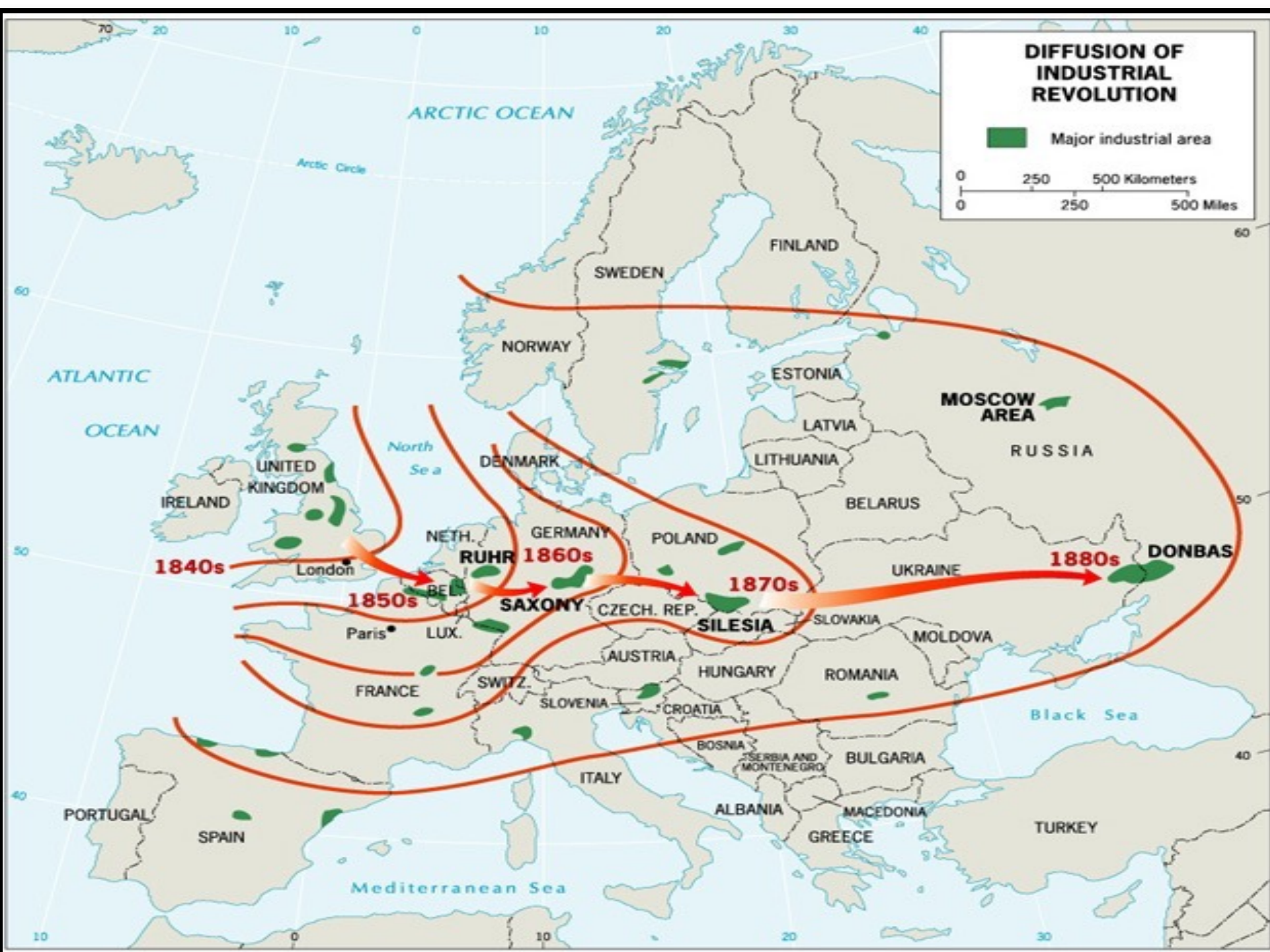


# DIFFUSION FROM THE UNITED KINGDOM



- Britain's Crystal Palace became the most visible symbol of the Industrial Revolution, built to house the 1851 "Great Exhibition of the Works of Industry of All Nations."
- When Queen Victoria opened the Crystal Palace, the United Kingdom was the world's dominant industrial power.
- From the United Kingdom, the Industrial Revolution diffused eastward through Europe and westward across the Atlantic Ocean to North America.
- From these places, industrial development continued diffusing to other parts of the world.





# Diffusion to Mainland Europe

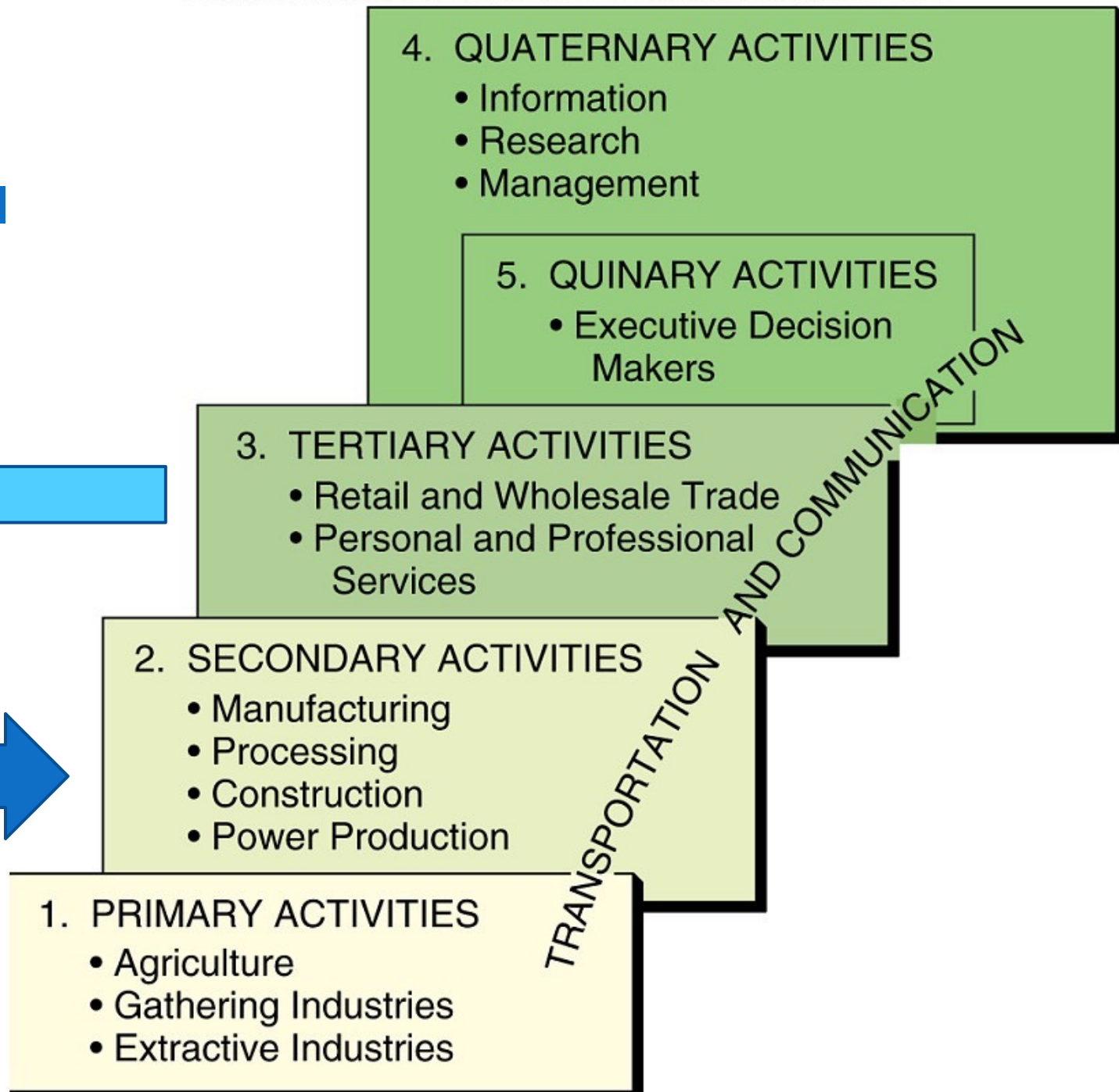
Early 1800s, innovations diffused into mainland Europe.

Location criteria:    proximity to coal fields  
                                 connection via water to a port  
                                 flow of capital

## Later Diffusion

Late 1800s, innovations diffused to some regions without coal.

Location criteria:    access to railroad  
                                 flow of capital



# SITE AND SITUATION FACTORS

Why are industries located where they are?

# Location of Industry

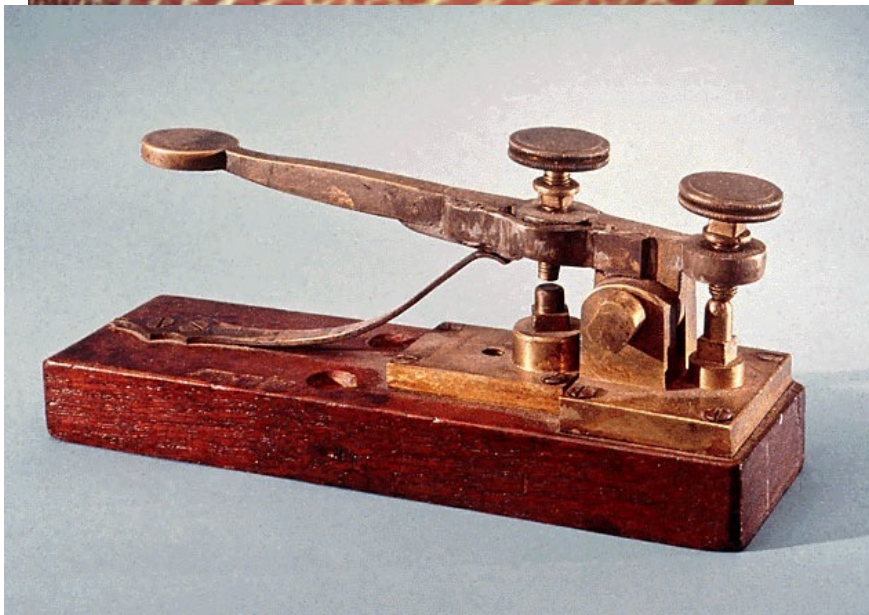
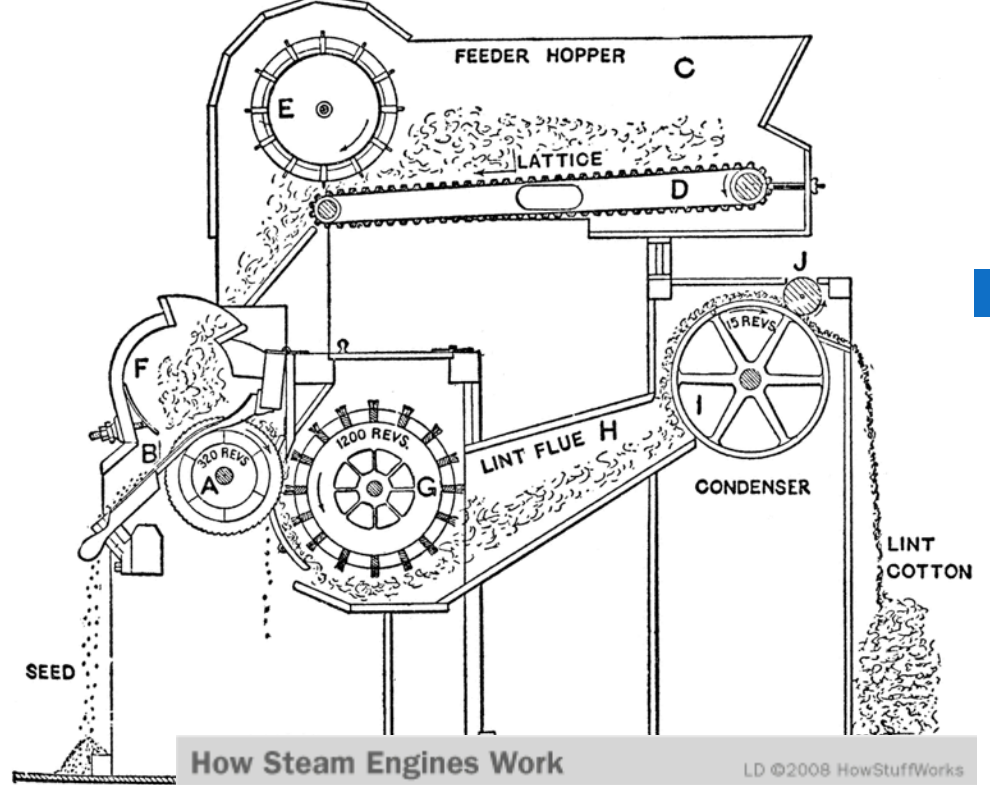
- **Location Theory** predicts where businesses will or should be located
- For businesses to make a profit, they must generate more income than the total of their expenditures
  - **variable costs** are expenditures on things such as energy, transportation, and labor.
  - these costs are crucial in determining where a business should/will locate

# SITE FACTORS

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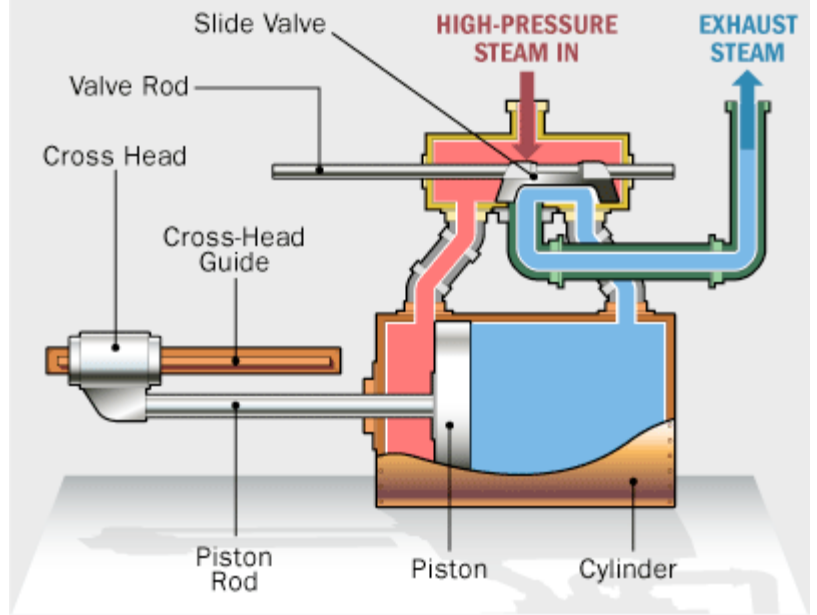


# Inventions/Tech.



How Steam Engines Work

LD ©2008 HowStuffWorks



# LAND

- Encompasses natural and human resources
- Rural: one-story buildings are more efficient; not enough space for giant one story factories in cities
- Trucks: need to be close to major highways





# Land

- Environmental Factors:
  - ▣ Climate
  - ▣ Cultural facilities
  - ▣ Low cost energy



# LABOR

- 1/2 billion workers are engaged in industry globally
- China – 1/4
- India – 1/5
- MDCs – 1/5
- More people = lower wages



# Labor

- **Labor-Intensive Industries**
  - ▣ Wages and compensation for labor is a high percentage of total expenses
  - ▣ Apparel and Textiles



# CAPITAL

- Borrow money to establish new factories
- Industry must establish itself in an area where banks are willing to lend money to them
- Silicon Valley
  - ▣  $\frac{1}{4}$  of all capital in the U.S.
- How does this effect the relationship between LDC's and MDCs?





**situation factors**



# Location of Industry

- Secondary industries sometimes locate near the natural resources on which they depend due to **friction of distance**
- Yet, in other cases secondary sector businesses will locate far from the resources they're dependent upon in order to locate close to their markets
- Whether an industry's product is **weight/bulk gaining** or **weight/bulk reducing** will be an important determinant in where the industry will locate

# Bulk reducing industry

- **Bulk Reducing Industry** - An industry in which the inputs (materials, etc.) weighs more than the final product
- Needs to be located near its source of inputs to minimize transportation costs
- Examples:
  - Copper - copper ore is extremely heavy, so copper mills are located near mines to reduce transportation cost.

# Bulk Gaining Industries

- **Bulk Gaining Industry** - makes something that gains volume or weight during production
- finished product weighs more than the raw materials
- Needs to be located near where the product is sold to minimize transportation costs
- Examples:
  - Fabricated metals:
    - Located near markets because products are much bigger
    - Largest market for fabricated metal and machinery is motor vehicles
    - $\frac{3}{4}$ 's of vehicles sold in the U.S. are assembled in the U.S.

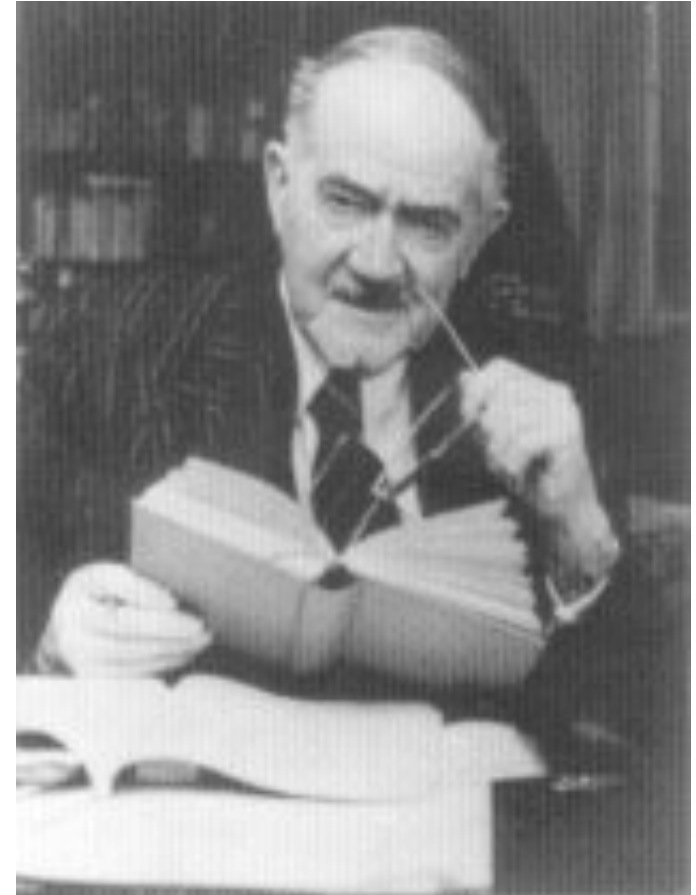


An industry such as potato chips, which uses potatoes and salt as raw materials, is a good example of what?

- A. Variable costs
- B. Fixed costs
- C. Weight-gaining industry
- D. Ubiquitous
- E. Weight-reducing industry

# LEAST-COST THEORY

- **Least Cost Theory** developed by economist Alfred Weber (1868-1958)
- Similar to Von Thunen model... except for industry instead of agriculture
- Aimed to decide the optimal location of an industry based on three factors:
  - transportation costs
  - labor costs
  - and how to maximize **agglomeration economies**



# What are Agglomeration Economies?

- **Agglomeration-** When similar businesses/industries locate in the same location for mutual benefits (nearness to market, nearness to inputs, infrastructure)
- **Examples?**

# Examples of Agglomeration

- Dalton, Georgia
  - ▣ All but 1 of the top 20 U.S. carpet makers
- Wall Street
  - ▣ Banking Industries are located near the Stock Market
- Silicon Valley, California
  - ▣ High-Tech Companies/Computers
- ▣ Research Triangle
  - ▣ pharma



# Benefits of Agglomeration

- Similar or interrelated companies nearby
- Pools of Skilled & Ordinary Labor
- Capital
- Infrastructure
- **Localization Economy** - when businesses group in an area in order to share the labor force
- **urbanization economy** - businesses group in cities to take advantage of infrastructure... ex: subway, powergrid, fiber optics
- **Multiplier Effect** – each new firm added will lead to the further development of infrastructure & linkages

# Disadvantages of Agglomeration

- ❑ Congestion
- ❑ High Land Values
- ❑ Pollution
- ❑ Increased Government Regulation
- ❑ **Degglomeration** – when it's more profitable for a company to move to an isolated location.

# Deglomeration

- **Deglomeration** occurs when businesses in the same industry attempt to locate far away from similar businesses
  - why?
    - avoiding traffic congestion
    - avoiding competition
    - avoiding increasing costs
  - **examples?**



# Location Models

- Harold Hotelling - Location Interdependence
  - businesses will locate where they have the most access to the market *and* where they will take a maximum amount of their competitor's access to the market.

# INDUSTRY IN THE UNITED STATES

# Industrialization in the US

- Industry and manufacturing were at their height in the united states in the late 1800's and early 1900's.
- Production increased greatly due to Fordism.
- USA was at forefront

# Fordism

- **Fordism** – assembly line production of identical commodities by a rigidly controlled and specialized labor force for mass markets.
- increased efficiency made goods cheaper
- United States developed a **consumer economy**, an economy sustained by the purchase of consumer goods



# International Division of Labor

- Throughout the 20th century, demand for cheaper consumer goods in the consumer economy led many manufacturers to search for cheaper wages (why?)
- As industry diffused from core countries to those in the semi-periphery (ex: Mexico, China), an **international division of labor\*** developed
  - \*transfer of some types of jobs, especially those requiring low-paid less skilled workers, from more developed to less developed countries
- <https://www.youtube.com/watch?v=geoe-6NBy10>

# **Economic Restructuring and Deindustrialization**

**Explain how economic restructuring and deindustrialization are transforming the contemporary economic landscape**



# Deindustrialization



- **deindustrialization:** process by which companies move industrial jobs to other regions with cheaper labor, leaving the newly deindustrialized region to switch to a service economy and to work through a period of high unemployment
- Industry had been concentrated around Pennsylvania to Michigan
- Industry has been declining in this region
- Called the **Rust Belt** because the factories were left to rust



# outsourcing

- **outsourcing:** Turning over much of the responsibility for production to independent suppliers
- Cons: Outsourcing and economic restructuring have led to a decline in jobs in manufacturing regions and to relocation of segments of the workforce to other areas.
- Pros: Cheaper goods and services, people can spend more on services if they spend less on manufactured goods. Provides LDCs with jobs.
- <http://www.youtube.com/watch?v=i5zg1fG7m88>

# Locations for outsourcing.

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# Export-processing zones (EPZs)

- **EPZ:** Region of a less-developed country that offer tax breaks and loosened labor restrictions to companies who export goods to foreign markets



# Ten of Asia's Most Dynamic Export Processing Zones





# Special Economic Zones

- **special economic zones:** an area in a country that is selected by the government for development.
- This area has economical laws made in such a manner so that they are business friendly to attract people to set up manufacturing, trading or service establishments.

# Maquiladoras

- Foreign-owned assembly companies located south of the US – Mexico border region
  - Cheaper labor
  - Favorable tax breaks
  - Lax environmental regulations
  - Close to markets at minimal cost
- Maquilladoras

## Examples of

### Maquiladoras in Mexico

BMW

Kodak/Verbatim

Eberhard-Faber

Fisher Price

Ford

JVC

GM

Hasbro

Hewlett Packard

Honda

Honeywell, Inc.

Hyundai Precision

America

IBM

Mercedes Benz

Mitsubishi Electronics Corp.

Motorola

Nissan

Philips

Samsonite Corporation

Samsung

Sony Electronics

Toshiba

Xerox

**Type of employment:** *Worker from Auto Trim de Mexico S. A. de C. V*

**Work Schedule:** *40 hours per week*

**Daily wage:** \$8.29

**Minimum wage (Geographic Area A):** \$3.44  
*per day*

**Wage per hour:** \$1.04

**Weekly salary:** \$58.09

**Discount for union dues (4%):** \$2.32

**Net pay:** \$55.77

**Amount leftover per week for clothes, shoes,  
entertainment and medical attention:** \$2.03



# Special Economic Zones (China)



# United States economy today

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- The US economy is no longer based on the secondary sector
- It is now a service economy (tertiary sector) based around services and high tech industries
  - Silicon Valley, Research Triangle

# 79.6 percent

The services sector is an important part of the U.S. economy. According to BEA, in 2009 services accounted for **79.6 percent** of U.S. private-sector gross domestic product (GDP), or \$9.81 trillion. Services jobs accounted for more than **80 percent** of U.S. private-sector employment, or 89.7 million jobs.

## The Services Sector: How Best to Measure it?

[trade.gov/publications/ita-newsletter/1010/services-sector-how-best-to-measure-it.asp](http://trade.gov/publications/ita-newsletter/1010/services-sector-how-best-to-measure-it.asp)

- The US economy has transitioned from manufacturing to service-based
  - **service economies** focus on research and development, marketing, tourism, sales, and telecommunications.
- **The services sector accounts for 80% of the US economy**



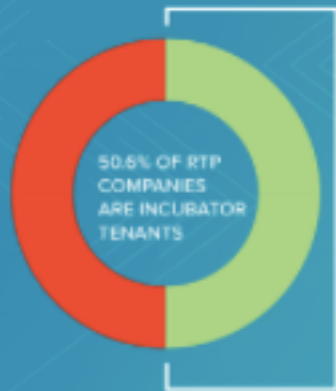
**Table 2.1 Employment by Major Industry Sector**

Industry Sector	Thousands of Jobs			Change		Percent Distribution			Compound A of Cha
	2004	2014	2024	2004– 14	2014– 24	2004	2014	2024	2004–14
<b>Total<sup>(1)</sup></b>	144,047.0	150,539.9	160,328.8	6,492.9	9,788.9	100.0	100.0	100.0	0.4
<b>Nonagriculture wage and salary<sup>(2)</sup></b>	132,462.2	139,811.5	149,131.6	7,349.3	9,320.1	92.0	92.9	93.0	0.5
<b>Goods-producing, excluding agriculture</b>	21,815.3	19,170.5	19,227.0	-2,644.8	56.5	15.1	12.7	12.0	-1.3
Mining	523.2	843.8	924.0	320.6	80.2	0.4	0.6	0.6	4.9
Construction	6,976.2	6,138.4	6,928.8	-837.8	790.4	4.8	4.1	4.3	-1.3
Manufacturing	14,315.9	12,188.3	11,374.2	-2,127.6	-814.1	9.9	8.1	7.1	-1.6
<b>Services-providing</b>	110,646.9	120,641.0	129,904.6	9,994.1	9,263.6	76.8	80.1	81.0	0.9
Utilities	563.8	553.0	505.1	-10.8	-47.9	0.4	0.4	0.3	-0.2
Wholesale trade	5,663.0	5,826.0	6,151.4	163.0	325.4	3.9	3.9	3.8	0.3
Retail trade	15,058.2	15,364.5	16,129.1	306.3	764.6	10.5	10.2	10.1	0.2
Transportation and warehousing	4,248.6	4,640.3	4,776.9	391.7	136.6	2.9	3.1	3.0	0.9
Information	3,118.3	2,739.7	2,712.6	-378.6	-27.1	2.2	1.8	1.7	-1.3
Financial activities	8,105.1	7,979.5	8,486.7	-125.6	507.2	5.6	5.3	5.3	-0.2
Professional and business services	16,394.9	19,096.2	20,985.5	2,701.3	1,889.3	11.4	12.7	13.1	1.5
Educational services; private	2,762.5	3,417.4	3,756.1	654.9	338.7	1.9	2.3	2.3	2.2
Health care and social assistance	14,429.8	18,057.4	21,852.2	3,627.6	3,794.8	10.0	12.0	13.6	2.3
Leisure and hospitality	12,493.1	14,710.0	15,651.2	2,216.9	941.2	8.7	9.8	9.8	1.6
Other services	6,188.3	6,394.0	6,662.0	205.7	268.0	4.3	4.2	4.2	0.3
Federal government	2,730.0	2,729.0	2,345.6	-1.0	-383.4	1.9	1.8	1.5	0.0
State and local government	18,891.3	19,134.0	19,890.1	242.7	756.1	13.1	12.7	12.4	0.1
<b>Agriculture, forestry, fishing, and hunting<sup>(3)</sup></b>	2,111.3	2,138.3	2,027.7	26.9	-110.5	1.5	1.4	1.3	0.1
Agricultural wage and salary	1,149.0	1,384.0	1,307.3	235.0	-76.7	0.8	0.9	0.8	1.9
Agricultural self-employed workers	962.3	754.3	720.4	-208.1	-33.8	0.7	0.5	0.4	-2.4
<b>Nonagricultural self-employed workers</b>	9,473.6	8,590.2	9,169.5	-883.4	579.3	6.6	5.7	5.7	-1.0

## 2016 RTP COMPANY DATA

Each year The RTP conducts a Park wide survey of companies. We compile that data and generate valuable insights on startups, industries, growth and employment.

Check out the highlights from the 2016 data. The full survey can be viewed on [www.rtp.org/2016-rtp-directory](http://www.rtp.org/2016-rtp-directory)



# 46,000

SKILLED WORKERS



## COMPANIES WITH GLOBAL HQ'S IN RTP

- RTI International
- Spiegl
- Dupont Electronics and Communications
- Fujifilm Diosynth Biotechnologies
- Toshiba Global Commerce Solutions
- United Therapeutics Corporation
- WolfSpeed

## 2016 RTP TOP EMPLOYERS

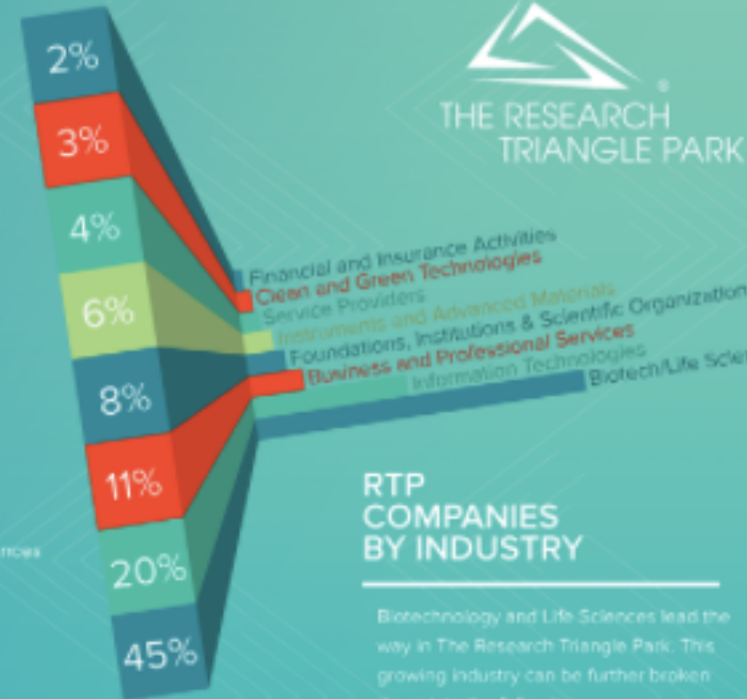
1. IBM Corporation
2. Cisco Systems, Inc.
3. GlaxoSmithKline
4. Fidelity Investments
5. RTI International
6. Credit Suisse
7. Lenovo
8. NetApp, Inc.
9. Biogen
10. United States Environmental Protection Agency
11. BASF Corporation
12. National Institute of Environmental Health Sciences
13. EMC Corporation
14. Bayer CropScience
15. Grifols

# +38

NEW COMPANIES MOVED INTO THE RTP IN 2015



THE RESEARCH TRIANGLE PARK



## RTP COMPANIES BY INDUSTRY

Biotechnology and Life Sciences lead the way in The Research Triangle Park. This growing industry can be further broken down into the following:

- 4% Agricultural Biosciences
- 7% Medical Devices/Instruments
- 20% Pharmaceuticals/Diagnostics
- 14% Other Biotechnology

**The economic landscape has been transformed by the emergence of service sectors**

**Government Initiatives help promote  
economic development**

# Governmental influence on development

- In capitalist economies, consumers and business owners - not government - decide how things are made, where things are made, and for what price.
- Therefore, governments are limited in the ways they can impact economies and jobs. They can *encourage* or *discourage* employers to act in certain ways, but unless businesses break laws, they cannot be *forced* to
  - Incentives: tax breaks for businesses, build infrastructure, etc.

# Measures of Development

# Development

- **development** (defined by the United Nations)-
  - expanding the richness of human life in a country, not just the richness of the economy in which human beings live.
  - It is an approach that is focused on people and their opportunities and choices.
- development measures economic *and* social progress of a state

# Development Measures



## economic measures

- **Gross National Income**
- **Sectoral Structure**
- **Income Distribution**
- **Purchasing Power Parity**



# Social and Economic Development Measures

- **ECONOMIC**

- Gross National Income (GNI) - *total* domestic and foreign output claimed by residents of a country
- Sectoral Structure -(primary/secondary/tertiary/quarternary/quinary)
  - Google: “wiki list of countries by GDP sector composition”
- Income Distribution - how wealth is distributed throughout a population
  - income inequality - when wealth is concentrated in a small segment of a population leaving less for the majority

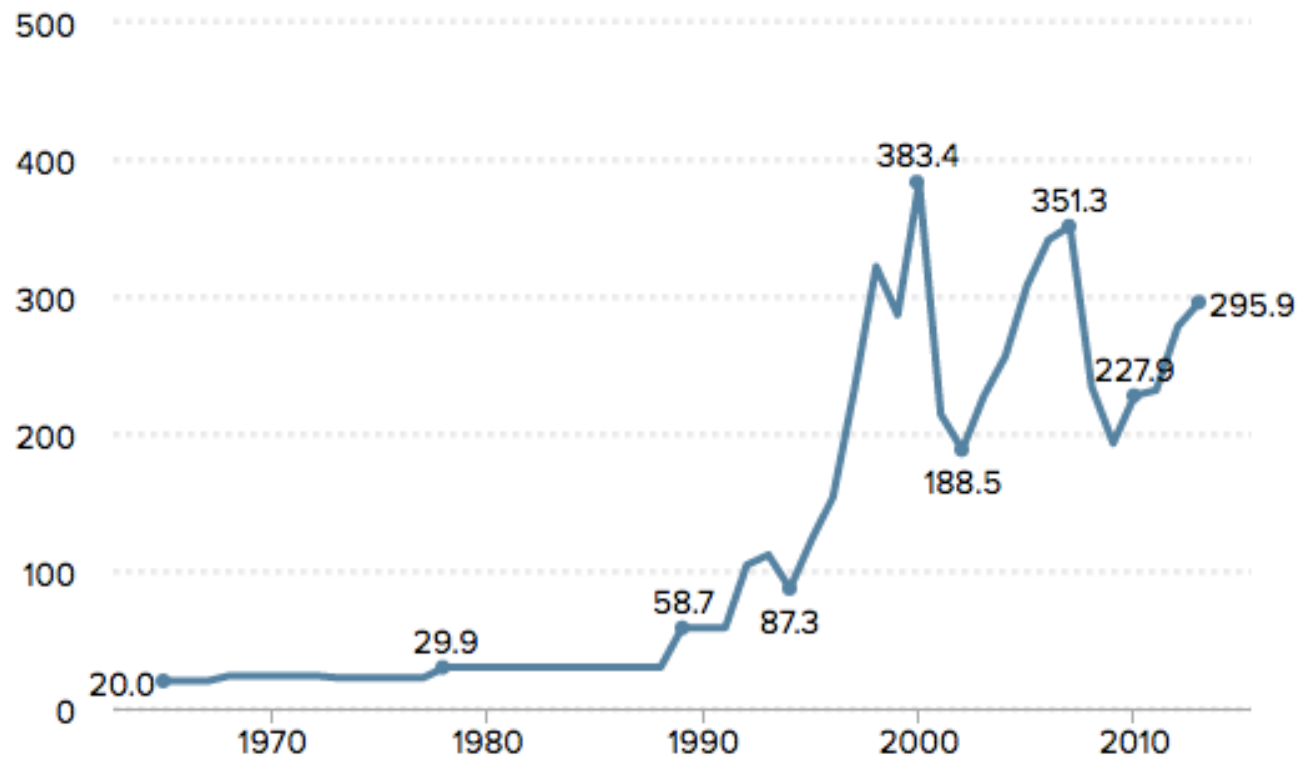
# USA Income Distribution

Segment	% Income	Cum. % Income
Bottom 20%	3.6%	3.6%
Second 20%	8.8%	12.4%
Third 20%	18.2%	30.6%
Fourth 20%	29.2%	59.8%
Top 20%	40.1%	99.9%

<https://www.youtube.com/watch?v=QPKKQnijnsM>

# Extreme inequality—CEOs versus the workers they manage

CEO-to-worker compensation ratio, 1965–2013



**Note:** CEO annual compensation is computed using the "options realized" compensation series for CEOs at the top 350 U.S. firms ranked by sales. Typical worker compensation is average compensation of production/nonsupervisory workers in the key industries of the firms included in the sample. ...

**Source:** EPI analysis of data from Compustat's ExecuComp database, Bureau of Labor Statistics Current Employment Statistics, and Bureau of Economic Analysis NIPA tables

Reproduced from Figure C in *CEO Pay Continues to Rise as Typical Workers Are Paid Less* ...

# Why Income Inequality Matters

- According to the United Nations:
- *It is clear that inequality can be a serious threat to social and political stability. There is a growing recognition, however, that it can also threaten sustained growth. A study by the International Monetary Fund (IMF) showed that greater equality of income increased the duration of countries' economic growth spells more than free trade, low government corruption, foreign investment, or low foreign debt (Berg and Ostry, 2011).*

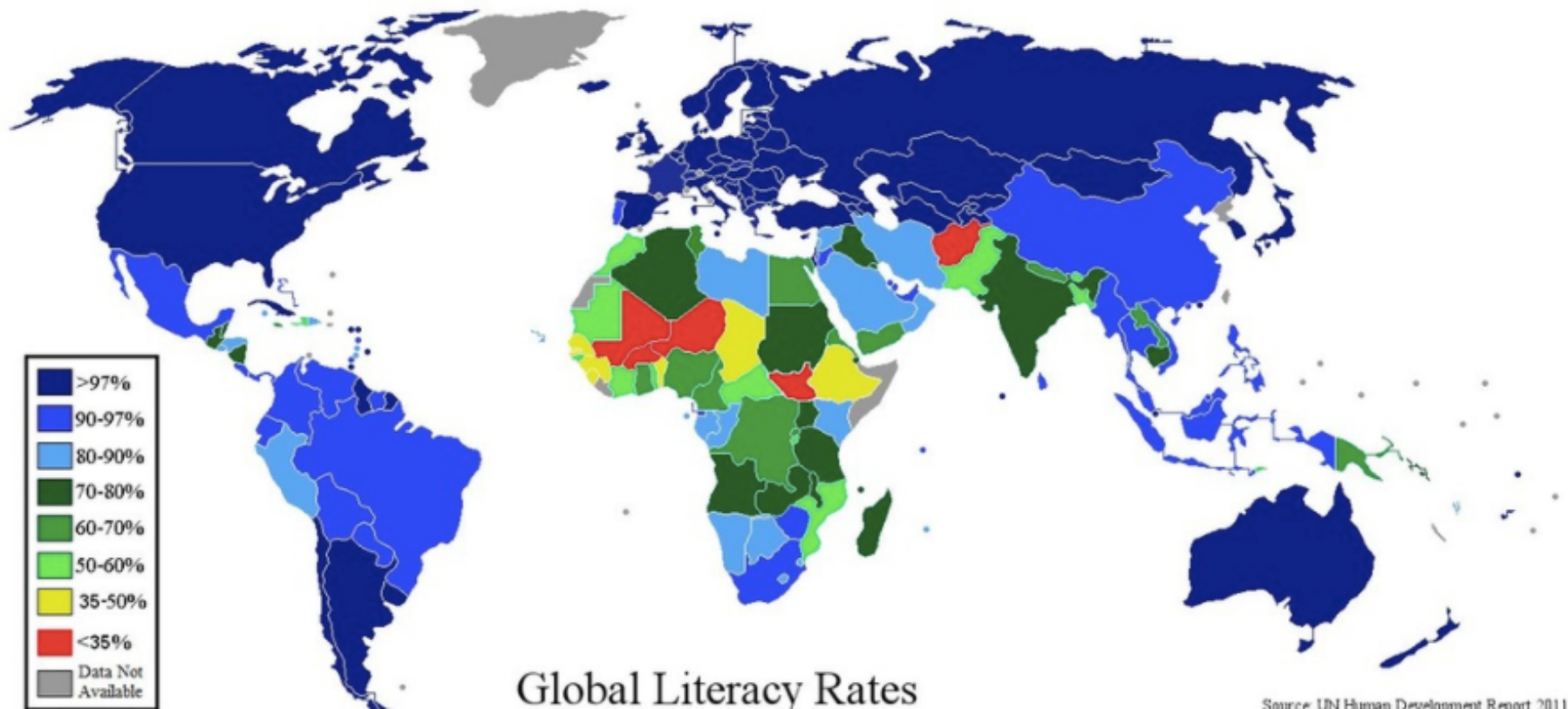
# Purchasing Power Parity

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- How much a country's currency is worth.

# ■ Social Development Measures

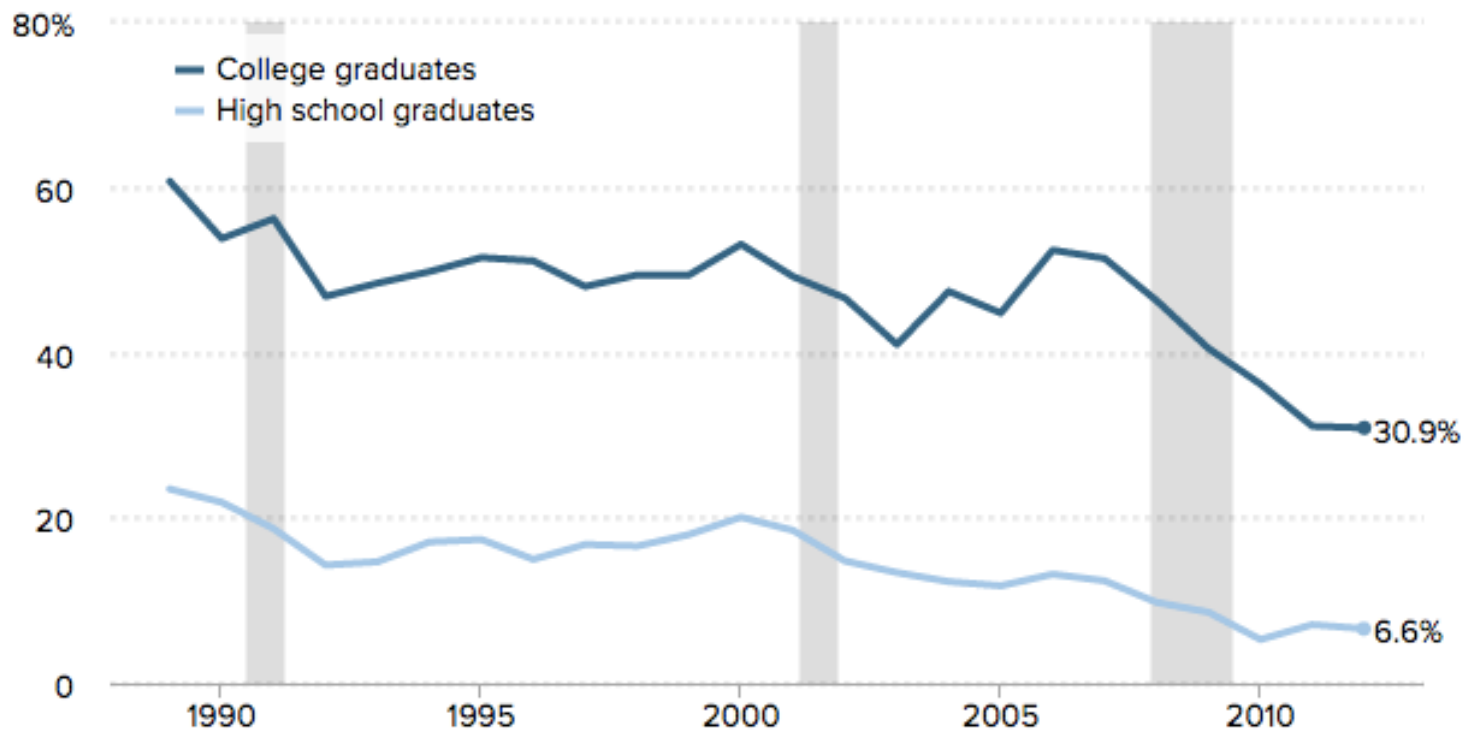
- Fertility Rate
- Access to Health Care
- Infant Mortality Rate
- Literacy Rates



# Access to Health Insurance

## Eroding health insurance coverage led to health reform

Share of employed recent high school and college graduates with health insurance provided by their own employer, 1989–2012



**Note:** Coverage is defined as being included in an employer-provided plan where the employer paid for at least some of the coverage. Data are for college graduates age 21–24 who do not have an advanced degree and are not enrolled in further schooling, and high school graduates age 17–20 who are not enrolled in further schooling. Shaded areas denote recessions.



# Measures of Social/Econ Dev.

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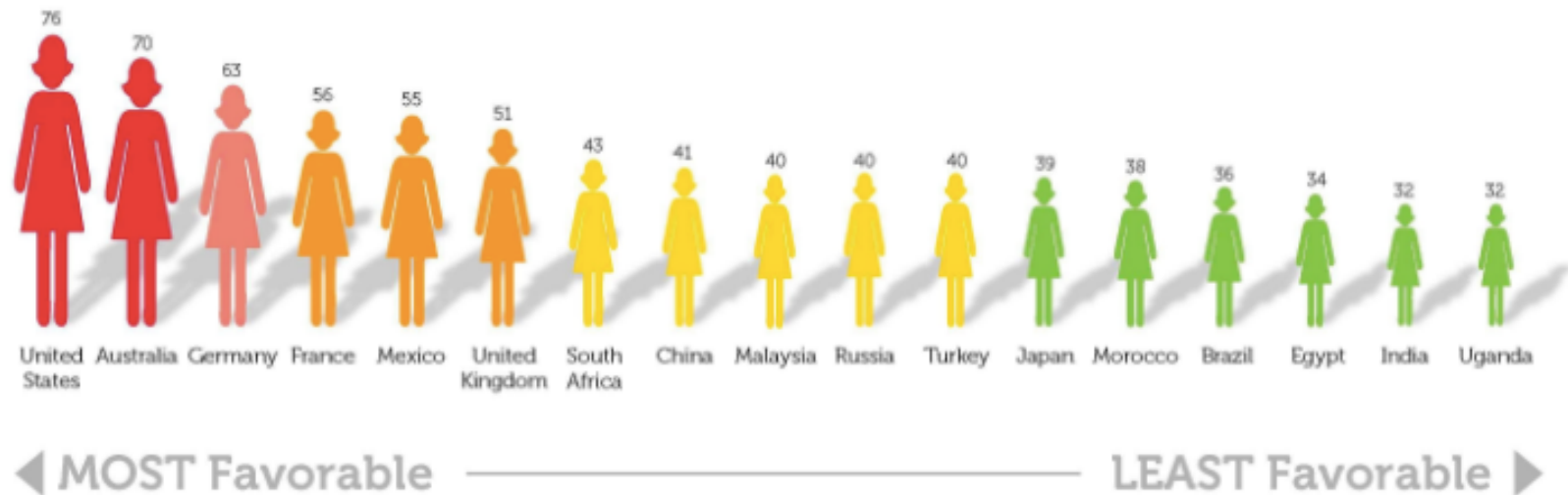
- **Human Development Index (HDI)** - Google search  
*UN Development Programme Human Development Index (HDI)*

# ■ Measures of Gender Inequality

## ■ Indices (plural of indexes) of Empowerment

### WHERE ARE THE CONDITIONS FAVORABLE FOR HIGH-POTENTIAL FEMALE ENTREPRENEURSHIP DEVELOPMENT?

\*Conditions include entrepreneurial environment, entrepreneurial eco-system and entrepreneurial aspirations



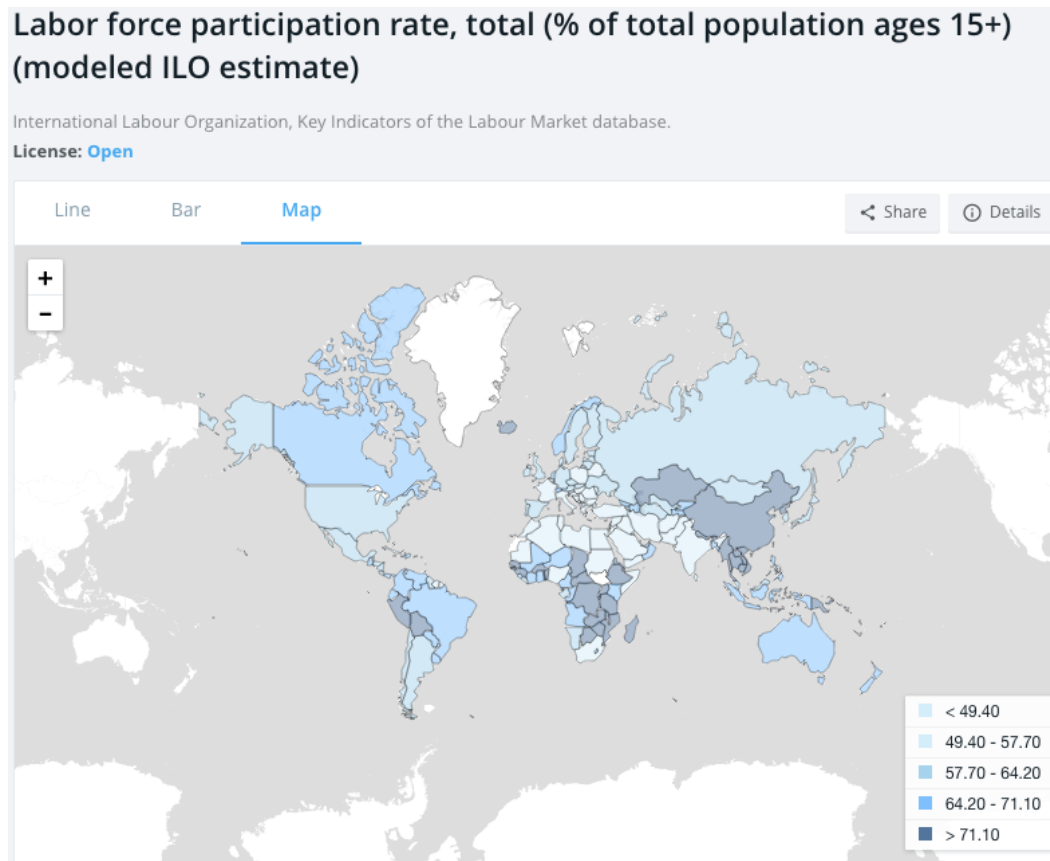
Source: Gender-Global Entrepreneurship and Development Index (GEDI) Research of High-Potential Women Entrepreneurs  
To learn more about the methodology of this research visit [www.gedi.com/entrepreneurs](http://www.gedi.com/entrepreneurs)

# Gender Equity in the Workforce

- There are more women in the workforce globally, but:
  - they do not have equity in wages
  - they do not have equity in job opportunities
- Solutions?
  - microloans: Financial institutions and corporations offer loans to disadvantaged people to start their own small business and earn a living.
    - loans have little or no interest, so they're easy to pay back

# Measures of Gender Inequality

- **Reproductive Health Measures - such as maternal health (source United Nations)**
- **Labor Market Participation**





# UN Millennium Development Goals

- UN Millennium Development Goals measure yearly progress on their eight goals
  1. Eradicate Extreme Poverty and Hunger
  2. Achieve Universal Primary Education
  3. Promote Gender Equality and Empower Women
  4. Reduce Child Mortality
  5. Improve Maternal Health
  6. Combat HIV/AIDS, Malaria and other Diseases
  7. Ensure Environmental Sustainability
  8. Develop a Global Partnership for Development

# Global Interdependence

*Some countries are more developed than others. Why?*



# Theories of Development


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- **Walt Rostow's “Modernization Theory of Development” (see handout)**
- Draw it.
- Problems with this theory?

# Structuralist Theories

- **Structuralism-**

- A school of thought regarding development that disagrees with Rostow
- Some states' development is impeded by other states.
- The global economic system works against the development of some states

- 
- **Wallerstein's World Systems Theory (unit 4)**
  - **Dependency Theory (unit 4)**

# Criticisms of Rostow

- Wallerstein's world systems theory and dependency theory disagree with Rostow's development model
- Rostow's theory only applies to capitalist countries (Europe and USA), ignores fact that many LDCs are at a severe disadvantage
- **neocolonialism** - the practice of **core** countries using global capitalism, globalization and cultural imperialism to...
  - obtain natural resources from periphery and semi-periphery states
  - maintain political influence

# Why states trade with one another

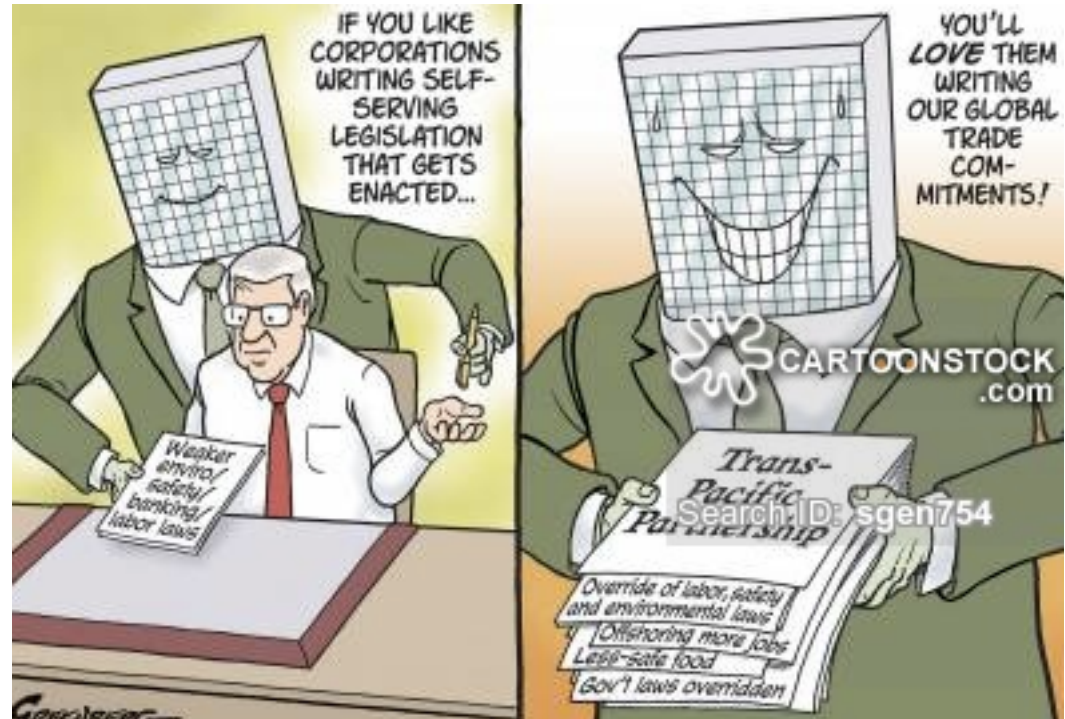
- **Complementary comparative advantage** create a basis for trade between different regions of the world
  - Each developed country excels at producing some products, and struggles to produce others.
  - So... countries produce and sell what they're good at...
  - and import products they cannot make well/cheaply from other countries.

# Global Interdependence

*Consequences*

# International Trade/Trade Blocs

- International trade & trade blocs (EU, NAFTA, TPP) have become increasingly important because of globalization
  - Why?
  - Google search Trans-Pacific Partnership explained Vox
  - Why are some US government officials so against it?



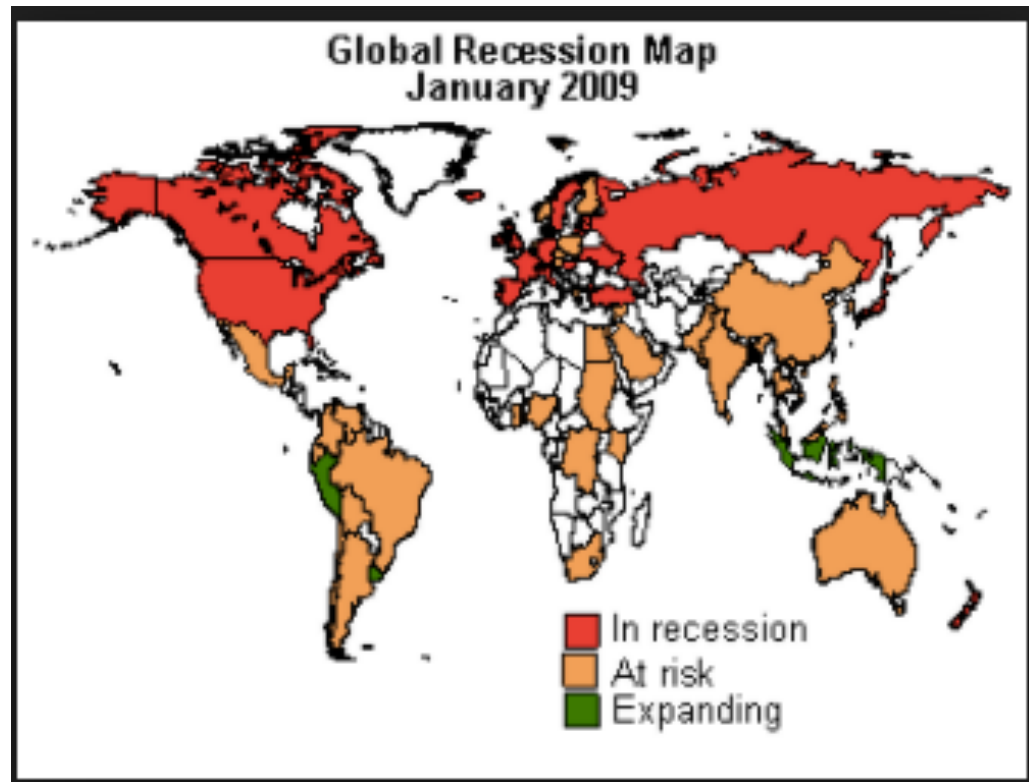


# Free trade and Fair Trade

- **Free trade** - *only* market forces (supply and demand) influence trade - not tariffs or other regulations
- **Fair trade** - higher prices are paid to producers (products like coffee, sugar) in developing states *if* they meet certain labor and environmental criteria

# Consequences of Global Interdependence

- Financial crises are no longer localized to countries, but entangle the whole world

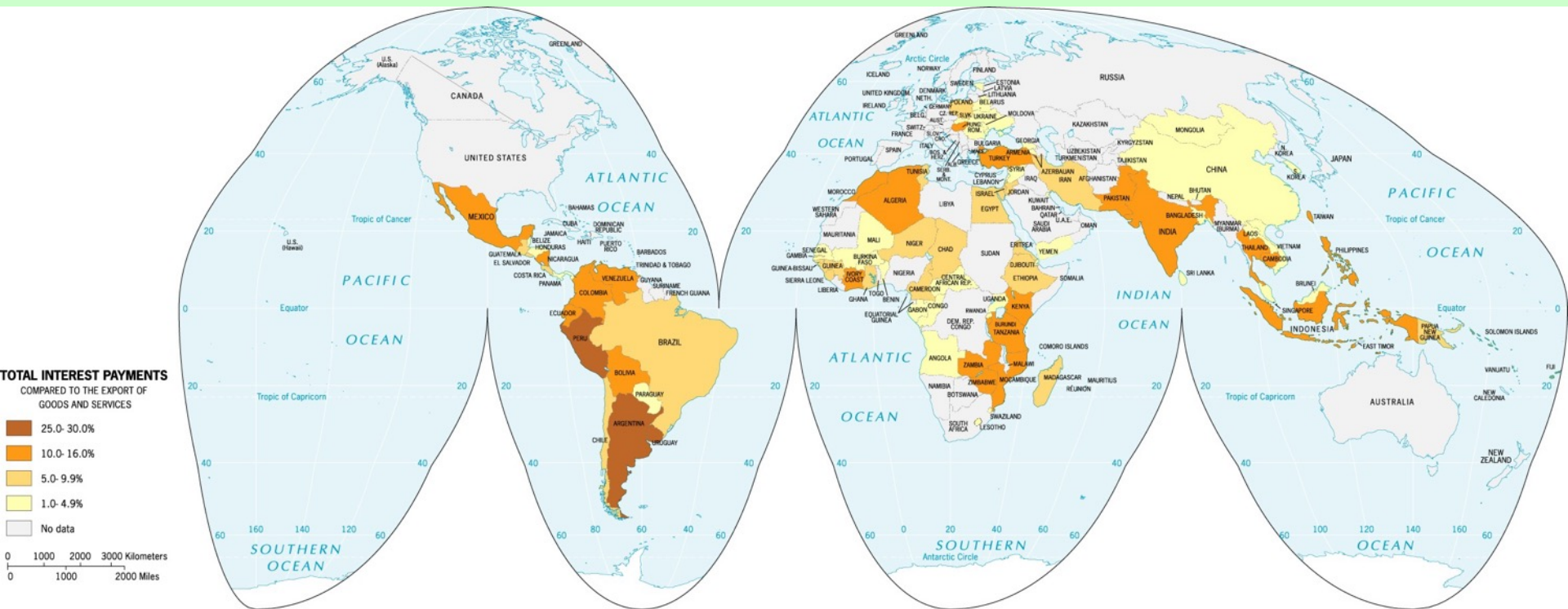


# **Barriers to Economic Development for Developing Countries**

- **Low Levels of Social Development**
  - **Trafficking**
- **Foreign Debt**
  - **Structural adjustment loans**
- **Political Instability**
- **Widespread Disease**
  - **Malaria**

# Foreign Debt Obligations

Total interest payments compared to the export of goods and services.



# Foreign Debt Obligations



**Foreign Debt and Economic Collapse  
in Buenos Aires, Argentina, 2001**



# Widespread Disease

- Malaria kills 150,000 children in the global periphery *each month*.

Tamolo, India

This baby sleeps under a mosquito net distributed to villagers by UNICEF workers.



# Consequences of Global Interdependence

- **Manufacturing has shifted to newly industrial states**
- *Google this* 



forbes manufacturing mexico continues to grow



All

News

Images

Maps

Shopping

More ▼

Search tools

About 517,000 results (0.91 seconds)

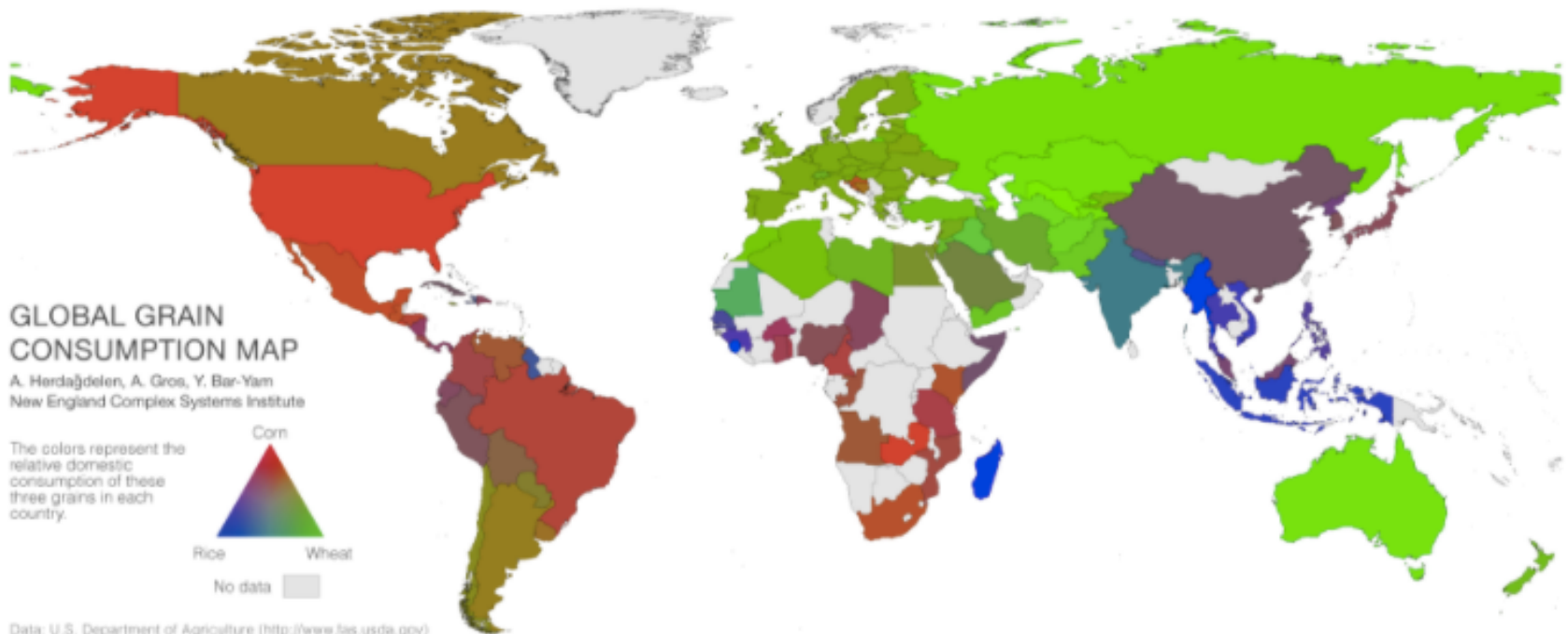
**Mexico's Manufacturing Sector Continues to Grow - Forbes**

[www.forbes.com/sites/stratfor/.../mexicos-manufacturing-sector-continues-to-grow/](http://www.forbes.com/sites/stratfor/.../mexicos-manufacturing-sector-continues-to-grow/) ▼

Apr 8, 2015 - Mexico's Manufacturing Sector Continues to Grow. Stratfor , Contributor. Summary:

# Consequences of Global Interdependence

- **Environmental Sustainability**
- **There are extreme imbalances of consumption of goods...**



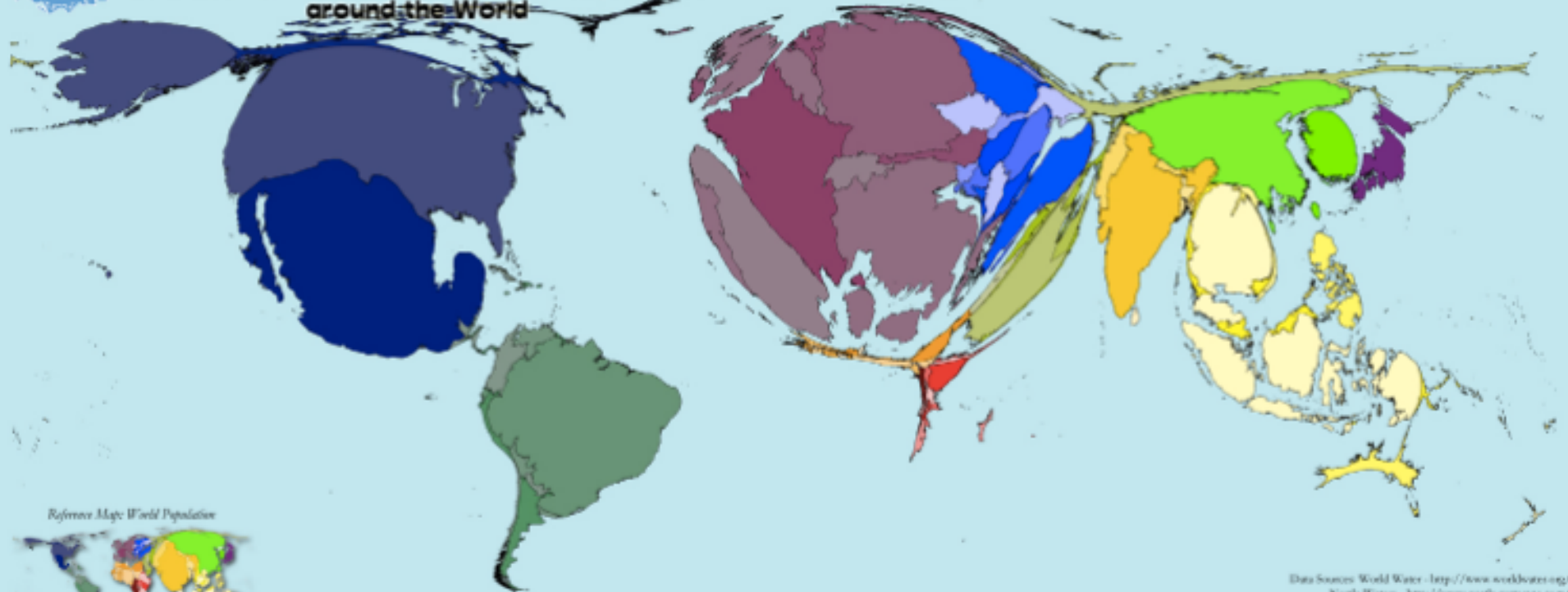




# Turning Water into Gold

## Bottled Water Consumption

around the World



Reference Map: World Population

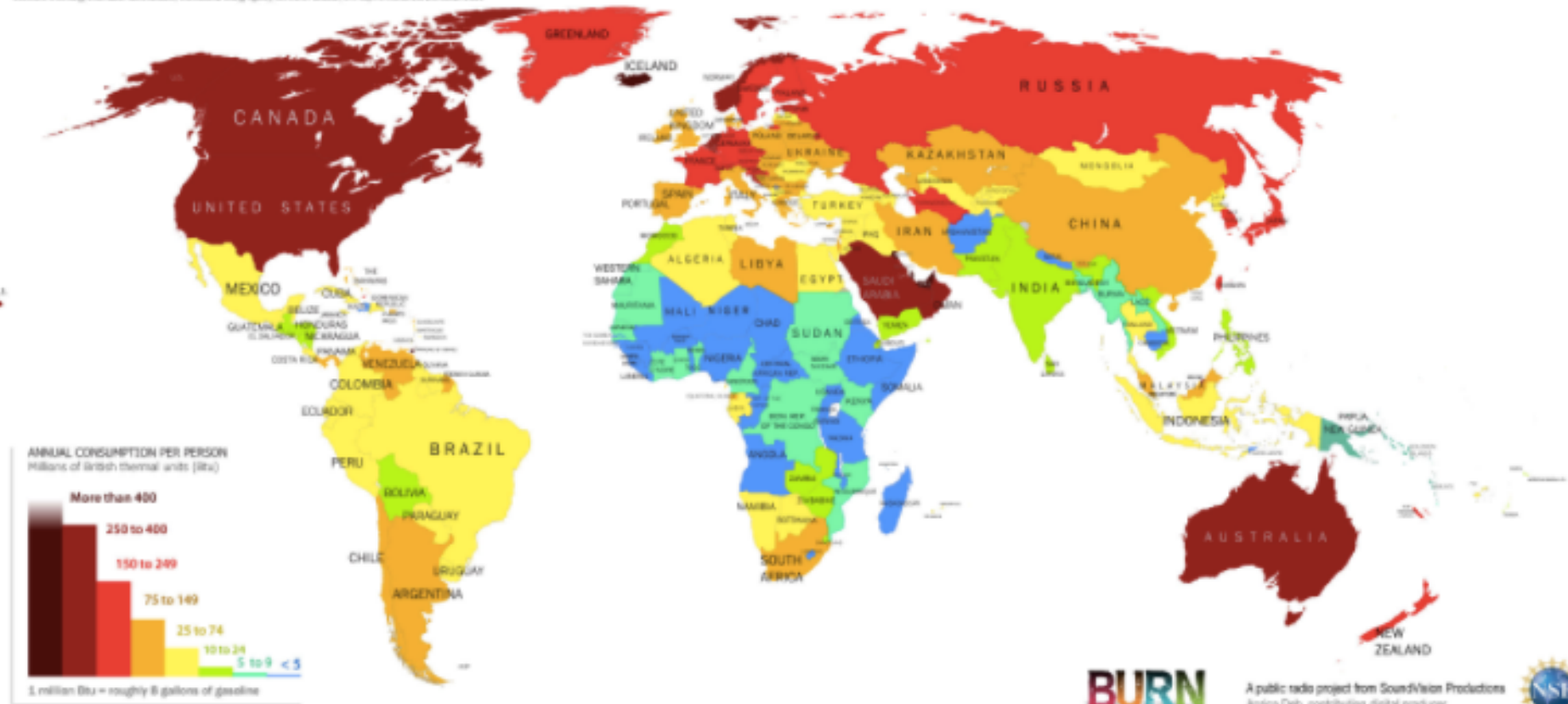


Data Sources: World Water - <http://www.worldwater.org/>  
Nestle Waters - <http://www.nestle-waters.com/>  
Bottled Water World Annual Review - B2 Science, Inc.  
Map created by Benjamin D. Hering, Suez Research Group, University of Sheffield 2011

# Why is this energy consumption trend unsustainable in the century to come?

Energy Consumption Per Person, by country, 2010.

Source: U.S. Energy Information Administration, International Energy Agency, Oil Market Review, U.S. Dept of Commerce and Energy Affairs



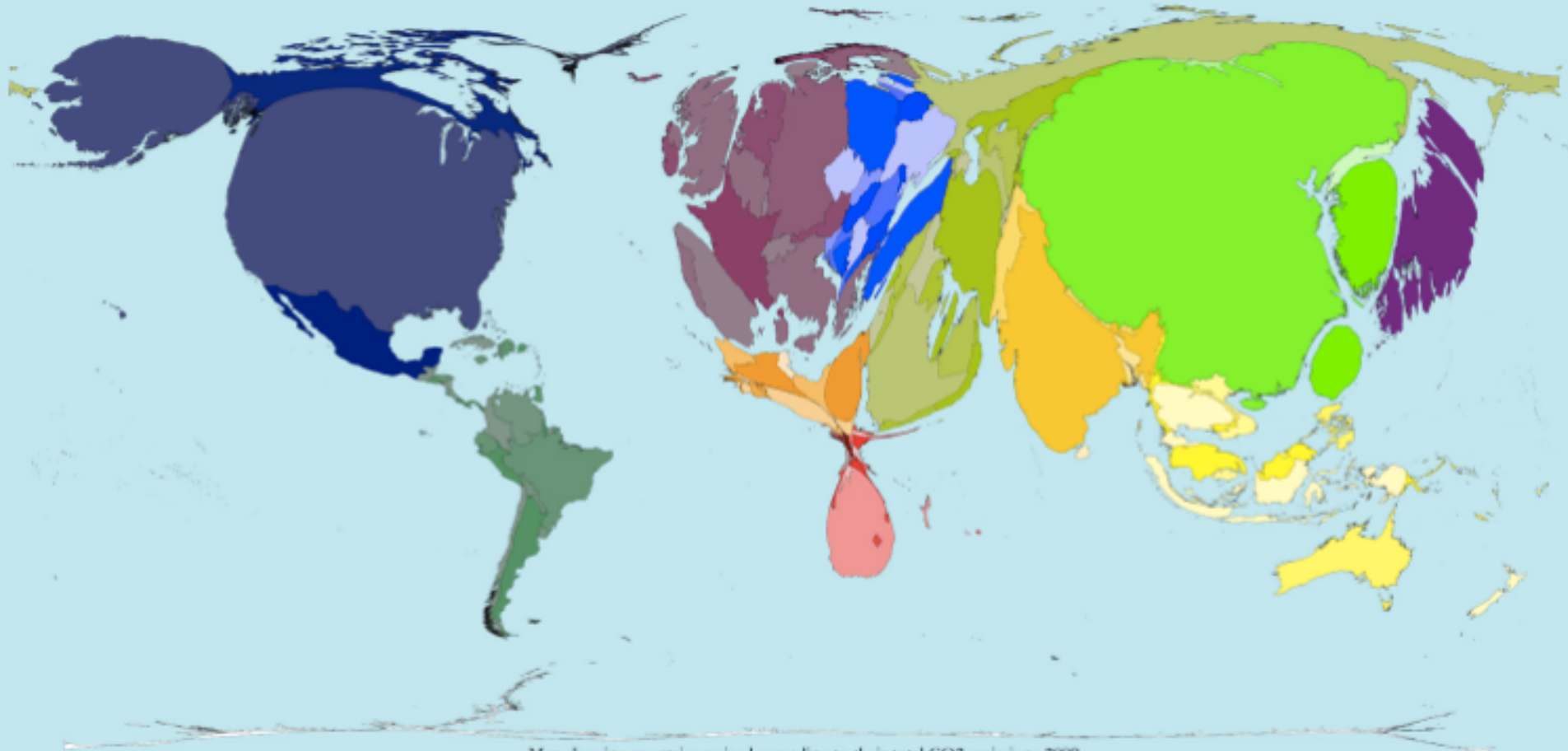
**BURN**  
*an energy journal*

A public radio project from Sound/View Productions  
Antonia Ocho, contributing digital producer



# Consumption is tied to pollution

Global CO<sub>2</sub> Emissions

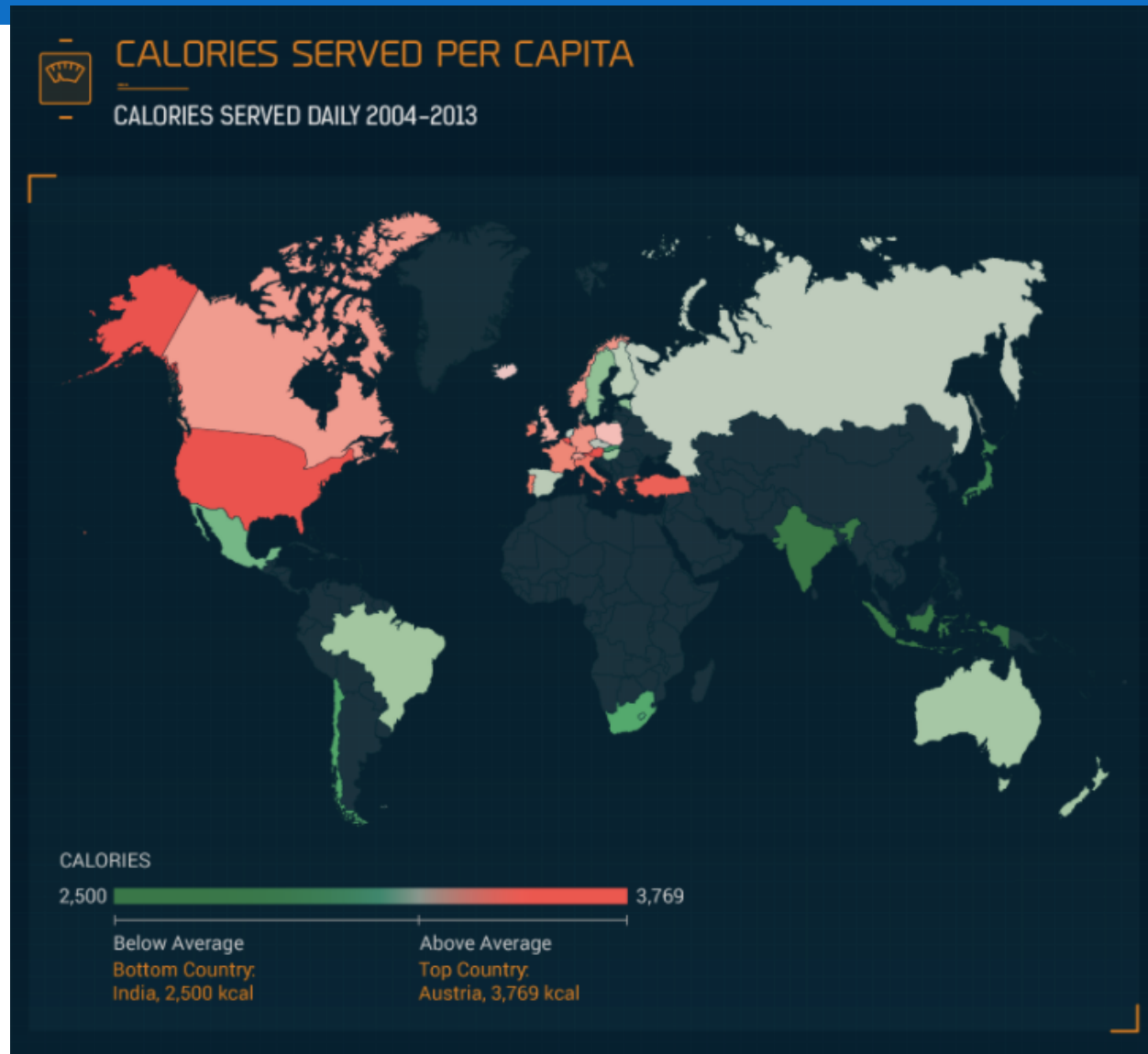


Map showing countries resized according to their total CO<sub>2</sub> emissions 2009

*Data Source: JWR (2009) & UNFCCC (2007)*

Map created by Benjamin Hennig, Sasi Research Group, University of Sheffield - [www.viewsoftheworld.net](http://www.viewsoftheworld.net)

MDC people require 130% (on average) their daily calorie requirement.



**Sustainable development is a strategy to address resource depletion and environmental degradation**

# Sustainability Issues

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- **sustainable development** is development that meets the needs of the present without compromising the ability of future generations to meet their own needs

# Trying to be sustainable

- Sustainability addresses issues of...
  - natural resource depletion, mass consumption costs, pollution, climate change, human health, and social & economic equity
  - In industry and agriculture, more women are taking on responsibilities in the workforce.
    - the challenge = laws that protect them and treat them equally
- **Ecotourism** - A form of tourism pursued by many ecologically concerned people, who visit regions with pristine ecosystems without damaging the economic system

# Other Challenges of Global Development

- **Human Trafficking**
- <https://www.youtube.com/watch?v=35uM5VMrZas>
  - sex trade
  - debt slavery
  - forced labor
  - child labor



# Human Trafficking

Human Trafficking is a crime against humanity. It involves an act of recruiting, transporting, transferring, harbouring or receiving a person through a use of force, coercion or other means, for the purpose of exploiting them.

Human trafficking is a  
**\$32-billion**  
industry worldwide.

The United Nations estimates that between 800,000 and 4 million men, women and children are deceived, recruited, transported from their homes and sold into slavery around the world each year.

Between  
**800,000 and  
4 million**

men, women and children are deceived, recruited, transported from their homes and sold into slavery around the world each year.

**117,000**

people are made victims of human trafficking on average in Ukraine every year.

Moldova	57,000
Romania	28,000
Belarus	14,000
Bulgaria	9,500

## Human Trafficking Cases

Sexual exploitation and forced labor are the most common forms of human trafficking in the world.



**20%**

human trafficking cases involve the labour industry.



**80%**

human trafficking cases involve the sex industry.



Resources : [http://articles.cnn.com/2009-02-16/world/un.trafficking\\_1\\_human-trafficking-women-and-girls-camel-jockeys?\\_s=PM:WORLD](http://articles.cnn.com/2009-02-16/world/un.trafficking_1_human-trafficking-women-and-girls-camel-jockeys?_s=PM:WORLD)

CREATED BY : **Piktochart**

# Other Challenges of Global Development

- Exploitation of labor
  - - Behind the Swoosh
  - *How prevalent are sweatshops?*
  - *Are your clothes made in sweatshops?*
    - *<http://www.thejournal.ie/60-big-name-brands-continuing-to-use-sweatshop-labour-130318-May2011/>*

Abercrombie & Fitch	Adeeba
Adidas	Athleta
Ann Taylor	AX
Banana Republic	Billabong
Bon Marché	Calvin Klein
Champion	Columbia
Converse	D&D Shirts
Dickies	DKNY
Dunlop	Espirit
Express	Fairtrade
Fila	Forever 21
GAP	Gemona
Greg Norman	GT
Jansport	JC Penny
Kelty	Konkep
Land's End	Levi's
Li & Fung	Macy's
Marks and Spencer's	Mizuno
Mountain Hardware	Nautica
NEXT	Nike
Nordstrom	Old Navy
Polo Jeans	Puma
Ralph Lauren	Reebok
Slazenger	Solomon
Speedo	Tesco
Triumph	Tommy Hilfiger
The North Face	Victoria's Secret
Wal-mart	Wanjielong
Wood Bank	WSN Phils
YM3	York AC

# Other Challenges of Global Development

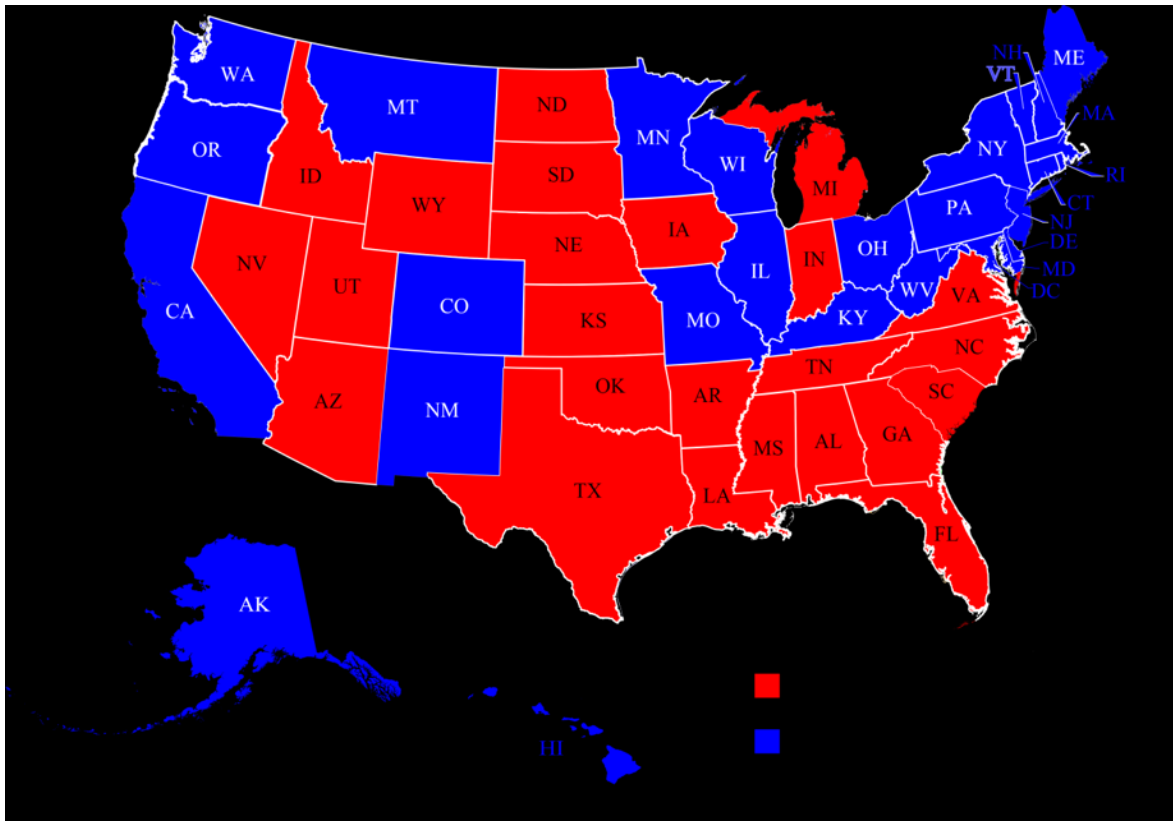
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- Environmental Damages
  - Climate Change contributing to global warming
  - Damage to Earth's ability to provide services

# GOVERNMENT AND LOCATION

# Government and labor

- Right-to-work Laws: requires “open shop”, workers do not have to join the union as a condition of employment
- How does this draw industry into a certain area?
- Is it good for employees of these industries?



# Minimum Wages Around The World

