# Geog 216 Notes for Final Exam

Geography of the World Economy (McGill University)

# Geog 216 Final Exam

# GEOG 216 Test 1 Study Note

## Lecture 1: Geographies of Global Change

**Globalization:** is understood as the most recent stage in a long term, historical process of construction of a global economy. A widespread discourse about globalization describes it as the "new economic order" and is arguably creating a new political and cultural order.
**Def:** the process by which businesses or other organizations develop international influence or start operating on an international scale.

**Economic Globalization**

1. A set of on-going processes, not static
2. Both spatial and time dimensions
    a. Extension of economic activities
    b. Growing number of transactions/interconnectedness
    c. Speeding up of transactions
3. Magnified local-global impacts, i.e something unfolds simultaneously over multiple geographical scales. Ex: an oil spill in the Indian Ocean causes gas prices to rise in Sudbury Ontario

**Characteristics of Globalization**

- A succession of economic crises beginning in the 1970s
- Continued domination of the neo-liberal, free market ideology
- Outsourcing, offshoring of jobs
- Deepening gap between the rich and poor
- In the Global **economy qualitative (qualities) changes are deemed more important than the quantitative (quantities)**
    - The crucial diagnostic characteristic of a "global economy" is the qualitative transformation of economic relationships across geographical space.

**Three Competing Explanations for Globalization**

- Hyperglobalizers
    - Emergence of new world order, decrease role of nation-state, a borderless economy
    - Believe globalization is the "solution" to the world's economic problems and inequalities
- Skeptics
    - Economic globalization = overblown, myth
    - Globalization is an obstacle to resolving problems
- Transformationalists

- Globalization = on-going and transformative
- Offers opportunities and poses some problems

**Two Key Phases of International Trade**

- 1500-1800 – early commercial expansion for Europe
  - Age of discovery & exploration
  - Trade in commerce of high valued goods
  - Mercantilism & protectionism (anti trade)
- 1800-WW1 – RISE OF COLONIAL ECONOMY
  - Trade boom – colonies and countries develop bulk staple exports
  - Drivers: Free trade, migration, innovation
  - Divergence of Europe from the rest

**What's new in our global economy?**

- More of everything
- Trade and capital flows comparable to the 19thC
- Differences
  - Type of trade and capital flows
  - Market integration – breadth and depth

**20th C drivers of commercial integration**

- Much of work done in the 19thC
- Key changes in 20thC
  - Trade (re)liberalization – back to what it was like before WW1
  - International governance
    - GATT (General Agreements on trade and tariffs) /WTO (world trade organization)
    - IMF (international monetary fund)
    - Trade blocks: EU/NAFTA (North America Free Trade Agreement)
    - Unilateral world to multilateral world
- Greater degree of connectedness

**Consequences of a more global economy**

- Potential Loss of domestic control over nation's own economy
  - Competition to attract capital
  - MNCs and environmental regulations
- Increased intra-firm trade

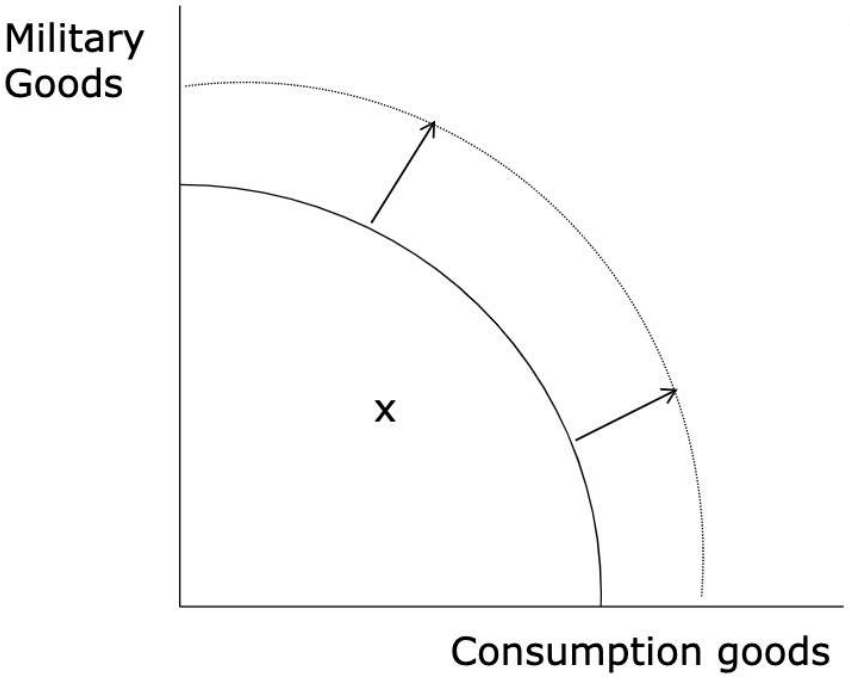
- Who regulates intra-firm flows?

- Job opportunities vs. job losses
  - Relocation of production activities; who wins, who loses?

## Lecture 2: The Structure & Organization of Economies

### What is an economy?

- Economy is a system. It's scale dependant, like an ecosystem
- The *Economic Problem:*
  - Scarcity -> Tradeoffs -> Choice
- Production Possibilities Frontier (PPF)
  - Tradeoffs
  - Valuation
  - Preferences
  - Opp Cost
  - Economic Growth




**Key Economic Terms**

- Economic Agents: governments, frims -> anyone involved in making economic descions.
- Economic Institutions: **a set of norms and rules** that govern commerce, trade, products and construction. Institutions influence people's behaviour. Ex: A classroom is a social institution.
- Factors of Production
  - Land – Resources
  - Labour – physical/mental effort into the production of goods.

Underperforming economy

        - Capital – Goods used in the supply of other products, ex: tech.

Goods and Services: both private and public goods.

- Private goods: excludable and rivals. Ex: Diamond mine you can protect it but people can break in.
- Public Goods: you cannot exclude public goods. Ex: street lighting

- Scarcity
    - Natural: there is only so much on earth
    - Socially constructed: institutions exclude people from an attenable resource. Ex: Two rich families own all of the fertile farmland, and hundreds of poor people are crammed into a small area nearby.
- Markets: Facilitate the exchange of good and services. An institution
    - Product Markets
    - Factors/resource markets: Labour markets/Land Markets
    - The Majority of world have fragile markets because people don't have enough money to hire from the Labour Market
    - Efficiency
        - Productive: lowest cost therefore higher returns
        - Allocative: goods and services reach those who most need them. Therefore, will use the resource most efficiently
    - Primary role of markets
        - Allocate scares resources efficiently
            - Ex: How to allocate oil

Structure of a market economy

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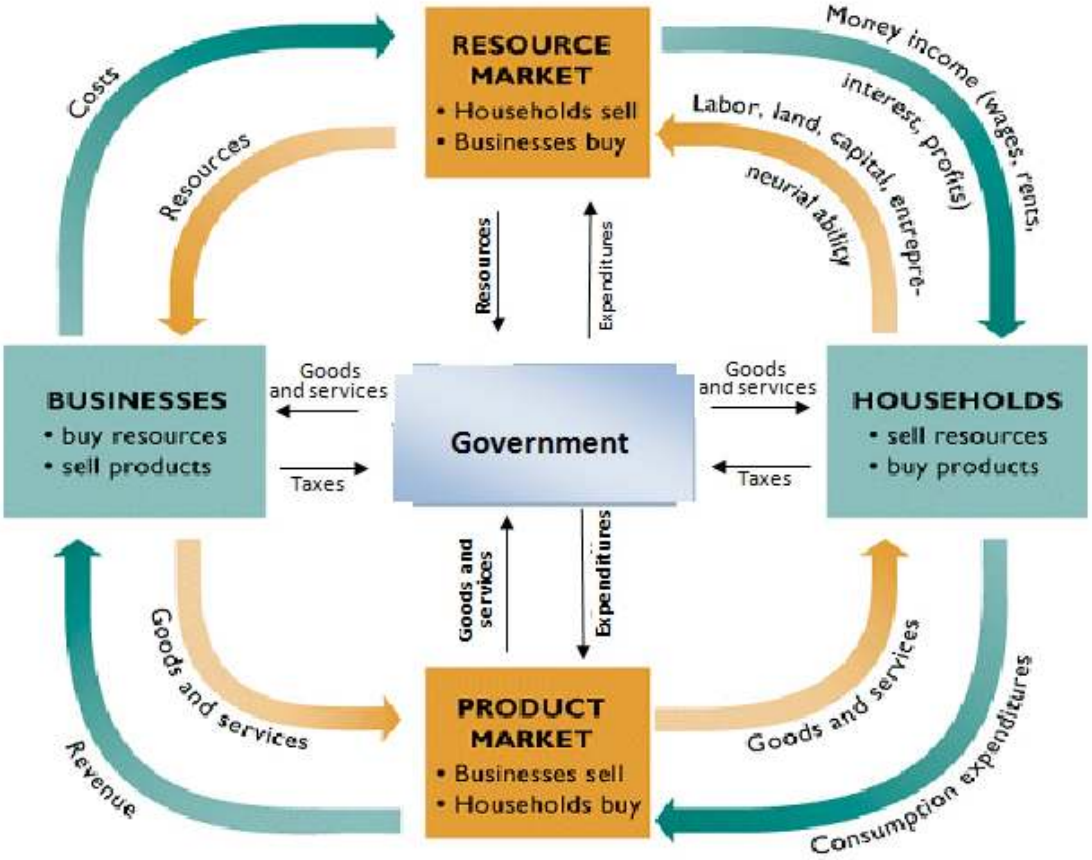
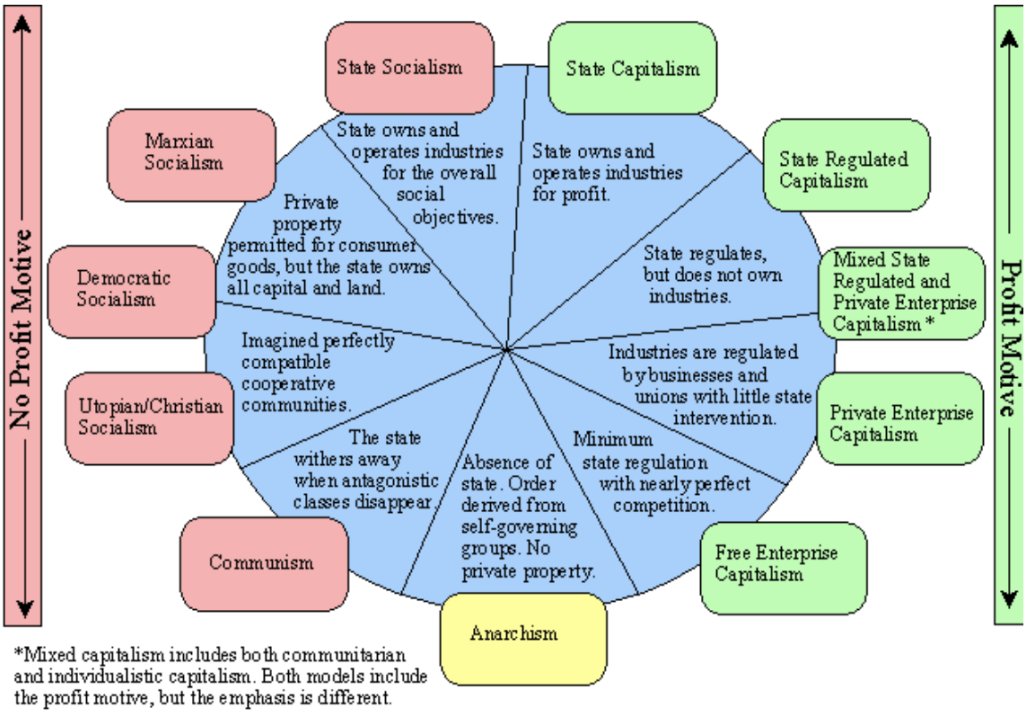



Basic types of Economies

- Traditional: economic system in which traditions, customs, and beliefs help shape the goods and services the economy produces, as well as the rules and manner of their distribution
- Market: consumer goods, low government role, private ownership, the goal is to increase capital and wealth
- Command (planned): Exchange of goods and services are controlled by the state. Focus on production.
- Mixed: combo of market and command, government incentivises the market, public goods get to the people.

- Political Economy: focused on the interaction between political and economic




## Lecture 3: Growth and Development

Commodity markets are where resources are bought and sold

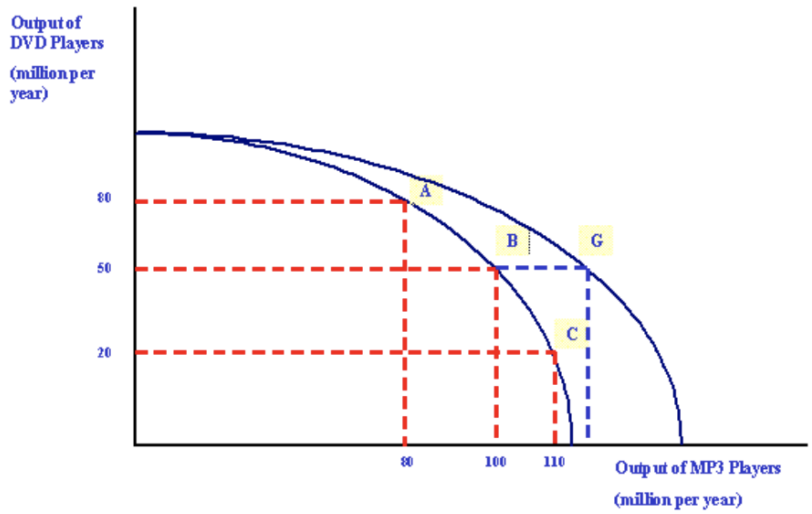
Factor markets are where the resources themselves are bought, ie seeds, soil etc.

**Outline**

How do economies grow?

Two drivers of economic growth (causes PPF curve to move outwards)

1. New Resources- (add them through pillaging, acquiring)
2. Technological change




**Economic Growth: Technological change**

Ex: PPF of DVD vs MP3

The tech of MP3 has improved greatly causes just its section of the curve to go outwards (like a stretch)

**Measures of Economic Output: GNP/GDP**

- Gross Domestic Product (GDP): the market value of all goods and services produced within a country's borders in a year. (All finished products, no intermediate resources). The Countries national income.
- Gross National Product (GNP): The market value of all goods and services produced by nationals of a given country in a year

**Problems with GDP:**
- Informal sector/underground economy.
- Unpaid work
- Welfare enhancing vs. welfare reducing activities: GDP can't distinguish the terms.
Ex: If there is an oil spill and it costs 250 million to clean it, that counts toward the GDP the exact same way that spending 250 million to a renewable energy charity.
-Distribution of income/wealth
-Comparisons with developing countries. Lots of unpaid work in developing countries, ex: going to Get water from a well, running the family farm.

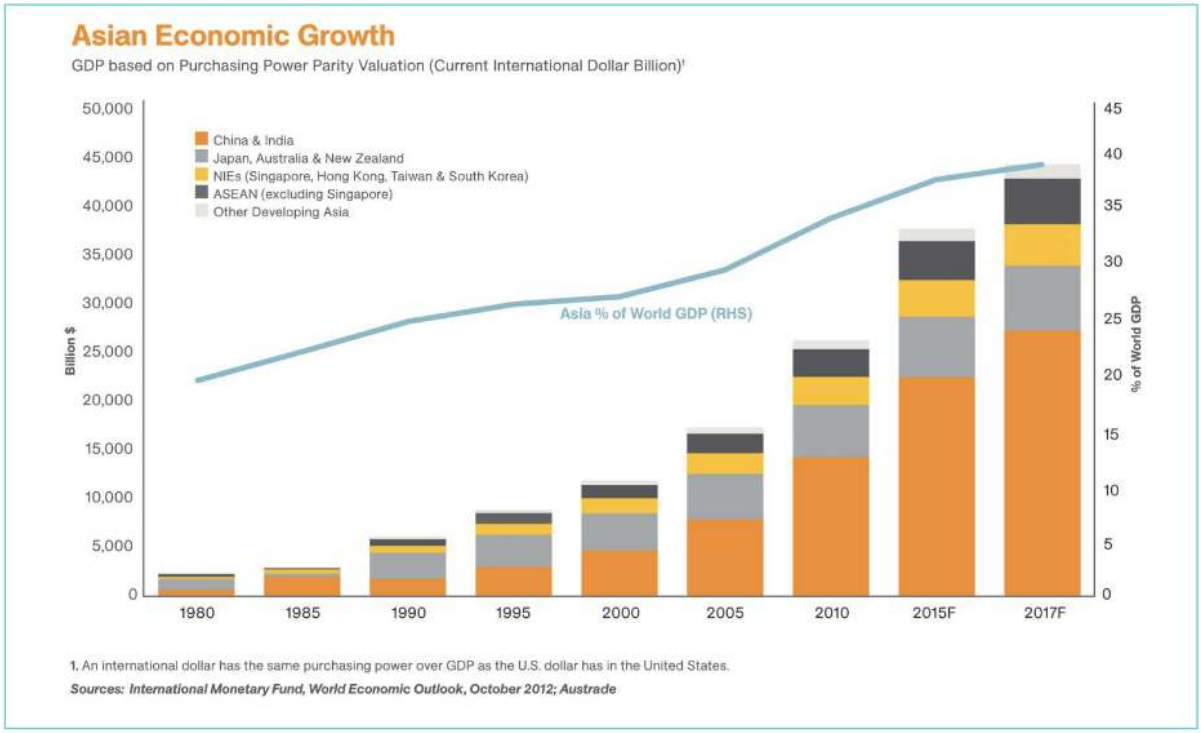
**Adjustments and Alternate Income Measures (The Law of One Price)**

- Purchasing Power Parity (PPP)
    - Exchange rates and purchasing power
    - Adjust GDP as if country' output sold in the US
    - Better comparisons among countries

- Gross national income (GNI)
    - Incomes received rather than value of goods and services
    - Remittance and aid
    - Similar to GDP for large countries

Big Mac Index: To see how much USD a big mac costs in the country.

# Contribution by country/region to World GDP

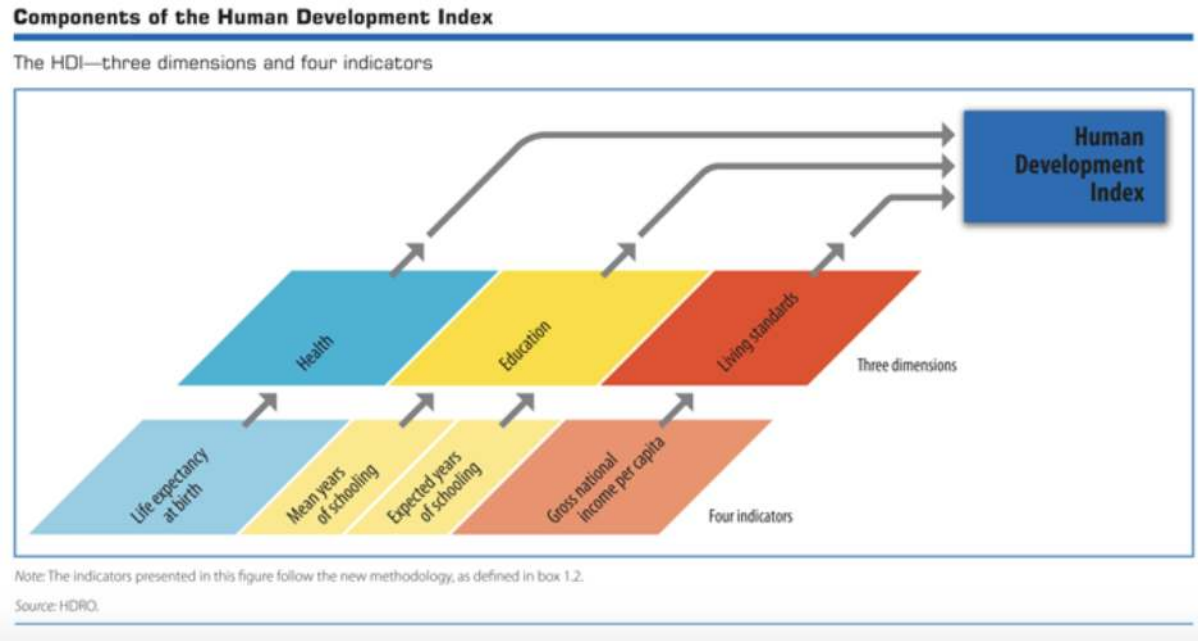



**Growth = Development = Well-being?**

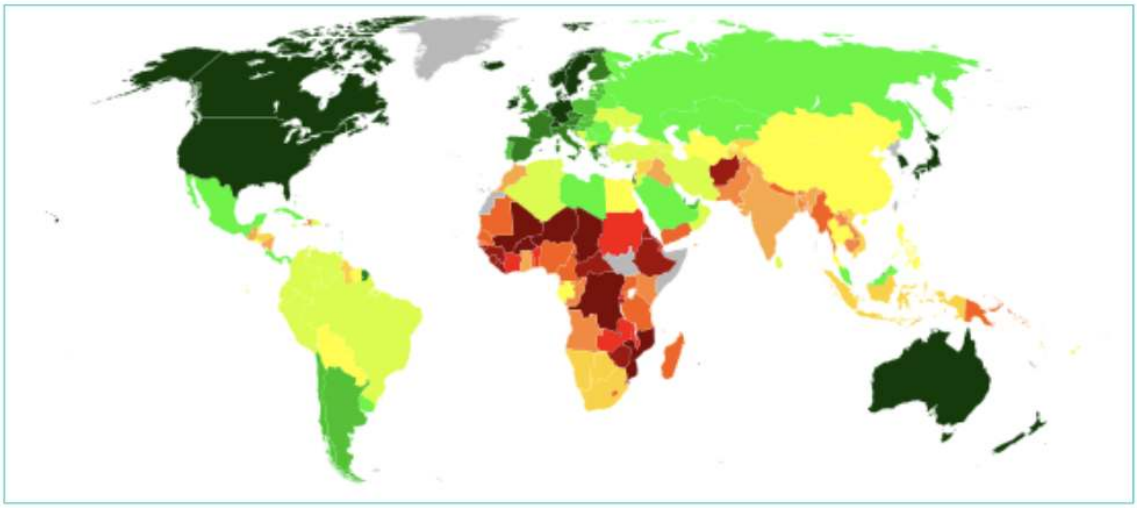
- Growth vs. Development
- Millennium Development Goals
- Alternate measures of development, including Human Development Index (HDI), Gross National Happiness Index (GNHI), Genuine Progress Index (GPI)

*Growth (GDP) is necessary for development, but you need more then growth for development

Human Development Index




# Human Development Index scores, 2012

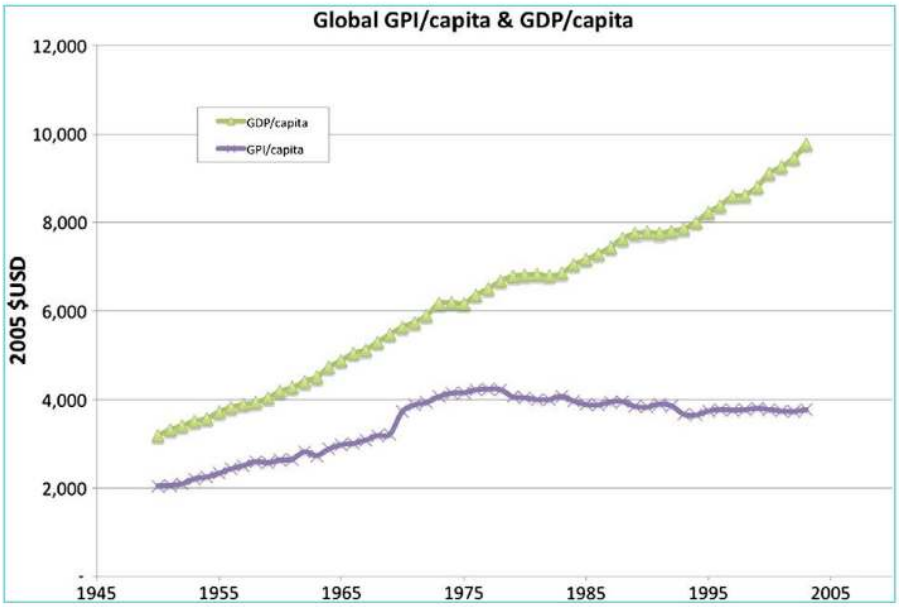


Canada: 0.911 USA: 0.937 Norway: 0.955
Mexico: 0.775 Brazil: 0.730 China: 0.699
Haiti: 0.456 Congo: 0.534 Niger: 0.304

## 3. Genuine Progress Index (GPI)


## 2. Gross National Happiness Index

# GPI vs. GDP per capita for 17 countries.

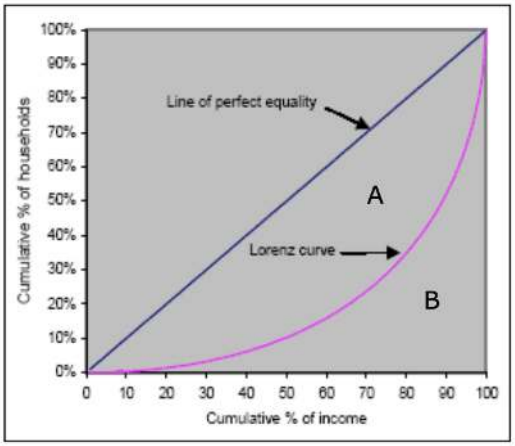



- As in can see in the graph above just because a country is experiencing economic growth that does not necessarily mean the nation is having quality improvements in development and happiness. (As shown with the plateau in GPI).

**Income distribution and inequality**

- Income Shares
- Income Inequality: Lorenz Curve and the Gini coefficient
- Gini is a measure of inequality, the closer you are to zero the more equal.

## Income inequality: Lorenz curve

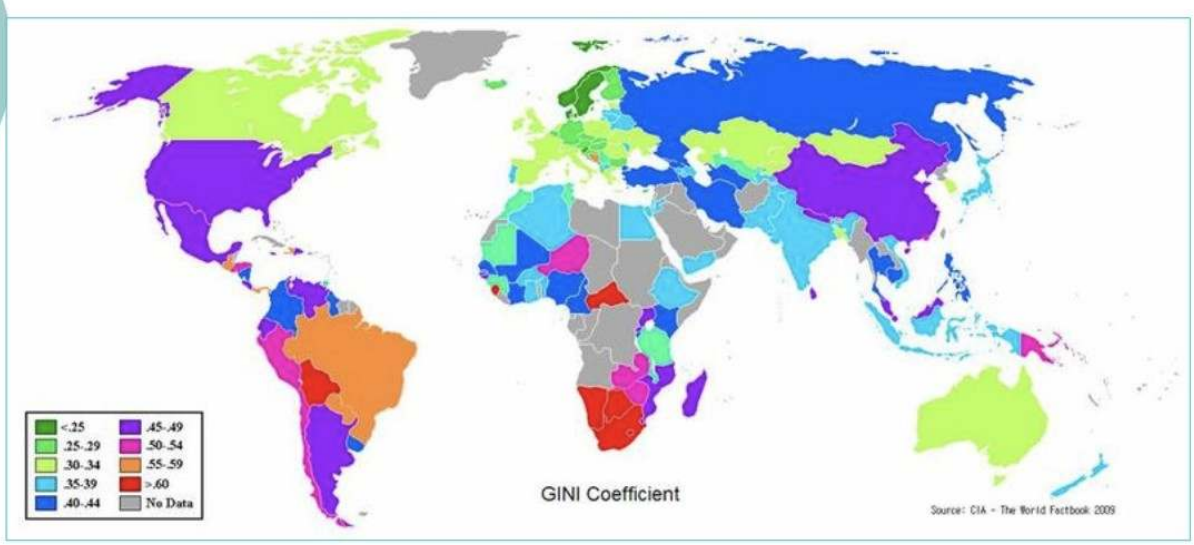



Gini coefficient:

G = (A/A+B)

Sweden: 0.250
Canada: 0.326
USA: 0.408
Brazil: 0.519
South Africa: 0.620

## Global income inequality, 2009



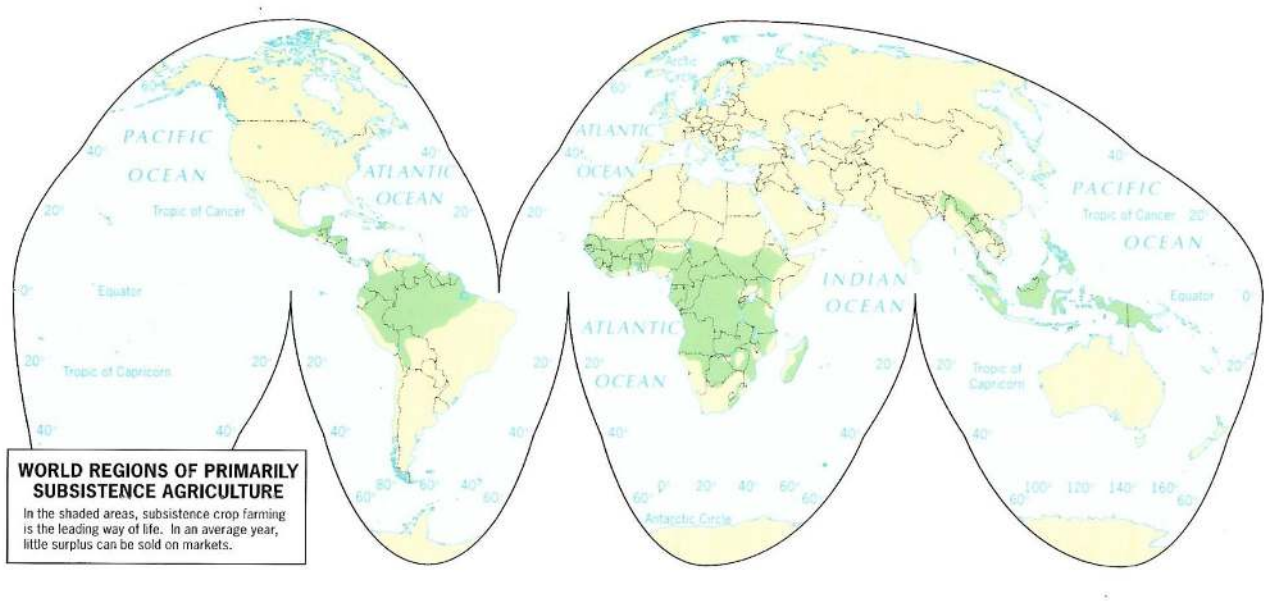

Tripolar Core of the World Econ
Based around three major cities, London, New York and Tokyo.
Of the three stock markets at least, one is open at all times

# Lecture 4: Mapping the World Economy

**The Structure of Economies**

- The Economy has typically been “broken down” using the following categories

- Primary Activities: Concerned with natural resources
- Secondary: processing/transformation of raw materials (derived from resources) ex: manufacturing activity/industry
- Tertiary: sale and exchange of goods and services ex: The service sector. Traditional consumer and producer services (includes retail and wholesale + public sector)
- Quaternary: handling and processing of knowledge, information Research and Development; communication tech




**Industrial GEOG: Traditional location factors. Fordist era (labour incentive, less skills required)**

- Access to inputs (raw materials, energy)
- Availability of labour (numbers; skills)
- Processing costs (land; labour; capital)
- Distance to market (depends on product)
- Transport costs (often associated to previous)
- Behavioural considerations (associated to decision makers – objectives, constrains)

**Post-Fordist production: "new" Location factors (The economy largely because of tech, requires a high level of skills, large part of production have become robotized).**

- Lack of "inhibiting" industrial tradition
- Pleasant environment (amenities)
- Availability of skilled scientists, technicians

- Availability of venture capital (risk taking – investing in emerging firms that are deemed to have high potential)
- Presence of science-based universities, research centres, facilities
- A well-developed transport infrastructure (including international connections)

**Worlds major industrial regions**

- Maps in this package illustrate a geography of the previous industrial econ order (old manufacturing regions)
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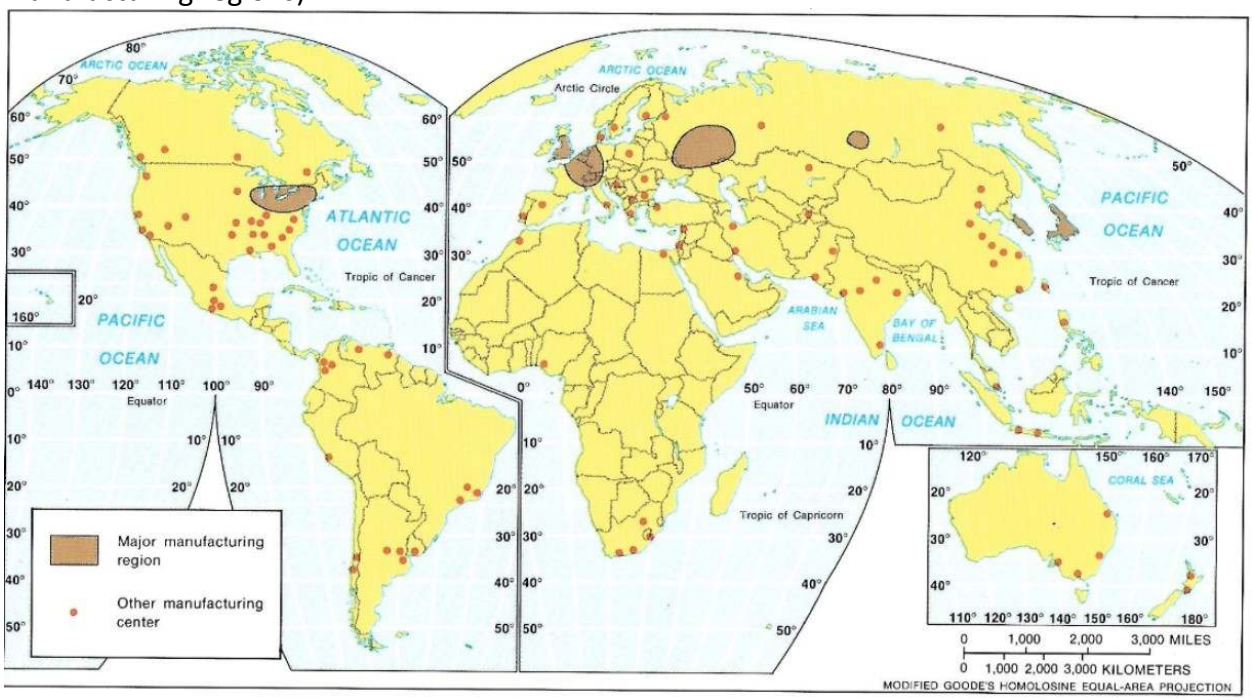
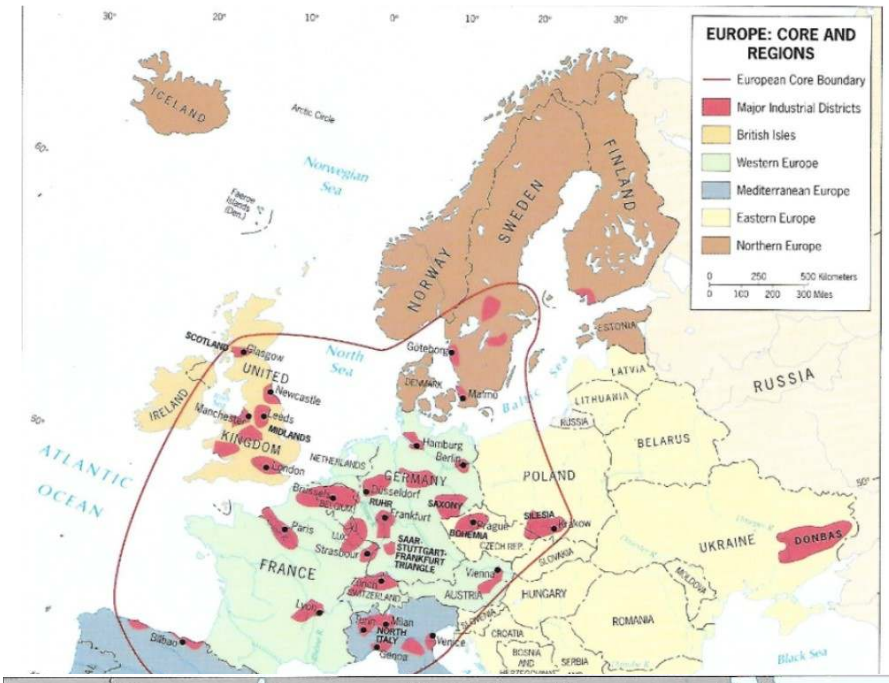


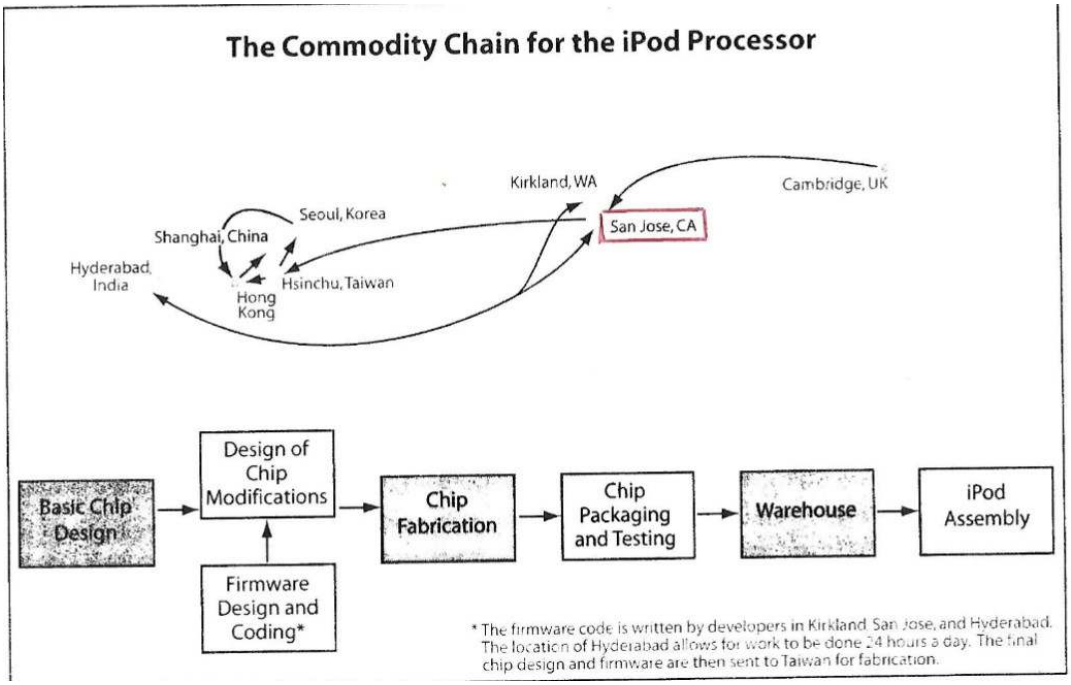

They correspond to a useful, conventional "division of the world" in broad areas, mostly based on continents

- The leading industrial regions of the world are Europe (mostly western Europe), North America (including the old US manufacturing Belt and Sun Belt), and East Asia (China, Japan, and the Four Tigers (Hong Kong, Singapore, South Korea and Taiwan)).
    - Each has its own sub-areas, with each having their own domain of specialization, particularities.




- Europes Manufactoring core tends to be in the western core.

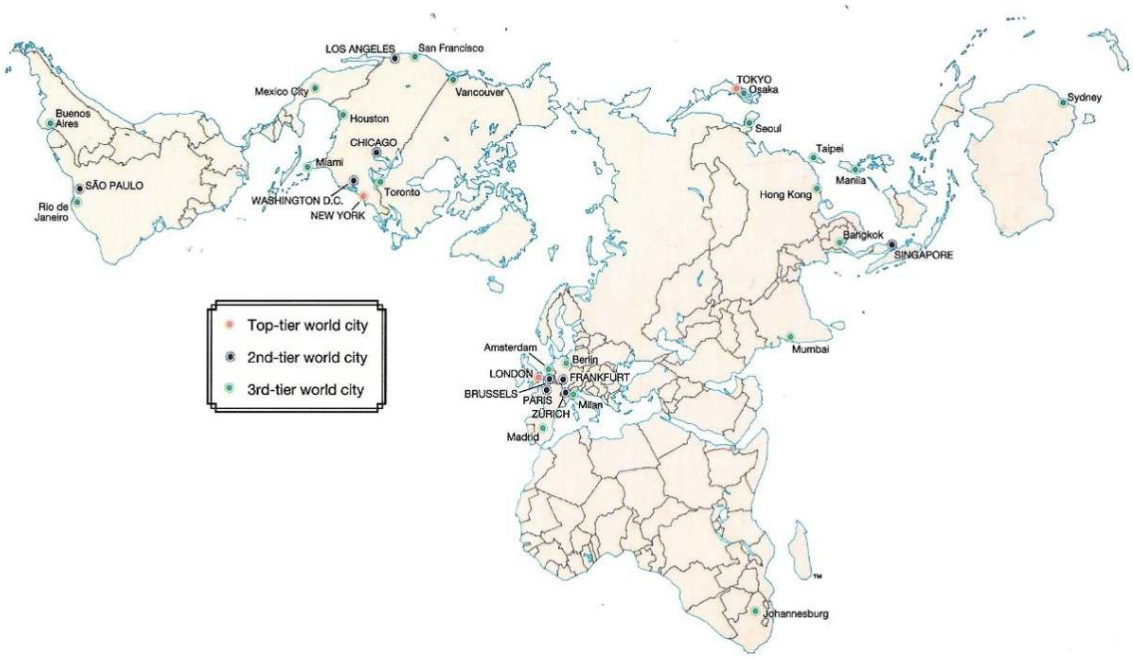

- East Asia Manufacturing is mostly costal.




**Economic "Regions" of the world the Post-Fordist perspective**

- With the late 20C and rise of the high tech sector of the economy (the post-industrial society)

- A new geography of regions, associated, but less limited to only production has emerged




  - Including the construction of a system anchored by leading **metropolises (world cities)** and organized following a hierarchical principle.

## Lecture 5: Recent Patterns and Trends – A Global Perspective

**Recent Patterns and Trends – Formation of the global economic Map.**

- There are constantly changes occurring, modifications to the global economic map, it is always in a state of becoming
- It can be said that today's global economic map is the outcome of a long period of evolution, shaped by the structures and relationships of previous historical periods

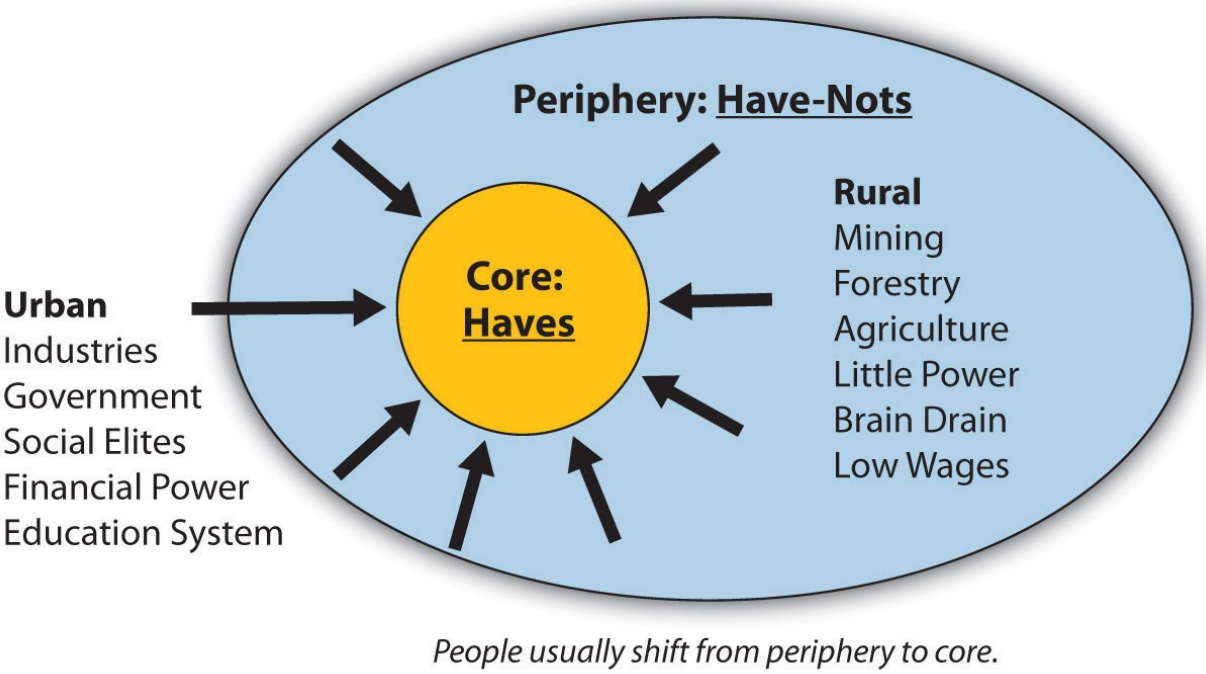
**Taking a very broad perspective on the global economic map**

- The current economic map is the result of post WW2 processes and developments
- Until the collapse of the USSR (1989-1991) the world was divided between a capitalist "west" under USA influence and a "communist realm (the USSR)
- The Late 20C saw the rise of Asian economies as major global economic actors, particularly China.

**Major Processes and shifts in the world economy**

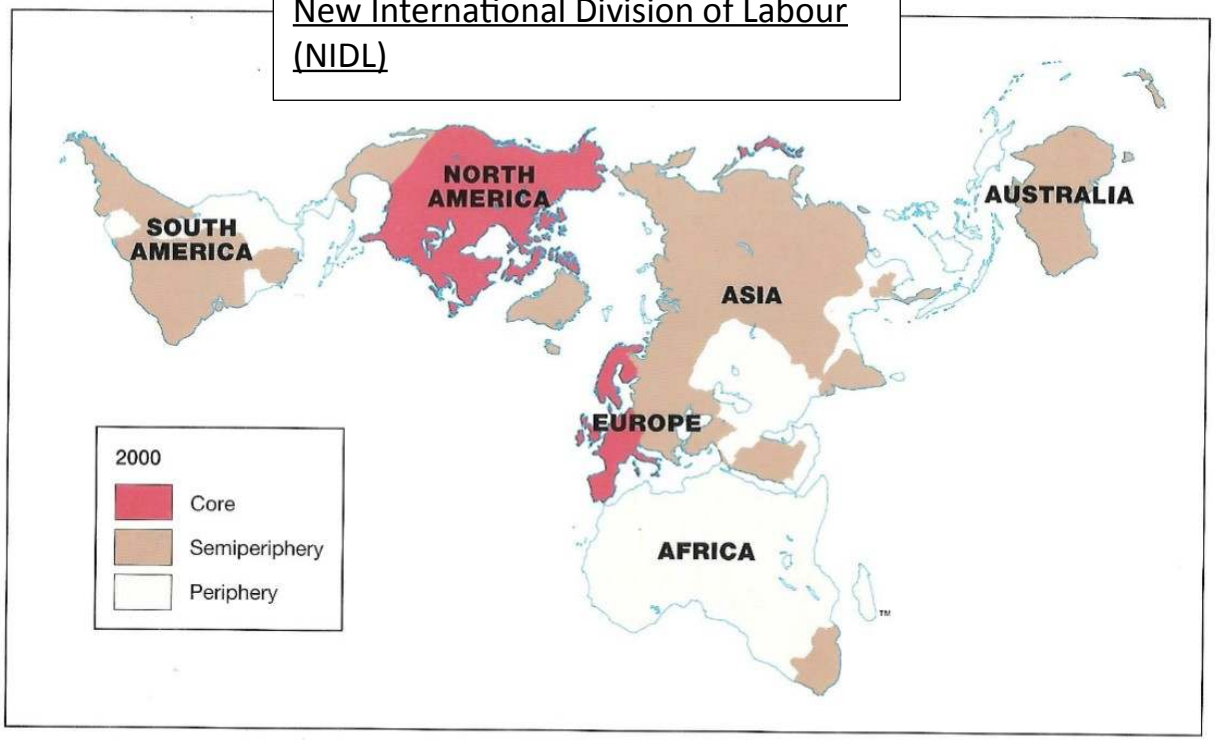
- **2 major features that have characterized global economic processes leading to the current state of things**

- Development of a global division of labour (which *capitalist*, western powers came to dominate)
- Establishment of a core-periphery configuration




*People usually shift from periphery to core.*

## New International Division of Labour (NIDL)




**Major Processes and shifts in the world economy**

- *It is notable that the dynamics involved within the setting of (new) division of labour, and core-periphery ARE NOT limited ONLY, and therefore analyzed, based on production only.
- Production is considered one aspect of "total" economic activity
- The other major aspects are trade and Foreign Direct Investment (FDI)
    - According to Dicken (2015) 2 features mostly characterized the global economy since 1950
        - Increasing volatility of aggregate economic growth
        - Growing interconnectedness between different parts of the world

**Major Processes and shifts – Economic growth**

- Following the golden age of constant growth which followed WW2 and lasted until the 1970s, **rates of growth became extremely variable,** due to a succession of economic upswings and recessions.
    - Oil crises of the 1970s (first in '73) and late 80s
    - Late 1990s Asian financial crisis
    - 911
    - 2008 sub-primes crisis, deep recession, slowdown in the world economy.

**Major Processes and shifts – Interconnectedness**

- Three major dimensions are identified
    - Trade has grown faster than output (production), post WW2
    - FDI has grown faster than trade
    - Serious structural imbalances have emerged in the world econ. (rich are getting richer, middle class is stagnant)

**Recent Patterns and Trends and Patterns – Trade and Output**

- In the second half of the 20C, merchandise trade increased 20 fold while merchandise production increased 6 fold.
    - There was outstanding growth in the ratio of trade to GDP (as reflected by value of exports figures)
    - The world's major trading regions (factoring in intra-regional trade) are Europe (39% of world trade), Asia (29%), and North America (16%)
    - The relative weight of trade is greater for smaller countries

**Recent Patterns and Trends and Patterns – FDI**

- **FDI is defined as** direct investment across national boundaries to buy a controlling investment in a domestic firm OR to set up an overseas affiliate
    - Evidence points to acceleration of FDI growth, particularly since the mid-1980s
    - Transnational corporations (TNCs) are the major agents for FDI in the realm of goods and services exports (accounting for 2/3)

**Geographical patterns resulting from shifts and processes**

- Recent spatial/geographical signs of structural imbalances associated to previously described processes and shifts
    - Developing economies have higher growth rates than developed economies
    - The global economy's "centre of gravity" moving away from the west and to the East

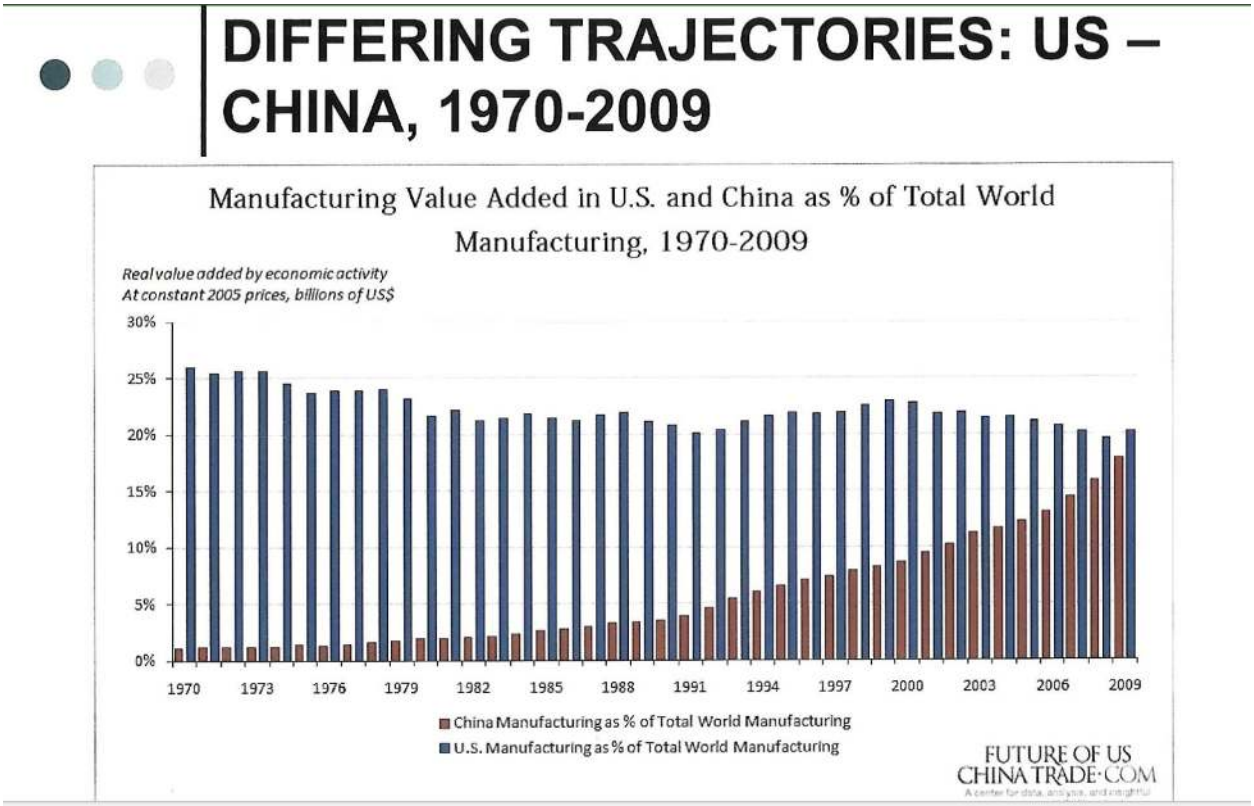
**Geographical Patterns resulting from shifts and processes**

- Shifts within the global economy can be characterized both by continuing concentration as well as changing focus
    - The late 20C powerhouses' states maintain their weight, with some rank "exchanges". Increased influences of China, Asian Tigers, some extent India

**Recent Patterns and Trends – China**

- It has become common/accepted to refer to China as the world's second largest econ
- It is notable that this formulation often applies only to production and trade of good, <u>the service industry is often excluded.</u>

- China has become the world's leading trade power
- If ONLY domestic production (total economic Output) is considered, it has been put forward that by 2010 it had overtaken Japan as the second largest economy
- China is the world's biggest exporter, steel producer, and auto buyer




## Lecture 6: Recent Patterns and Trends – Canada

**Recent Patterns and Trends – Canada**

- At the most basic level, Canada's defining position in the world economy has been considered, and to a great extent continues to be one of producer and exporter of natural resources, and the products derived from those resources (ex: forest products, softwood lumber)
- Canada has operated and transitioned through a succession of trade/production staples including furs, fish, forest, agricultural products, minerals, and more recently energy products (fossil fuels and hydroelectricity)
- A second major feature defining Canada's position has been its relationship with the USA, are essential business partner

    - This feature is characterized by an outstanding share of trade involving the two, and historically very significant presence of US firms and investment in Canada
    - Canada's economy is thus labelled as a **resourced based, and a branch-plant economy**, this very much is due to its relationship with the US economy.
- While considering previous statements, it is also true that Canada has followed the rest of the industrialized world in the transition to a post-industrial society because we have **jobs in the service and advanced services/tech sector now represent the overwhelming share of our labour market**
- Nevertheless, **products from the primary sector (natural resources) continue to contribute the most to the country's balance of trade.**
- Canada's reliance on natural resources in trade becomes a factor of vulnerability, as demand, and prices fluctuate following the changing state of markets.
    - In Canada's case this means we rely particularly on the changing conditions within the US economy
    - Thus making Canada even more sensitive to variations in the course of US currency – this may however play both ways.

**Prof S. Brault (McGill)** characterized the history of Canada's links to the world economy as follows,

- Pre- 19th century: Canada (part of periphery) exports staples to European core countries
- Mid-19thC: as US national economy begins to industrialize, exports of resources flow south of the border
- 1867: Confederation -> nation-building policies (transnational railroad), tariff-protection, industrial cores emerge -> encourage east-west trade flows
- WW1: Pacific coast lumber industry develops
- WW2: consolidation of parts of Ontario and Quebec as key manufacturing districts
- 1965: Canada-Us Auto pact, elimination of trade tariffs on cars, trucks and automotive parts
    - Canada – USA linkages 'unique' in terms of volume of bilateral trade and patterns of corporate ownership
    - But is this free trade? What country benefits?***
- 1970s: development of oil industry in Alberta (new staple) and rise of Japan's industrial capacity
- 1988: Canada – USA free trade agreement because NAFTA (inclusion of Mexico), in 1994 -> leads to greater regional economic integration

**Recent Patterns and Trends – Canada' economy and natural resources**

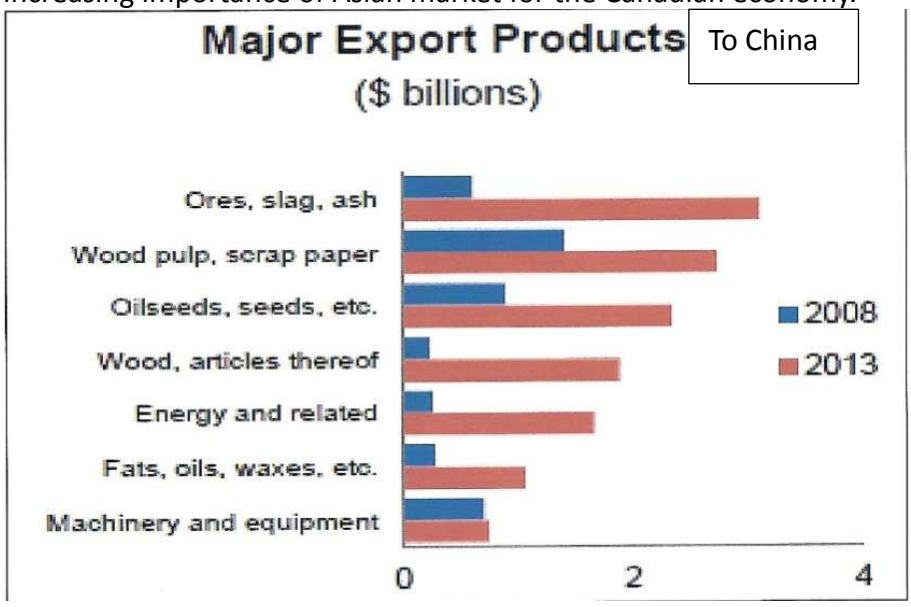
- Among most visible features which illustrate Canada's position as major producer and exporter of natural resources, Dearden and Mitchell (2016) identify Canada as the world's leading **forest products** exporter
- The US accounts for over 60% of export sales (softwood lumber for construction is a major product)
- There is strong growth in Asian demand (South Korea and China)
- **Canada is also considered a global leader in export of minerals**
    - In addition to a long list of metallic minerals (gold generating the largest value).
    - Canada among top producers and exporters of **potash** (2nd behind Russia)
    - **Uranium** (second after Kazakhstan)
    - It has become a leading producer of **diamonds (**diamond mines begin activity in later 1990s)

**Fossil Fuels**

- Canada has both important reserves of land based and offshore oil and gas
- Canada ranks second in the world in proven oil reserves (with a large portion lying in the Alberta oil sands)
- The greatest share of Canadian oil and gas exports go to the US

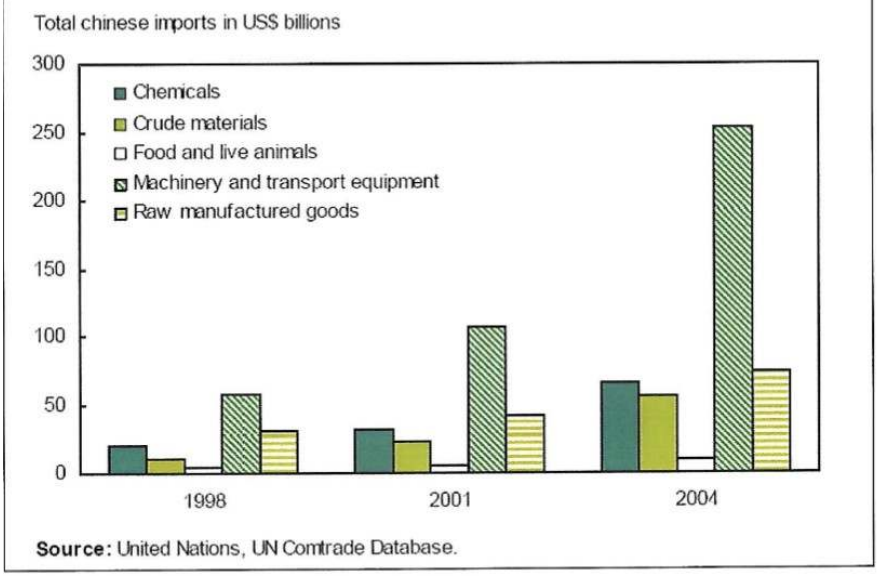
**Asian Markets**

- Recent pipeline mega-project plans oriented toward the pacific provide insight on the increasing importance of Asian market for the Canadian economy.




**Chinese imports to Canada**

**Total Chinese imports dominated by machinery and equipment…**




**Source:** United Nations, UN Comtrade Database.

## CANADIAN MERCHANDISE TRADE BY REGION, 2013

| Imports 2013 ($ million) | Imports 2013 % change (2008-2013) | Region | Exports 2013 ($ million) | Exports 2013 % change (2008-2013) |
|---|---|---|---|---|
| 278,039 | 11.7 | North America (incl. Mexico) | 363,618 | -4.6 |
| *247,815* 52% | *9.1* | *United States* | *358,207* 76% | *-4.6* |
| *26,727* | *49.2* | *Mexico* | *5,386* | *-7.8* |
| 60,999 13% | -4.2 | Western Europe | 37,013 8% | -10.2 |
| *8,432* | *-32.8* | *United Kingdom* | *13,970* | *7.4* |
| 5,605 | 28.1 | Eurasia (incl. Turkey) | 2,814 | -16.4 |
| 97,409 21% | 16.2 | Asia-Pacific | 52,638 12% | 31.9 |
| *52,726.7* 11% | *23.7* | *China* | *20,488* 5% | *95.7* |
| *13,730.6* | *-10.2* | *Japan* | *10,662* | *-3.8* |
| 8,904 | 29.5 | Middle East | 4,587 | -23 |
| 9,333 | -30 | Africa | 4,022 | -6.3 |
| 16,618 | 21 | L. America/ Caribbean | 8,202 | -5.3 |
| **476,907** | **9.6** | **Total** | **472,892** | **-2.4** |

*Source* : Statistics Canada

# Lecture 7: Trade (Why Countries Trade)

**Trade – The classical interpretation**

- Factor endowments: countries may possess, or develop attractiveness and advantage from

    - Natural resources/raw materials
    - Climate, terrain
    - Labour force (size, quality, skills)
    - Capital and/or technology
- Intra-industry or intra-firm trade has become another factor

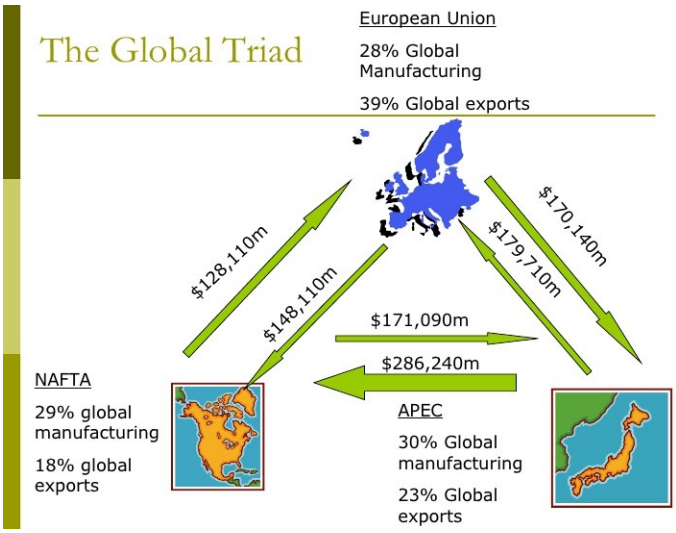
**Trade – The classical interpretation, Advantages and Gains**

- *Countries become advantaged (relatively more efficient) in the production of certain goods in part as a result of differences in factor endowments (land, labour, capital, entrepreneurship)
    - They may have, may be said to have absolute or comparative advantage.
- A Key question is
    - Can they gain from specializing and trading?
- **Mutual gains from trade** occur when products are redistributed in such a way that countries end up with a combination of goods that is better adapted to their preferences than what they had before.
- In the arena of world trade, countries develop comparative advantage in specializing and selling goods in the production of which they are less inefficient in producing compared with other countries they trade with.

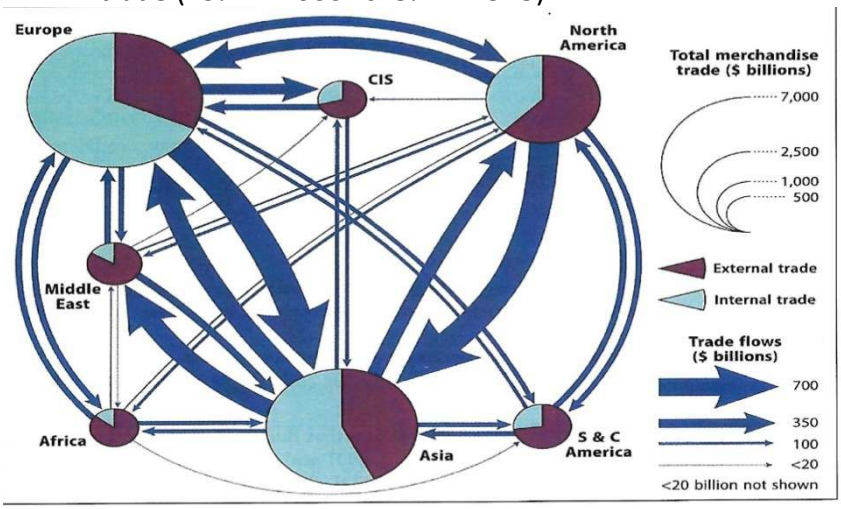
- Thus, for the situation to be mutually beneficial, the key is not necessarily absolute advantage (as the country is exporting a good in which the receiving country produces more efficiently).
- Classical economic theory surmises that if countries specialize in production of goods in which they are relatively more efficient, trade can lead to mutual gains.

**Trade – Current Trends and Facts**

- Trade involved 28% of total world production in 2000, double from 1970
- The Triad accounted for 80% of the total value of international trade in 2000.

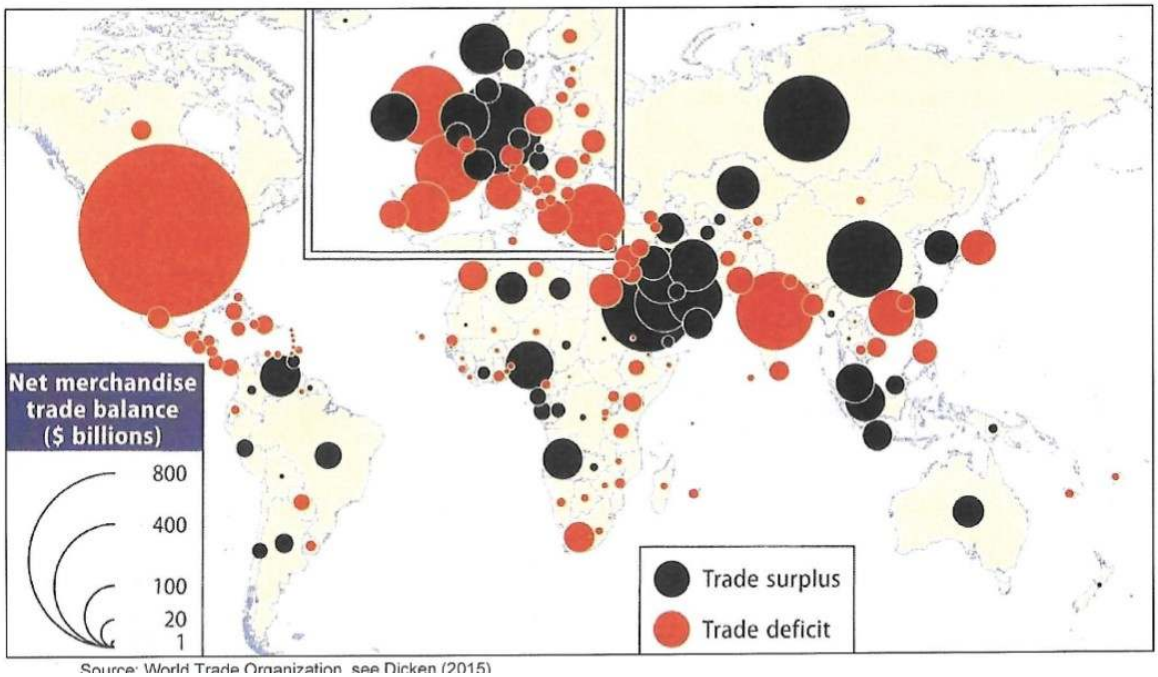



- Northern countries displayed outstanding domination of exchanges, a large share of total commerce involving exchanges between,
    - The USA, Germany, Japan, France, UK, and Canada accounting for 45% of world trade in 2000
- The share of countries labeled as developing remained the same as in 1955 as 2000 (27%)
    - Notably however, these are NOT the same countries
- The most striking change is the emerging east-Asian economies development in world trade (15% in 2000 vs. 3% in 1973)




**<- Network of World Merchandise Trade (2012)**

# NET MERCHANDISE TRADE BALANCES, 2012




Source: World Trade Organization, see Dicken (2015)

**Trade – Beyond the classical interpretation**

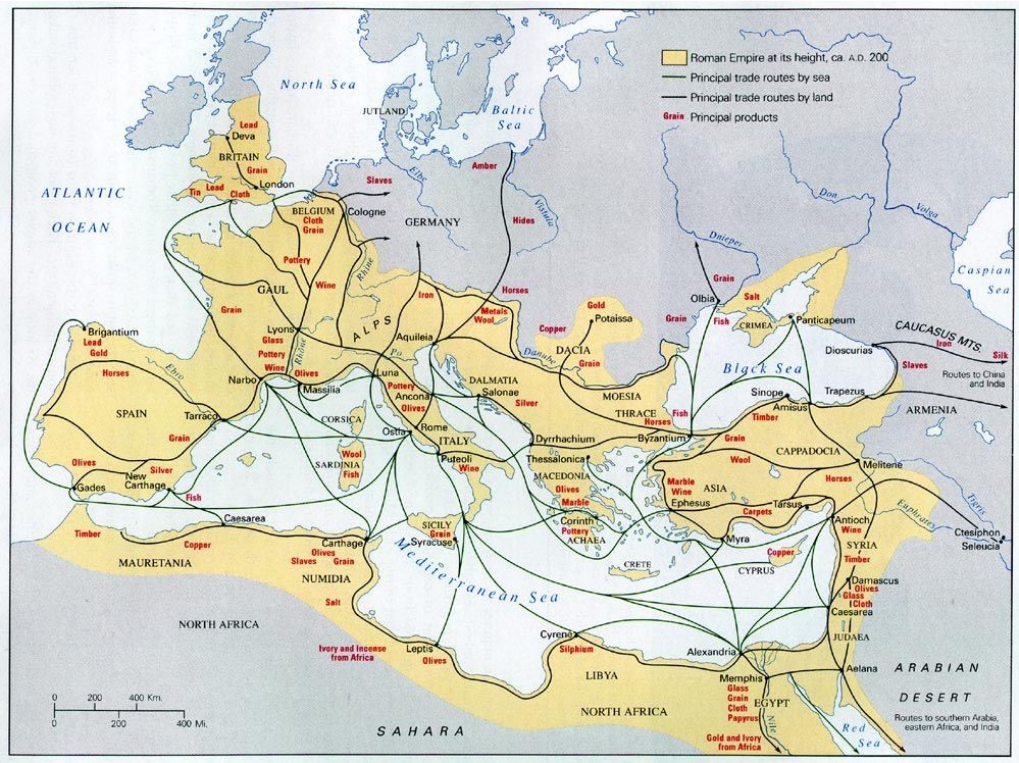
- Early on in GEOG 216 we pointed to a "free market ideology" as one of the key features helping define globalization
  - The fact is that the international trade environment is packed with various "conditions" and therefore trade may not be as free as we are told
  - For example: presence of such regulatory means as **quotas and tariffs** put in place by states at their borders (often as protection to their domestic industries and home markets)
- Paradoxically those same states participate in having membership in various agreements which aim at removing barriers to trade.
  - For example, the EU have reached an advanced stage in integration and removal of obstacles to the movement of persons and goods
- Another view is that trade occurs in a context of unequal exchange.
  - This framework is the heritage of 19C colonialism, and mostly of practices first put in place by the British.
    - This mindset let to protectionism
- **It has been increasingly accepted that the traditional theory based on comparative advantage is overly simplistic and unrealistic.**

- An interpretation which corresponds more to the complexity of the current environment of international trade privileges are based around competitive advantage rather then comparative advantage.
    - The cornerstone of Porter's theory of competitive advantage is <u>productivity growth,</u> the interpretation is not limited only to the individual worker's productivity but considers the broader institutional and technological environment within which production occurs.

# Lecture 8 – Early Commercial expansion

**The world since the Romans**

- <u>Trade under the Roman Empire</u>

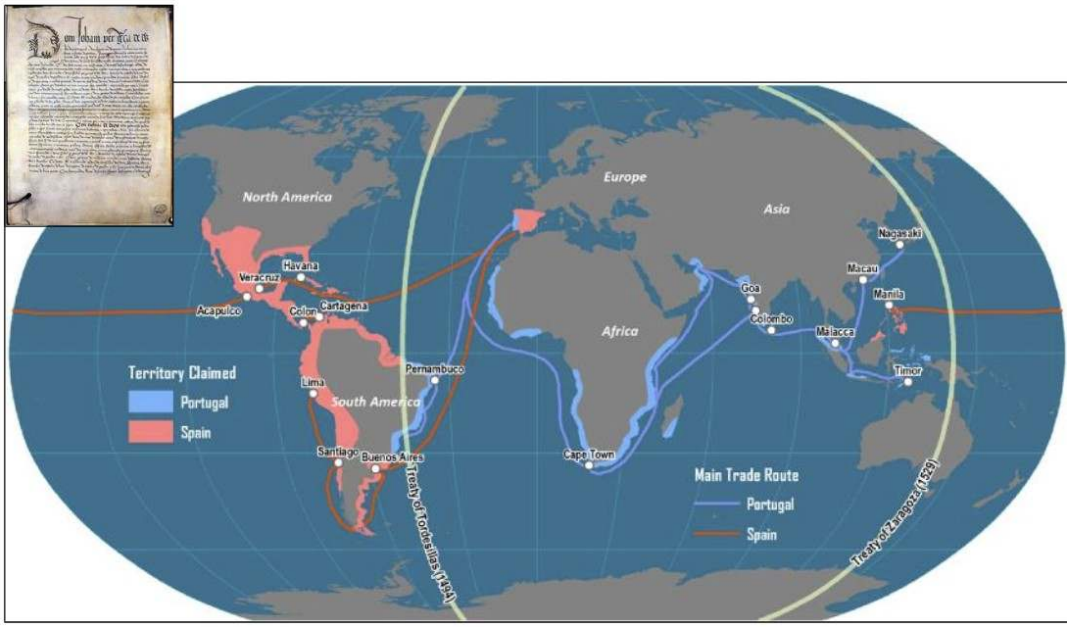



- High Middle Ages
    - Manorialism: The economy relied mainly on agriculture. Manorialism was a way of organizing where the massive peasant population worked and who they worked for. A lord received a piece of land, usually from a higher nobleman or a king, when he receives the land he also gains control of the people on it. The peasant on the land had to pay the lord to live there and/or work for him. Peasant would give a share of their crop and in return the lord would provide protection.
- During the middle ages Europe had major trade centres in Venice and Genoa
- The Crusades in the 11C allowed for the European discovery of sugar.

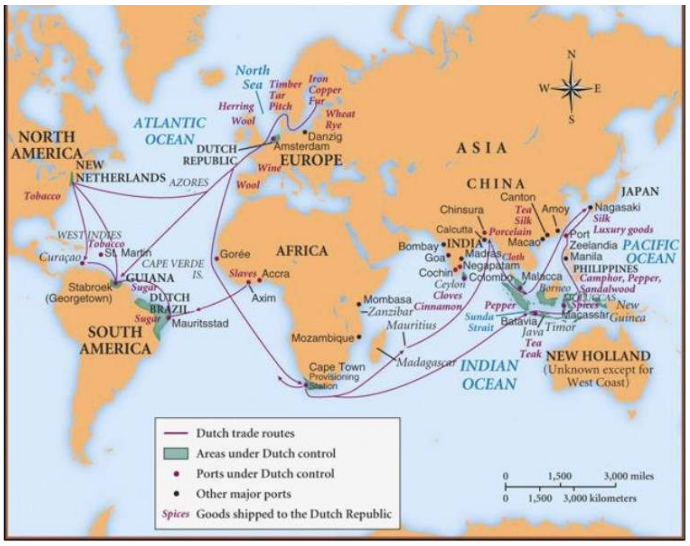
- When access to the far east weakened with the fall of Constantinople in 1453 European nations began to look to the sea as a means to access it.

**Era of Exploration and Discovery**

- Portugal: Cape Bojador and Africa
  - Portugal had faced the black plague, surrounded by the moors to the east and south, could only rely on the sea.
  - In order to access the far east Portugal established a trade route around the port of a good hope.
- Spain: The Americas
  - In an attempt to find another route to the far east Spain sent Christopher Columbus west in hopes of accessing the far east from around the globe. They ended 'finding' America
- The Treaty of Tordesillas, 1494
  - This treaty divided the trading and colonising rights for all newly discovered lands of the world located by Portugal and Spain, to the exclusion of other countries.




The Exploration Golden Era (1500-1550)


**International Trade and Commerce**

- Exploration, extraction and trade
- Luxury good trade: new trade roots and destinations allowed for easier/new access to luxury goods, like spices, furs, coffee, tea, sugar.
- East India Companies: first MNCs (multinational corporation) established. The east india companies had great power and control, having their own armies allowed them to create monopolies.
    - MNC: has facilities and other assets in at least one country other than its home country
- **Financing trade with credit**: Used *primarily by the Dutch*. Trade credit is a type if commercial financing in which a customer is allowed to purchase goods or services and pay the supplier at a later date. This would allow MNC to free up cash flow and finance short term growth.
- Key Innovations of exploration golden era
    - Finance and banking
        - Influx of funds in Europe led to countries developing national banks
    - Ship building, navigation, Naval ordinance
        - All allowed for the development of the Columbian exchange: corn, beans, sweet potato, tomato's, are all from the new world
        - Naval trips were very expensive, investors usually were looking to make at least 10 times their investment.
    - Communication (the printing press, 1450)

**Rise of nation States and mercantilism**

- **Mercantilism:** economic nationalism that seeks to limit the competition faced by domestic producers. With the goal being to maximize the amount of gold and silver in a country.

    - **EX:** England would not allow any fish product into their country unless it was caught and processed by English ships.
- Feudal estates to nation states, shifting away from the Manorialism and into a more nationalized interconnected state.
- Gold and silver as wealth & security – the more gold and silver your country had the richer you were, regardless of the resources you have.
- Mercantile trade-related policies
    - Gold and silver via conquest, trade and mining
        - Spanish conquest of America caused them to gain large amounts of gold. With gold being the major community entering the country this caused inflation, because everyone got 'richer.' Led to their economy to stagnate.
        - Britain and France were not as successful in gold pillage and chose to use their funds to invest in agriculture -> ultimately kickstarted the industrial revolution.
    - A trade surplus was needed in an exchange (every trade had a winner/loser)
    - Import tariffs and import substitution of manufactures (replacing foreign imports with domestic production, protectionism)
    - Strong navy and military: the joining of trade, politics and military
- Change to mercantilism
    - Intellectual
        - Ex: Kashmir shawls were popular in England, but since they were spending so much gold on them, they were 'losing' the trade. Leading them to create their own fabrics, and place tariffs on Kashmir.
    - Political

# Lecture 9: The Colonial World Economy

## 19thC trade boom

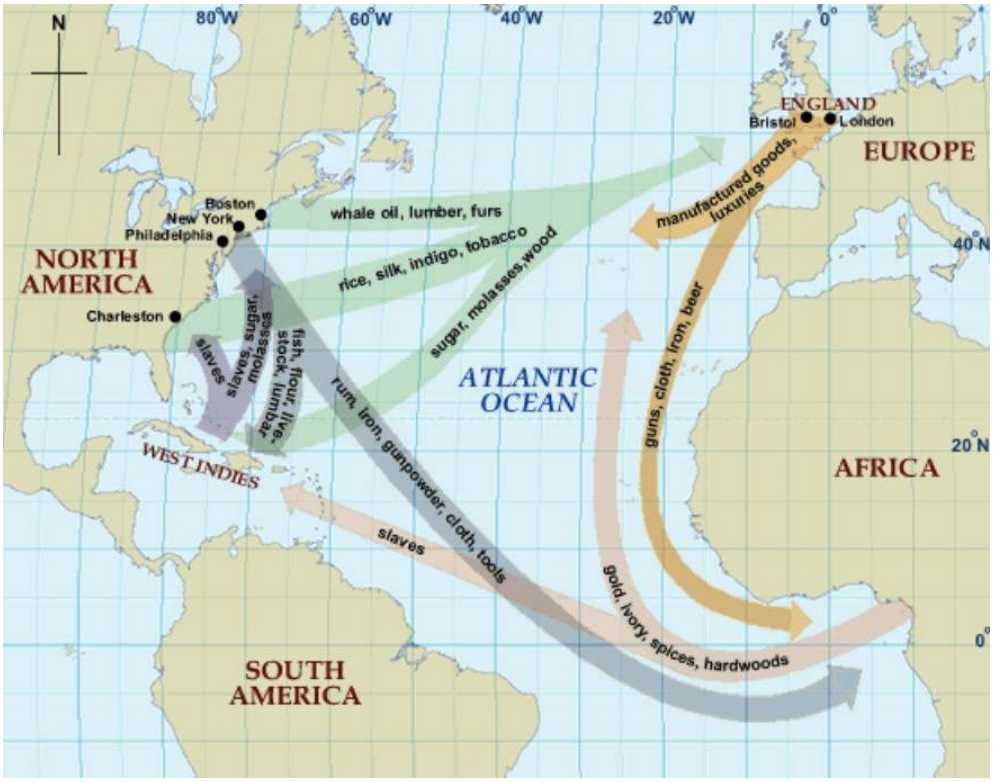
- Expansion of Trade: Europe and NA rise in econ output and trade while other areas fall behind.
- **<u>Drivers of trade boom</u>**
    - **Free Trade**- a revolution in trade, before empires relied on mercantilism (high tariffs on inputs). Monarchs lose power, and parliament takes over, with independent land holders. In 1846 the corn laws were introduced, food imports into England no longer have tariffs. Britain lowered the global standard for trade. England imposed free trade on India, China and the Ottomans.
    - **Industrial rev** – industrial development in Europe, ie steam engines, the telegraph. Stuff was essentially made differently.
        - Cycle: Innovation->Trade->Surplus->back to Innovation. <u>This is Endogenous growth.</u>

- **Transport and communication innovation** – Rail ways, canals, steam ships. Wheat used to be untradeable due to trans costs, now cheap goods like wheat were tradeable. Suez and Panama Canal. Telegraph (allowed for clear instruction). Made trade easier.
- **Gold Standard** – Everyone had their own currency, so countries developed the gold standard, saying how much their currency was in gold. Made trading with different currency way easier.
- **Peace** - Free trade era, meant that nations had common interests, meaning trade was a win-win situation, reducing conflict.
- **International Migration** – 11 million slaves, 50 million settlers, had immigrated. New international geo of labour and a demand for trade.

## Circuits of Trade

- Raw Materials and staples
- Manufactured goods and import substitution
- Development of the middle class, flues demand for international products.
- Promoting of industrial development in countries

**Atlantic Trade Triangle**

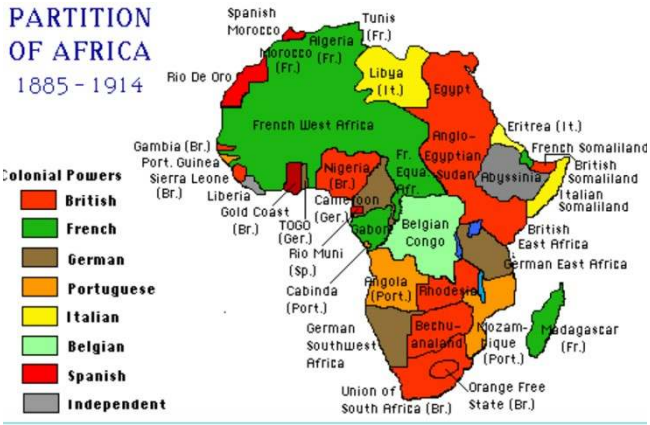


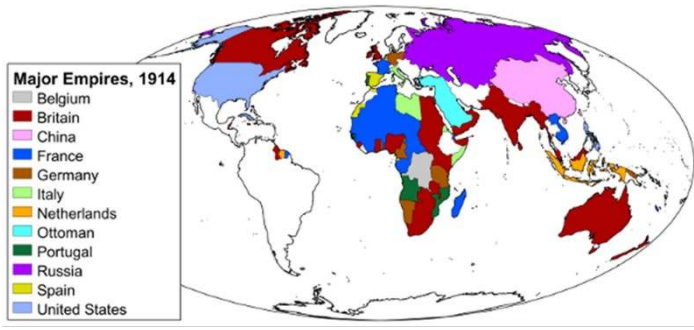

- The Atlantic Triangle last 200 years. Ended in 1850, as slavery was abolished, and technology was changing.

- 70% of NA slaves worked in Sugar.

**Colonialism**

- Discovery-conquest- colonization
- 2 major waves of colonialism
    - 16-19C. Spain/Portugal battling of the New World. England and France establishing colonies in the USA/Canada.
    - 19-early20C. EX: **scramble for Africa.** Battle for Southeast Asia.




**Colonialism: Economic Roles of Colonies**

- New Sources of resources and revenue
    - The UK would run trade defects to their colonies
    - They would have a trade surplus with India and China. <u>This is called crossover trade, because the surplus and defects are offset.</u>
- New markets for industrial goods
    - The colonies became a market for industrial goods.
- New investment opportunities
    - The wealth that was being created needed, 'a place to go'. Ex: Building of railways in Chile, in mines, overseas building opportunities.
- Safety value for excess population
    - The colonies were an opportunity for people in England to find work, to improve their family's quality of life. Especially for the expanding middle class. The colonies are also a place to go if things go bad, ie the Irish potato famine.

**Colonialism: Consequences**

- Pop of indigenous people.
    - 50-80 million died in Latin America for famine, war, disease.
- Economic centering on primary products for export:

    - The colonies are specializing in what the colonial power wants. Ex; in Brazil 90% of their exports were rubber and coffee, 100% of Siams exports were rice, ect.
- Formation of Dual societies.
    - 2 societies in one, the colonials and everybody else. Ethnic groups having priorities over others. Ex: The coffee oligarchy and everyone else in El Salvador.
- Urbanization: port cities and railways.
- Transplantation of nation state.
    - Colonial admin causes countries to developed unnaturally. The legal system brought to French African you had the Napoleonic code, if you're in an English African colony you would be following common law. Greatly affecting how the native population develops.

**Outcomes of the trade Boom**

- Econ Growth – rapid econ expansion
- Market integration
    - market was more integrated in the 19C. In 1860 the price of wheat of 60% higher in Liverpool then Chicago, by the 1900s it was only 16%
- Income divergence (between and within poor countries).
    - Prior to 1820 India and China had the largest GDP because they had the largest pop. After GDP become more based around productivity differences not by pop differences.
    - Inequality increases globally and within countries. Oligarchies get established within countries, creating separation within the nation.

# Lecture 10: Development Theories and Pathways

**What is development**

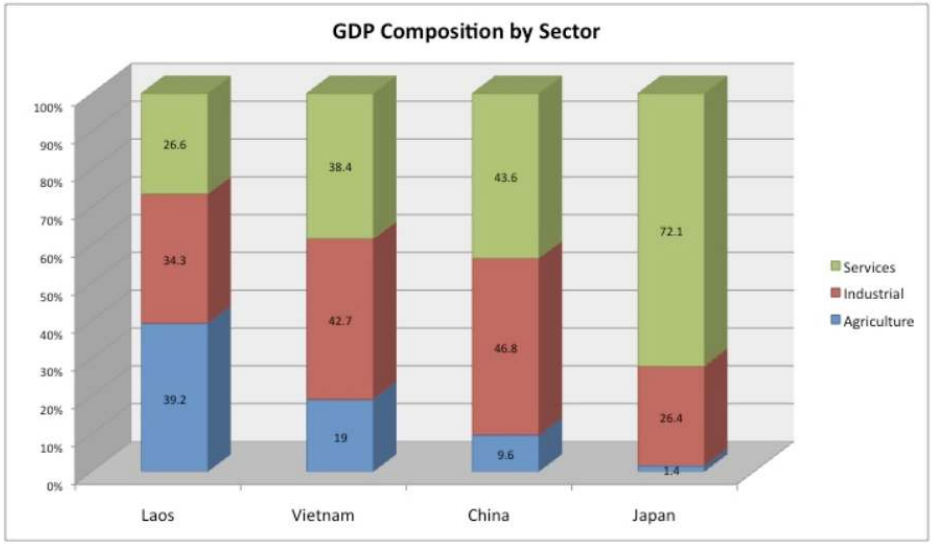
- Econ growth and structural change.
    - Development is a lot more then economic growth. To the rich back in the day, poverty was good because it meant cheap labour, this is not development. Development has to enhance all people's freedoms and capabilities.
- Growth -> Basic Needs -> Poverty reduction -> freedoms & capabilities.
    - Development depends on where you are in the developmental process, if you are poor your goals for development are different.
- Concept is endogenous to development process.

**How countries change as they develop**

- Economic structural change
    - Exports & Imports increase with GDP.
    - Accumulation of capital increases with GDP.

        - People and governments are saving money, to invest in people and industry. A higher share of savings
    - Share of agriculture fall and industry services rise with GDP/Capita.
        - Engels Law: As families incomes increase, the % your families spends on food falls. As industry develop there are innovation in agriculture making it more efficient, ex: in Canada 1 farmer makes enough food for 140 people, in a poor country farming is more inefficient, therefore more people have to be farmers.

## Structural change with development

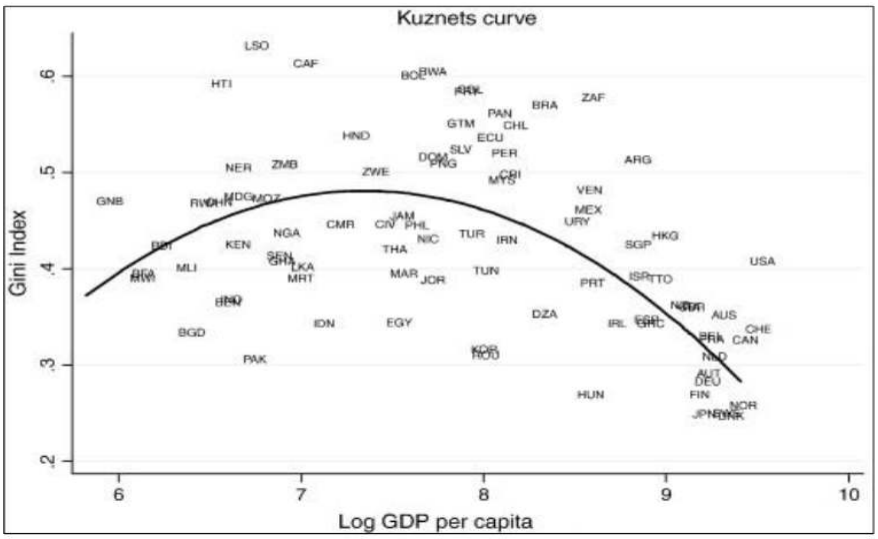



Source: World Economy Watch, April 26, 2011.

- Urbanization: Cities attract industry
    - Economies of agglomeration. Cities attract industry. Advantages and benefits provided by industries being near other industries.

- Economies of scale: more efficient to produce in large scale then in small scale.

## Inequality and economic growth




- Inequality: initially wealth is equally distributed, then unequal, and back to equal, when dealing with countries GDP per capita and Gini index, known as Kuznet curve (above).

**Theories of economic development**

- Stages of growth – Walter Rostow, wrote and anti-communist manifesto. Think of an airplane taking off, some countries on the runway, some are taking off, some are flying. In order to have sustained growth (say in the air) you must have savings. Poor countries can't save enough to invest in their economy.

- Two-sector model – Arthur Lewis, argued that econ growth and development occurs because industries get started and are more productive in urban areas then rural areas. Therefore, attracts people to the urban area, encourages investment and development.

- Dependency theory – development and underdevelopment are 2 sides of the same coin. Development in some countries causes underdevelopment in other countries.

- Endogenous growth theory – most sway. **Investment in human capital**, innovation, and knowledge are significant contributors to economic growth. The basis of growth is endogenous.
    - For example, subsidies for research and development or education increase the growth rate in some endogenous growth models by increasing the incentive for innovation.

**Paths to econ growth**

- Primary products exports *
    - How good is your econ/geo at producing products from the Land. Ex: Canada Durham wheat, are soil and tech make it an efficient export. Invest the money made from exports into linkages, ie invest wheat money into building a railway, grain elevators
- Export agricultural products, timber, fish, oil and gas.
- Comparative advantage
- Growth based on
    - NEW RESOURCES
    - Improved use of existing resources
    - Linage effects
- Problems
    - Sluggish demand, volatile prices & unbalanced growth

Inward looking industrialization (ISI)

- Shift from primary product exports to manufactures
- Import substitution industrialization
- How?
    - Identify large domestic market
    - Acquire tech and capital (abroad)
    - Provide protection to nascent(promising) industry
- Problems
    - Infant industries never grow up
    - Exports uncompetitive
    - Size of your economy is a major limited factor on the potential for ISI
    - First find a strong domestic market,
- Resources -> labour -> capital -> Knowledge

Export-oriented industrialization (EOI)

- Promote manufacturing for export markets
- Role of gov: it is focusing on exports, what could the gov promote to be successful on the international scene.
- How?
    - Subsidies & preferential treatment. How many cars with south Korea export? Reduce cooperate income tax to promote this industry, Country picks what industry to invest in.
    - Manage exchange rates.
    - Factor Market Intervention (capital)
- Problems

- Expensive and difficult – if you are providing credit at discounted rates, someone (normally the government) has to pay for that. As the government you have to pick winners and losers, i.e which companies to promote.
- Protectionism – countries don't like other countries beating them in the market. Countries find ways to nit-pick imports. Protectionism is very expensive
- Vulnerability – to oil shocks, war, crisis, hostile admin in other countries

# Lecture 11: Global Population Dynamics

- Numbers and Rate of increase
- Historical Population growth
- Global distribution

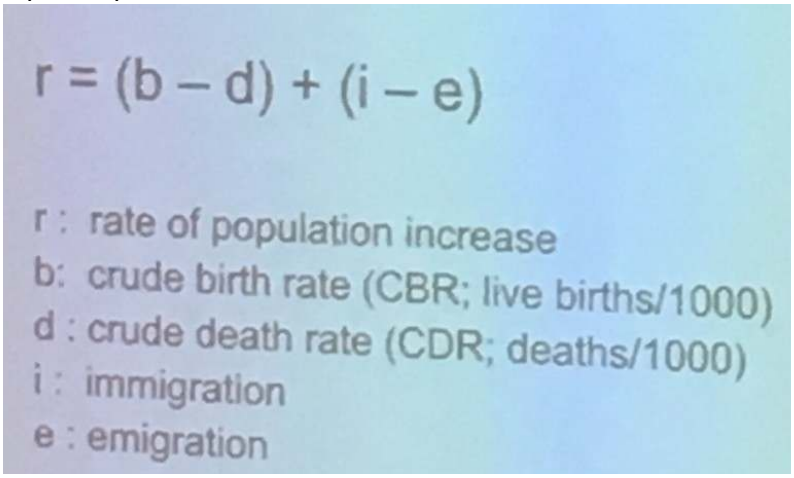
Population growth is double the heart rate

Population growth is exponential, but is slowing

6.5% of humanity is alive today

**Demography and the Demographic equation**

- Study of population
- Policy importance
- Demographic equation




**Other demographic measures**

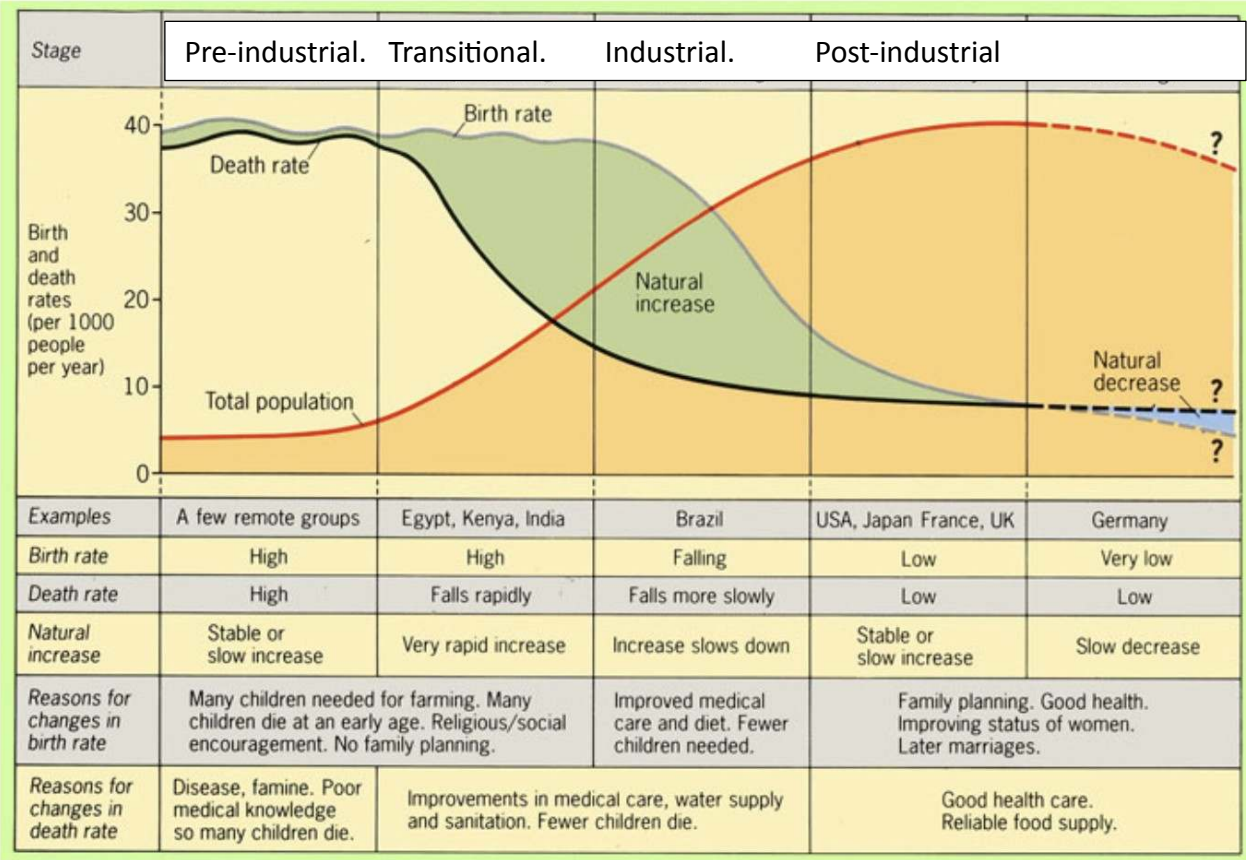
- Total fertility rate
  - Average number of children that a woman has in her childbearing years, (about 2.5 is global average) (15-44)
- Replacement fertility rate
  - Number of children a couple must have to replace themselves
- Infant mortality rate
  - NUMBER OF DEAATHS AGE 1 OR LESS and divide by 1000

- 200 years age infant mortality was 200-300 per 1000
- Now it's about 40 per 1000 worldwide

- Life expectancy (LE)
  - Number of years a person is expected to live at birth.
  - World average is 70
- Doubling time is 70/annual growth rate

**Demographic Transition**

- Cause of population explosion
  - Due to increase health care, hygiene, income, access to food
  - Since WW2 public health, medical advances, and income have been the major factors in population increase
- The demographic transition
  - Four stages
    - Stage 1: Pre-industrial
    - Stage 2: Transitional
    - Stage 3: Industrial
    - Stage 4: Post Industrial (5 get collapsed in to 4)

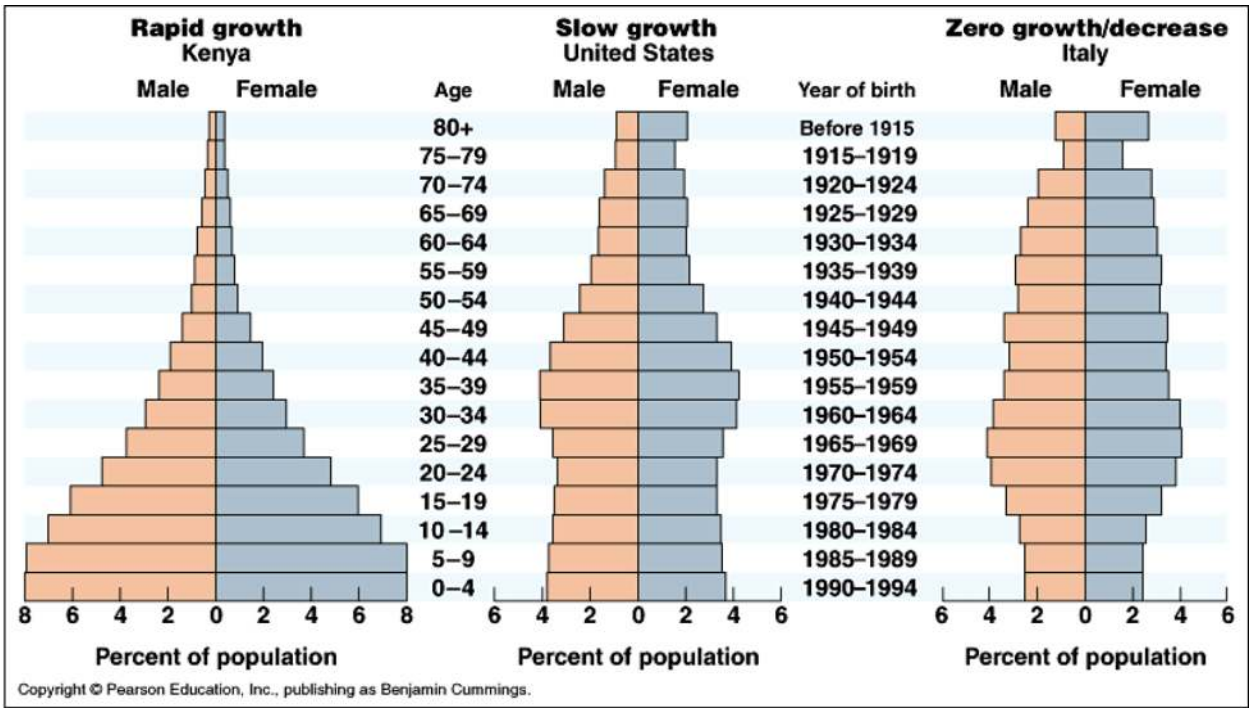



| Stage | Pre-industrial. | Transitional. | Industrial. | Post-industrial | |
|---|---|---|---|---|---|
| *Examples* | A few remote groups | Egypt, Kenya, India | Brazil | USA, Japan France, UK | Germany |
| *Birth rate* | High | High | Falling | Low | Very low |
| *Death rate* | High | Falls rapidly | Falls more slowly | Low | Low |
| *Natural increase* | Stable or slow increase | Very rapid increase | Increase slows down | Stable or slow increase | Slow decrease |
| *Reasons for changes in birth rate* | Many children needed for farming. Many children die at an early age. Religious/social encouragement. No family planning. | | Improved medical care and diet. Fewer children needed. | Family planning. Good health. Improving status of women. Later marriages. | |
| *Reasons for changes in death rate* | Disease, famine. Poor medical knowledge so many children die. | Improvements in medical care, water supply and sanitation. Fewer children die. | | Good health care. Reliable food supply. | |

- Always use these titles

**Population structure**

- Pyramids
-



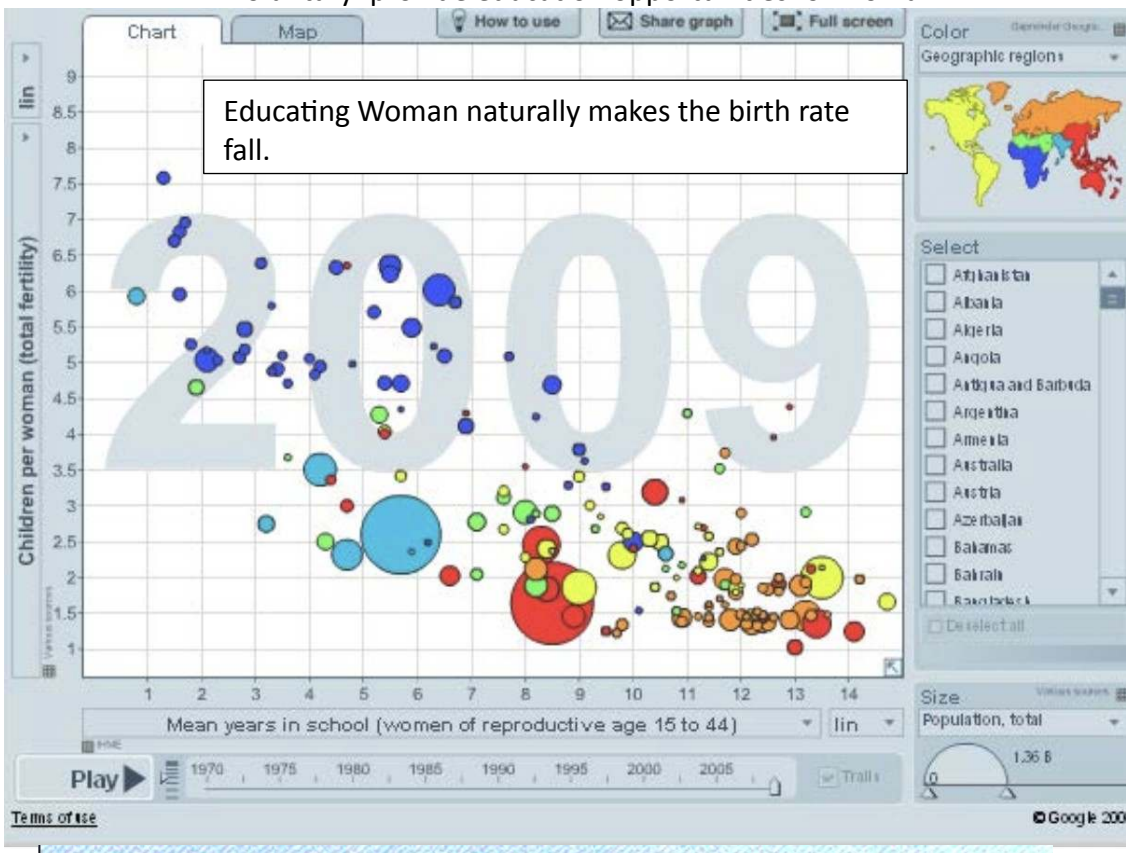

- Concept of momentum
  - Kenya has momentum – when Kenya has 2.1 children per couple their population will still grow at a high rate.
  - The USA has minimal momentum
  - Italy has a negative momentum

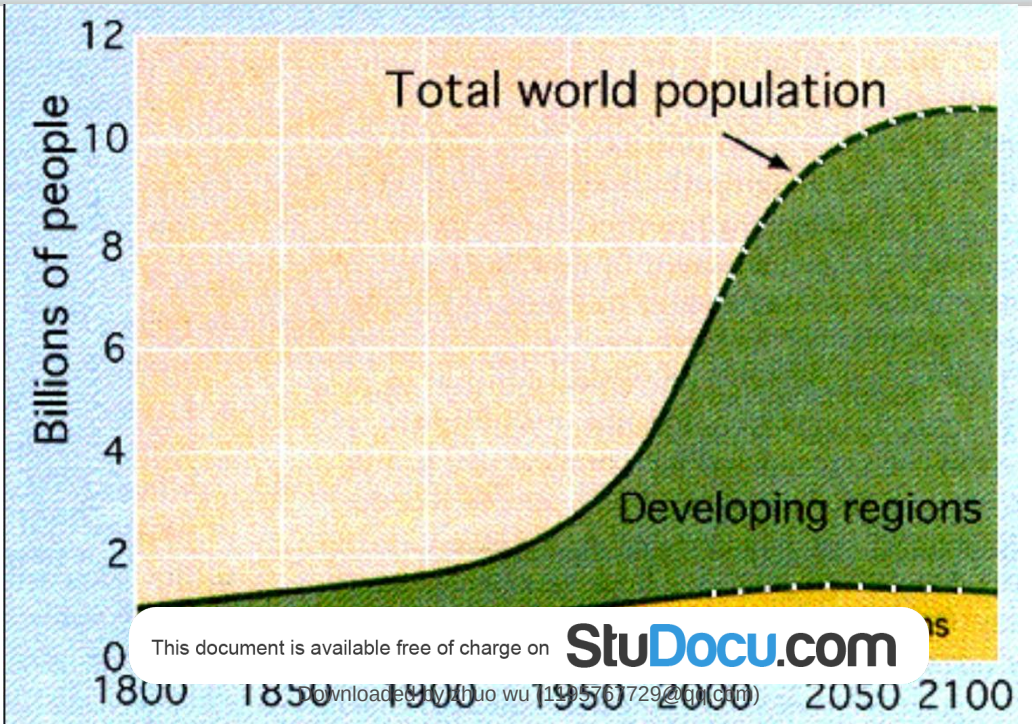
Population Policy

- Managing population growth
  - Fertility rate
    - Social Norms
    - Governments promote fertility (for military, political, etc)
      - Ex: Quebec promotes fertility through have subsidize child care and a liberal maternity leave.

- Pronatal vs. Antenatal
    - Population growth is all about fertility, not mortality
    - EX: AIDS has killed 35million which would be replaced globally in 4-5 months

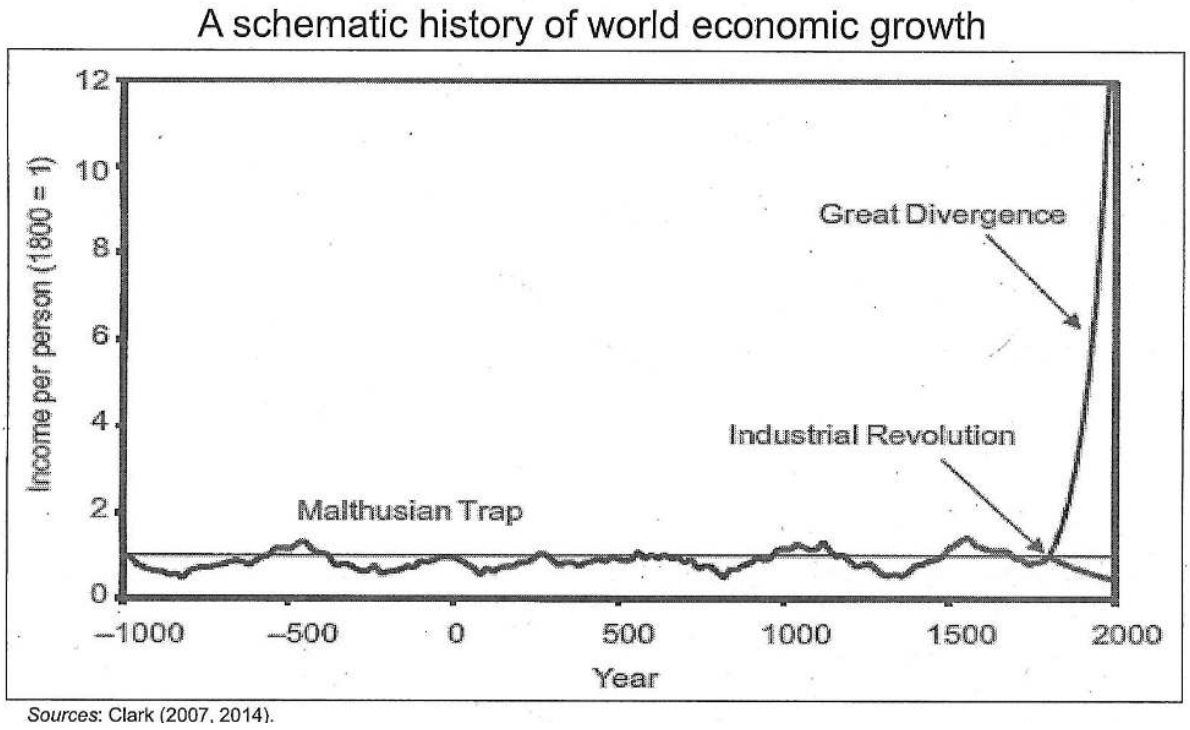
- How to decrease fertility
    - "Later, longer, fewer"
    - Coercive vs. voluntary approaches
        - Coercive: One child policy in China
        - Voluntary: provide education opportunities for woman



# Lecture 16

## Historical Context of the Industrial Rev

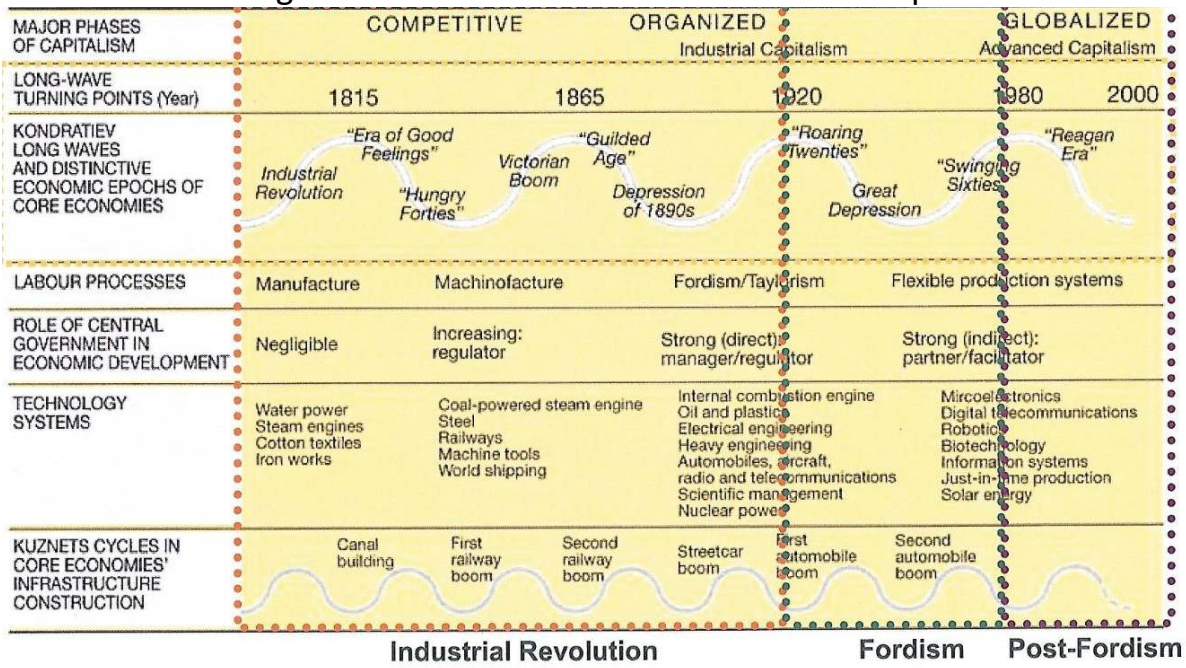


*Sources*: Clark (2007, 2014).

## Industrial Revolution (IR): Five Key Features

- General time frame for IR: 1760 to WW1
- Characterized by
    - Shift to large-scale production
    - Technological innovations revolutionize production
    - Development of new products (ex: food processing)
    - Penetration of new (overseas) markets
    - Institutional and organizational changes
- Degree to which different regions in Europe 'embrace' these features varies

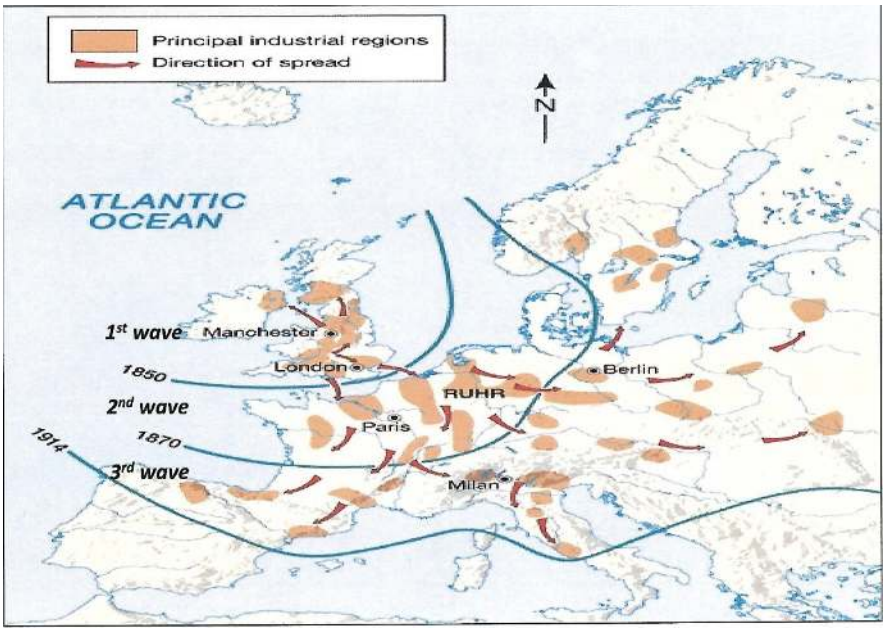
## Long Waves and the Historical Evolution of Capitalism




## Three Major Waves of Industrialization

- 1st wave: Britain (1760-1850)
  - Phase 1: 1760-90
  - Phase 2: 1789-1820
  - Phase 3: 1820-1850s
- 2nd wave: Industrialization spreads to continental Europe (1850 to mid-1870s)
- 3rd wave: spreads to intermediate Europe (mid-1870s to 1914) and NA

## Geographical Spread of Industrialization in Europe




## 1st Wave, Phase 1 of IR: Britian (1760-1790)

- Why Britain in the first place?
    - 1. Favorable political and Legal climate
        - End of monarchy
        - No foreign invasions for centuries, spared from warfare
        - 1707: political union of England and Scotland -> formation of single economic entity
        - Gov policy: private profit and economic development
    - 2. Colonies -> Britain accumulates wealth
    - 3. Favorable geography, easy accessibility
    - 4. Tradition of industrial employment (ie, wage earning class; no feudal privileges (relationships derived from the holding of land in exchange for service or labour)) – industrial organization and DoL
    - 5. Conditions ripe for technological innovations – Industrial organization and DoL

## Industrial Organization and the Division of Labor (DoL)

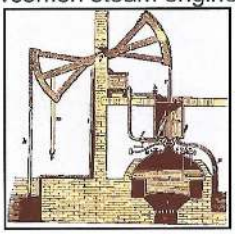
- Growing reliance on large-scale manufacturing

- DoL: Fragmentation of tasks in the production process into different specialized functions (ex: managers, supervisors, productions workers)
- Adam Smith (1776); what are the sources of labour productivity growth (pin making's 18 tasks)
    - Country craftsman (or artisan) vs.  pin factory

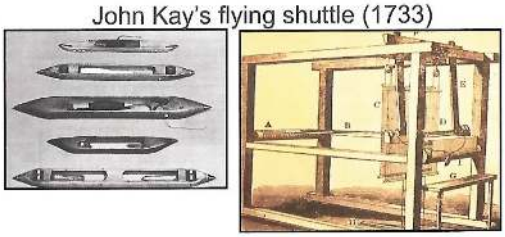
- Consequences of DoL: increased productivity, search for economies of scale (saving in costs gained by an increased level of production), **but** also deskilling of workers, lower wages, control and discipline.

## Technological Innovations provide further impetus for IR

Newcomen steam engine (1712)



John Kay's flying shuttle (1733)



Hargreaves' spinning jenny (1764)

Cartwright's power loom (1780s)

## Phase 2 of the industrial revolution in Britain (1790-1820)

- Consolidation of **<u>agglomeration processes</u>** in North and West of Britain
  - Industrial complexes continue to thicken, growing pools of capital, commodities and labor
  - Support industries also popping up + banking system
- **"Follow-through"** innovations
  - Cotton industry: mechanization continues progress, also facilitates relocation of industries
  - Iron-making (steel): different types of furnaces but still located close to supplies, iron ore and limestone

## Phase 3 of IR in Britain (1820-50)

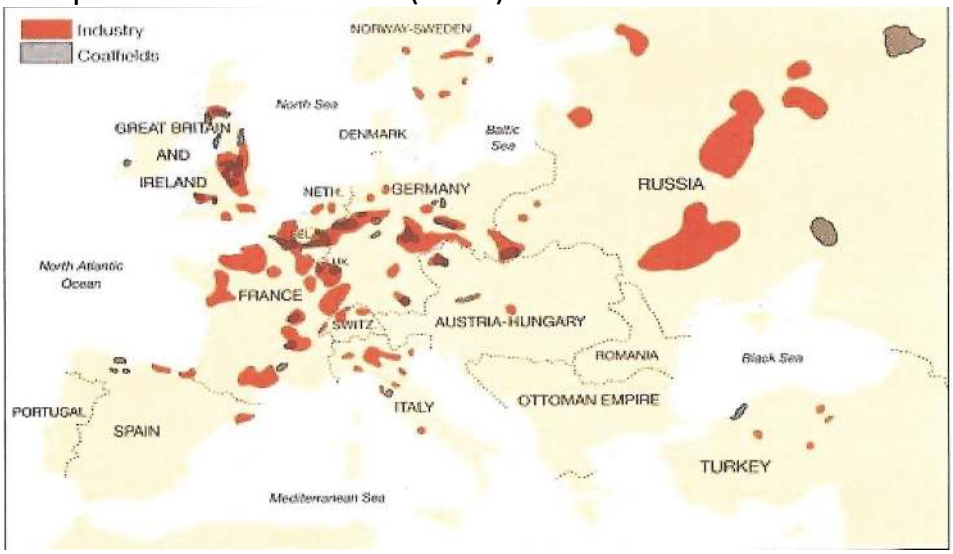
- Expansion of **railway system:** does not foster growth of new industrial regions but broadens market outlets of existing regions
  - London becomes more accessible
  - Labor markets widened
- 1851: **Apex** of the IR in Britain. Britain's **competitive advantage** over its continental European rivals is at its best!

## 2nd wave of industrialization: Continental Europe (1850-70)

- IR on continent held back but revolutionary and Napoleonic wars, as well as continued political fragmentation

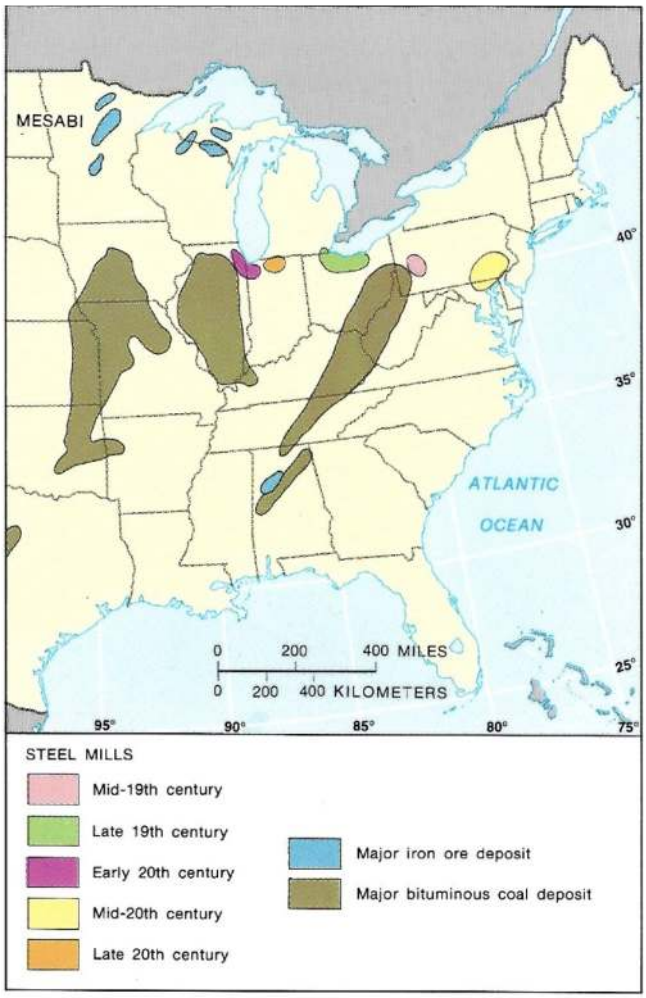
- 2nd wave really about the **technological transfer** from Britain. Which European regions adopt and implement innovations?
- Some regions better suited than others
- **Location to coal continues to be the key**

## European Industrialization (1870)




## 3rd wave of industrialization: Intermediate Europe and North America (1870-1914)

- From mid-1870s to WW1, IR continues to spread to other areas of Europe and NA
- Expansion bolstered by further technological refinements that continue to erode barriers in terms of transportation costs.
    - Space-time compression




Conclusions: Importance of Regional Perspective

- Regions across Britain/Europe during the IR have:
    - 1. Distinct technological traditions
    - 2. Different forms of industrial organization
    - 3. Signification institutional differences
- This implies different patterns of convergence and divergence across regions!

# Lecture 17 and 18: The organization of industry in the 20 century: from Fordism to Post-Fordism

Regulation Theory: Context

- Regulation Theory (RT): Framework to describe and explain historical changes in 'Marco-structures' of capitalist economies
- RT developed in France (late 1970s)
- Emphasis on historical place-based specificities and structure of capitalist world space economy
- RT looks at transition from Fordism to post-fordism in western Europe and NA
- Two key concepts: regime of accumulation and mode of social regulation

Regime of Accumulation (1)

- Regime of accumulation (ROA): a macroeconomic regularity, a common and temporarily coherent way of producing, distributing and exchanging commodities
- ROAs assume different shapes at different historical moments of capitalist expansion. (ex: Fordism and Post-Fordism)
- Transition from on ROA to next involves ruptures in organization of production relations (ex: industrial divides). Moved from standardized mass production line, now there is a more flexible approach to production.

Regime of Accumulation (2)

- Each ROA can be characterized by:
    - Certain set of production techniques
    - Key or leading-edge industrial sectors
    - How labor relations are organized
    - Predominant form of competition
    - Distributional mechanism of profits
    - Specific spatial forms of expression

Mode of Social Regulation (1)

- Mode of Social regulation (MOSR): is socio-cultural and political counterpart of ROA
- MOSR: set of norms, institutions and conventions that support the ROA
- The MOSR governs the ROA by providing a coordinative and regulatory framework
    - Laws, regulations, state policies, political practices, industrial codes, cultures of consumption

Mode of Social Regulation (2)

- MOSR has two functions
    - 1. Reflects the reproduction of social relations
    - Regularizes the overall processes of economic reproduction
- Benefits of ROAs and MOSRs: allow use to investigate 'many varieties of capitalism' found in specific places over time!

Fordism: 1920s-70s (1)

- Term Fordism comes from Henry Ford (1913, first assembly line, Highland Park, MI). Incorporates insights of Taylorism!
- Taylorism
    - Separate management and production jobs
    - Further separate production jobs according to production line (i.e. break down into series of fragmented, highly controlled, deskilled, and standardized tasks – DoL)
- Taylorism -> facilitates mass production and realization of economies of scale: increase in the volume of output results in a decrease in the average costs of production
- Ford understood that mass production <-> mass consumption
    - Requires significant market base and some degree of cultural uniformity in terms of consumption
    - $5 per day program.

Key Developments Enabling growth of Fordism, Post 1945

- Golden era of Fordiam (1945-68) buoyed by
    - Rise of Keynesian economic planning
    - Suburbanization -> mass consumption possibilities
    - Maturing of mass production techniques
    - Key industries: cars, heavy equipment, steel, petrochemicals, electrical appliances
    - New R&D in key sections (aviation, communications, nuclear energy)
    - Competition = oligopolistic (and domestic)

Keynesian Welfare states as the Fordist MOSR?

- Keynesian Welfare State (KWS): capital and labour work together to float Fordist mass production through state intervention
    - State regulates business, labor, finance, and provides for physical infrastructure, education, health car, UI, etc

- Capital and labor negotiate – through state – predictable compromise concerning relative wages gains and production env'ts
    - Ie KWS as a form of mass economic democracy, a social contract

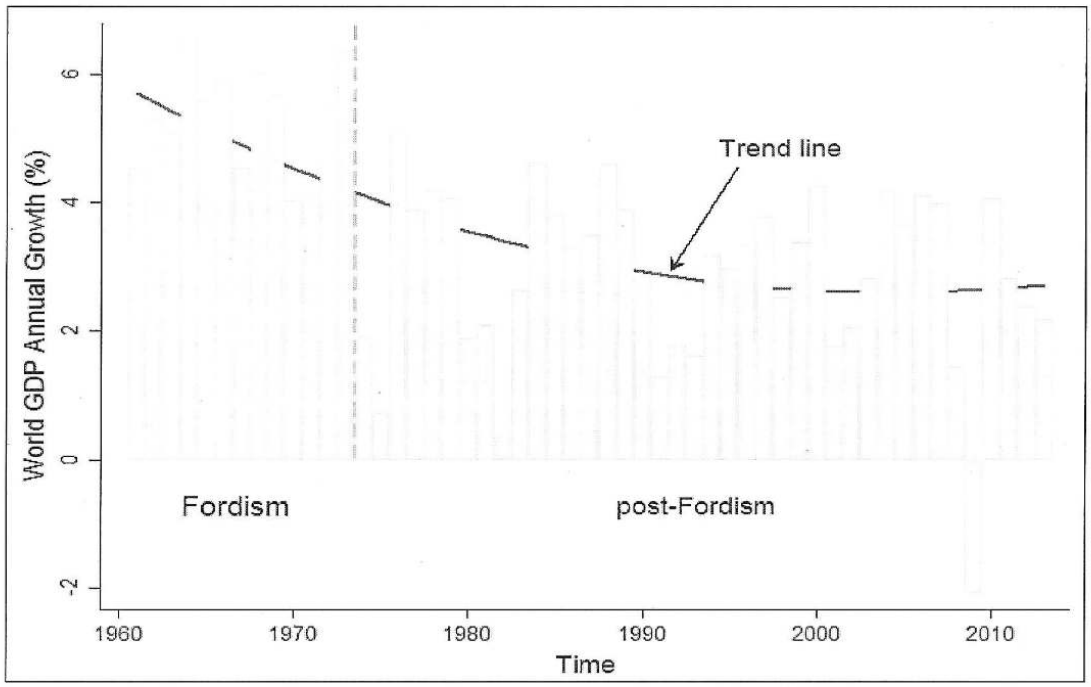
The Geography of Fordism

- Fordism -> international rules (ie internation mode of social regulation). Bretton Woods compact signed in 1944, was exactly this:
    - US $ = world's reserve currency (backed by gold);
    - Fixed exchange rates between currencies; and,
    - regulated flows of capital across borders
- Bretton Woods creates stable financial sphere upon which world trade could proceed (ie, state based mosaic of financial spaces)
- Also allows Keynesian Welfare state to work

The Goegraphy of Fordism

- Regional Scale (US): mass production develops most in NA manufacturing belt
- Global Scale: Fordism requires massive expansion of world trade and international investment. Both followed WW2 and rebuilding of Europe (Marshall Plan)
- Expansion of world trade allows:
    - US surplus commodities to be absorbed overseas
    - For new globalized sources of cheap raw materials (ex: oil) for Fordist production

# FORDISM AND THE GOLDEN AGE OF CAPITALISM




*Source*: World Bank

The Undoing of Fordism

- Domestic US roots of crisis -> Stagflation: combination of rising inflation and stagnating output
- Late- 1960s/early 1970s characterized by
    - Rigid mass production systems -> precludes flexibility of design and presupposes stable consumer markets
    - Strikes and labor disruptions -> Therefore increased production costs
    - Pressure of KWS (KEYNESIAN WELFARE STATE) entitlement programs
    - Monetary inflation
- International roots of the crisis:
    - Abrogation of Bretton Woods (1971) and capital controls: too many US$ circulating outside USA
    - 1973 oil crisis -> forces tech & organizational changes

- Turn to post-Fordism production can therefore be seen as emergence of new ROA(Regime of accumulation) with the new MOSR (Mode of Social regulation)!

What is Post Fordism? Defining Characteristics

- Decreasing large-scale manufacturing activity in "core" countries (ie blue collar jobs); firms relocate
- From economies of scale to economies of scope (ie small-batch, flexible production systems)
- Surge in services/ FIRE (white collar jobs)
- Increase in use of telecom. Technologies to articulate production requirements across globe
- Increase role for scientific and high-tech knowledge
- Flexibilization of work
- Key industries: telecoms., semi-conductors, biotechnology, medical devices, cultural industries
- Highly competitive conditions (global competition)
- Growth of Peripheral Fordism (EPZs, maquiladoras)
- For 'just in case' (JIC) to 'just-in-time (JIT) inventory and production methods -> move to lean production systems

consequences of Post Fordism

- Post-Fordism as a ROA
    - JIT changes production process: requires increased coordination, timing precision and considerable flexibility on part of subcontractors and workers
        - Team work efficiency replaces assembly line speed
    - From vertical integration of firm to vertical disintegration of firm
    - Geographical decentralization Vs. centralization
    - Centralization (industrial clustering) increasingly important because of coordination between subcontractors and suppliers and untraded interdependencies
    - Post-Fordism as a MOSR?
        - Move away from KWS (subsidy state) to a Workfare (entrepreneurial) state, from state regulation to de-regulation, from collective bargaining to grater individualization

        - Shift in societal values: from the mass 'standardized' consumption to individualized culture
    - Negative consequences
        - Increased labour market uncertainty
        - Increased social polarization and inequality
        - Increased competition between individuals and regions

Conclusions: Shift from Fordism to Post Fordism

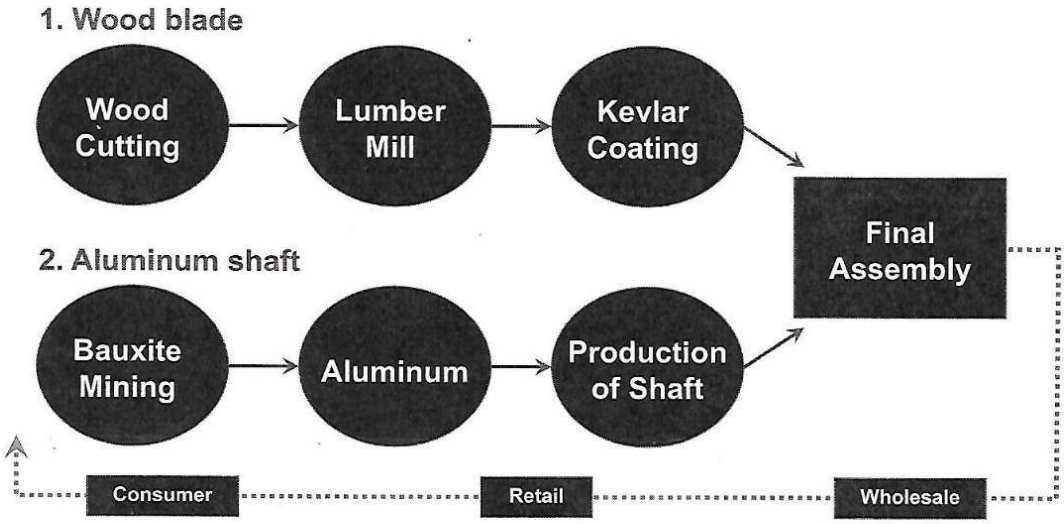
- Not wholesale destruction of Fordism for post-Fordism. Instead, proliferation of both:
    - Fordist production in the peripheries
    - Post-Fordist R&D in the core
    - Mass consumption/production of durables combined with niche consumption/production of services
    - Mix of manufacturing and services jobs
    - Emergence of flexible FIRE
- RT (Regulation Theory) offers synoptic view of very complicated Marco system
- Point of departure for New Industrial Spaces

## Lecture 19: Geography of the division of labour

Theory of Industrial Organization

- Economies of scale (a) and economies of scope (b)
    - (a) produced by quantitative increases in levels of output (size)
    - (b) based on levels of productive variety, cost advantages derived from performing two or more activities together
- **Fordism** is most characterized by internal economies of scale = high level of activity "under one roof"
- **Post Fordism** by external economies of scope (involving a range of producers operating at different locations)
- Two Geographical forces are constantly at work
    - **Dispersion** to suitable locations
    - **Agglomeration** (centralization/clustering)
- There is a DoL: separation of tasks within the production process, and allocation of these tasks to different works

# AN EXAMPLE: DoL IN ALUMINUM HOCKEY STICK PRODUCTION




There is a geography to this DoL!

- Technical DoL (within the firm)
  - The production process is broken down into several specialized tasks
  - Involves vertical hierarchy
- Social DoL (between firms)
  - Parcelling out of tasks between independent firms in pattern of vertical disintegration (exchanges through networks of externalized transactions)

Roundaboutness

- Roundaboutness: number of interconnected steps between the production of raw materials on which the economy is based and the production of final outputs
- Increased roundaboutness -> more complex input-output system
  - Also more potential for geographical differentiation of economic activities

A New International Division of Labour

- More recent interpretations of DoL surmise for a “New international division of Labour”

- More geared towards flexible, “just in time” production

- Two Notable Features
  - Optimization of recourse to sub-contracting
  - The joining of newly industrialized countries and emergence of spatial subnetworks

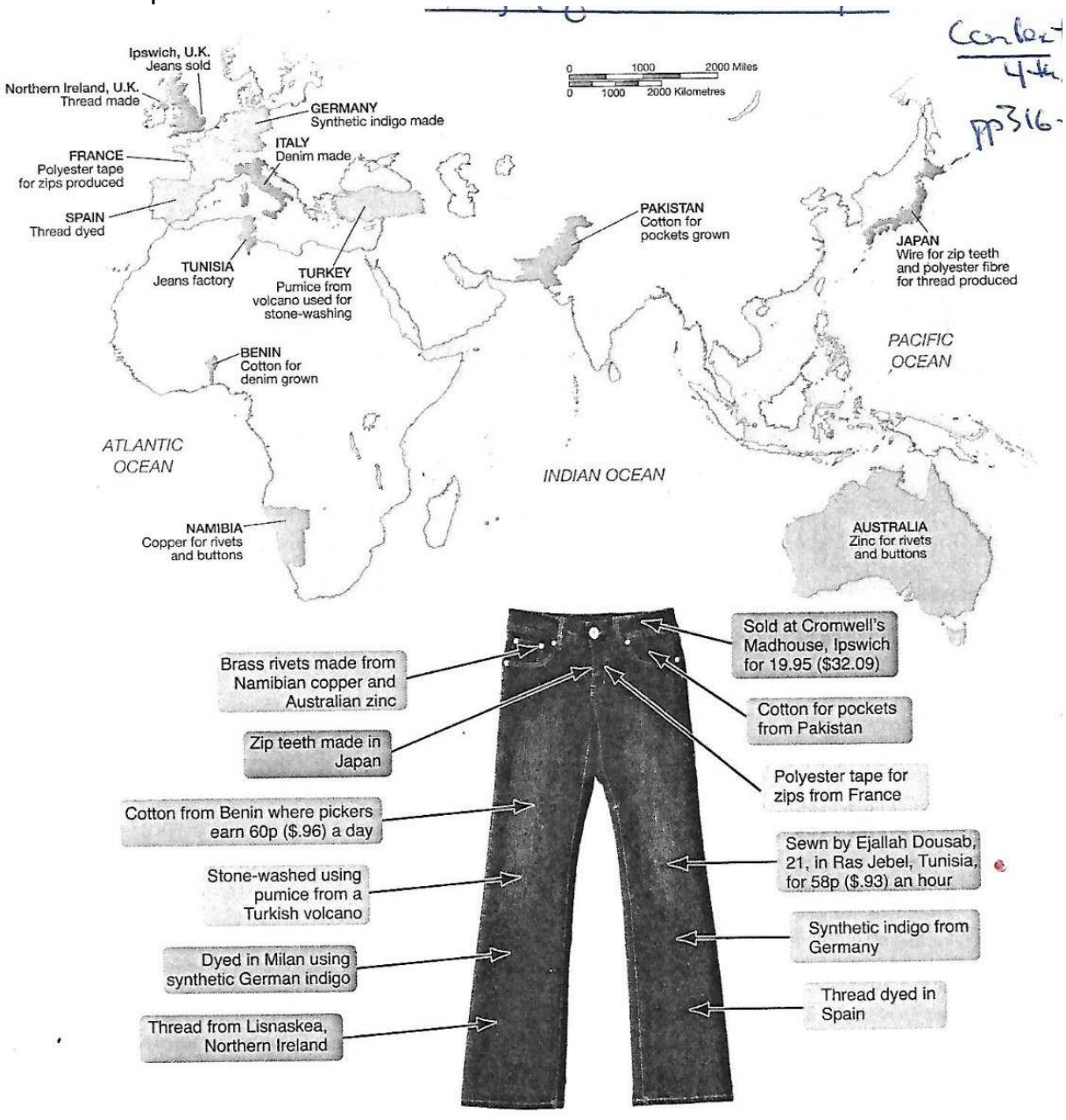
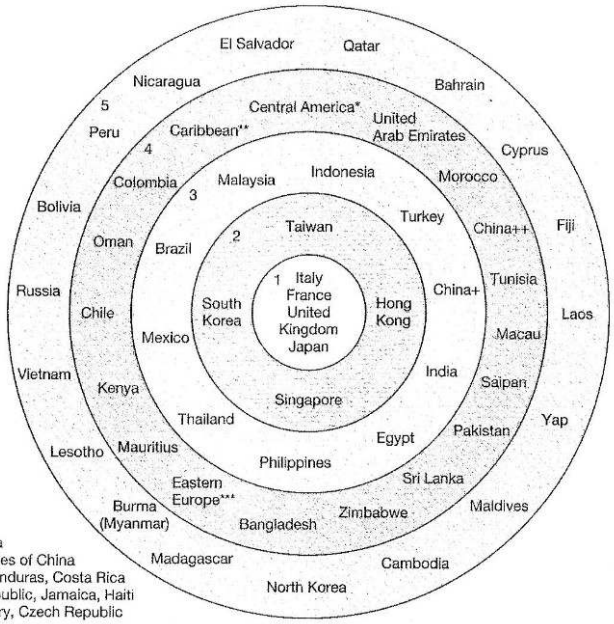



**FIGURE 2.E** The making of a pair of Lee Cooper jeans (*Source:* Adapted from A. Hughes and S. Reimer, eds., *Geographies of Commodity Chains*. New York: Routledge, 2004. *Photo source:* Oleksiy Maksymenko/Alamy)

## Figure 7.E Global sourcing by U.S. clothing retailers




\+ Southern China
++ Interior Provinces of China
* Guatemala, Honduras, Costa Rica
** Dominican Republic, Jamaica, Haiti
*** Poland, Hungary, Czech Republic

**Retailers and Main Sourcing Areas**

Fashion-oriented companies

(Armani, Polo/Ralph Lauren, Donna Karan, Gucci, Hugo Boss, etc.)

- Rings 1,2

Department stores and specialty chains

(Bloomingdale's, Saks Fifth Avenue, Neiman-Marcus, Macy's, Liz Claiborne, The Gap, The Limited, etc.)

- Rings 2, 3, 4 (generally better-quality and higher-priced goods than those sourced by mass merchandisers and discount stores)

Mass merchandisers

(Sears Roebuck, J. C. Penney, Woolworth, Montgomery Ward)

- Rings 2, 3, 4

Discount stores

(Wal-Mart, Kmart, Target)

- Rings 3, 4, 5

Small importers

- Rings 4, 5

HUMAN GEOGRAPHY: PLACES AND REGIONS IN GLOBAL CONTEXT, 3e
by Paul L. Knox and Sallie A. Marston

# Additional notes on 19-21

McGill University, Fall 2019

GEOG 216 - Geography of the World Economy

Pierre Deslauriers Ph.D.

Additional Notes - add to and complete Lectures 19-21

ON the Division of Labour and New Industrial Spaces

## Global restructuring

The global restructuring of the economy is reflected by the evolution of the International Division of Labor, itself a manifestation of time-space compression.

Recent views argue that as there is New International Division of Labour (NIDL),

we have now reached a further stage.

NIDL is characterized by decentralization : the sub-contracting to the periphery of tasks requiring lower levels of skills, mostly to take advantage of lower wage levels.

Two features of note are as follows :

1. Optimization of recourse (use of) to sub-contracting
2. The Newly Industrialized countries join "the game" : sub-networks emerge and develop

Most useful to illustrate the above is the apparel and textile industries, which together represent the largest industrial employer in the world (Knox et al 2014)

**FACTSHEET**

**The following synthesizes Knox et al's (2014) profile of income discrepancies between core and periphery and (implied) economic advantages derived from IDL (2012 figures ; GEOG 216 Coursepack, p. 285)**

- **The hourly compensation of clothing workers in the United States ranged from $8.25 to $14.00**
- **"counterparts" in Asia earned on average about $3. Per hour**

  **... with labour costs in India and China under $ 1**

  **... in Cambodia and Bangladesh less than 25 cents**

**Knox et al put forward that the conditions described above may produce a retail margin between 100 and 250 percent for European and American stores,**

**while it is more in the order of 70% for garment produced "at home"**

**NICs "join the game" (3.)**

For instance, now, Taiwan invests in mainland China (PRC); PRC invests in **Vietnam** ... etc ...

Comparative statistics from Sept 2006 indicate that in the textiles industry, labour costs in Ho Chi Minh-Ville were 20% less than in coastal (expanding ... fast growth) Chinese cities. In Vietnamese rural areas ... salaries are 70% of those paid in Ho Chi Minh-Ville !!

In the **Bangladesh** textile industry, in 2012, it is reported that monthly pay was topped off at 37 $US ... for weeks of 6 working days, of 10 to 16 hours

Some countries seemed on the way to taking action to regulate, and thus improve conditions on their labour markets (THUS some progress is actually being made) :

- Thailand legislated to set the "floor" value of daily income to 10$ CAN per day ... an immediate raise by 40%
- Malaysia (at beginning of the 2010s) put in place a regime setting minimum MONTHLY salary in a range between 270 and 320 $CAN

# Lecture 20 and 21: Industrial Geography

Marshall's Industrial District

- Ties that bind: Three forces of agglomeration -> Districts forms -> Districts interact (complex's)
  - 1. Increase the efficiency of linkage between firms (input-output)
  - 2. Pools of local labour. The people that are used to produced are found, binding/animating agglomerating.
  - 3. Existence of industrial 'atmosphere' there is something in the air (flows of knowledge, spillovers)

Growth dynamics of industrial complexes – more traditional approach

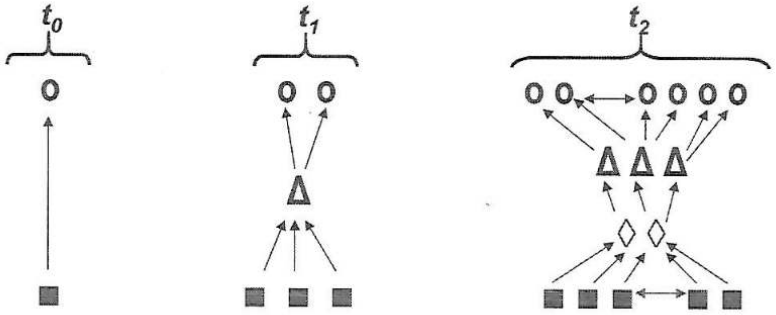
- Marshalls three forces of agglomeration
  - 1. Are bolstered by institutional infrastructure
  - 2. Involve cumulative processes and feedback
  - 3. Lead to lock in on certain developmental trajectories
  - 4. Agglomeration economies reinforce competitiveness
  - 5. Industrial complexes are a mosaic of interconnected agglomeration (not isolated)

On the Nature of Transactions

- Positive relationship between distance and costs!
- Futher characterize the nature and structure of transactions by:
  - 1. Physical content varability (ex weight, perishability
  - 2. Temporal and spatial variability (routinized transportation routes vs. special orders)
  - 3. Necessity for face-to-face contact (ex, little in petroleum industry vs. a lot in clothing industry)

## FORMATION OF INDUSTRIAL COMPLEXES

- There is a positive relationship between vertical disintegration and the proliferation of externalized transactional activity
- Example: T-shirt industry




- Industrial complexes: large assemblages of specialized and flexible producers interconnected via an intricate web of external transactions

A particularly eloquent and representative case of a typical "trend follower" with respect to outsourcing (OR *offshoring*) is the Swede H&M (As documented in GEOG 216 Reading 17, Coursepack p. 285)

A dossier published in the Montreal newspaper La Presse *La fin du cheap labor* (March 2012) reported that H&M purchased a value of 1.5 B $US from Bangladesh textile (fabrication) shops

- In 2011 Bangladesh exported a total value of 19B $US in various textile products. This represented 80% of that country's total exports

  40% of workers in Bangladesh were employed in/by the textile industry

**Apart from labor related factors, the following are also identified as fueling increasing internationalization :**

- Access to raw materials and energy
- Access to markets
- Various incentives, "subsidies" (for ex. Special economic zones; trade tariffs reduction and/or elimination ...)
- (more) Permissive regulation and laws ... environmental laws for instance

## Lecture 14

Food as a resource

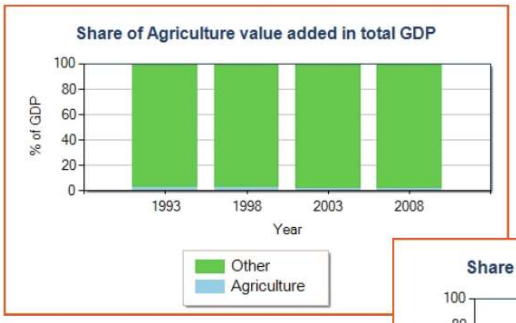
- Physiological needs and cultural norms
- Very narrow spectrum from plant world
- High reliance on a few cereals
  - 16 species of plants provide us with are needs. 8 of the them are cereals. 3 cereals (rice, maze, wheat), feed 4 billion people.
  - Are food spectrum is 0.005% of what is available
  - Highly dependent on a small number of crops

Importance of agriculture in global economy

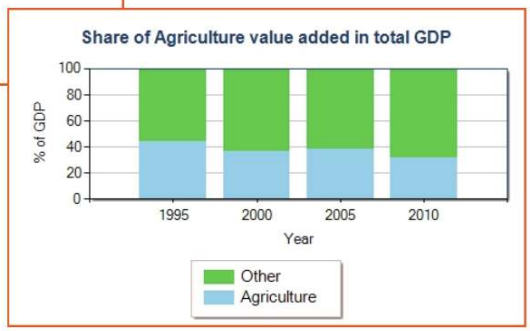
- International trade
  - $1 trillion a year in value traded (600 agricultural products are solds)
  - Top exporters include USA, Malaysia, Indonesia, Brazil, Thailand, and France
- Source of national rev

- Small % of agricultural products are traded
- Agricultural products contribute to GDP

Canada




Rwanda




Source: FAOSTAT, 2013

- Employment
  - 1/3 of the worlds workers are in agriculture
  - Up until the year 2000 it was the highest employer (now service)
- Livelihoods
  - 2.6 billion people rely on agri for their livelihood
  - Source of security, nutrition, and investment
- Environment
  - 40% of the worlds land surface and 95% of the water used on agri
  - Makes of 30% of greenhouse gas emission annually
  - Major player in climate change

Types of agri

- **Subsistence**: Small scale, for household consumption, simple, labour + Land, productivity is low, exchange is through gifting and bartering (not market economy). Very few people get by with just subsistence agri
- **Cash Cropping**: Peasants (One foot in market econ, and one in subsistence), may specialize in a particular product, peasant production for export is key. The peasant household is dependent on inputs (pesticide's, ect). In good times they will produce more for markets, and in bad times they will be more subsistence.
- **Industrial/commercial:** large scale, high input, for exports

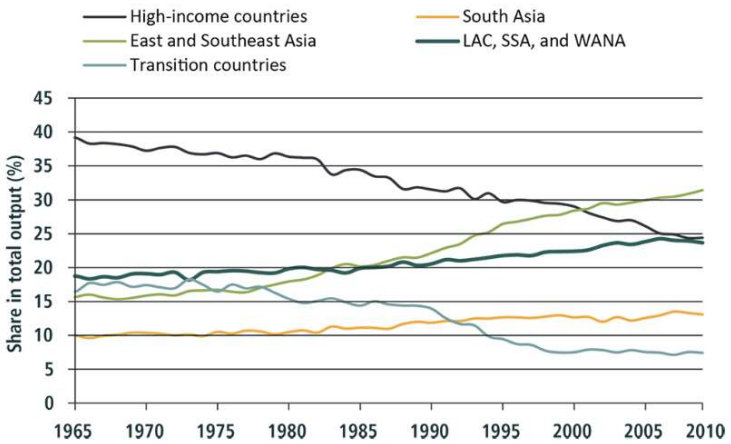
Agri practices and innovation

- Productivity: the goal is to always be increasing it

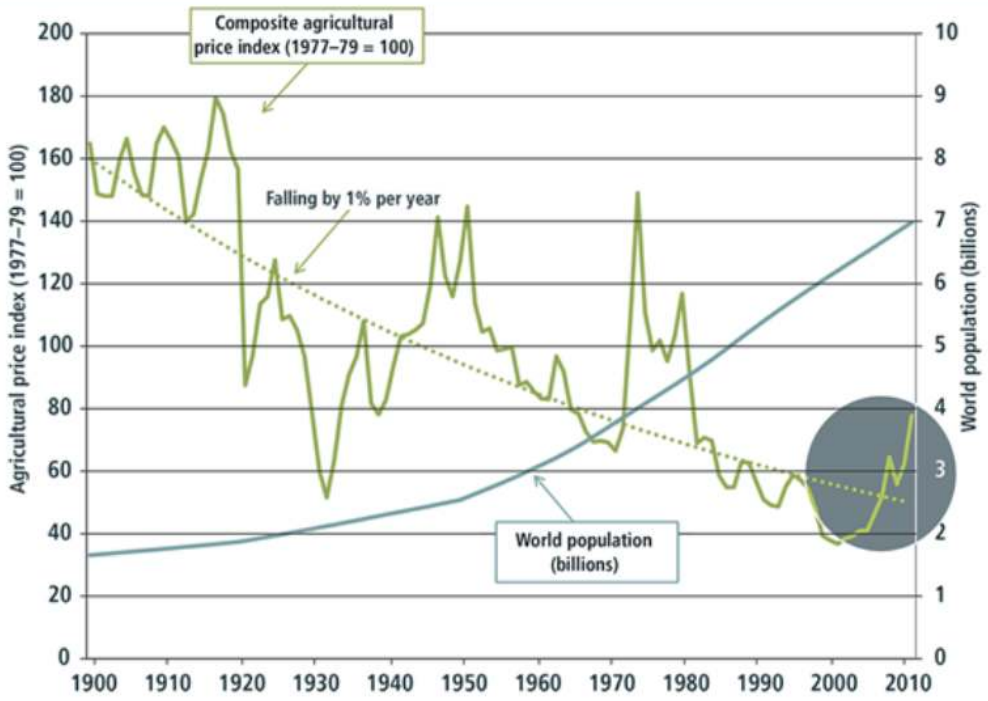
    - Ex: corn, through selective breading, we made corn larger and more desirable.
    - Depends on how and where you are.
- Diversity in practice of agri- diverse crops production
- Role of relative factor endowments : people practice agri based on land labour and capital
    - Ex: prairies: low pop, high capital, lots of land. Therefore, the output per person it extremely high
    - Ex: Amazon, high land, low pop, low capital. Shifting cultivation used as a direct response to the availability of factors.
    - Ex: Java, land is low, people are high. They use terraces to conserve on the scarce factor that is land.
- Innovation
        - Will focus on the relative availability of L,L,K
        - Innovation is endogenous: induced by the circumstances of the farmers themselves. Water scarce=irrigation. Bad soil=fertilizer, etc.
    - Agri intensification: goal is to try to raise yields by increasing the inputs.
        - Ester Boserup: induce innovation. Wrote a book in the 1960s on agricultural change. Found a pattern (Bosrupian intensifaction), as land becomes scarce, then you intensify agriculture on a certain piece of land (ie from shifting cultivation -> bush fallow ->: short-term fallow -> permanent agri and multicropping). Population drives food
    - Biological innovation
        - Green revolution: package that would enabled farmers to grow wheat more efficiently.
        - Biotech rev: GMOs, gene snipping.

Global trends in agri

- Rate of increase in agri productivity is higher than the population growth.
- Changing geo of production
- Falling prices of agri commodities until recently.
    - The recent spike has caused issues
        - Ex: People urban areas have a passion




**Source**: Elaborated by authors using data from FAOSTAT, accessed May 2012.
**Notes**: LAC = Latin America and the Caribbean; SSA = Africa south of the Sahara; WANA = West Asia and North Africa.




**Source**: K. O. Fuglie and S. L. Wang, "New Evidence Points to Robust but Uneven Productivity Growth in Global Agriculture," *Amber Waves* 10 (September 2012).

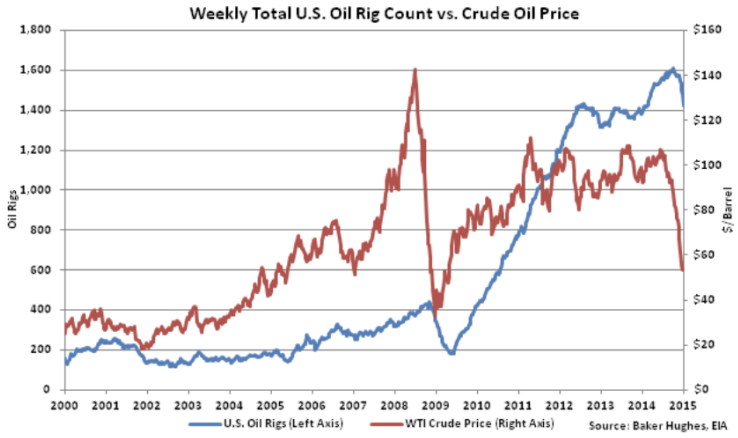
Lecture 15

We use about 90 billion barrels a day.
40% of greenhouse emissions come from oil combustion

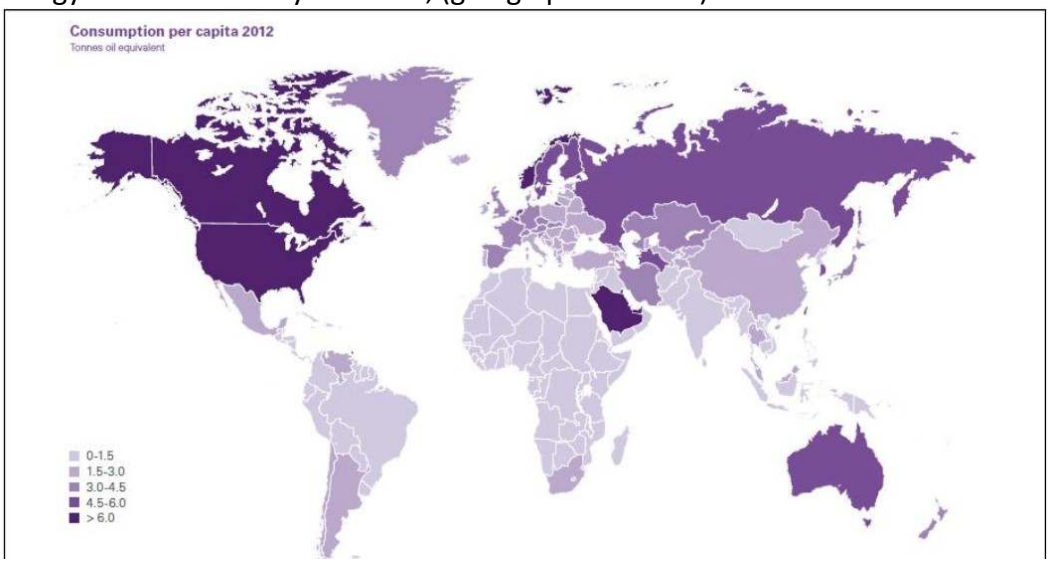
Energy and Economic growth

- Energy consumption drives GDP, as it is an input to production and is related to energy consumption. When energy prices go up, GDP tends to go down.
- 10% price change in oil will lower global GDP of .02%
- There are dramatic changes in the price of oil

## Impact of the recession and falling oil prices on exploration



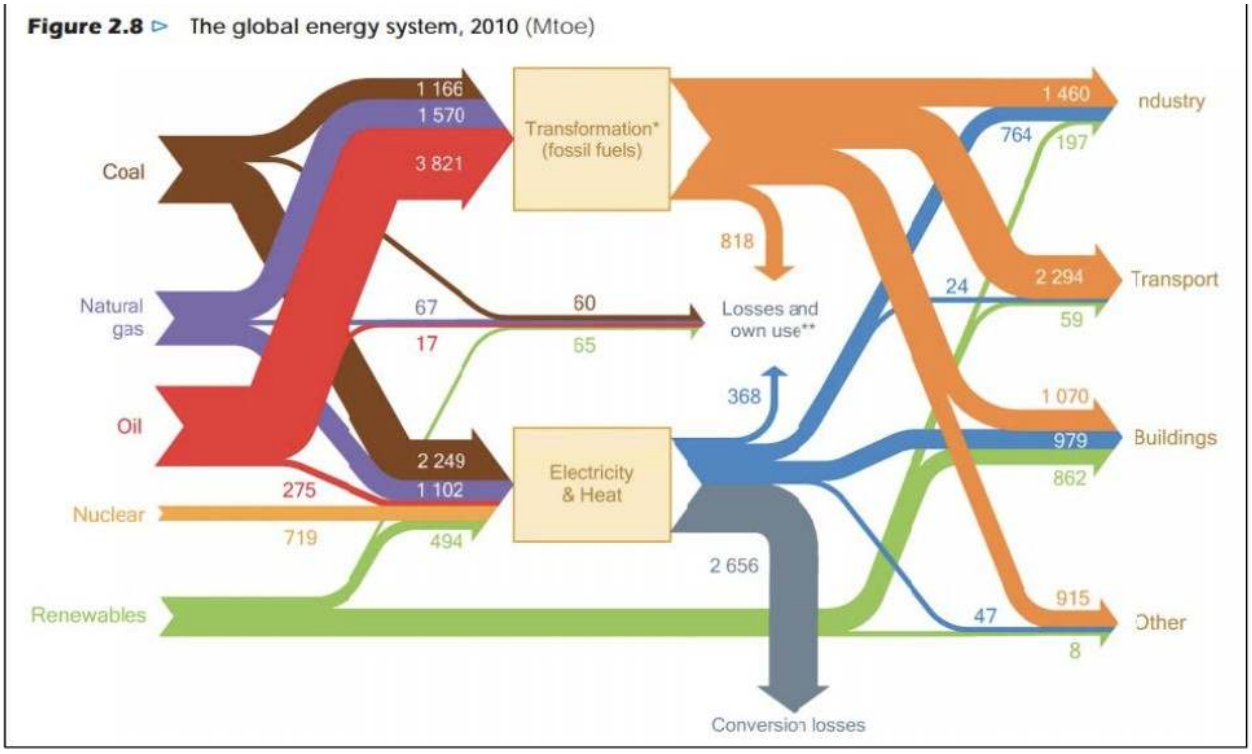

In Russia the fall in oil prices reduce gov revenue and caused them to invest less in public infrastructure.
Energy markets are very sensitive, (going up and down)



Canada and the USA lead are world leaders in energy consumption per capita.

- In the case of Canada, it is cold and you have to travel far, spread out. (spatial distribution of people.

World's top energy consumers per capita (all are small countries with extreme climates)
Iceland
Trinidad
Qatar
Kuwait
UAE
Bahrain




Coal 28%
Natural Gas 22%
Oil 33%
Renewables 22%
Nuclear 6%

Where is the energy being used
28% industry
34% buildings
Transportation

Other

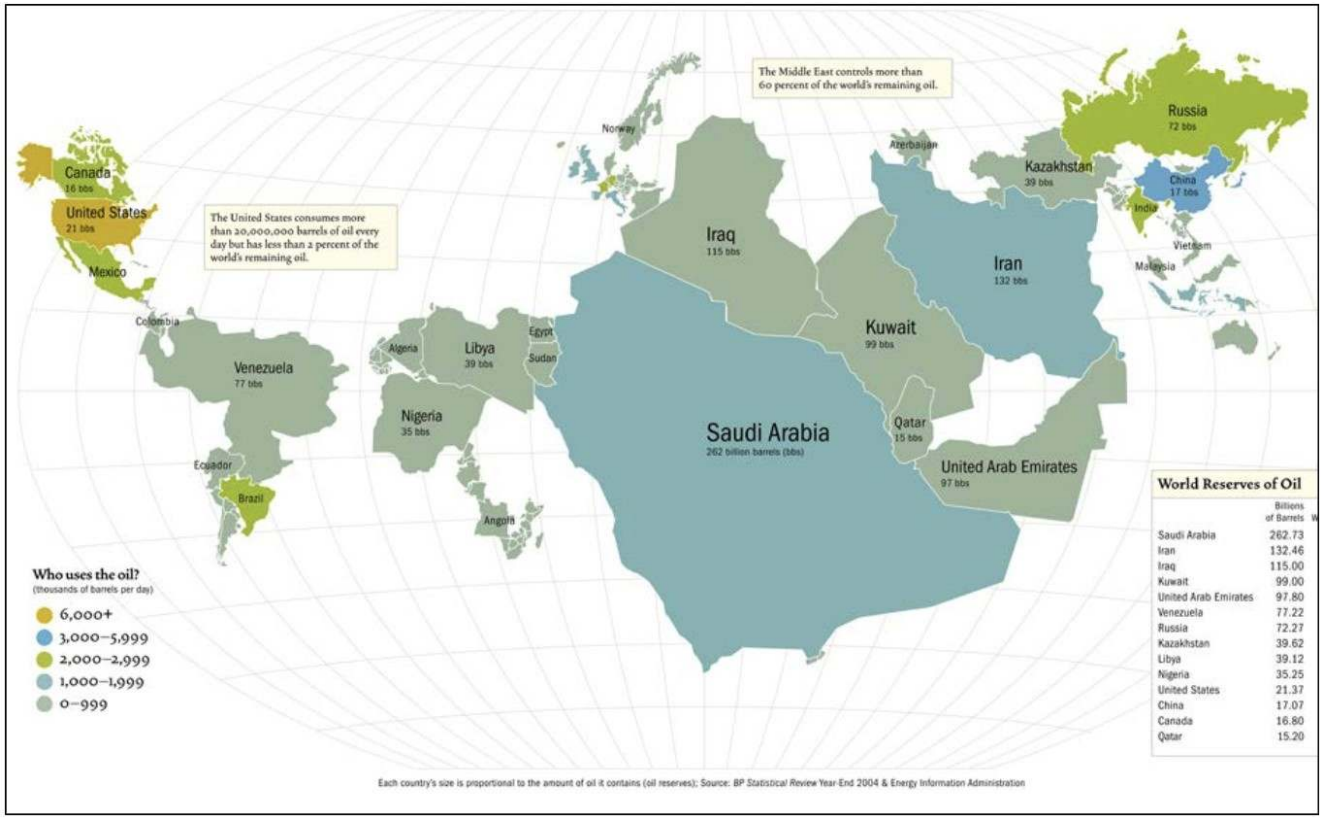
One of the challenges in Energy use is efficiency and lots of energy is losts and wasted in the process.

The consumption of energy exploded after WW2.

Oil: There is a lot of energy in a barrel of oil, that means that is practical to transport, it's versatile, and it is hard to substitute in certain sectors. Oil is preferred because its light with a high energy density.

Gas: Gas reserves have increased, as prices rise, used for domestic and regional markets. It has a low energy density and is not exported as much.

Coal: most abundant of fossil fuels, mostly used in the country that is it found in. It is bulky, heavy, and expensive to transport. Heavy pollutant. One region where coal is very important is Asia Pacific (50% of energy used is coal).

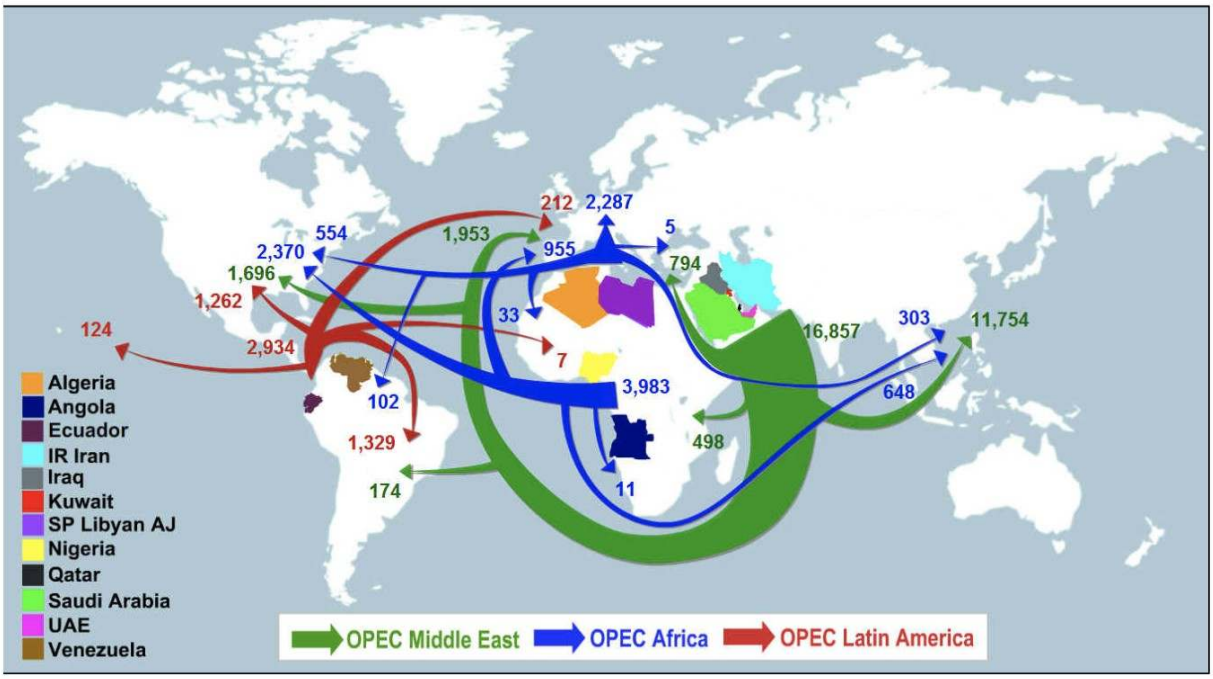



The distribution of oil reserves does not reflect the consumption of oil.
The USA is the largest oil producer, but doesn't export a lot of it.

Millions of tons of oil are shipped world-wide daily.

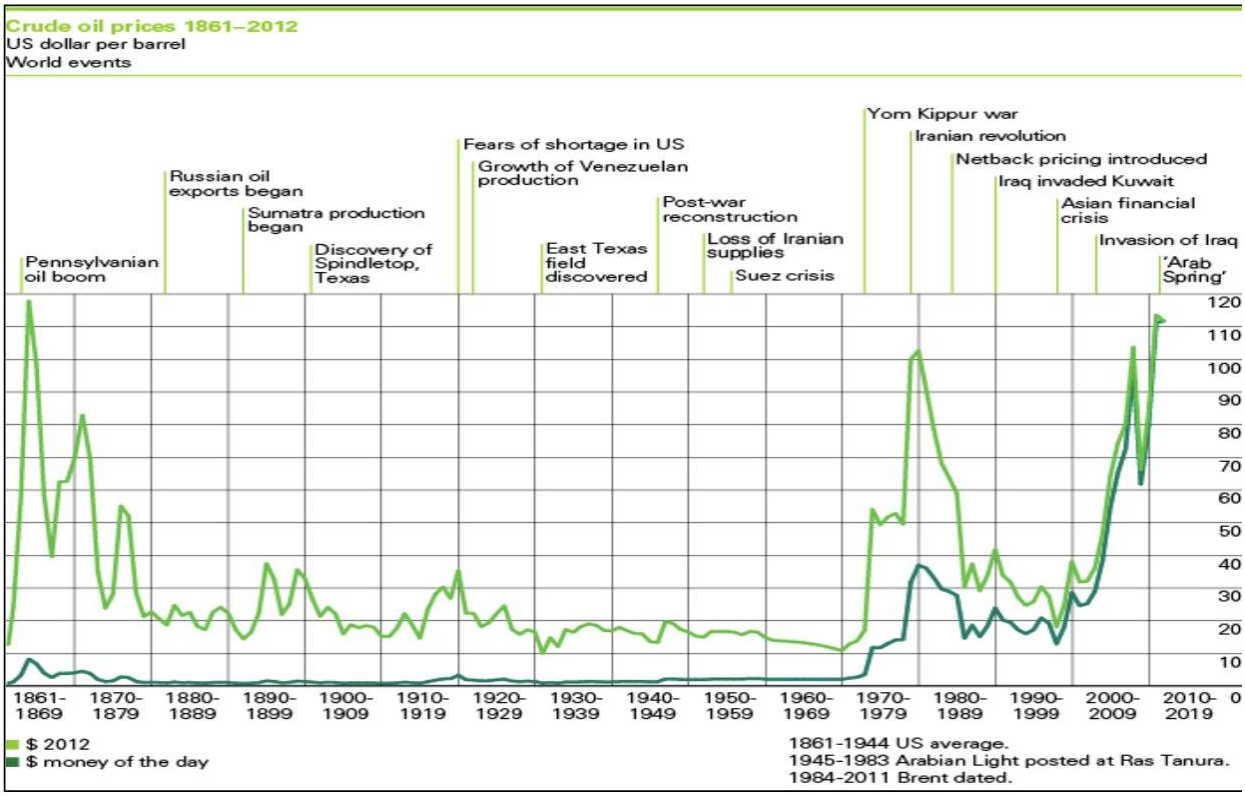
Interdependence on oil. EX: Russia to Europe. Leaves countries vibrable.

# Oil trade from OPEC countries, 2009



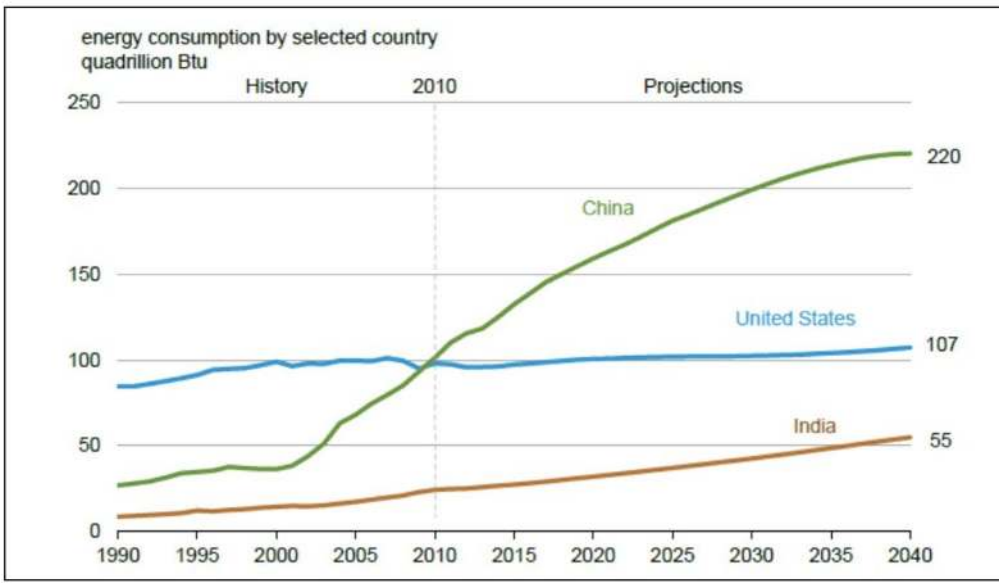

The price of oil today is about $57 a barrel
The price to get a barrel of oil fully process in Sadia Arabia is 4-6$.

- This is lucrative, receives high rents on their barrel sales.




Any distrubtion in the supply of oil is problematic to the global economy.

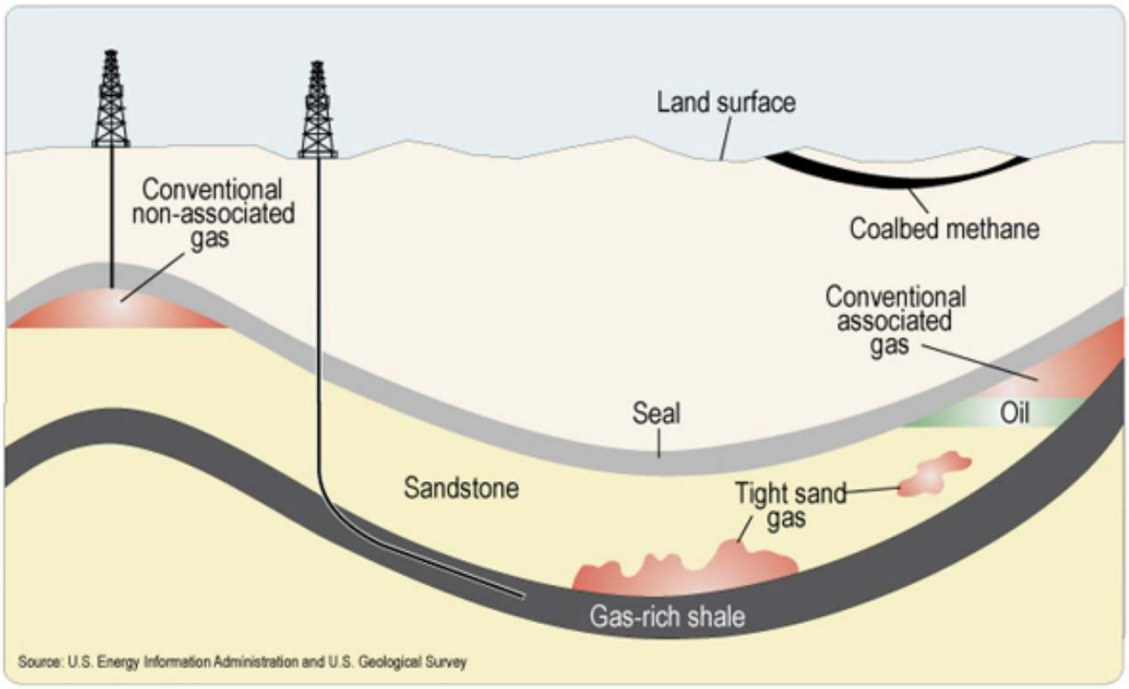
- Most oil is moved globally by sea. There are 7 choke points at sea where oil has to travel world-wide. Ex: Panama canal.
- These choke points can easily be blocked off, and thus easily caused conflict.
- USA produces the most oil in the world. But still has to import 50% of its oil to meet their countries demand.
- Oil is becoming harder to discover



In the last 10 years China's demand for energy has doubled. By 2040 China's energy consumption will be *2 as large as the USA.

Conventional vs Non-Conventional oil.

# Convention and non-conventional oil & gas extraction




Shale oil and gas formations (unconventional sources)

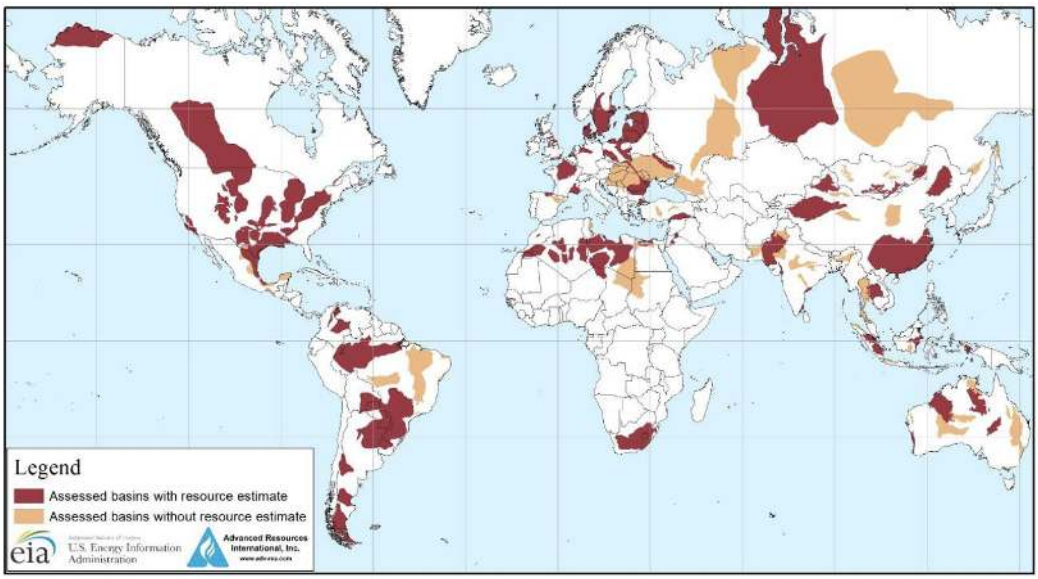
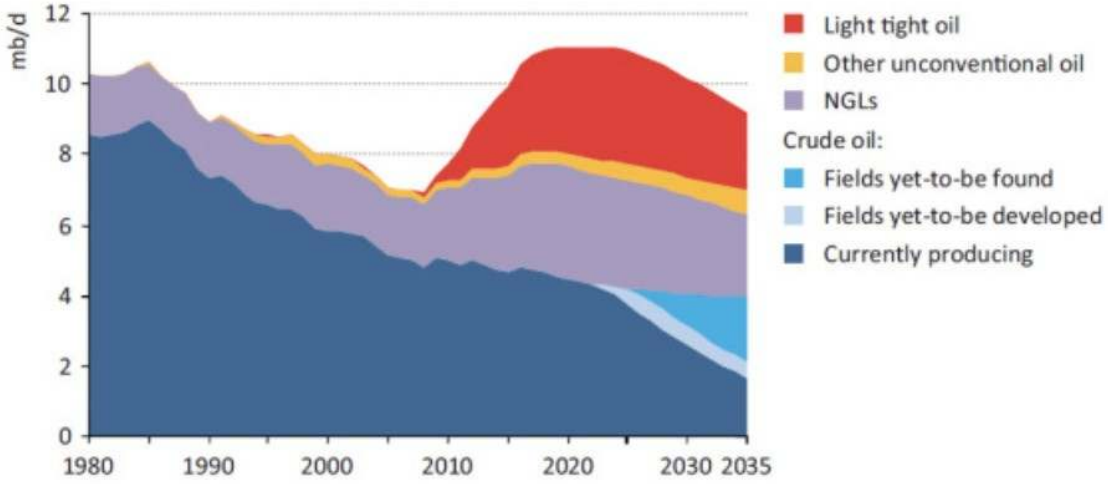


**Figure 3.18 ▷ United States oil production by type in the New Policies Scenario**




Note: The World Energy Model supply model starts producing yet-to-find oil after it has put all yet-to-develop fields into production. In reality, some yet-to-find fields would start production earlier than shown in the figure.

Light tight oil, is from fracking (unconventional).
The USA will be self sufficient in oil in about a decade, although unlikely

- Unlikely thought because major oil producing countries like Saudi Arabia.
    - SA raised the price of barrels to squeeze out the USA producers. (Caused American producers to go bankrupt).

Brazil, Norway, Canada, Ghana, are all expected to blow up globally as oil producers and exporters.

- Therefore in 5 years there will likely be more conventional oil, then unconventional (fracking)

Non-fossil fuels

- Rise in renewables
- Oil prices are projected to go down, not good for renewables.

Fusion

- Has be “around the corner” for nearly 70 years. So is there really hope?

## Lecture 22: Global Trade institutions and agreements

- Global trade institutions and agreements (22)
    - International trade organizations, GATT, WTO

- Recent developments with WTO
- International free trade agreements
- 2 major types of intl free trade agreements
- Union, free trade areas, common markets
- Emphasis on EU
- Recent trade developments between Canada and Europe

**Historical Background**

- High levels of trade/output in the early 20thC
- Prior to WW2, most trade agreements bilateral (two sided)
- Economic depression in the 1930s, nation-states respond with protectionist policies that worsen the slowdown.
    - Smoot-hawley tarrif Act in the US (1930): tariffs raised on over 20,000 imported goods
- 1944, eventual victors of WW2, led by the USA and the UK, meet at Bretton Woods to reshape post war structure of world trade and international finance.

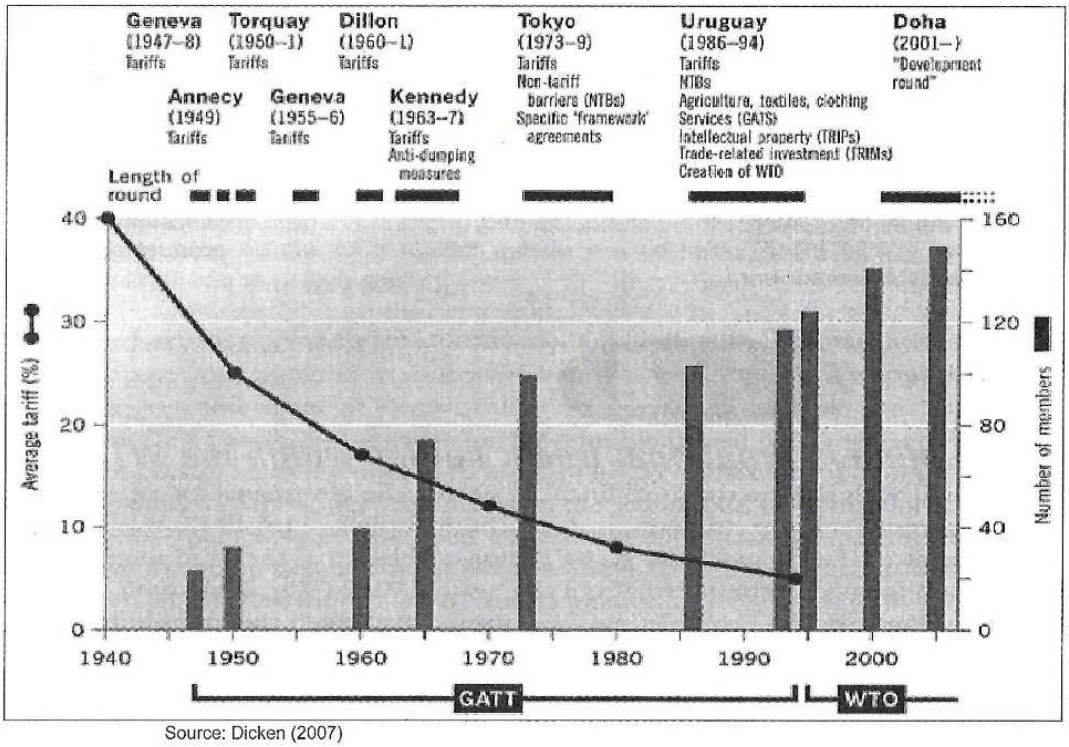
**Bretton Woods**

- BW sets institutional basis of postwar global era
- Principal objectives = stabilize international financial situation and rebuild war-damaged economies
- 2 main institutions established
    - International bank for reconstruction and development (later become known as the World Bank)
    - International Monetary fund (IMF)

**The General Agreement on Tariffs and Trade (GATT, signed in 1947)**

- Countries (i) reduce trade barriers through multilateral negotiations and (ii) agree not to raise them unilaterally
- Operates through rounds of negotiations, setting an agenda in terms of binding tariffs (towards trade liberalization) and administrative reforms
- Pre-1960s, GATT focused on trade between developed countries. With development of UNCTAD (1964), focus on developing country access.
    - Also geopolitical consideration

# EVOLUTION OF GATT / WTO INTERNATIONAL TRADE FRAMEWORK



Source: Dicken (2007)

**From GATT to WTO**

- At the end of the Uruguay Round in 1994, GATT succeeded by the World Trade Orgainization (WTO)
- How different is the WTO from the GATT
    - WTO is a full-fledged international organization whereas GATT is a provisional agreement
    - Includes rules on trade in services
    - Defines intellectual property rights (TRIPs)
    - Has a dispute settlement mechanism (tribunal)

**DOHA Round**

- Negotiations begin in 2001. Most contentious issue to emerge = agriculture
- Goal: reduce government support of agricultural products, mainly in developed countries
- In addition to disputes between governments, NGOs and other civil society actors get involved seeking to influence the decisions made by the WTO (labour standards, environmental issues, patents)

- Cancun (2003 WTO negotiations), Doha round “deal” breaks down and again in 2008, developed countries backtrack on their pledges.

**Regional Trade Agreements**

- Attempts to liberalize trade over smaller groups of countries include
    - Free Trade Agreements (FTA): least comprehensive of the three
        - Allows for tariff-free trade among member countries, but leaves each country free to design its own policy with respect to non-member countries. Ex: NAFTA
    - Custom Unions: a FTA area in which the member countries agree to establish a common trade policy with the rest of the world.
        - Ex: Mercosur, linking Argentina, Brazil, Paraguay, and Uruguay
    - Common Markets: Common market: customs union that also has free movement of labour and capital among its members
        - The EU is the world’s largest and most successful common market

**The EU**

- The EU can be considered the utmost example of an extensive, functional free trade area.
- 19 members of the EU use the Euro as there official currency
- You can travel amongst 26 countries in the EU freely without needing a passport.

**The Latest Free Trade Agreements**

- Comprehensive Economic and Trade Agreement (**CETA**): FTA between Canada and European Union.
    - Negotiations: 2004-2014. Came into force Septement 2017
    - 98% of tariffs between Canada and EU to be eliminated
    - Would surpass NAFTA
- Trans-Pacific Partnership (TPP): includes 12 Pacific Rim countries
    - Negotiations: began in 2008, signed in 2016
    - Lower trade and investment barriers, create dispute settlement mechanism for member countries
    - Would be worlds largest FTA (40% of world trade)
    - Trump pulled out in 2016

# Lecture 23: Local-Global geographies of the Financial crisis

- Local/global implications
- How global financial system works
- How did it move from regulated to deregulated state
- What is the great recession what happened/why and consequences
- No details on Detroit
- Geographical aspects – local global dynamic aspects associated
- Mortgage financing, moving to intl level while having important local impacts

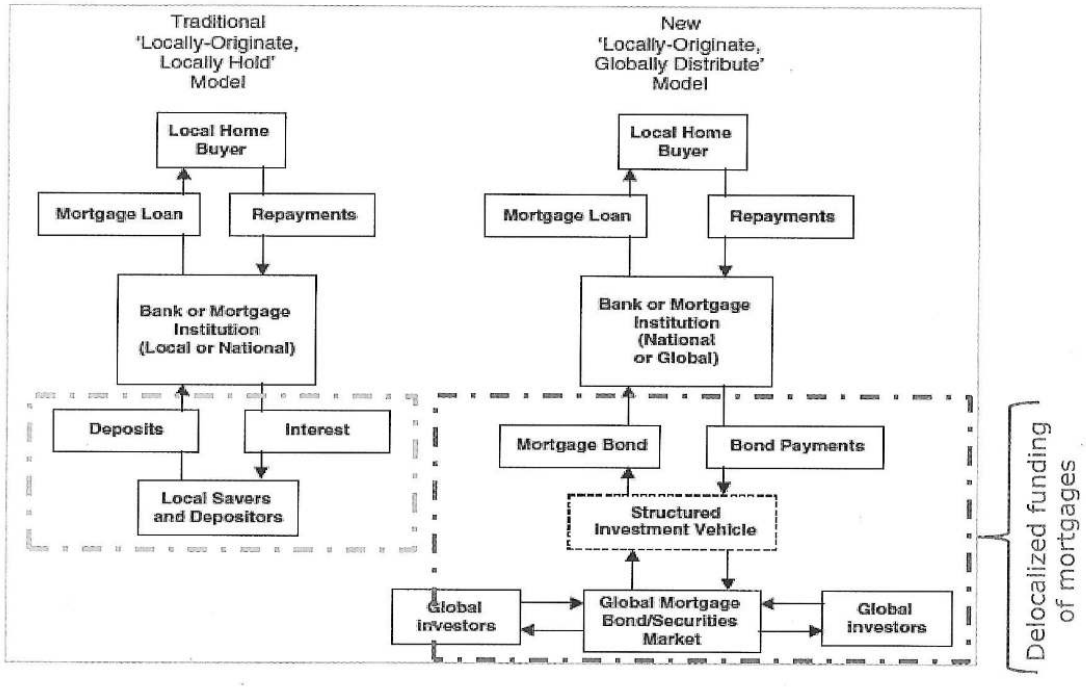
**Stock Market – The Basics**

- Stock market: where stock are sold and bought
    - Function is to establish the value of corporate shares
- Stocks issued by companies to raise capital
    - Contrary to debt (must be repaid), capital collected via issuance of stocks does not have to be returned
- Until 1970s: mostly national and oligo/monopolistic stock exchanges
- Post-1970s: globalization of financial system
    - Increased deregulation of financial activities, increased competition between stock exchanges
    - Increased MNCs -> more cross-listings on foreign exchanges (to tap into new pools of capital and increase visibility)
    - New financial instruments, new tech and virtual trading floors; difficult for regulatory framework to keep up.
    - At least one major global stock market in open over a 24-hour period

**2007-09 Financial Crisis**

- Worst since Great depression
- Trigger: Collapse of US housing market
  - Easy credit conditions, sub-prime lending (is the provision of loans to people who may have difficulty maintaining the repayment schedule) .
  - Institutions adopting more aggressive and expansionary mortgage lending practices
- Other causal factors
  - Increased debt burden, diminished savings
  - Deregulation of banks, financial institutions (increased risk taking)
  - Growing imbalances in world trade
  - Commodity bubble (oil $50 a barrel in 2007, to 150$ in 2008)

## GLOBALIZING LOCAL MORTGAGE LENDING




Consequences of Global Recession in urban areas

- Outrageously low average citizen income
- Deteriorated, neglected infrastructure, diminished efficiency in provision of services

## Lecture 24: The Environment – Economy Interface

- Inputs and outputs

- Utilitarian commodified understanding of environment
- Conventional economic approach
- What's a more conventional view
- Political economy
- Comparisons of the 2
- Explored commodification aspect
- 2 major aspects: ownership (4 models), **

**The Environment-Economy interface Starting points**

- A most fundamental aspect of discussing the title-theme is that nature is a part of the economic system
- 3 key points
  - The natural environment is a fundamental part of the production system
  - Natures transformation into "something useful" requires social institutions and structures to happen
  - Use of the planets resources and environmental degradation are difficult to integrate into conventional economic ways of thinking
- Economy places two sets of demand on nature
  - 1. Nature as provider of inputs
  - 2. Nature as receiver of outputs

**Conventional Economic Approaches**

- Valuation of nature: a price is set for units of a given natural material through market exchange (laws of supply and demand)
- Local vs. global commodity markets
- Key Global commodity exchanges
  - Agricultural products: Chicago Mercantile exchange, Dalian commodity exchange (China)
  - Metals: London Metal exchange
  - Energy: New York Mercantile Exchange (NYMEX)
- Trading at commodity exchanges can be for
  - Immediate purchases
  - Futures: future deliveries at guaranteed price
- Commodity exchange (or markets) seen as high efficient price setting mechanisms (equilibrium price)
- Yet, do not account for broader environmental impacts of extracting and using a resource. (A negative externality)
- Criticisms of conventional approaches
  - 1. Anything that is neglected or underplayed (ex: loss of a species habitat)
  - 2. Economy is seen as separate from the natural world.
    - Ie, the natural world only has meaning when it affects economic processes (treating it as a object)

- Nature-Economy interface allows economy to become a part of nature as vice vesa

**Commodification of Nature**

- Commodification of nature: harnessing and incorporation of nature for economic purposes
- Factors that determine history and geography of natures commodification
    - Technological and scientic knowledge
    - Economic circumstances
    - Location of raw materials
    - Investment requirements, government action (e.g. organizational and institutional)

**Environment-economy interface. A geographical approach**

- It is argued that in contrast to conventional economic thinking, a geographical approach leads to think about how nature becomes a resource to be traded, how it becomes commodified, rather than just assigning a current monetary value
- Other authors emphasize political economy aspect in this commodification – the context in which nature and society are produced together

**Environment-economy interface. A geographical approach – political economy**

- From the pov of political economy, a set of power-laden relationships, influencing the structure of the economy strongly affect this commodification of nature/production of nature.
- One of the cornerstones of capitalism being to produce surplus value, it is argued that it does so in exploiting labour
    - It is also argued that a means of creating surplus value is by over extracting from the environment.
- Nature is now being consumed as a commodity
    - Commodification: transformation of an object or a resource from something valued in and for itself to something valued economically.

**Interface 1 – Establishing Ownership**

- Questions of ownership
    - If nature can be sold, who will do the selling (who does nature belong to)
- 4 models of resource ownership
    - 1. Communal access
    - 2. State ownership and state exploitation
    - 3. State ownership and private exploitation
    - 4. Private ownership and private exploitation and management.
        - Trending from 1-4

**Interface 1 – Ownership + Management**

- Management aspects are also crucial with respect to ownership
- 1. Innisian – resource as staples

    - Private or public ownership and exploitation
    - Accepts that resources may be exploited to exhaustion, no attempts at sustainability.
- 2. Common property – communal access
    - Implies regulation to attain responsible management (through controls and quotas.
    - Done through agreement, medium level of sustainability
    - What is made available is still managed.
- 3. Common Pool
    - Seeks institutional design that will optimize resource policy
    - A longer-term view seeking conservation and sustainability. Bring all stakeholders together.

**Interface 2 – Commodification of environmental Degradation**

- The side or after effects of economic processes: how can environmental protection be commoditized?
- Placing a value on environmental degradation
- How?
    - 1. Markets for trading emission credits
    - 2. Growth of certification programs in resources industries
- 1. Markets for trading emission credits
    - Kyoto Protocol (1997): attempt to establish a global carbon credit trading system (reduce GHG)
    - National govs allocate emission permits to companies the surplus of which can be sold to others exceeding the pollution allocations
        - EU's emissions trading system is most advanced market of this type
- 2. Growth of certification programs in resources industries
    - Goal is to demonstrate environmentally-friendly nature of certain products
    - Ex: forest stewardship council, products are labeled as coming from well-managed forests!
- Actor network theory: think about objects as part of social networks

# Lecture 25: Urbanization

- Urbanization
- General state of urbanization
- Dynamics of it and how they've changed/how they vary in core and periphery
- City size and influence isn't correlated
- GaWC
- World city hypothesis – what makes a large global urban centre what qualifies it as being a city
- Amount of weight and influence that they have in global economy
- World city inventory

**Geographical forces and location. The post-fordist environment**

- In the putting in place of the current globalized, urbanized 'world order,' twin geographical forces operate. There are,
    - Local/regional processes: clustering of economic activities to benefit from agglomeration economies (in a range of sectors of activity)
    - Global processes: TNCs, financial flows, trade flows, evolution of ICTs
- Local-global scalar dynamics emerge as configurations in lieu of the nation state
- A strong manifestation of the aforementioned is the appearance of a mosaic of large world cities, which constitute principal structural networks of the global economy
- This dialectical movement of globalization and localization is referred to as **Glocalization**

**The World City hypothesis**

- It is argued that in the context articulated in previous slides, world cities constitute the anchors, the relay stations for the process of globalization
    - First introduced by Peter Hall in 1966 to attempt to explain why certain urban centers represent such disproportionately large segments of the world economy

**World Cities**

- The concept
    - World cities are a set of select, upper level cities
    - They are centers of economic, cultural, and political authority
    - They are the setting of a hierarchy of control of the world economy, in the era of globalization.
    - World cities are seen as the product of NIDL, of the internationalization of finance, and the global strategies of TNCs
    - According to Amin and Thrift (1992)
        - They are centers of economic and knowledge authority
        - Setting of sociability – serving high level planners and decision makers
        - Centers of innovation
    - Concentrate high-level and management
    - Constitute the skeleton of the information economy
    - Are centers of advanced business services
    - Centers of transnational NGOs and IGOs (non-gov and inter gov organizations)
    - Sites of the leading global markets
    - Headquarters of trade and professional organization
    - Anchors for technological and research activities

**World Cities – National and Regional significance**

- World cities also have significant influence (sometimes exert domination) over national economies
    - Ex: Paris
        - Parisian region concentrates 88% of all French head offices
        - 60% of all French R&D performed in the Ile de France region

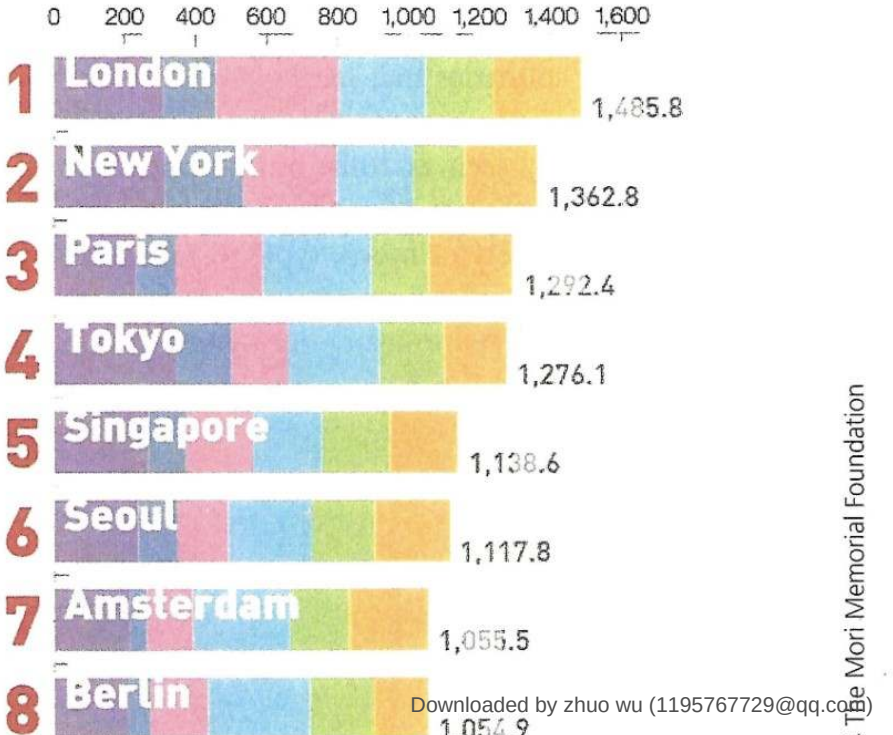
- The region concentrates 40% of the French high tech production, and 50% of consulting to this industry

**GaWC (Globalization and World Cities Research Network)**

- It is associated to the construction of a very detailed inventory of World cities, using a large amount of data to measure the extent of networks linking cities around the globe

**World Cities According to GaWc**

- Assumption: in post-fordism, "innovation in corporate services and finance are integral to recent restructuring of world economy"
- Corporate services = key economic activities
    - Dispersion of production vs. concentration of advance producer services necessary to manage and organize the above dispersion
- Cities are ranked according to overall "**world cityness"** ie, global connectedness In terms of different types of coronate services
    - Estimates of a city's global service capacity (ex: office networks), in 4 corporate services:
        - 1. Accountancy services
        - 2. Advertising agencies
        - 3. Banking/financial services
        - 4. Legal services
- Data gathered via trade directories, magazines, newspapers, the internet, etc
- Each city ranked based on number of different corporate service providers it has in each of the four corporate sectors.
    - Prime/alpha (5+ firms, 3 points)
    - Major/beta (3-4, 2 points)
    - Minor/gamma (1-2 firms, 1 point)



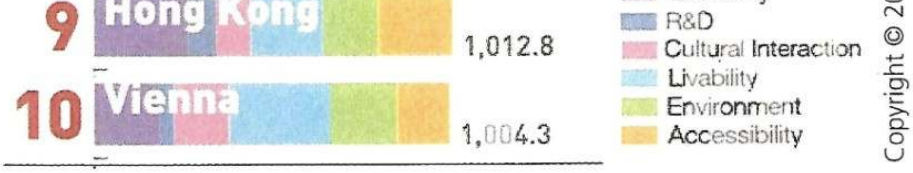




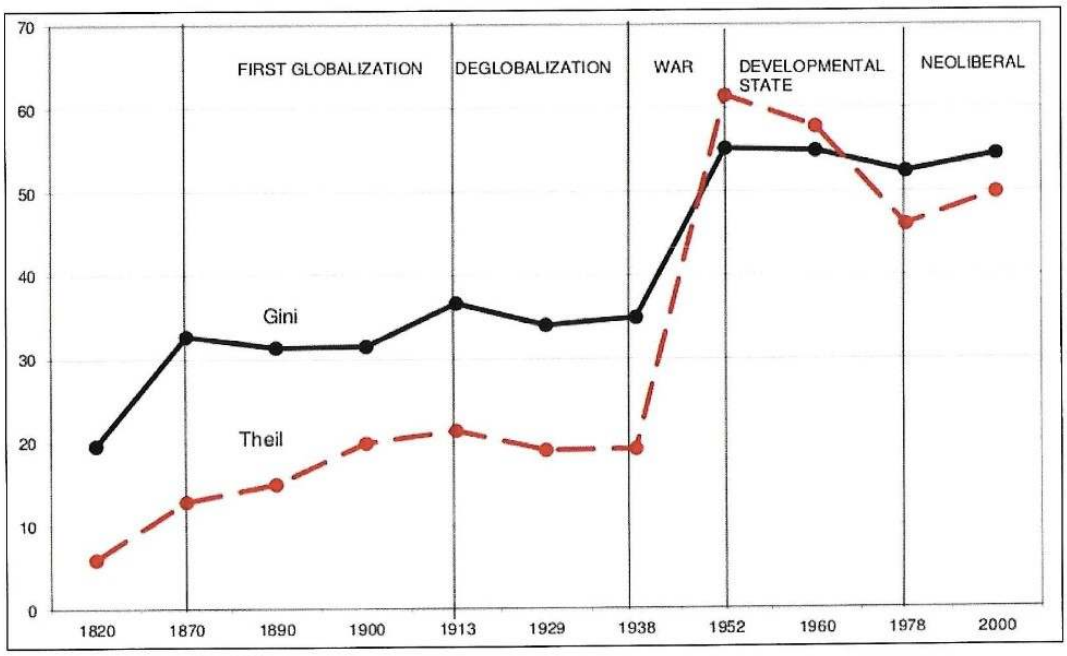

**FIGURE 10.37 Global Power City Index, top 10 cities in overall ranking, total score and rank by functions, 2014.** Source: Institute for Urban Strategies, The Mori Memorial Foundation, Global Power City Index 2014. Available at www.mori-m-foundation.or.jp/gpci/index_e.html.

# Lecture 26: Towards a Conclusion, Globalization and Inequality

**Measuring Inequality**

- Although inequality is manifested in various realms of the economy, it is most often appraised based on differences in income.
    - Income inequality: measures disparity between % of population and % of income received by that population. Inequality increases as the disparity increases
    - Max inequality: one person holds all income
    - Min inequality: all people hold the same % of income.
    - Gini Coefficient, varies from values between 0 and 1
        - Closer to 0 = all individual has same income
        - Closer to 1 = one individual has all the income.

# HISTORICAL PATTERNS OF INEQUALITY: CONCEPT 1, 1820-2000




Source: Milanovic (2007)

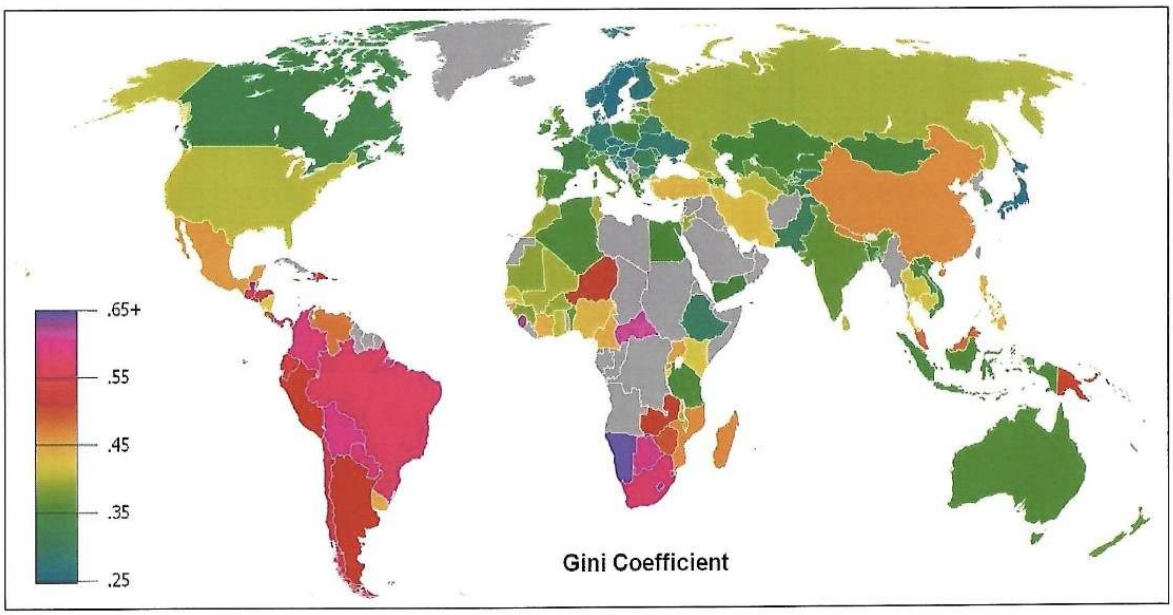
**Why does Inequality Matter?**

- At the national level
  - Negative effect on econ growth
  - As a potential factor of political instability
  - Has negative health and social outcomes.
- At the global level
  - May lead to conflicts (due to awareness of differences in incomes across countries)
  - Fuels migratory movements

**Global Inequality: Some Worrying Facts**

- In Purchasing power parity terms, top 5% of world population controls 1/3 of world income; make in 2 days what poorest 5% make in a year
- Inequality among people in the world is very high (Gini over .5), but direction of change not clear.
- New reality: within country inequality is growing

# MAPPING INEQUALITY: WITHIN COUNTRY GINI COEFFICIENTS, 2008




**Potential options for what can be done globally**

- Change international trading system as it is biased against poor countries (Stanley Fischer)
- Remove agricultural subsides, allow for free trade in key sectors (eg, clothing, textiles, steel)
- Change recent WTO rules: less emphasis on intellectual property rights and financial liberalizations
- Move from loans to grants
- Special program for Africa (AIDS, exports help)
- Global taxes and transfers

## Lecture 27: The Resource Curse & Dutch Disease

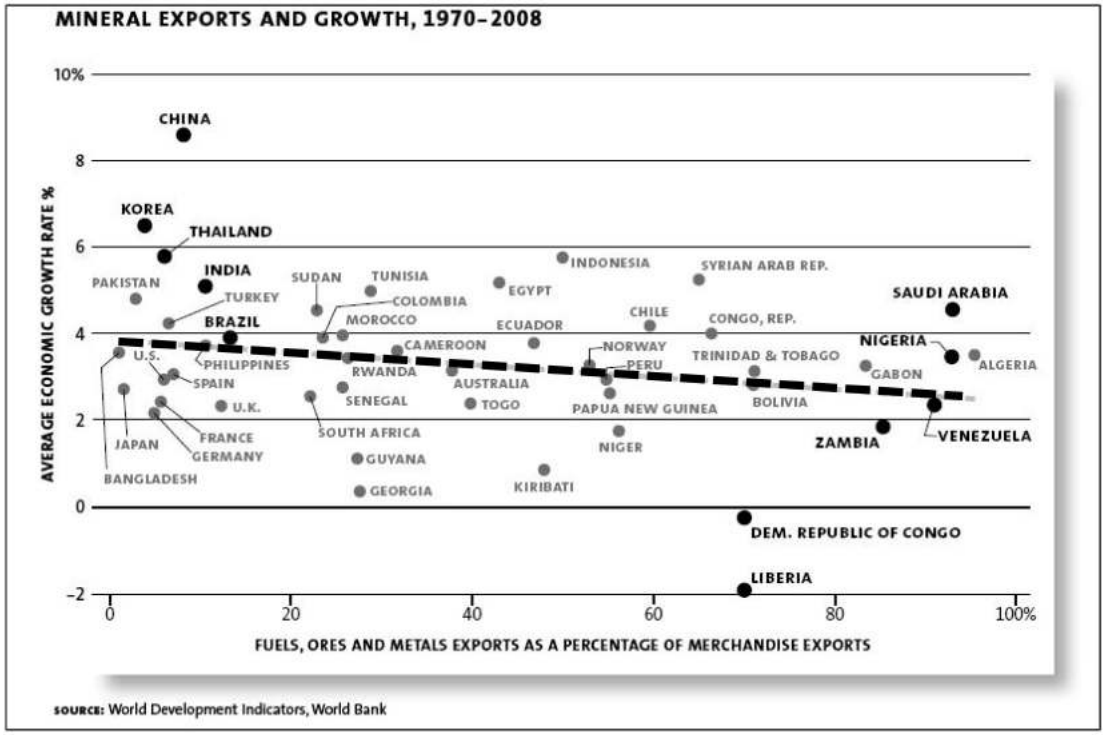
**The Paradox of Plenty**

- The resource curse
    - Symptoms
        - resource wealth, slow growth, high poverty, poor governance, weak states, revolution and conflict
    - Economic Windfalls
        - Boom and bust cycle, ex: Alberta

- Deindustrialization. Ex: industrial sector withers
- Inflation and overvalued exchanged rates. Ex: Canadian $ becoming too strong
- Withering agricultural sector

As the % of export of fuels, ores and metals goes up, average economic growth rate trends downward. (See diagram below)

# Mineral exports and economic growth




**Cause of the Resource Curse**

- Resource Characteristics. (Non-renewable resources)
  - Point-source (appropriable). -> can be private
  - Owned by state. -> can be leased
- Rents, not abundance. How is the money that flows consumed and managed.

**Three causes of the Resource curse**

- <u>1. Income volatility – Money is variable, there are cycles</u>
  - 3 causes
    - Commodity Price variation
    - Rate of extraction
      - Extraction rates are very high at first, but fall over time. Income also falls over time.

        - Timing of receipt : royalties being paid
    - Consequences
        - Cycles of economic boom and bust
        - Government spending is cyclical.
            - Based around a cycle of consume, produce, invest. It is very difficult to organize an economy like this.
        - Borrowing money during boom times
        - Bust
            - Recession – occurs and then changes. Good times = borrowing, bad times = retracting.
- 2. Rent-seeking, patronage and 'living off the land'
    - Not just the presence of rent but how the rent shapes economic and political outcomes
    - Economic Rents
    - Political economy of rent-seeking gives power
        - The political seeking of rents gives groups power. Ex: ISIS capturing control of oil production. – Oil exporters tend to spend much more on militaries.
    - Overconsumption: Money that is made from resource that could be used for good is "pissed away." Leaders supress, oppress, or buy off those going against.
    - Underinvestment: no tax rate, don't invest in their people. Causes government to not rely on the support of the public, but instead rely on the supporters of oil.


- 3. Dutch Disease
    - Got its name by the Netherlands – gas pumped off the coast, which caused other sectors to die out.
    - The symptoms
        - Booming resource sector
            - Ex: Alberta. During boom time:
                - Wages are high, unemployment low
                - Things are more expensive
                - Invest in boom for better return – economy becomes focused on the boom.
        - Inflation and currency appreciation (overvalued)
        - Withering manufacturing/agricultural sector
    - Boom Dynamics
    - Economic Causes

        - Boom vs. non-boom sector
        - Tradeables (agriculture, manufacturing) vs. Non-tradeables (real estate).
            - During boom, economy becomes run around boom itself and non-tradeables.
        - Resource allocation effect – reallocation of resources into boom sector.
        - Spending effect – purchasing overseas, investing in real estate
    - Case of Amazon rubber boom
        - Brought huge revenues, when boom ended, whole economy became vulnerable and distorted.

**Avoiding the Resource Curse – Industrialized countries.**

- The case of Norway
    - Impressive growth and wealth. Income per capita changed with oil, 23% GDP comes from oil.
    - Social contract central to strategy – between citizens and politicians. Argument is -> oil and gas will run out so we should divide it equally.
    - Strategy
        - Sovereign wealth fund -> money does not contaminate the economy, can only go into non-oil sectors.
        - High taxation of oil profits. About 75% tax on the profit
        - Collective and transparent wage negotiations via government
        - Protection of manufacturing sector – money is put into innovation.
- Everything was in place before oil industry was set up.
    - Small country, strong democracy, low corruption, media scrutiny, strong legal system and accountable bureaucracy.

**Avoiding the Resource Curse – Developing Countries**

- The case of Nigeria – the problem comes with patronage and tax seeking
    - Large country, history of dictatorships, weak institutions
    - Weak growth and dissipation of wealth
- Potential Options
    - Sovereign wealth fund
    - Transparency and accountability
    - Direction distribution mechanisms (Oil2Cash)
        - Instead of oil going to politicians, it goes to people then taxed back, thus making the government dependant on people.
- Even though Nigeria's economy is getting wealthier, its average person is getting poorer.

# Lecture 28 – Global Food Systems

Global food price

- Historical prices for agri commodities, but 1/7 are eating too much and 1/7 don't have enough

- Demand and supply for food is relatively inelastic. As people simply need food. Food prices can spike very quickly
- There has been a decline in food prices, until a spike in 2008
    - Cause of the spike
        - Oil prices: directly related to agri, because agriculture is an energy intensive activity, meaning it relies heavily on oil.
        - Adverse weather: drought in Australia, bad weather in Ukraine and Argentina.
        - Trade shocks (export bans, hoarding, panic buying). The droughts and oil prices caused politicians to lower the amount of exports. Or banning trade, ex: rice. As their people need the rice more.
    - Consequences – oil prices will go up again and these consequences will continue to happen.
        - Undernourishment and impoverishment – poor families spend 50-80% on food. The oil shock in 2008 had pushed an extra 44 million people into poverty, and 50 million people into malnourishment.
        - Food riots and revolts – Direct relationship between social unrest and food prices.
        - Greater policy attention. Droughts and prices in food prices brought attention to increasing the productivity in agriculture.

Drivers of food demand

- Pop increase
    - More people, need more food
- Dietary transitions, with an increase in income
    - Shift from tubers and coarse grains to cereals
    - Shift from plant-based diet to animal products (livestock revolution). 40% of world pop will go from plant to meat based diet by 2050.
- Changes in food retailing
    - Advent of supermarkets. Have replaced central food markets. 60% of food in Latin America is through supermarkets, in a 10-15 year transition. This transition took the USA 50-60 years.
    - Supermarkets are good because they have food regulation
    - But they can be less accessible than central food markets and have a lot of cheap and unhealthy foods.

Food Supply: productivity and yield gaps

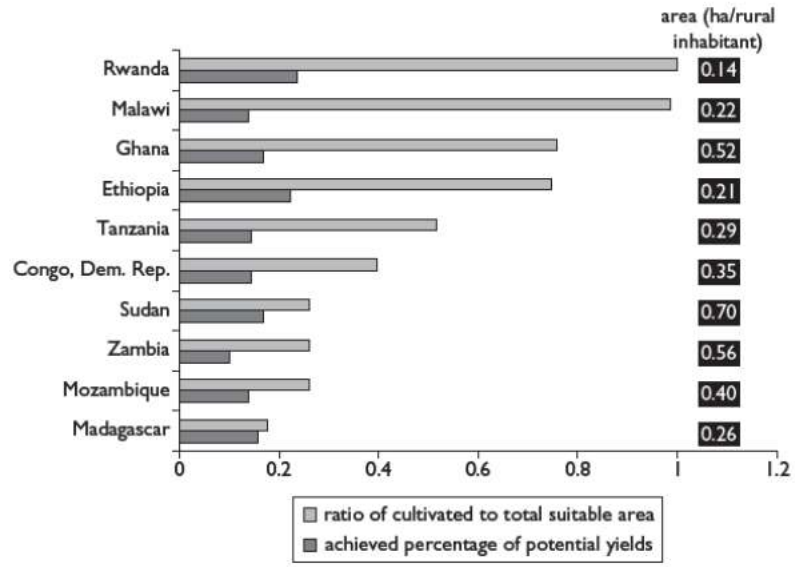
- Growth in world agricultural production
- Source of growth
    - New land – cut down forest and plant crops
    - Input intensification – more fertilizer and crops planted on a small piece of land, better seeds, more pesticides.

- Increased total factor productivity: what you get out for what in get in (input/output). Efficiency of agriculture. Precision agriculture, not just dumping fertilizer everywhere but carefully adding the fertilizer, thus increasing efficiency.

Five Challenges for global agriculture

- 1. Crop yields and closing the yield gap
  - Crop yield growth 'peaking'?
  - Yield gaps. Not increasing at the rate we want them to increase
  - Available land vs. yield gaps – investing in yield gap. Yield gap is what you are getting vs what you could get from the land. Famers in Africa are getting 1/10 of the rice yields in comparison to Asian rice farms.
  - Causes of yield gaps.
  - The challenge for reducing the yield gap is huge and is extremely hard to close.

Figure 2 Yield Gap, Availability of Uncultivated Land, and Area Cultivated per Rural Inhabitant, Selected Countries in Sub-Saharan Africa




*Source:* Authors based on Fischer and Shah 2010.

2. Climate change and crop yields

- Concerns (temperature, crop-damaging weather events, reduced H20, shortened growing season). Warmer temp will decrease productivity, 3% loss in calories has caused a 20% rise in crop price, droughts caused by and increase in natural disasters.
  - Crops that we are particularly reliant on are sensitive to temperature.
- Mixed effects
- Importance of distribution of impacts

3. Dietary change

- Importance of dietary choices

- Livestock – only 10% of what goes into the livestock sector comes out of the food we eat.
- Calories delivered per hectare.

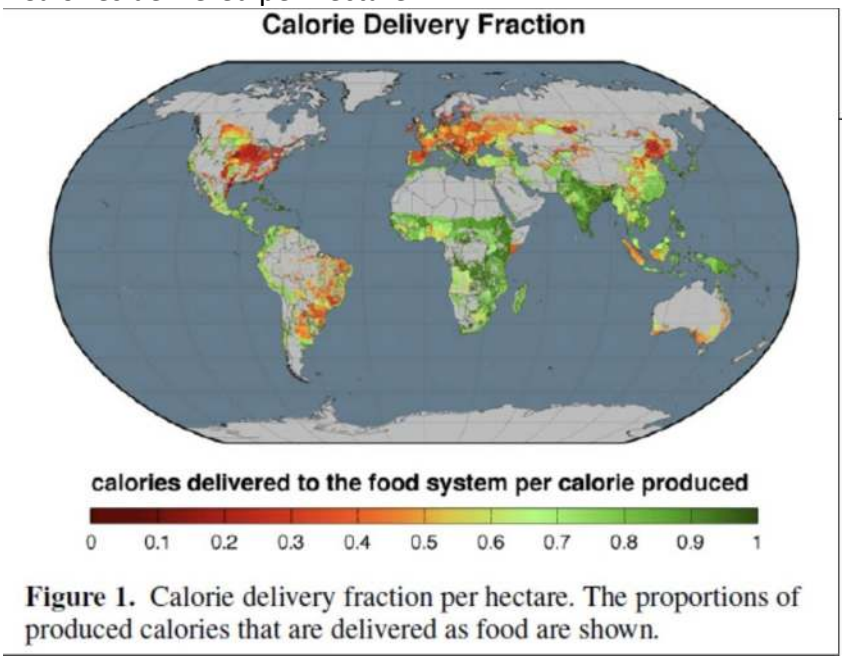



**Figure 1.** Calorie delivery fraction per hectare. The proportions of produced calories that are delivered as food are shown.

4. Food waste
- 30-40% of food is wasted/lost globally
- developing vs industrialized countries
- Consequences of waste – lost water and an increase in greenhouse gases in the atmosphere.
- **What is wasted in north America is equal to what is produced in all of sub Saharan africa**

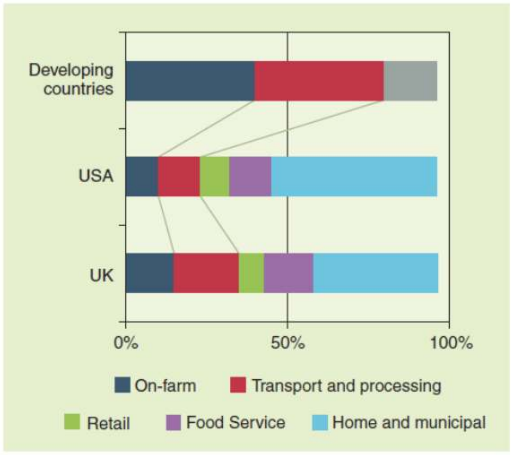



**Fig. 3.** Makeup of total food waste in developed and developing countries. Retail, food service, and home and municipal categories are lumped together for developing countries. [Source: (*16*, *37*–*39*)]

5. World Agricultural Trade
- most crops are not traded. Most is consumed within the countries its produced,

- tariffs, quoatas and quality standards. Countries do this to protect their farmers and consumers. You are very vulnrable if you are getting lots of food from another country.
- Heavy subsidization of domestic agri in industrialized countries (over production). Leads to dumping in other countries and underproduction in developing countries.
- Underinvestment in developing countries
-Freer trade in agricultural commodities.
- trade in food is a double edge sword between efficiency (may be cheaper to import) and security (don't become over reliant on other countries).

# Lecture 29: The global land rush

**Introduction**

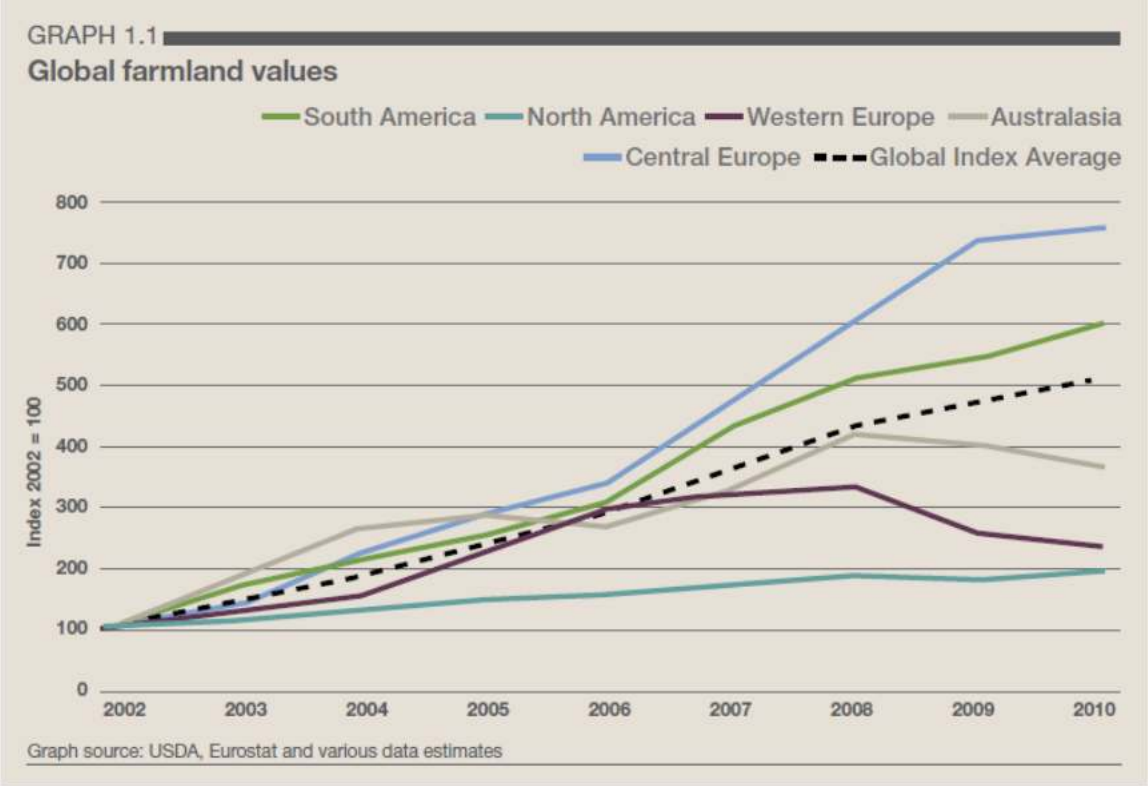
- Long Legacy of Foreign land acquisitions
    - Happened in colonial times, Ex: plantations in panama. People in the North buying land in the south to grow crops in the south.
- What is different now?
    - Size and frequency
    - New players
    - Disillusionment with smallholder farming: not efficient or competitive, more advantages to having large scale agriculture.
    - Vertical integration of agribusiness (farming). Companies are buying farmers land and leasing it back to them to continue to produce.
    - New crops, increased competitions (biofuels and carbon forests). When oil prices rise, farmers would grow biofuel like corn or sugar cane. Carbon forest: people want to buy land in order to get carbon credit for the nature on the land. Ex: If you buy land in panama and left it untouched it give your company carbon credit to burn fuels in Ontario.

**Drivers of global land rush**

- High food prices
- Competing land uses: Are we running out of land?
- Low returns on other investments. Bank investment returns are extremely low (2% ish), so investors turn to land as an investment as it will appreciate. Land is  a good hedge against inflation. It generates income and appreciation value (overtime).
- Land as good investment
    - Traditionally a hedge against inflation
    - Income and appreciation
    - Returns not correlated with equity markets. The land market is more stable then the stock market.

    - Farmland prices rising. Massive differences around the world, overall, they are rising. (3 times increase from 2002 to 2010). The productive value of farmland also varies substance worldwide.
        - Farmland has very high returns on invested compared to the bank interest rates.

- Speculation




**Geography of land acquisitions**

- Media reports vs. inventories
- International land coalitions “land matrix”
- After as focus for large scale acquisitions
- Acquisitions for
    - Food production (34%)
    - Non-food crops (26%), ex: palm oil.
    - Flex crops (23%), ex: corn (biofuel or food)
    - Multiple (17%)
- 2/3 of global acquisitions are in Africa

**The main actors**

- Nationals (most of land acquisitions happen by nationals)
    - Urban elite (people who live in the city with no connection to the land) + diaspora (people who are from a country but live somewhere else, and invest in land in the homeland).

- Regional foreign investors
    - Only gulf states purchase land specifically for food production. (60% of cereals consumed come the imports).
- Global foreign investors
    - Top investor and target countries

**Top 10 Countries**

Investor countries | Target countries

| | |
|---|---|
| Usa* | 7,205,070 |
| Malaysia | 3,459,124 |
| Arab Emirates* | 2,833,081 |
| Uk* | 2,278,885 |
| India | 2,083,068 |
| Singapore | 1,877,755 |
| Saudi Arabia | 1,540,218 |
| China, Hong Kong* | 1,358,834 |
| China | 1,333,526 |
| South Korea* | 1,100,129 |

**Top 10 Countries**

Investor countries | Target countries

| | |
|---|---|
| Papua New* | 3,799,169 ha |
| Indonesia | 3,549,462 ha |
| South Sudan | 3,491,313 ha |
| DRC* | 2,717,358 ha |
| Mozambique | 2,167,882 ha |
| Liberia | 1,362,213 ha |
| Sierra Leone | 1,221,105 ha |
| Sudan | 1,209,256 ha |
| Ethiopia | 923,792 ha |
| Argentina | 788,631 ha |

Why shift to large mega farms?

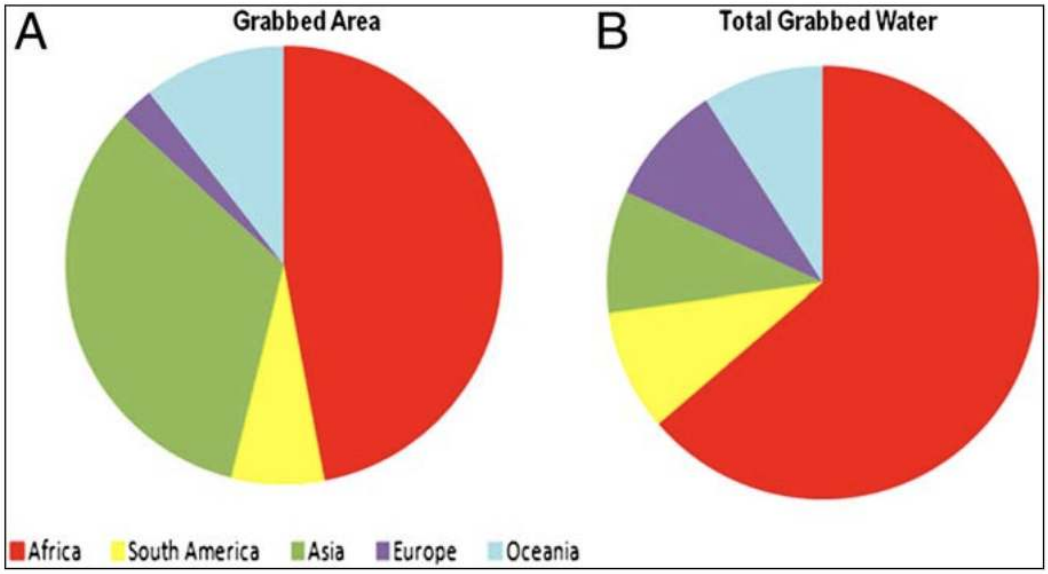
- Economies of production and processing
    - Machinery use – machines are used more effectivity on large scale farms (economies of scale).
    - Quick processing – You have to get sugar cane to the mill within 24 or it goes bad, mega farms are efficient.
    - Demanding product standards
- Easier access to credit and insurance
- New crops are expensive
- Lack of local available labour
- Public policy bias
    - Policies to provide cheap land and capital
    - R&D

Primary concerns

- Rich countries take land from poor and vulnerable people. Firms come in and kick out poor people. Ex: only 3% of land is owned independently in Cameroon.
    - Some companies don't even use the land for agriculture it just sits there and the value increases.

- Food security in food-insecure regions
- Employment opportunities limited
- Loss of smallholder farming
- Water grabbing with land. Firms gain access to poor countries water supply.

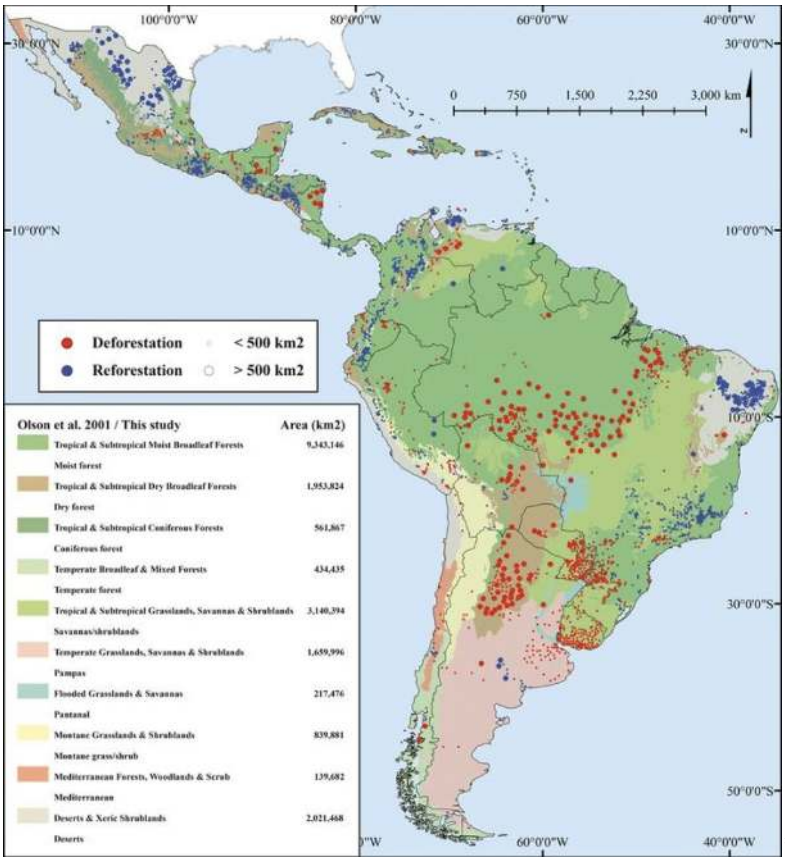
# Food prices and land acquisitions




**What is being done?**

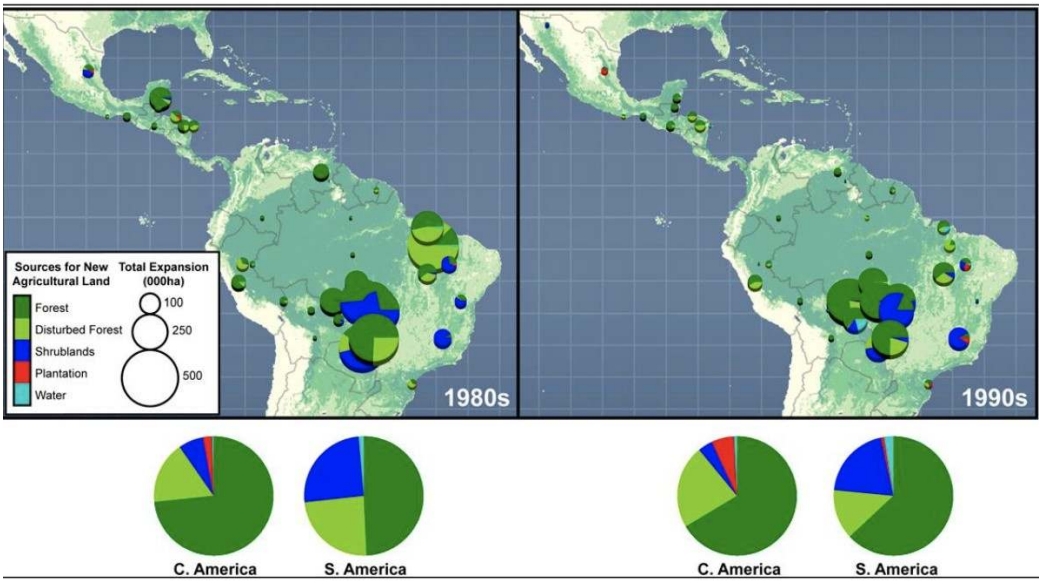
- Land purchase restrictions on foreigners. Although most land deals are by nationals.
- Strengthen land governance and better manage land-investments. Block chain technology for all land transactions.
- The creation of a global land price index.
- Guidelines for best practices.
- Level playing field for family farms. So that they are able to participate in this processes.

# Lecture 30: Tropical Deforestation




*blue dots represent reforestation.

In Cuba, Mexico, Costa, Porta Rico have more forest today than they did 10-20 years ago, they are in the forest transition. (growing faster than forests are being cut down).




- Tropical deforestation is based around the soy and cattle industry
- 2/3 of the lost forests are coming back, either naturally or through plantations.
- Forest are being lost in tropical forest and forest are re-growing in drier and higher up regions.
- Countries that make the switch from net deforestation to reforestation are considered to be in the forest transition.
- Reforested areas may be plantations instead of an intact forest.
- Forests are actually returning to the planet overall, through both natural regrowth and humans bringing them back.

**Drivers of tropical deforestation**

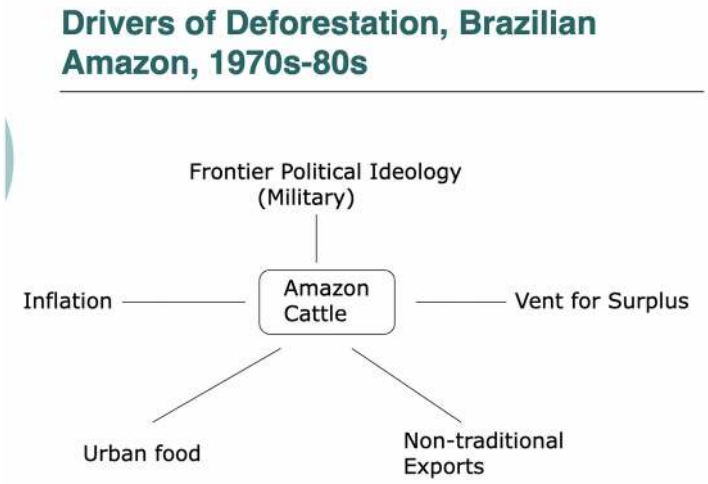
- Proximate vs underlying drivers
    - Proximate: trees are gone because someone is cutting them down
    - Underlying: why are they cutting these trees down
    - Where you are depends on why you are deforesting an area.
        - Ex: cut down for roads
- Environmental vs. political economy explanations
    - Environmental: how people relate to ecosystems. Environment and society are different. Deforestation used to just be seen as an environmental problem
    - Political: Social, econ, and political problem. Nature is a part of society.
- The 'classic' drivers. Apply to any environmental problem
    - Population: growing pop need forests to meet material needs. Solve: control pop.
    - Inappropriate tech: slash and burn agriculture is inefficient and wasteful. Solve: ban shifting cultivation.

- Ill-defined property rights: forest is cut down because no one owns it. Solve: clarify who owns the land
- Incomplete markets: value of the forest does not consider the broader value of the forest, like for climate regulation. Solve: find ways to include the fuller costs of environmental damage caused by deforestation
- Weak institutions: the problem is enforcement, there are rules but no one enforces, not enough institutions to protect the forest. Solve: create new institutions to enforce protecting of lands, employ more environmental workers.

- The classic solutions are an armchair response to why these forests are falling

**Deforestation in the Brazilian Amazon**

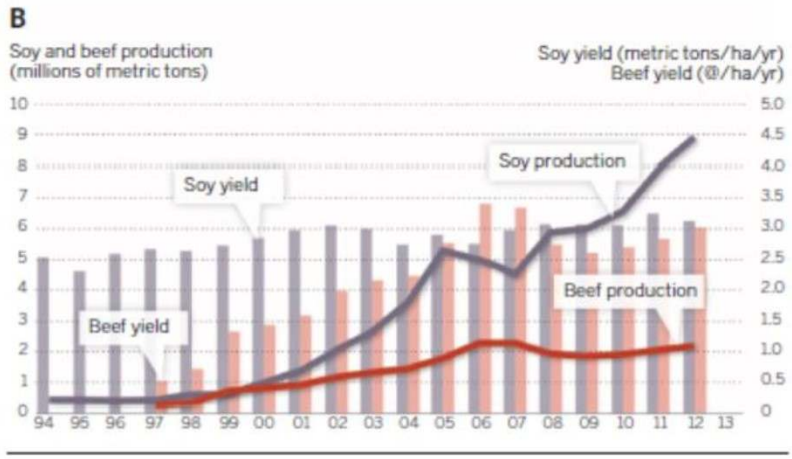
- Opening of the Amazon: 1960s-80s
  - Amazon basin used to be a net importer of beef until the 1980s
  - Military government changed everything, in an attempt to modernize its economy
    - "land without people, for people without land."




  - Incentives
    - Tax exemptions on agricultural income
    - Land grants: states give land away
    - Subsidies (credit)
      - This caused massive deforestation in the eastern amazon.
    - The value of investing the amazon was not cattle, but what might be in the ground and increased land value with the addition of roads. The forest fell as a result of people getting into cattle for appreatiing land values, land grants and tax exemptions.
- Export-oriented deforestation: 1990s-2000s
  - Cattle sector
  - Soybean sector

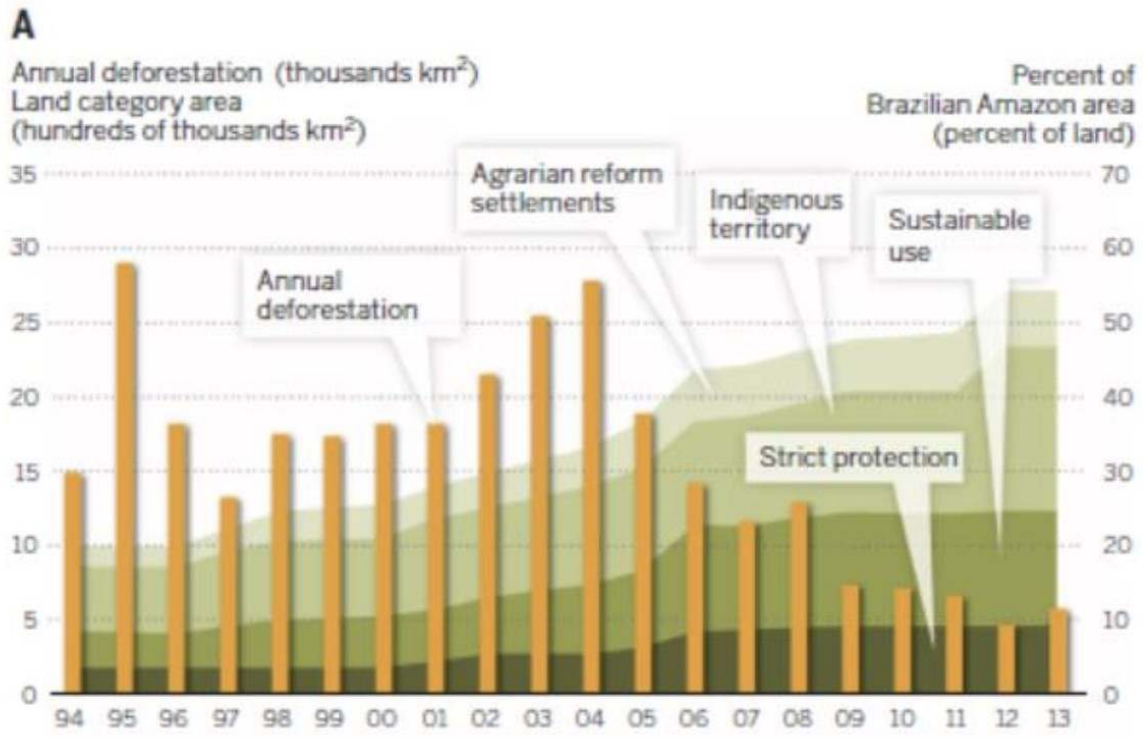
- Fall rates of deforestation

## Beef and soya production in the Brazilian Amazon




- When the military gov fell in 1985 the beef industry exploded, and Brazil became the largest exporter of cattle.
- A rise of soy demand in China and mad cow disease in Europe gave Brazil soy sector to explode. (Cows had to eat soy instead of animal products). Soybean explosion led to more roads, ports, and deforestation in the amazon. ¼ of the lost forest in the amazon is due to soy cultivation.

# Falling deforestation rates in Brazilian Amazon




- The return of democracy and the rise of civil society slowed down deforestation by created reserves and protected areas.
- Once brazil started exporting cattle NGOs were able to fight the deforestation going on in Brazil. NGOs got organizations like McDonalds to sell deforestation free beef. Causing Deforestation to fall
- Currently deforestation is rising again with new government
- Other countries in the Amazon basin experience far less deforestation.
- Moratorium on soybean (2006) and beef (2009), lower deforestion

Over 50% of the Brazilian Amazon are under protection

**Political economy of deforestation.** The problem of deforestation lies in the political economy of Brazil, not a classic environmental cause. Nature is part of society

- Socio-political structure of society
- Distribution of wealth
- Opportunities for capital accumulation
- Role of State and military

- Prevailing cost-price environment (currency devaluations). Beef is cheaper in Brazil, therefore they cut down more trees
- International context, connections and markets
- Rise of Civil Society and role of NGOs

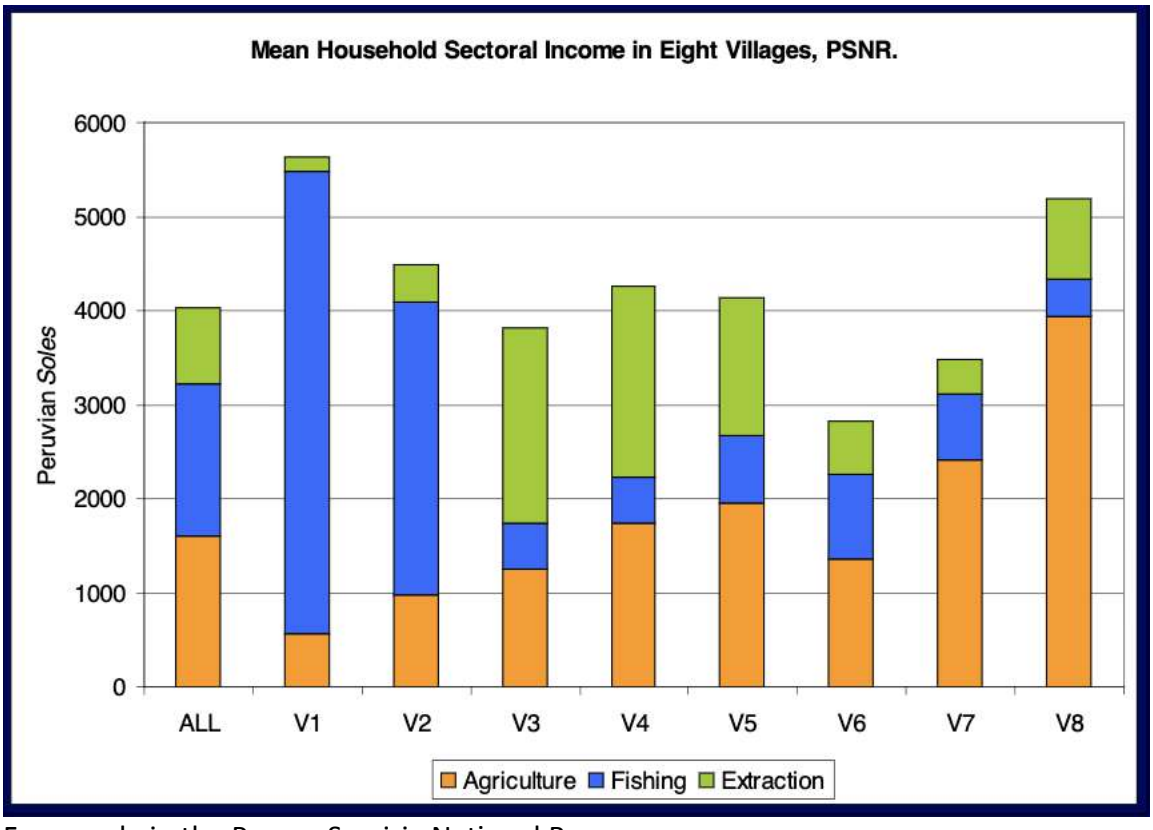
## Lecture 31: Amazon Livelihoods

**Rain forest peasants**

- 2 groups: Amerindians and folk peoples
- Live along Amazon and its tributaries
- Traditional agri and forest harvesting practices but produce in markets
- Poor in income and assets
- "Guardians of forest"

**Forest peasants are generalists**

- Backwoods people: peasants. A bit of everything (hunting, fishing, gathering)
- Livelihoods: mix of agriculture, fishing, hunting, forest product extraction (people practice pluriactivity)




For people in the Pacaya Samiria National Reserve

## Household Draw on Critical Resources, PSNR.

| | Producers' Share Top 5 | Share of Top Village |
|---|---|---|
| **Ornamental Fish** | **44%** | **53%** |
| **Moriche Palm Fruit** | **35%** | **57%** |
| **Game Meat** | **55%** | **54%** |
| ***Paiche*** | **67%** | **69%** |

Evidence of Hyper Specialization in types of agriculture, fishing and extraction
Ex: Top 5 producers in the villages for Paiche make of 67% of share

**Forest peasants are generalists**

- Households and communities specialize in distinct market products
- Use of natural resources and economic reliance highly heterogeneous
- Specialization is geographically contingent and reflection of high environmental diversity
- Need for careful targeting of conservation and development

**Rain forest communities are egalitarian**

- Persistent view that while difference inevitable, communities are generally egalitarian
- Small communities, few local authorities, no obvious class or status distinction
- Limited or no markets for Land, labour, or other inputs
- Cases: land, labour, crop seed

**Rain forest communities: access to land**

- Land can be highly unequally distributed in a village where land markets are absent
- Land inequality driven by differences in initial endowments and access to labour for clearing
- Land inequality decreased by land diversification and land transfers

**Rain forest communities: access to labour**

- Sources: household, wage labor, cooperative labour
- Wage labour: limited and very unequal
- Cooperative labour: work groups - Goods and drink in return
    - Reciprocity (labour as a trade for something)

**Rain forest communities: access to seed**

- Seeds and other planting material are key to
    - Agricultural productivity
    - Subsistence security
    - Market specialization
    - Agrobiodiversity
- A serious constraint in arid and mountainous regions, same in tropical forest.

**Traditional forest use as sustainable**

- Indigenous practices as models for sustainable agri and forest + path out of poverty
- Low input, simple tech, indigenous knowledge, stewardship ethic, and poor people
- Cases: charcoal (unsustainable) vs chambira palm (sustainable)

Non-timber forest products

- Sustainability of use not due to group identity or traditional practice but rather
    - Type of product being harvested
    - Circumstances of harvesting
    - Circumstances of harvester
- Conservation & development initiatives need to focus on mircofoundational logic of resource.

Rain forest is primary safety net

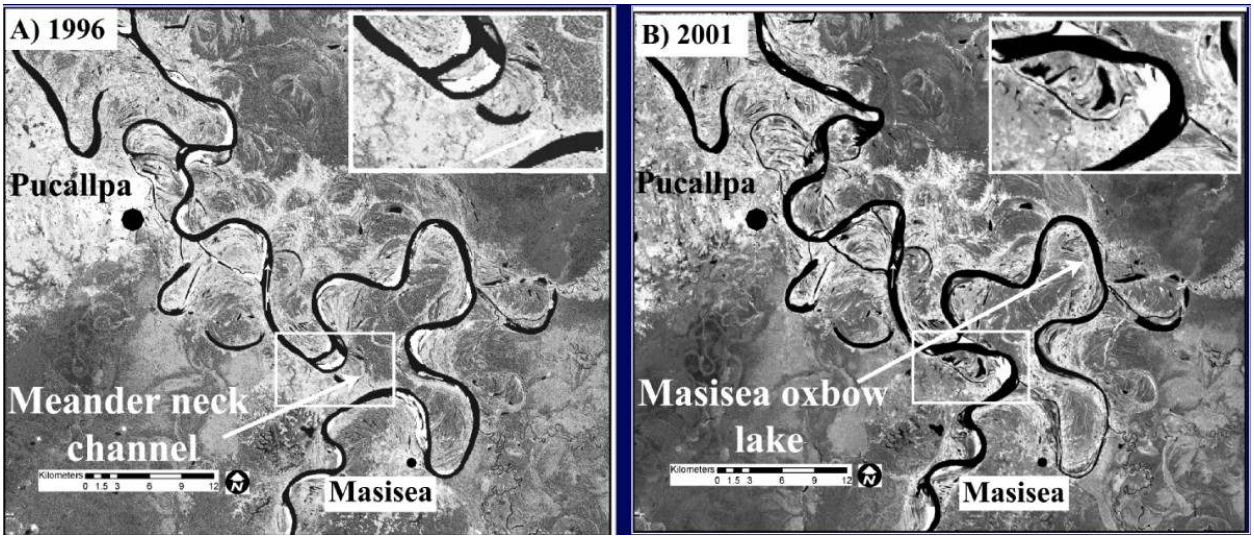
- Protecting the rain forest protects forest peoples
- Adversity and forest as safety net
    - Sustenance
    - Income smoothing

| | Ucayali River | | Marañón River | |
|---|---|---|---|---|
| | Major flood | Illness | Major flood | Illness |
| **Labour deployment** | | | | |
| Fishing | 56 | 7 | 42 | 13 |
| Forest Extraction | 11 | 0 | 26 | 8 |
| Cropping on higher ground | 0 | 0 | 26 | 0 |
| Wage labour | 34 | 10 | 10 | 11 |
| **Precautionary savings** | | | | |
| Food stock | 11 | 3 | 12 | 16 |
| Livestock | 6 | 21 | 15 | 55 |
| Financial Assets | 0 | 24 | 5 | 11 |
| **Other** | | | | |
| Formal credit | 0 | 0 | 0 | 3 |
| Informal credit | 0 | 7 | 0 | 3 |
| Mutual assistance | 0 | 24 | 3 | 24 |
| Migration | 22 | 0 | 6 | 0 |
| No. of observations | 18 | 29 | 78 | 38 |

**Table 3.** Adoption rates (%) of coping strategies among households experiencing flood and health shocks.

Rain forest is primary safety new

- Type of shock important for cooping strategy used
- Along tropical forest rivers: rivers, not forest as safety net
- Two solitudes: forestry and fisheries research and policy




10 guys with shovels and machetes diverted this massive water way

Human imprint on landscape is small

- People using simple tech with nature, massive changed to their environment
- Makes you ask “how natural is Amazonia?”
    - Forest
    - Soils
    - Rivers

- Challenges conservation discourse about protection of pristine environments and how to conserve

Poorest most vulnerable to environmental change

- Policy discourse over climate change and mitigation
- Rain forest poor people are vulnerable: physically, economically, and socially
- Disaster impact the poorest most, and recovery reassert prior inequalities
- Case: Hurrican Mitch (1998), Tawahka Sumu, Honduras (the poorest did much better then anyone, they were able to expand their land holdings).
    - Poors land holding increase 250% and land distribution became more equal
    - Re-establishment of agriculture production and income diversification
    - Endogenous institutional change: land tenure reform
        - Hybrid *blazing* ststem
        - Bottom up/ viral
    - Outcomes
        - Land inequality reduced
        - Deforestation rate lowered
        - Resilience to future hurricanes increased
- Environmental shocks can open window of opportunity for the poorest
- Fate of the forest poor not sealed; path dependency broken
- Endogenous institutional change critical for enabling poor to cope with climate-change shocks