

Economic Geography

The three sectors

Primary Sector

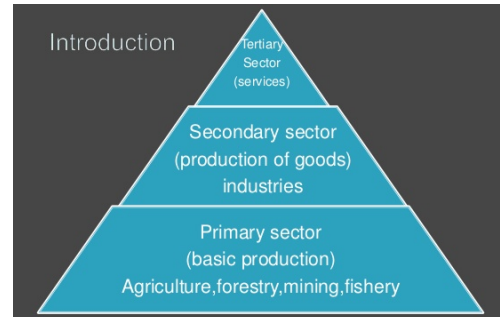
Raw material extraction and food production (mining, agriculture, forestry, and fishery operations)

Secondary sector

Construction industry, energy supply and trade

Third sector

(biggest especially in CH), Services like consulting,

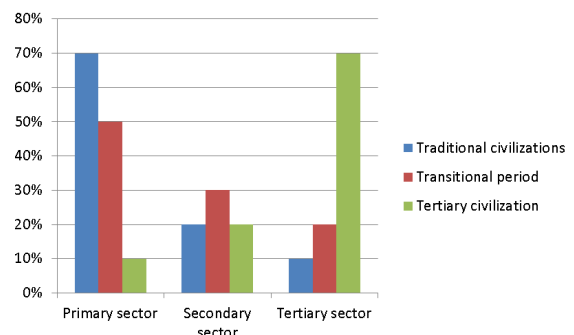


The model of Fourastié

support, travel, hospitality, bank, IT, health care, mass media, government, gambling, legal
In the development of every country the country will start with a big primary sector and then turn into a country with a big tertiary sector.

Primary Sector -> Tertiary Sector

Progression of the distribution of the workforce among the three sectors, according to Fourastié

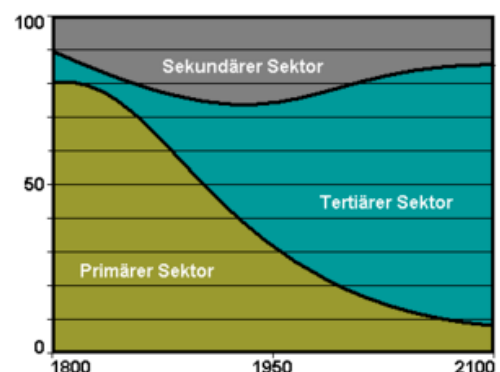


Growth of the Tertiary Sector:

- more education = bigger tertiary sector because more mental skills are required
- when first and second sectors have a higher efficiency the tertiary sector can grow (efficiency through less needed people through industrialisation and mechanisation -> no manual labour)
- when all primary needs of the Maslow pyramid are covered -> higher standard of living demands for more and different services
- it will not shrink because service jobs cannot all be automatised (today: partially true -> some jobs can be automatised)

Shrink of secondary sector:

- technological advances make it more efficient to produce -> less people are needed



Country not fitting into Fourastié theory:

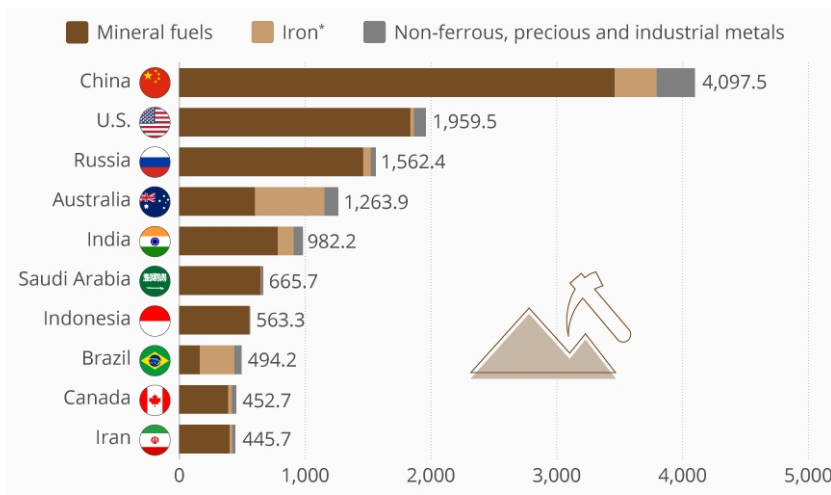
- Australia is a developed country but has a large mining sector (-> primary sector)
- same goes for Arab states

Important mining countries and agricultural countries

Primary Sector, Agriculture

- United States (GDP: 17 Mio. / Agri. 1%/ Indus. 19%/ Serv. 80%)
- China (GDP: 11 Mio. / Agri. 9%/ Indus. 41%/ Serv. 50%)
- Japan (GDP: 4.7 Mio. / Agri. 1%/ Indus. 28%/ Serv. 71%)
- Germany

Primary Sector, Mining



Outsourcing

= A company transferring a part of the production to another country

- > can be internationally, nationally, regionally
- ex. H&M clothing production in Bangladesh
- ex. main house of Credit Suisse in Zurich but everything else is outside of the city
- ex. UBS technology from India



Today it's easier

- better technology and communication (ex. conference via Skype)
- reduction of trade barriers -> cheaper to trade (ex. EU)
- less bureaucracy in countries like India

Advantages

- access to skilled expertise
- increase in efficiency
- saving money : cheaper production
- work around the clock: different time zones

Disadvantages/ Difficulties

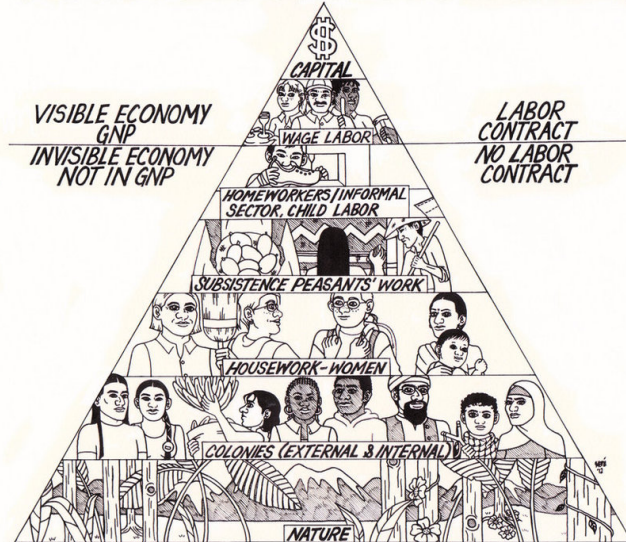
- avoiding restrictions from the home country
- communication between different cultures: different frame sets
- lost of total control: producing company doesn't know everything about the product
- quality issues
- suffering reputation (callcenters in India)

Iceberg Model

There is a big „**invisible part**“ in our economy -> subsurface component of the economy

- children working unofficially
- every work without being paid
- money from nature, we give nothing back (we don't pay for nature)
- housework
- informal sector
- Cooperation and Self Help business (p.101): ex. crisis in greek - people supported each other with free food markets/ zero waste society
- cottage industries

ICEBERG MODEL of CAPITALIST PATRIARCHAL ECONOMIES



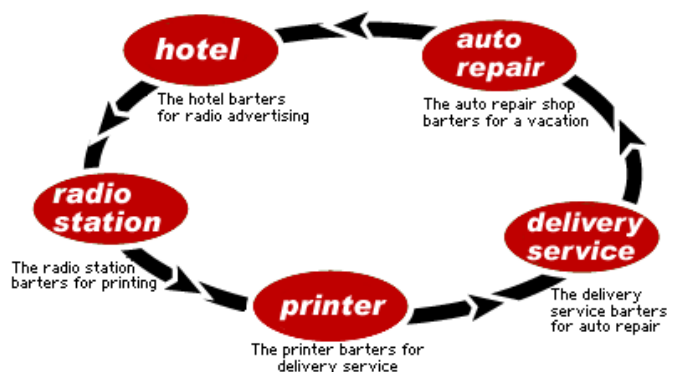
The Third System

= because not all societal needs are fulfilled anymore by either the private or public sector which lead to a growth of the shadow economy (third system)

3 basic segments:

- neighbour and self-help
- family economy
- all forms of illegal but necessary criminal economic activity

Organisation on a cooperative basis by the participants/ non-profit orientated / give and take relationships



Leslie A.

Increasing importance in Europe

- more people are excluded from the sectors
- more ecologically minded
- to save money. scissor tween rich and poor is increasing

Profiting people

- Barter exchange groups: ex. Berlin
- young families with not much money
- in general less wealthy people



Where does barter exchange make sense

- big cities with many available resources/ skilled people
- ex. Venezuela with the current economic system breaking down

Advantages of barter exchange

- money issues: need less money, if you don't want to rely on money
- a smaller group of participants
- lower risk of inflation
- better control of 'currency'
- everyone can participate and gets something back -> fair trade -> no speculation

Disadvantages of barter exchange

- reliance on other people
- smaller community means less resources to access
- less possibility to compare
- products from companies aren't bought anymore -> loss in profit

Why is such a type of economic activity not popular (yet) in Switzerland?

- there's not a lot of poverty
- Swiss people don't think that much about the environment
- because people are rich and Swiss people are not so neighbouring friendly, so to say the average Swiss person is very private
- it is not common for people to show what they have or don't have in Switzerland

Rare earth metals

Facts

- 80% global energy -> fuels through mining and drilling
- global energy needs = (are equivalent to) ca. 14 billion tonnes of hard coal
- raw material production has risen about 12% in the past 15 years
- DE: 950 tonnes mineral raw materials during a lifetime
- Deposits = where concentration of the raw material is high enough for profitable extraction
- large mining countries: Afrika, Australia, Ukraine
- rare earth metals aren't rare: extraction techniques are increasingly expensive, labour-intensive, environmentally hazardous
- there is no substitute for metal without loss of quality

Law from European Parliament 2012:

- for every 100 tons of electronic goods sold in the previous 3 years, 45 tons of e-waste must be collected

Use

- when recycled a primary becomes a secondary raw material
- 90% of rare-earth metals for the USA come from China -> because they have less environmental restrictions and cheaper labour forces
- rare earth metals are needed for renewal energy systems

Difficulties

- toxic chemicals, acids and workers have almost no protection
- air emissions with radioactive materials, and toxic material
- pollution stays in China
- China produces most rare earth metals
 - disadvantages: dependance, pollution and contamination
 - why: little regulations, cheap labor forces -> causing environmental pollution and major accidents and disasters

Soft coal mining

Ecological problems

- dislocation of the villages
- deforestation
- more surface rock and soil is drained regularly
- social conflicts -> town is built newly
- impact on natural groundwater balance -> they have to drill down groundwater: otherwise they would work underwater
- they artificially lower the groundwater: plants and animals don't get the water they need, that produces sulphuric acid
- surface water may not be able to drain any more
- a shift in the surface rock through underground mining
- subsidence -> under earth holes -> whole level of landscape sunk down

Mining in Switzerland

Glencore is the largest mining company in the world

- it's located in Zug because of the low taxes
- because of the "Bankgeheimnis" in Switzerland
- supported by Zug
- in the northern part of Switzerland: Salt mining: drill holes into the ground and pump out saltwater and then dry it
- some marble mining in Ticino

- gravel: near Flüelen, Eschenbach
- used to be a gold mine near Lugano: problem with high wages it is not worth it to mine it
- coal mining near Horgen, very small, not worth to extract with swiss wages

Reasons: Little mining in Switzerland

- environmental restrictions
- high wages
- dense population: inhabitants can inhibit the mining (democracy..)

Reasons: mining companies are unknown to the public

- they don't need the public attention
- they don't sell products to private people -> no advertisement
- they don't want the attention -> habit of work

Cottage and backyard industries

Cottage industry

= small family businesses in residential districts, employ primarily family members
 -> can be informal
 ex. motorcycle garage, copy shops

Backyard industry

= small production operations located in the rear courtyards of urban housing blocks
 -> less formal, unofficial
 ex. Italy: Chinese people coming to Italy to produce in garages Prada products

Weber's Theory of Industrial Location

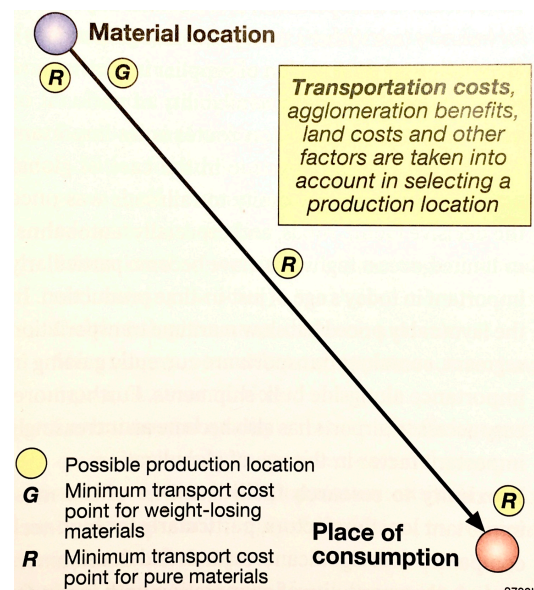
Assumptions

- equal cost of land everywhere
- assumes one market for the product to be sold
- transportation is very expensive
- no geographical challenges

Two types of industries

G: minimum transport cost point for products that are lighter after manufacturing (ex. crisps)
 -> easier to transport after manufacturing
 -> production should be near the location of the rare materials (ex. potatoes)
 ex. steel: two raw materials are needed to produce that: iron and coal

R: Minimum transport cost point for pure materials/
 products that became heavier after manufacturing
 -> production closer to the market
 ex. plastic, textile, beer (water, grain -> heavy bottles)



3 factors for a production site

- low transportation costs
- low labour costs
- agglomeration benefits (having similar businesses around it -> knowhow)

Out of date

- > he assumes that workers are available everywhere for the same price
- > transportation got cheaper
- > production got cheaper

Soft and hard location factors for an industry

Soft location factors

- cannot be calculated precisely/ difficult to quantify
 - social aspects
 - psychological aspects

Example: chemical industry in Basel

Factors that influence the quality of the local living environment:

- Housing Quality: availability of good, affordable housing with access to traffic and transportation routes
Basel: better than outside of Switzerland
- Recreation value: available things to do during leisure time
Basel: perfect, city,
- Shopping and Culture:
Basel: Fasnacht, Europapark, border to France and Germany, Supermarkets, cinemas, food markets
- The mentality of locals: attitude of social openness, hospitality, friendliness to children , acceptance of strangers
Basel: open-minded people
- Environmental quality: presence of sufficient green spaces, recreational areas
Basel: Schwarzwald, greenery, Rhein
- Image: strong positive image such as state or national capital
Basel: no problems, clean
- educational opportunities: range of schools, training facilities
Basel: university, schools, training facilities

Hard location factors

- factors can be calculated and reflect directly on the company's balance sheet

Example: chemical industry in Basel

- Raw material supply: via the Rhein -> not optimum but the best place in Switzerland: ships are cheaper than via land
- land/ real estate availability: not so great

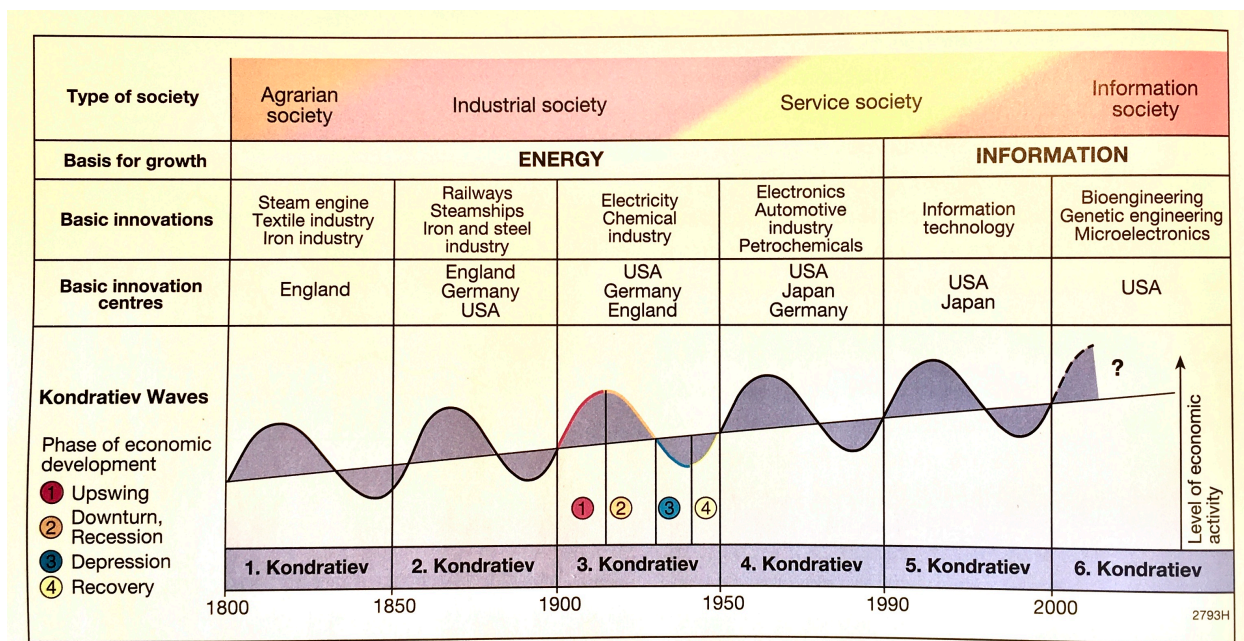
- Transportation infrastructure: good railway towards Italy, Frankfurt, Rhein to transport large volumes, airport nearby, excellent motorways
- proximity to research facilities: Zurich, Bern, universities
- labour supply: students, workers from three countries
- Market volume: EU, airport, large volume
- Availability of services: excellent
- Environmental regulations: challenging for the company to fulfil
- Taxes/ fees: better than in France or Germany
- Agglomeration benefits: many medical companies: get raw material cheaper, interchange the workers

-> Basel is a great place for the chemical industry

Kondratiev Waves

Kondratiev waves (also called super cycles) are cycle-like phenomena in the modern world economy.

The period of the wave averages at fifty years, the cycles consist of alternating intervals between high sectoral growth and intervals of relatively slow growth.



4 Phases of economic development

1. Prosperity/ Upswing: rise in the economy if the invention is known
2. Recession/downturn: the idea becomes obsolete, there might be newer inventions, also bubbles -> overrating of the idea (ex. IT), or a general crisis, basic innovation is produced in other places, hope but not enough understanding of the idea
3. Depression: decrease of production
4. Recovery/ Improvement: if the are is reinvented (ex. Ruhrarea -> recovery due to new technological advances)

Consequences for a region of a downturn

- unemployment
- outdated infrastructure
- lost of economic power
- social issues -> rising crime rate
- fabrication of the innovation gets to another point

ex. big industrial revolution -> northern Europe, Ruhrarea with the steel industry

Ex. new super cycle: AI, genetic engineering

The regions which will profit: Basel, Zurich, Geneva

Cycles in History

- industrial revolution 1771: steam engine (fewer workers needed, factories ran by the steam engines -> everything became cheaper and more affordable of the people)
- The age of steam and railways 1829 (many people lost their jobs/ everyone could travel)
- the age of steel and heavy engineering 1875: enabling the WW (production of high-quality steel)
- the age of oil, electricity, the automobile and mass production 1908: the economy is oil-dependent, more products, sinking the price of cars -> basic innovation was the oil derrick
- the age of information and telecommunications 1971: basic innovation was the transistor (regulates the flow of electricity)
- today: basic innovation of the AI: the machine learning

Some terms

Growth Industries

- companies that have a strong impact on the local community
- ex. in CH: Google, blockchain in Zug

Global Sourcing

- spreading parts of your business on a global scale to minimise costs
- production where it is cheapest
- ex. Glencore

Global Players

- the most crucial roles of a business that have the most global influence
- ex. Google, coca-cola, Mcdonalds

Extended Workbenches

- low wage labour countries
- outsourcing
- Problem: low standards and wages: bad for the reputation and moral/ different mindset about quality standards

Joint Ventures

- ex Volkswagen in China
- two different companies from two different countries produce something together
- Benefits: more people working together -> more knowhow and workers, access to new resources and other countries/ a larger market volume/ sometimes to avoid taxes

Footloose industry

- an industry that is not reliant on any raw materials on a large scale
- ex. Computer chips, pharmaceutical sector (ex. Rosch), clothing, watch production in CH, online platforms: Google, Facebook, IT industry
- ex. watch sector: "le french Montaigne" -> tax-free area for watch industries - in favour of the Huguenots in the Jurassic mountains

some notes from the lessons

Product life cycle

1. At which point, a new product starts to pay off?
 - the initial development and research needs to be paid, and if then the net gain of the investments is bigger, profit starts
2. What might be reasons that profits are not that high any more at the phase of maturity?
 - because of the hype, everyone will buy it
 - at the beginning there is no competition
 - if it is not enough developed they have to face the problems of the product later on
3. Why do most recent electronic devices have short life cycles?
 - planned obsolescent: artificial manipulation of the battery -> people have to buy more
4. What could be done to extend such a cycle?
 - updates, additional gadgets -> facelift
 - switch the targeted group
5. What finishes the life cycle of a product?
 - out of date: new adjustments wouldn't make any more sense
 - other products take over (ex. iPod -> iPhone/ Camera -> smartphone)

Cluster

- Basel is an example of a biotech, pharma Medtech and nanotech cluster in Switzerland

4 names and their products of Swiss companies from Basel:

- Raiffeisen: bank
- Syngenta (Agricultural products like seeds and chemicals)
- Lonza (a variety of life sciences products)
- Roche and Novartis (pharmaceutical products)
- Synthes (medical devices)

What are the reasons that Volkswagen produces cars in Shanghai?

- Produce cheaper with higher quality. high skilled workers
- the main market is China
- joint venture with Chinese factories: to sell VW in China they needed to produce them

Why is the headquarter of Volkswagen still in Germany?

- The knowhow and the experience are in Germany it is a German brand (tradition): it represents Germany -> represents good quality
- skilled workers: engineers etc.
- national pride: the government wants them in Germany