Module 2: Capitalism

- What is capitalism?
  - Is it the natural system which simply arises from basic human instinct, or is it just one economic system among many, which just happens to be dominant at the moment?
  - Is it a sociopolitical reality, essentially referring to structures of power, the relationships between people who own things and people who don't?
    - Social pyramid
  - Is it an economic reality, referring simply to the way our economy works (as opposed to other ways that it could)
  - Is it something else entirely
  - Surplus, Profit, Competition
- Major elements of capitalism
  - Class division, profit motive, free markets
- <u>The economic dimension of capitalism</u>
  - Capitalism is an economic system in which goods are owned by private individuals or businesses
    - Production based on supply and demand in the free market (as opposed to a centrally-planned system)
  - In its pure form, capitalism allows private individuals to produce, buy, invest and sell whatever and however they see fit
    - In reality, most modern countries practice a mixed system in which governments regulate some private activity
  - Hence, the concept private property is central to understanding capitalism
    - The only legitimate means of transferring private property is through trade, gifts or inheritance
    - Private property promotes efficiency by providing its owner with a strong incentive to maximize its value
    - To insure that the value of private property belongs to its owner, the central role of a government in a capitalist system is thus to protect private property, to promote confidence
      - Police, judicial system
- Technically private property produce profits. How?
  - By definition, individuals only enter a voluntary exchange of private property when they believe the exchange will benefit them. Therefore, both the buyer and seller obtain benefits from the transaction
    - Both profiting from transaction
  - Therefore, capitalist transactions can be justified both by utilitarian as well as libertarian arguments!
  - **Profits** indicate **increased value** (less valuable input transformed into more valuable outputs through transaction), while losses indicate the opposite
  - Because both parties profit from voluntary exchanges, capitalism provokes capital **accumulation**.
    - This is known as economic growth
    - It is not a zero sum game
      - Profits and losses do not compensate for each other
      - Both parties increase their value (no one looses)
    - This is enormous! No per capita economic growth from 10 000BCE until the rise of capitalism, in the 18th-19th centuries
      - GDP used to be the same year after year

  - Nets of value = price bought/sold- value to the person
- The Philosophical foundations of capitalism
  - There are two fundamental philosophical arguments for free market capitalism
    - Liberal (Libertarian) argument: interfering with the free market (individual's freedom to do what they please with their belongings) violates their freedom
    - Utilitarian: capitalism generates general welfare: When two people make a deal, they are both more well off
      - As long as their trade makes them better off without hurting anyone else, it must increase overall utility
    - However, modern economic thought emerged with a hugely influential philosopher: Adam Smith (1723-1790)
      - People do things for their own interest
      - The Wealth of Nations (1776)
      - Invention of the notion of an Invisible Hand
  - So, a somewhat purist, Smithian view of capitalism would imply that only the search for personal interest, and economic growth through business transactions, can insure general public welfare
    - Conversely, any and all obstacles to such pure market mechanisms and dimish general public welfare
  - "The Social Responsibility of Business is to Increase its Profits" by Milton Friedman (1970)
    - Milton Friedman: => most influential economist in the second half of the 20th century (The Economist) => Economic advisor to President Ronald Reagan and Margaret Thatcher
    - Primary figure of "monetarist" economic policy, closely associated to the neoliberal turn of the 1980s decade.
    - Idea of social responsibility is wrong => companies should only increase their profit
      - Social responsibility = communism
      - Responsibility of company => only to increase profits
  - Some problems with capitalism
    - 1. Capitalism tends to underproduce public goods
      - What is a public good? Some examples?
        - Public good => consumed by everyone without profiting anyone
          - Public transportation (would have less if private) => reduce traffic, cleaner air; education=> educated work force, free vaccinations=>healthy society, arts, sports and perhaps mostly a clean environment
      - Positive externalities
        - Externalities: Indirect consequences => clean air, reduce traffic, reduce pollution
    - 2. Under-pricing & over-consumption of natural resources
      - In a competitive capitalist economy, prices reflect the cost of producing them, sending the right signal to consumer
      - Does not work with non renewable objects or very slowly renewable
        - Works with large quantity of product but not for non-renewable or slowly renewable products
        - Sustainable consumption
        - Fossil fuels, fish stock, forest product
        - For these products, the market consumes faster than resources can replenish (overconsumption) because they are under-priced
    - 3. Capitalism produces negative externalities

            - A negative externality is a cost that is suffered by a third party as a result of an economic transaction
                - Some examples: playing loud music at night, owning a car,building power lines, and of course, all form of pollution
                - This means that again, resources are underprices when they don't fully integrate all of there costs (to the environment, especially)
            - Capitalist rebuttal: “but there wouldn't be externalities if ALL resources were allocated as private property”
                - Sure but is it realistic to privatize all oceans, lakes, rivers, forests, the atmosphere, public health
                - Is it even desirable
            - Companies and capitalists usually complain when regulations are imposed to limit externalities, arguing that it makes them less competitive
                - According to Erik Olin Wright, what does this complaint amount to?
        - 4. Capitalism is fundamentally biased towards consumerism
            - Increase of productivity (Output÷ input)can lead to reduced input or increased output
                - The profit motive naturally pushed companies to the latter
                - Hence advertisement
        - 5. Capitalism is environmentally destructive, in 3 ways
            - 1. Negative externalities, companies ignore environmental cost of their production
            - 2. Non-renewable resources consistently underpriced
            - 3. Bias towards consumerism rather than reduced inputs
- The History of Capitalism
    - The Industrial Revolution began in the UK. Why?
        - Very productive agriculture
            - No longer need everyone to work in the field => more people moving towards city
        - Increased buying power of the population
            - More dynamic economy => birth of buying class
            - Wealth of United Kingdom
        - Profitable sugar plantations in the Caribbean
            - Lots of capital pouring into the UK => money that can be invested
        - Domination of the slave trade
            - More money in UK
        - Powerful navy to protect international trade
            - Protected trade route and commercial interests
        - Aggressive economic policy (import tariffs)
            - Cheap resources from colonies and sell their product to colonies very expensive
        - Extensive network of rivers and coastline
            - Easy to transport merchandise
        - Lastly, but most importantly, large deposits of fossil fuel (coal), the primary fuel of industry
            - British discovered enormous deposits of coal right on the surface in the UK
            - France not a lot of coal and very deep under the ground
            - Many other valuables resources as well, like iron &other metal
    - Industrialization begins in the textile (garment) industry
        - One of the biggest industry of the world => lots of money potential
        - The “putting-out” economic system

    - Merchants “loan” resources to women who work from their home then take a share of profits
    - Cotton loaned to spinners
    - Women would spin the cotton in their free time to make threads
    - Give back to merchants for a profit
    - Yarn loaned to weavers (other woman who would spin it)
  - Problem! (Opportunity)
    - Traditional spinning wheel is extremely inefficient
      - Five spinners for every weaver
      - Weaver not that efficient either
      - Very slow
    - 1765: The Spinning Jenny by James Hargreaves
      - Big machines
      - Operated by hand, up to 10x faster than spinning wheel
      - Spinning wheels were at people’s houses but these machines were in the original factories
    - 1769: The “Water Frame” by Richard Arkwright
      - 100s of times fasted than spinning wheel
      - Cannot be operated by hand! Solution?
      - Factories near rivers => for the water wheels
- So between, 1750 and the 1770s, the putting-out system is gradually abandoned in favour of large riverside factories
  - Originally textile factories were near rivers and not in cities
  - Still, there is an energy problem in Britain. Why?
- Since the dawn of civilization, until the 18th century, animal strength and firewood are the two dominant sources of energy (beside human strength)
  - Even in metallurgy, wood coals are the source of heat
- With Britain’s booming economy and increasing population, wood is now very hard to come by!
  - This would be made even worse with the Napoleonic wars
    - Napoleon blocks all European ports from trading with Britain
- A possible solution could be coal, but its mining is complicated, inefficient, and very expensive
  - Mines would fill up with water => couldn't get it out of the ground
  - Animal powered pump
    - Animals were very expensive so it was not economically smart
  - To drain coal mines efficiently, there is a race between inventors to come of with better pumps
    - Thomas Savery’s engine (1698) (name and date not important)
    - Thomas Newcomen’s engine (1705)
    - James Watt’s engine (1763)
      - Steam engine
      - First truly efficient steam engine pump
      - Coal became cheap
      - By 1780s, Watts steam engine is used in many other sectors, beside pumping coal mines:
        - Cotton textile factories, flour mills, malt mills, pottery mills, sugar refineries, iron industry
          - Rivers were unpredictable, steam engine more predictable
        - Iron production explodes
          - This allows for production of more engines, eventually rails, steel beams, etc

- Factories no longer need to be built along rivers! They can now be built in the heart of cities, where the workforce is!
  - Factories employ many many people
  - Cities became economic hubs
  - Very large cities
  - London=> 1 million inhabitants first time since Roman Empire
- Here we start to see the principles of economic growth at work! We can see the positive feedback loops!
  - Self reinforcing wheel
  - The consequence helps the cause
  - Ex: Number of cattle running => Overall level of panic => more cattle panic etc
  - Need coal => Must pump water out of coal mines => Invent engine pumps that function on coal => Find more applications for steam engines => Need more coal
    - Basis of economic growth
- Very quickly, steam engines provoke a revolution in transportation, as well as industry
  - Locomotives
    - Causes explosion in rail building industry
  - Steamships
    - Complete naval revolution
      - Drastic reduction in shipping costs
      - Revolution in naval warfare
- Dramatic economic consequences
- Another positive feedback loop
  - Steam engine becomes available=> Steam engine applied to transportation => Shipping costs reduce => Increased demand for coal, steel and engines => Build more engines, extract more coal
  - Beginning of economic growth
- Throughout 19th century, British Industrial Revolution becomes Global Industrial Revolution
  - First, USA, then Germany, France, Russia, Italy, etc
  - Eventually, Asia, Latin America, rest of World
- Then, Second Industrial Revolution (Late 19th, early 20th)
  - Electricity
  - Advances in chemistry
  - Replaceable parts
  - Rubber
  - Petroleum
  - Automobile
  - Telecommunications
- A Third Industrial Revolution
  - Debatable because did not create huge economic growth
  - internet
- A Fourth Industrial Revolution
  - Artificial intelligence