ECONOMICS I.

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week 1

What is economics?

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The nature and scope of economics

Economics has several schools. BUT this course will only deal with its *main stream*, the neoclassical line of thinking.

1 Subject of economics

What is economics?

- Science
  - Goal:
    - to *explain* things that have already happened.
    - to *forecast* things that have not yet happened.
  - The "What is science" question is very hard to answer. The philosophy of science deals with such questions. And WE DO NOT!
- Social science
  - Deals with human behavior and human interaction
  - According to standard classification social sciences are: Sociology, Economics, Anthropology, Political Science, Psychology
  - Middling cases: (Human)ethology, Physiology, (Socio)biology, (Neuro)psychology?
  - In reality, it is very hard to say what social science is, to classify a science based only on its subject.
    - The subject of economics is wealth or welfare, or decisions, or well-being, or income distribution, or ...?
- Its a way of thinking or to put it differently: a METHOD to study the phenomena around us, using only a handful of principles
  - This way we do not bind ourselves, which makes our life easier
  - This could include, for instance, the study of animal behavior ...
  - We follow this approach here!!!

Types of economic questions in a narrower sense

- Should the CEO of a company invest in a new assembly line, and thus increase production capacity, or equip a new laboratory to develop a new product? (How will s/he decide?)
- If someone inherits a larger sum of money, should s/he buy stocks, or buy some property instead? (How will s/he decide?)
- Should a local government build a new school or a new pensioners home? (How will it decide?)

Types of economic questions in a broader sense

- Should I become a doctor, an engineer, a lawyer or an economist? (How will I decide?)
- Who should I marry? (How will I decide?)
- Should I go for a beer or study for the next day economics exam? (How will I decide?)

What were the common things in all of the answers above?

- We have compared the benefits and the costs (in a broader sense).

  Note 1.1. *We will try to follow this approach in general: economics is a social science, which tries to come up with general hypotheses and regularities for the members of the society, unlike e.g. some subdisciplines of anthropology.*

- We are talking about *scarce resources*

  Note 1.2. *If there is no scarcity, there is nothing to decide about. A problem becomes an economic problem if SCARCITY holds.*

- Scarcity will make people to decide!

  Note 1.3. *People can decide in many ways: e.g. randomly, submitting ourselves to a higher force, by the "oracle method" ...*

- But we assume rational decision making.

  Statement 1.4. Rationality postulate *(for now) intuitively: economic actors will look at costs and benefits and within their set of options will choose the best(s).*

- When making a decision, we also have to take different possibilities into account. Among these alternative possibilities we have to look at the one with the highest *opportunity cost.*
- Every time we neglect some (not necessarily unimportant) factors (which ones?), while emphasizing others: we make MODELS!
- We build models based on our assumptions (e.g. scarcity, rationality, costs-benefit analysis), and draw conclusions using these models.

Note 1.5. *The economic view of the human being, the HOMO OECONOMICUS (a rational man following his best economic interest) is a simplification as well. This however provides a well functioning tool to explain certain phenomena, but no-one thinks that people are only like this.*

Note 1.6. *A model necessarily contains some unrealistic elements. But how could we use a map that is a perfect copy of reality?*

2 Fundamental notions of economics

2.1 "Economic man"

Is the Homo Oeconomicus a useful model? Are people rational?

E.g.: (HGH example 1.3) rational drivers

TWO-CAR ACCIDENTS WITH/WITHOUT AIRBAGS
(VIRGINIA, 1993)

	With airbags	Without airbags
Number of cars	30 (50 percent)	30 (50 percent)
Number of “initiators”	22 (73 percent)	8 (27 percent)

Adapted from Peterson et al., p. 262.

E.g.: (HGH example 1.4) Rational malingering

- What are the goals of self-interest?

  Assumption 2.1. *The goals of the Homo Oeconomicus stem from some sort of a taste.*

- Individual goals, norms and tastes can differ extensively.
  - culture (eating beef + child protection versus protecting cattle + infanticide (HGH 1.2))
  - subculture (Who would cut the throat of a chicken?)
  - individuals (Who likes spinach?)

- Individual goals, norms and tastes could be unstable.
  - "People change ... "
  - Advertisements, political campaigns... etc.

Assumption 2.2. *We assume that the Homo Oeconomicus has a stable preference ordering.*

Note 2.3. *Benevolnence, malignancy, altruism, etc. can be a part of the preferences. How?*

Note 2.4. *Rationality $\neq$ Omniscience. But rational decision is possible in situations with no perfect or uncertain information.*

2.2 Allocation of goods and resources

Allocation mechanisms

E.g.: (HGH 1.4) Consider the allocation of seats in your classroom. Some seats are more desirable than others. The possible rules of allocation are:

- First come first served (non market).
- The professor assign the seats on any basis (non market).
- The students might elect a committee to assign the seats (non market).
- It can depend on our ability to jostle and trample on others (non market).
- Auction (market)

example: (HGH 1.9) Bidding for faculty offices at the Arizona State University

- Management Department: based on seniority (non market)
- Finance Department: first come first served (non market)
- Statistics Department: randomly (throwing the dice) (non market)
- Economics Department: auction (market)

2.3 Market interactions

Characteristics of market interactions

- Reciprocity and free-will
- The most important information is transmitted by price

  Definition 2.5. *The* price *is the term on which goods or resources are exchanged.*

  - The buyers must be willing to pay the market price in order to get the given product, while those can sell the product, who are willing to give it up for the same price.

  - From the consumers side: those will get the goods, who pay the most.
  - From the sellers side: prices will define production.
  - As soon as the price exceeds the costs of production, it becomes profitable to produce more. Not only those on the market will produce more, but other will also be inclined to enter the market.

Are market transactions really voluntary?

- Can a poor man refuse a job offer, which pays very badly, but at least s/he could buy bread from the money earned. Is it not "wage-slavery"?
- Or take a bandit threatening his victim: "Money or life?" Is it a voluntary exchange?
- How could we differentiate the bandits coercive action with the market exchange?

Statement 2.6. *The key (for now) intuitively is to clarify the rights and "rules of the game" (legal framework, norms, etc.).*

3 Economics as social science

3.1 Pursuing self interest

Intended and unintended consequences of decisions

Decisions have intended and unintended consequences which can affect other decision makers as well.

- If I buy a bred and eat it, then the intended consequence of this decision is that I will not be hungry any more. But an unintended consequence will be that the baker will have money to buy clothes, or that I increase the GDP of the country, I help to boost the economy of the country and thus indirectly I help the poor; however I have only followed my own interest.
- If everyone seeks their own self interest in a hypermarket they will stand in the shortest line. If we know this, then we do not have to search for the shortest line (and walk from one side of the building to the other), because we can trust that lines there will be just as long as they are around us. So, although everyone was following self interest, everyone else profited from this.
- We want to buy a sandwich at the lake Balaton at the lake shore. There are many bars and many people. Is it worth to look at the price of the sandwich at each bar to find the cheapest?

What was the common in the arguments above?

- We have used the principle of *methodological individualism*: we trace back social behavior (how lines form in hypermarkets, how sandwich prices are set, etc.) to individual behavior.

  Note 3.1. *This principle is used widely in economics, and also in other social sciences.*

- Following self interest produced an advantageous state for the whole society (the principle of *"the invisible hand"*)

3.2 System of incentives

Market failures

Pursuing self interest is not always beneficial for the society.

- Why do the Austrian leather preparing company pollute the Raba? Who will pay the costs, and who gets the benefits?
- Why do the drivers of the long distance coaches sell tickets under the official price (without a receipt)? What are the consequences of this action?

So for example if

- many people consumes a product not only one
- the actors have more impact on each other than in a simple exchange (external effects)
- the informational structure is special (informational asymmetry)

Note 3.2. *To clarify the rights and "rules of the game" (legal framework, norms, etc.) help in these cases (market failures) as well.*

Note 3.3. *Unfortunately, this can not always be done perfectly, or would cost too much.*

Why can economies never be perfectly "bleached"? But economic actors react to *incentives*, which can be modified case-by-case.

- What makes the criminal to steal?
- And the BKV not to waste resources?
- And the governments to do good economic policy?
- And the companies to produce/raise prices?
- And the consumer to buy from credit?

How can these be modified so that societal costs are lower? And what are the costs of these? What other types of incentives can be created?

- E.g.: King Solomon and the child cut in half.

Note 3.4. *The MARKET MECHANISM is a sort of incentive system (which needs very few information and is cost-effective).*

3.3 Positive versus Normative analysis

"IS" versus "OUGHT"

- Not all incentive system allocates goods and resources the same way.
- "Market mechanism is not just, it favors the rich. So this *should not* dominate."
- What does "just" mean?
  - Equal distribution?
  - Distribution by effort?
  - Distribution by needs?
  - etc.
- This is a hard philosophical dilemma, with no consensus around it. We *do not* deal with this question.
- We will follow a positive line of analysis.

Does it matter whether we use positive or normative approach when considering the following statements? Do not mix the two approaches!

4 The economic system

4.1 Decision-making agents in the Economy

Elements of the economic system

- Individuals (consumers): The basic units of the economy. They decide over what and how much to consume and what sort of and how much resource to offer in exchange.
- Business firms (companies, producers): artificial units, consisting of people, who cooperate in order to produce - to transform resources into goods or services demanded by the people. So each company is owned by one or more people, directly or indirectly.
- Governments: artificial units, which we consider to be a sum of the people. Its job is to set the legal framework for the economy and to redistribute (a part of) the income. Governmental decisions are based on political and not market mechanisms.
- Other organizations: trade unions, cartels, clubs, foundations, churches, etc. (these can usually be traced back to one of the above types).

4.2 Object of economic decisions

Elements of the economic system

- The objects of economic decisions are commodities or goods. These terms are usually understood to include not only merchandize but also services. Services represent a flow of benefits over a period of time, which might be derived either from physical goods (e.g. shelter provided by a house) or else from human activities (e.g. the entertainment provided by a concert).

4.3 Economic activities

Elements of the economic system

- Economic activities:
  - Consumption:
    * the ultimate economic activity
    * in a sense the explanation for all the others.
    * In their consumption decisions, individuals choose their goods they like the best, given their incomes and the prices they face.
  - Production
    * transform resources into consumable goods.

    Note 4.1. *To be economically rational, production should represent conversion from less desired to a more desired configuration.*
  - Exchange (trade)
    * Like production it is also a kind of conversion: sacrifice of some goods or resources for others.
    * It does not create of destroy goods, but only reshuffles them among the different decision making agents.

Note 4.2. *From a social point of view exchange is distinguished from production by the fact that the totals of commodities are unaffected.*

Several model can be used to explain the same phenomenon, usually. We can treat a phenomena as consumption, or production or even as an exchange. It depends on what sort of features of that phenomena we would like to explain. Let us identify the models in the following cases:

- I am going to have lunch at the cafeteria.
- I run a cafeteria.
- Bilking on the bus or buying a ticket.

Note 4.3. *Depending on what we use to describe a phenomena sets (more-or-less) what we take to be defined inside the model, and what are the exogenous factors.*

5 Different levels of analysis

Microeconomics versus Macroeconomics

- A typical microeconomic problem: if a company lowers its price by 5 percent on a market, how would its profit change?
- A typical macroeconomic problem: if the government can lower unemployment by 5 percent, how would the price level change?

  That is

- A *microeconomics* deals with the decisions of well defined economic units, separate markets and their interactions.
- A *macroeconomics* deals with the economy as a whole, with aggregated markets and their interaction.

Note 5.1. *Is there a fundamental difference between the methodology of micro- and macroeconomics? If we take our principles seriously then* there is not*! The two has to be in harmony, so microeconomics founds macroeconomics.*

Fields and borderlands of economics

Microeconomics	Macroeconomics
Market theory and marketing,	Development economics
Business finance	Bank finance
Business theory	Regional economics
Economic regulation and	
Economic policy	

Where do data come from for the models? Statistics, econometrics, Accounting, etc.

Note 5.2. *Microeconomics, due to its special logic and use of notions, can be considered as the language for all economic subjects. Microeconomics will be used in almost all of the economic subjects you will study.*

6 Summary

Summary

- Economics as science and as method
- Principles
  - Cost benefit comparison (based on opportunity cost)
  - Scarcity
  - Rationality postulate
  - Modeling

- Economics as social science
  - Following self interest
  - Allocation mechanisms
  - Market interactions
  - Intended and unintended consequences
  - Market failures
  - System of incentives
  - Positive versus normative approach
- Fundamental modeling framework
  - Homo Oeconomicus
  - Production
  - Consumption
  - Exchange
- Fields of economics