

## Principles of Microeconomics - Chapter 1

- economics is about the study of *choice*, not money.
- **optimization**: the people try to optimize, or choose the best feasible option out of many options.
  - ex: you optimize your time by coming to class instead of doing something else, like sleeping or hanging out with your friends.
- **equilibrium**: when everyone is optimizing, nobody would benefit by changing his or her behavior.
- **empiricism**: analysis that uses data. this data is used by economists to determine whether economic theories about human behavior match up with actual human behavior.
- pretty much every moment in life can be related back to *choice*.
- we always want to be thinking about what the *best choice is*.
- **economic agent**: individual consumers or firms, any entity that makes choices.
  - ex: could be a specific person, a group of people; like the government or a country, or a firm.
- **scarce resources**: things that people want, where the quantity that people want exceeds what is available. this is what causes the people to optimize and make the best option. there are limited resources —> scarcity
- scarcity of resources is the reason that people want to optimize.
- economics is the study of how economic agents choose to allocate scarce resources and how these choices affect society.
  - **positive economics**: describes what people actually do.
  - **normative economics**: prescribes what people ought to do. (subjective statements)
- **microeconomics**: small scope economics. the study of individual behavior. whether it be an individual person, firm, or group.
- **macroeconomics**: large scope economics. the study of a whole economy. could be as large as an entire nation or continent.

## 1.2 principles of economics

### three principles of economics:

1. *optimization* = trying to choose the best feasible option with given information
2. *equilibrium* = when everyone is optimizing; no one would be better off with a different choice
3. *empiricism* = using data to figure out answers to interesting economic questions

- it is nearly impossible to have all of the relevant information about a given option. when you optimize, you make the best choice based on what information you have about your options. it is also based on the different opportunities you have.

- **feasibility & budget constraint:** also play into your optimization and opportunity cost.

ex: what is the cost of using Facebook?

- you give up your time when you're sitting on Facebook. you also have to buy a device that hooks you up to Facebook, and get access to Facebook as well. (internet access, or going to a place with internet access)

- **trade-off:** arises when an economic agent has to give up one thing in order to get something else.

- **budget constraint:** shows the goods or services that a consumer can choose given their limited budget. ex: money or time.

- **opportunity cost:** the best alternative use of a resource.

ex: list of alternatives to using Facebook:

1. working at a part time job
2. sleeping
3. working on a problem set
4. opportunity cost of using Facebook: working at a part time job. —> this is the answer bc the opportunity cost is the cost of the NEXT BEST alternative to what you decide to do.

**optimization:** the best feasible option, given budget constraint.

- **cost-benefit analysis** is equivalent to optimization.

- **evidence-based economics:** what is the cost of using Facebook? —> we want to estimate the cost of using Facebook. Think about factors such as, minimum wage. How much money could you be making per hour if you were to work instead of sitting on Facebook? If you spend 2 hours per day on Facebook and minimum wage is \$8 an hour.. your opportunity cost is \$16.