> What is Microeconomics? - `Microeconomics is the study of how individual and firms make decisions in world of scarcity`.

1. `Scarcity` is what `drives microeconomics`.
2. `Constraint optimization` exercises where economic agents (firms or individuals) try to make themselves as well off as possible given their constraints.
3. It's about `trade-offs`. How do you make trade off things to make you as well off as possible.
4. `Opportunity costs` is an `important concept` in microeconomics.
5. `Every action or inaction has a cost` in that you could've been doing something else instead.

- If you buy a shirt, you could've bought pants
- If you stayed at home and watched TV, you could've been out working.
- `Everything you do has a next best alternative you could have done instead`.

6. They get referred to as the dismal science

7. because their `whole point is that nothing is free`. There's always a trade-off, there's `always an opportunity cost`.

8. your `constraint optimization means you're going to have to pass up one thing to do another`.

9. because of Microeconomics, you can understand the decisions that drive our economy.

Supply and Demand model

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1. `Models aren't 100% true`, but always pretty true, "pretty" being between `10% and 95% true`.
   The idea is to make a trade-off. We want to write down in our models a set

of simplifying assumptions that'll allow us, with a small set of steps, to capture relatively broad phenomena.
2. To capture those broad phenomena, you want to do it in the most tractable possible way.

- `Positive analysis` - `is the study of the way things are`
- `Normative analysis` - `is the study of the way things should be`.

3. Example of eBay auctions - Auctions are a terrific example, they're like the textbook example of a competitive market. Demand comes as a bunch of people going on and bidding. People who want it more, bid more. So you get a demand curve. `The higher the price, the fewer people you're getting to bid`. Supply is how many units of it are for sale on eBay. You bid until those two meets. And then you have a market equilibrium at that bidding price.
4. > Example: someone offered their kidney for auction. The bidding went nuts. It started at $25,000. It climbed to $5m before the auction was shut down, and eBay wouldn't allow you to sell your bodily parts on eBay.

- `This raises two questions`:
- > `The Positive analysis question: Why did the price go so high?`
- > Because the demand is high (because I'd die without it). Supply is low because not a lot of us are willing to sell their kidneys to eBay. Low supply, high demand led to a higher price.
- > `The Normative analysis question: Should you be allowed to sell your kidneys on eBay?`
- > The standard economics answer to start would be, `of course, you should`. We're in a world of thousands of people die every year because there's a waiting list for a kidney transplant. And these are people who would happily pay a lot of money to stay alive. Meanwhile, there are hundreds of millions of people

> walking around with two kidneys who only need one. And many of these people are poor. And lives could be changed by being paid $1m. So this is a transaction that makes both parties better off. So the standard answer would be that you should be able to sell your kidneys on eBay.

- **The question is, why would we want to stop this transaction?**
- The first type of problem comes out of the category we call: `Market failures`. And `MF are reasons why the market doesn't work in the wonderful way economists like to think it should`.
- For this example, there could be the `problem of fraud`. People might not be able to tell if they're getting a legit kidney or not.
- There could be an example of `imperfect information`. Do you know what the odds are that you can spend the rest of your life with only one kidney? We ought to know that before we start selling our kidneys.
- A `second problem` is what we call `equity or fairness`, which is we would end up with a world where `only rich people get kidneys`.
- The `third problem` has to do with `behavioral economics`., which is essentially, that people don't always make decisions in the perfectly rational, logical way we'll model them. People make mistakes.
- You do the positive analysis to understand the economic framework before you start jumping to drawing conclusions. We have to be disciplined. We have to start with the fundamental economic framework.
- `Economics at its core is all about how the market knows best`, and `that basically governments only mess things up`.
- How freely should a market, should an economy function?
- We have a capitalistic economy. And in a capitalistic economy, firms and individuals decide what to produce and consume, may be subject to some rules of the road set by the government. There are some minimum rules of the road to try to avoid fraud or misinformation, but otherwise, we let the dice roll.

- The `other extreme` is a `command economy`. In this case, the government makes all the production and consumption decisions. The government doesn't just set the rules of the road, the government owns the road. The government says we're going to produce this many cars this year. And people can get them in some way. It could be a lottery, could be waiting in line. We'll allocate how many get produced and who gets them. The government decided how many shirts, cars, TV's, everything decided how much to produce.

- `Problems with this model`:

- `Too many opportunities for corruption` when the government controls everything.

- It's hard to control human nature.

- `Adam Smith's` invisible hand is that the `capitalist economy will manage to distribute things roughly in proportion to what people want`. Folks who want a certain kind of car are going to want to get to that kind of car.

- `Adam Smith's view` (the invisible hand view) is that `consumers and firms serving their own best interest will do what is best for society`.

- `The fundamental core of the capitalistic view` is that `consumers and firms serving their own best interests will do what ends up being best for society`.

- It can lead to outcomes that aren't fair.

Practice Problem