

## LECTURE 01: INTRODUCTION

- I. Economics: the study of optimality (or how to get the most out of life)
  - a. *Microeconomics* focuses on the actions of individuals, households, and firms in a single market.
  - b. *Macroeconomics* is concerned with the economy as a whole, dealing with big concepts such as inflation, growth, and employment.
    - i. Macroeconomics is built from microeconomic ideas; if you've had micro before, the beginning of this course will be familiar.
- II. Incentives matter
  - a. This is because people are *rational*—choosing the best action given their preferences and constraints.
    - i. Because incentives matter, choosing the right incentives changes everything. This has enormous implications for policy and economic development.
    - ii. The institutions, the rules of the game, should align self interest with social interest.
  - b. Rationality matters because people have choices. People have choices because there is scarcity.
- III. Costs and Benefits
  - a. What is not scarce?
    - i. *Scarcity*—when the sum of wants exceeds what there is.
    - ii. Virtually everything worth considering is scarce; there has never been enough to satisfy everyone completely.
    - iii. This is why economics claims insight to many different areas. As long as there is scarcity, there's a question of how best to allocate.
  - b. The importance of scarcity
    - i. *Cost-benefit analysis*—a process of weighing the total costs of an action against the benefits of that same action and proceeding if benefits exceed costs
    - ii. This sort of analysis seems too obvious to need to be pointed out but it serves as a helpful guide. Certain policies or events carry so much emotion that we forget to weigh the costs against the benefits.
    - iii. It can also be difficult because of the sheer scope of the analysis. Often one must care about the effects on not one but

multiple groups. By default, everyone is counted equally: if one business does better and another equally worse, and nothing else changed, the net effect is zero.

iv. Finally, it can be a factor in unexpected ways...

#### IV. Path dependence

- a. Standard keyboards have what's called a QWERTY layout, so named after the upper left-hand letters of the keyboard. But this set up is strange: the four vowels—E, U, I, and O) are inconveniently located on the top row. Less common letters, like J, are on the more convenient middle row. You could type faster if it was optimally organized so why this strange set up?
- b. The first keyboard layouts weren't on computers; they were on typewriters. And early typewriters weren't that great. If you typed too quickly, it would get stuck. Thus early typewriters were designed to slow typists down to avoid this problem.
- c. Typing too fast is no longer a problem; any computer can outpace even the fastest human. But switching to a new layout is costly (retraining, changing manufacturing machines) and the benefits are small (typing wouldn't be that much faster; good typists can already type faster than they can think). So the strange layout remains.
- d. *Path dependence* occurs when past decisions make it costly to adopt optimal standards. Inferior standards persist because it is expensive to switch to something better.
  - i. Note this is a type of cost-benefit analysis. Path dependence only occurs if the costs of switching are larger *relative to* the benefits of switching.