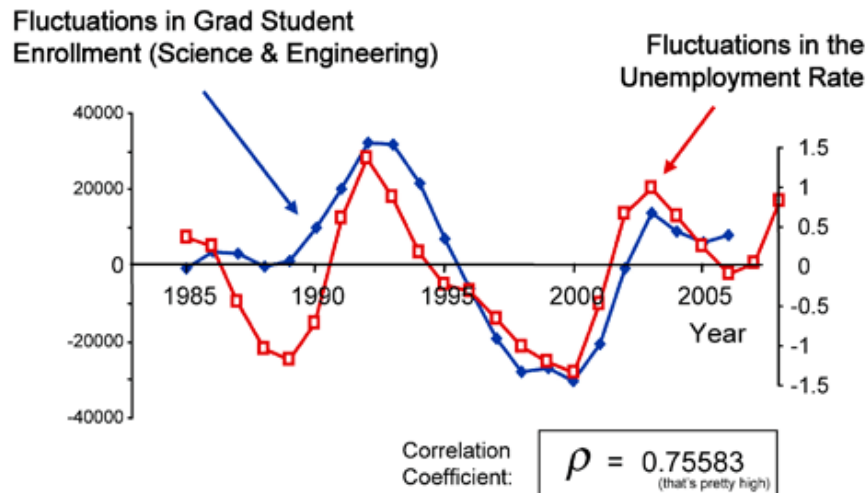


## LECTURE 04: OPPORTUNITY COST

I. Consider this diagram:



- a. Trade-offs are everywhere: it is a consequence of choice. For everything you choose, there is something you must give up.
  - b. This is the *opportunity cost*—the net gain of the next best option.
    - i. Note this is net gain: include the costs as well as the benefits.
    - ii. When the opportunity cost is high, that means you are sacrificing a lot; when it is low, you are sacrificing little.
    - iii. In that way, they are costs in the truest sense. Indeed, all costs are really opportunity costs. When you buy something, it doesn't cost you the money you spent. It cost you what you would have spent that money on.
- II. So what?
- a. *Efficiency*—Maximizing output with a given amount of input.
    - i. Also known as minimizing waste.
  - b. Efficiency seems like a dry, heartless concept but it isn't.
    - i. By being able to do more with less, we can use what's saved to do other things—in effect we lower our opportunity cost and do the things we would normally forgo.
    - ii. These other things are not just consumer items. Innovation, art, education, meditation, music, socializing, and traveling are all things we can do.
    - iii. Indeed the history of humanity includes more of these higher pursuits as people save the time and money to not just make

these things but appreciate them. Efficiency helped bring about the works of Mozart, Shakespeare, Aristotle, and Confucius—people don't ponder art and philosophy when they're struggling to survive.

- iv. Greater wealth also opens the door for medicine, sanitation, a variety of food, safe streets, warm shelter, electricity, etc.

### III. The Role of Prices

- a. Under capitalism, ownership—and thus decision-making authority—is decentralized. Because it's decentralized, there need to be a mechanism that allows coordination.
- b. Prices solve both problems socialism struggles with. The price for a good or service is information—it informs us how scarce something is—and it's an incentive—when prices change, then behavior changes.
- c. Imagine the price of cheese increases. Imagine people don't know what it's increasing—and it's important that they don't know why. Even in their ignorance as to the cause of higher cheese prices, we know the most important fact: cheese is becoming scarcer.
- d. At the same time, people who eat cheese will eat less cheese for the obvious reason that it's more expensive to eat cheese. This is desirable: if cheese is scarcer, we want people who value the cheese the least to not consume what's there. The people who value cheese the least are the most likely to see those higher prices and decide it's not worth it.
- e. At the same time, people who make cheese will have an incentive to make more cheese for the obvious reason that it's a more profitable good to sell. This is desirable; if cheese is getting scarcer, we want resources, like milk and effort, reallocated to making cheese. Their other uses, like yogurt and ice cream, are less valuable uses for milk.
- f. And so the great economic miracle. Without a central planner, without a great coordinator, resources are allocated efficiently. We live in a world of unprecedented abundance and no one is in charge!

### IV. Applications

- a. Do disasters make us wealthier?
- b. Does war make us wealthier?
- c. Does a draft make us wealthier?
- d. Does job creation for the sake of job creation make us wealthier?