0.1 Unit 1

0.1.1 August 18, 2021

Mr. Clifford's Introduction Video

- Scarcity is the idea that there are limited resources.
- Example: Thursday night flight for $275, $300, $325 dollar flight. The most expensive flight was actually the cheapest because of opportunity cost: she could work at the restaurunt for the next few days.
- Why don't we produce all the phones in our country?
- Unseen costs: because of costs in the United States, phones are much cheaper because China manufacturing is significantly cheaper in the United States. Economists often oppose tarriffs for this reason.

1 **Definition** (Economics 1)
The study of how people interact with each other and with their natural surroundings in producing their livelihoods, and how this changes over time.

2 **Definition** (Economics 2)
Economics is about how individuals, businesses, governments, and nations make choices about how to allocate limited resources when faced with unlimited wants and needs.

In essence, economics solves the problme of scarcity - which occurs when there are limited quantities of things.

3 **Definition** (Resources)
Anything that can be used to produce something else.

The Factors of Production

- Labor: the time and effort that people devote to producing goods and services.
  - Human capital: the knowledge and skill base of workers in society from education, trainings, and experience. Investing in human capital can increase your productive capacities as an economy. McDonald's and many companies will pay for associated colleges.
- Capital: Items used to produce goods and servies: machines, tools, buildings. NOT: money, stocks.
- Land: Nature that we use to produce goods and services: water, animals, minerals
- Entrepreneurship: resource that decides how to organize the land, labor. and capital of production; makes decisions and bears risks.

4 **Remark**
Technology falls under capital, since it is able to produce goods and services. In the future, this may fall under its own category because they are able to produce larger things.

How does scarcity impact human behavior?

People must make choices about how to use scarce resources.

5 **Definition** (Tradeoffs)

All alternatives that are considered when making a choice.

6 **Definition** (Opportunity Cost)

The value of the next best alternative when making a decision.

Example: by watching a movie at home instead of going out with friends, you are trading the benefits of added stress of going outdoors.

How do individuals make the best decisions?

- Benefits: the added satisfaction and benefit when a good is purchased.
- Costs: The added costs (and opportunity costs) when a good is purchased.

Should a city host the olympics?

- How are the land, labor, capital, and entrepeneurship used if you host the olympics.
  - Venues cost $ 7.6 billion. Bids are usually an optimistic estimate.
  - One year postpoponent meant that there were many costs added.
  - New costs are added incurred around 2.5 billion dollars to the games' budget.
  - COVID also is taking away ability to recoup that money. ; There will be no income from visitors because of COVID.
  - Around 2 billion dollars lost in economic benefits.
  - Corporate sponsors contribute billions of dollars and the IOC committed around 600 million. The overall cost of the pandemic is much higher than the olympics.
  - Japan has spent over 800 billion dollars on stimulus packages.
- What's something interesting you heard?
  - First game to be postponed.
  - Most expensive summer game ever.
  - Cost over 20 billion by the end.
- What are the trade-offs of hosting?
  - You often lose money.
  - There would be no spectators this year because of COVID-19.

0.1.2 August 23, 2021

Discuss what your terms mean, adn then come up with a group motion to represent this term.

1. Economics
2. Scarcity

0.1.3 August 24, 2021

Notes

How do you model scarcity on a curve.

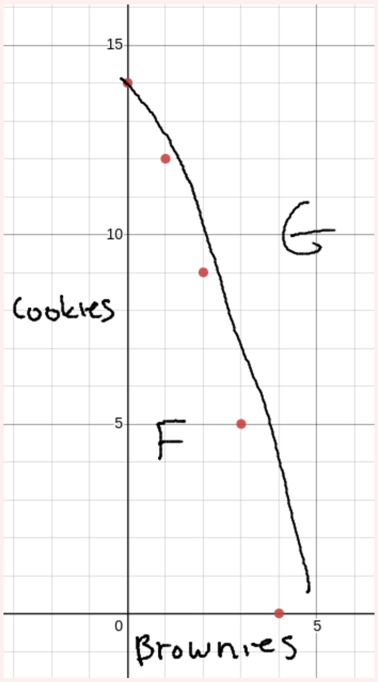
7 **Definition** (Production Possibilities Curve)

A curve that shows the maximum combinations of goods and services that can be produced, given the fixed factors of production (scarcity). Shows: Trade-off, efficiency, inefficiency, opportunity costs, and growths or contractions.

Consumer goods vs capital goods. The x-axis is the capital goods, and the y-axis is the consumer goods. Those on the outside of the curve are unattainable.

PPC Features:

- The model shows the two alternative choices someone or a country can make.
- Because scarcity exists, there is a maximum amount of goods and services that can be produced.



Note that any points that lie inside of the curve are inefficient. In order to calculate the opportunity cost, we calculate from moving points:

Opportunity Costs

- A to B: gain one brownie and give up two cookies.
- D to C: lose one brownie and gain four cookies.
- E to B: lose three brownies and gain twelve cookies.
- A to E: gain four brownies and give up fourteen cookies.

Homework

Day 1: Review: Answer a few term-based questions before diving into today's content.

1. What is the basic problem of economics? Explain this term.

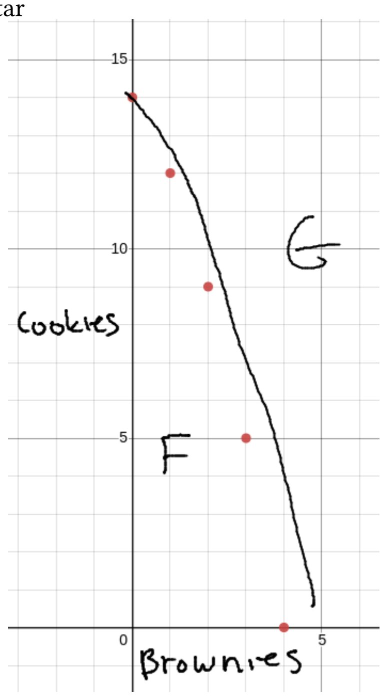
   Scarcity. There is a limit to how much something can be produced, or exist. As a result, distribution of resources is a problem.
2. Why would economists say there is no such thing as a free lunch?

   There is no such thing as a free lunch. The free lunch is a false statement. This is because some labor is required to produce a good, and all goods in lunch require some labor.

3. What does the Production Possibilities Curve show? What resources are fixed?

   The Production Possibilities Curve shows the trade-offs between two alternatives. The resources that are fixed are the summation of the alternatives being considered.
4. How does the curve show scarcity?

   The curve shows scarcity because as the amount of one good is increased, the amount of the other good is decreased, implying that there is a finite amount.
5. Plot
6. Star



7. Calculate the opportunity cost of the following points:

   - A to B: gain one brownie and **give up two cookies**.
   - D to C: **lose one brownie** and gain four cookies.
   - E to B: **lose three brownies** and gain twelve cookies.
   - A to E: gain four brownies and **give up fourteen cookies**.

8. Since the graph looks relatively linear, the opportunity cost looks constant.
9. What will happen to the PPC for brownies and cookies if… (shift out, shift in, no shift)

   - There is an increase in technology

     The production curve will shift right because more goods can be produced.
   - There is a natural disaster, such as a major earthquake

     The production curve will shift left because less goods can be produced.
   - There is high unemployment

     The production curve will shift left because less goods can be produced.
   - There is an improvement in human capital, or education

     The production curve will shift right because more goods can be produced.

10. When in history might there have been a time that a country operated at an inefficient point of production?

    In the past, people have been at an inefficient point of production. For example, in the late 1800s, the United States was at an inefficient point of production because it was using more labor than it could produce. This event is called the Panic of the

1893.

0.1.4 August 25, 2021

8 **Example** (What's the difference between inefficient pproduction and a contraction?)
Inefficient: a point under the PPC. Indicates an underutilization of resources. Unemployment, etc.
Contraction: a country has an under-utilization of resources, shifting the curve leftward or inward. This can occur due to natural disasters. Ex. natural disaster, war, etc.

What strategies encourage economic growth?

- Increasing the quaality of quantity of the factors of production.
- Such as land, labor, capital, or entrepeneurship.
- Your labor force could become more efficient through education.