Opportunity Cost

The value of the next best option!

Rules for the Simulation ☺

1. Half the class will be facing the choice at table #1, half will be facing the choice at table #2
2. Each student may choose to take ONE of the items on the table, or you may choose to take nothing. Once you have chosen, that item is yours, you may take your seat and consume it now or later, your choice ☺
3. Write down the opportunity cost of your individual decision. (show next slide) (share out)

Costs

- Costs are to people. All costs are costs to the decision-maker.
- Costs are subjective; individuals value costs differently.
- Opportunity costs may change and changes in costs affect people’s choices.
- Only actions have costs. “Things” have no cost independent of decisions about their use.
- All costs lie in the future. The anticipation of future consequences shapes people’s decisions.

Discussion Questions

- What were the considered alternatives in your choice?
- If someone made a different choice (different type of candy, or no candy) than you did, did one person make the right choice and one the wrong choice?
- Suppose an ice cream bar had been offered as an alternative along with two types of candy.
- Would *your* opportunity cost have changed? Why or why not?
- What is the opportunity cost to the person who chose the ice cream bar from among the 3 options?
- What is the opportunity cost to someone who sticks with their original choice when the ice cream bar is included in the alternatives?
- Suppose all 4 types of snack had been on one table and everyone could select from that table.
- Would that change your opportunity cost? Why?
- Is the availability of a greater number of alternatives likely to increase or decrease opportunity costs? Why?

Economic Choices and Decision Making

Economic Choices and Decision Making

- The Process of making a choice is not always easy. To become a good decision maker, you need to know how to identify the problem and then analyze your alternatives.
- Because resources are scarce, consumers need to make wise decisions.
- To become a good decision maker, you need to know how to identify the problem and then analyze your alternatives.
- Finally, you have to make your choice in a way that carefully considers the costs and benefits of each possibility.

Trade-Offs

- Because people cannot have everything they want, they face **trade-offs**, or alternative choices.

Trade-Offs and Decision Making

- Choices are not always easy to make.
- A decision-making grid is one way to approach difficult problems.

Trade-Offs

- This grid summarizes a decision by Miguel to spend a $50 gift the best way possible.

Miguel's Decision Making Grid

Alternatives	Costs <$50?	Durable?	Parents?	No Future	Anytime?
Movie Date	Yes	No	Yes	Yes	No
Concert Tickets	Yes	No	No	No	No
MP3 Player	Yes	Yes	Yes	No	Yes
Soccer Ball	Yes	Yes	Yes	Yes	No
Jeans	Yes	Yes	Yes	Yes	Yes

Thinking on the Margin

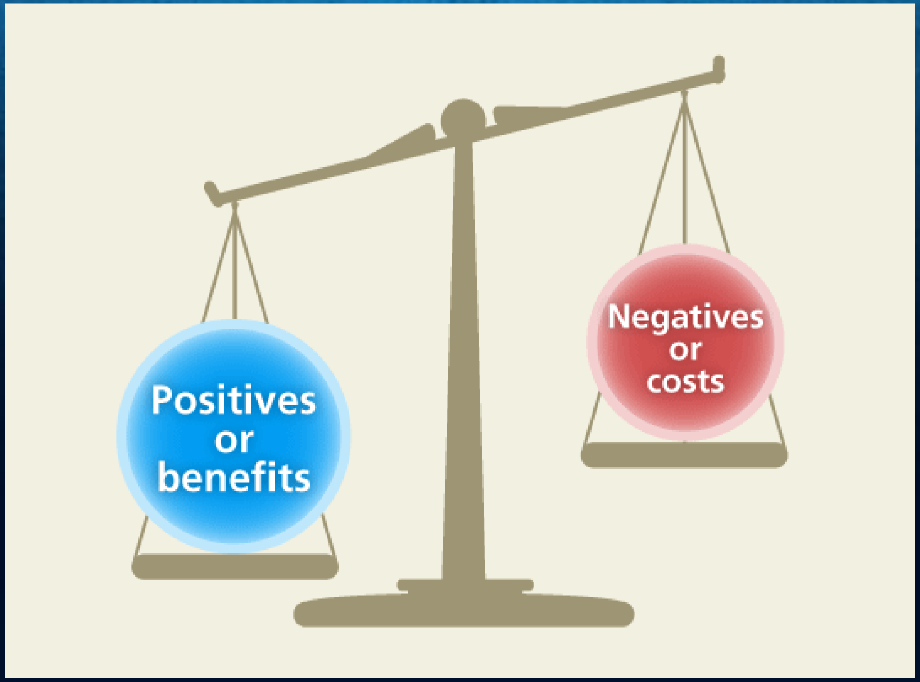
Marginal Cost: the increase of total cost that results from producing <u>one</u> additional unit

Marginal Benefit: the increase in total benefit that results from producing, purchasing or consuming <u>one</u> additional unit

Example: Doing your hair in the morning. Additional time styling (marginal benefit) vs. minutes late for school (marginal cost)

Cost-Benefit Analysis

- Cost-benefit analysis is a way of thinking about a problem that compares the costs of an action to the benefits received.
- It is used to assess whether a proposed project, program, or policy is worth doing.
- It is often used by governments and businesses to evaluate the desirability of a given intervention.



Opportunity Cost

- People often think of cost in terms of dollars.
- To an economist, however, cost often means more than the price tag placed on a good or service.
- Opportunity cost is the cost of what you give up when one choice is made over another.
- This could mean money, time, or resources either now or in the future.

Opportunity Cost

Why do farmers often wait until a rainy day to do errands in town, while a man in a new suit will decide not to do his errands on the exact same day?
Why do business men and women often buy full-price airline tickets, while people planning vacations will fly when the rates are lowest?

Options, Choice, Opportunity Cost

Option: go to a movie with a friend or out to dinner with a boy/girlfriend
Choice: which one do you do?
Opportunity Cost: what is it that you give up?

Law of Comparative Advantage

- The individual (or country) with the lowest opportunity cost of producing a particular good should <u>**specialize**</u> in producing that good.
- <u>Specialization</u> – The concentration of the productive efforts of individuals and firms on a limited number of activities

Babe Ruth

- Opportunity cost is the key to comparative advantage: Individuals and nations gain by producing goods at relatively low costs and exchanging their outputs for different goods produced by others at relatively low cost. All potential trading partners can gain enormously through appropriate specialization and exchange.

Comparative & Absolute Advantage

- Comparative Advantage:
- The ability to produce something at a lower opportunity cost than other producers face

- Absolute Advantage:
- The ability to produce something with fewer resources than other producers use

Suppose, for example, that a lawyer whose fees run $250 an hour types twice as fast as her secretary, whose wage is $12 hourly. She still gains by hiring the secretary. Despite her absolute advantage in typing, the lawyer's comparative advantage lies in practicing law.

Comparative Advantage in Early America

"Cash crops did not grow well in the Northern soil and climate. Southerners, on the other hand, had begun to reap huge profits from cotton by the mid-1790s. The South had very little incentive to industrialize. As a result, the North and South continued to develop two distinct economies, including very different agricultural systems."

- ---The Americans

Comparative Advantage in Early America

- Northern Comparative Advantage
  - Industry
- Southern Comparative Advantage
  - Mass Cotton and Tobacco Production

Other Economic Principles in Early America

- Trade is mutually beneficial
  - Northern farmers traded with Northern manufacturers
    - Facilitated growth of Northern industry
    - Relative wealth in industry ownership
  - Southern farmers traded with European manufacturers
    - Facilitated growth of Southern plantation system
    - Less industrial growth in South
    - Relative wealth in plantation ownership
  - Beneficial trading was separating North and South

Other Economic Principles in Early America

- "American System"
  - Tariff in 1816 on imported manufactured goods from Europe
    - Designed by President Monroe to make North and South more interdependent
    - Lobbied for by Northern Manufacturers
  - Ushered in the "era of good feelings"
    - Circular Flow of Income and Expenditure
    - One person's spending becomes another's income

Other Economic Principles in Early America

- Restricting Trade
  - Common Incentive:
    - Shift the mutually beneficial trade my way
    - Limit my competitors
  - Tariff of 1816
    - Shifted South-Europe trade to South-North trade
    - Strengthened Northern Manufacturing
      - Influenced outcome of Civil War

Practice:

- Under current conditions, we can produce either 120 autos **<u>OR</u>** 3 aircraft, therefore: 120A = 3 B.
- Dividing both sides by 3 yields: 120/3 = 3/3 or 40A = 1B
- 40A = 1B is the number of autos given up to produce one aircraft or the <u>opportunity cost</u> of one aircraft

To Find Which Nation has the Comparative Advantage

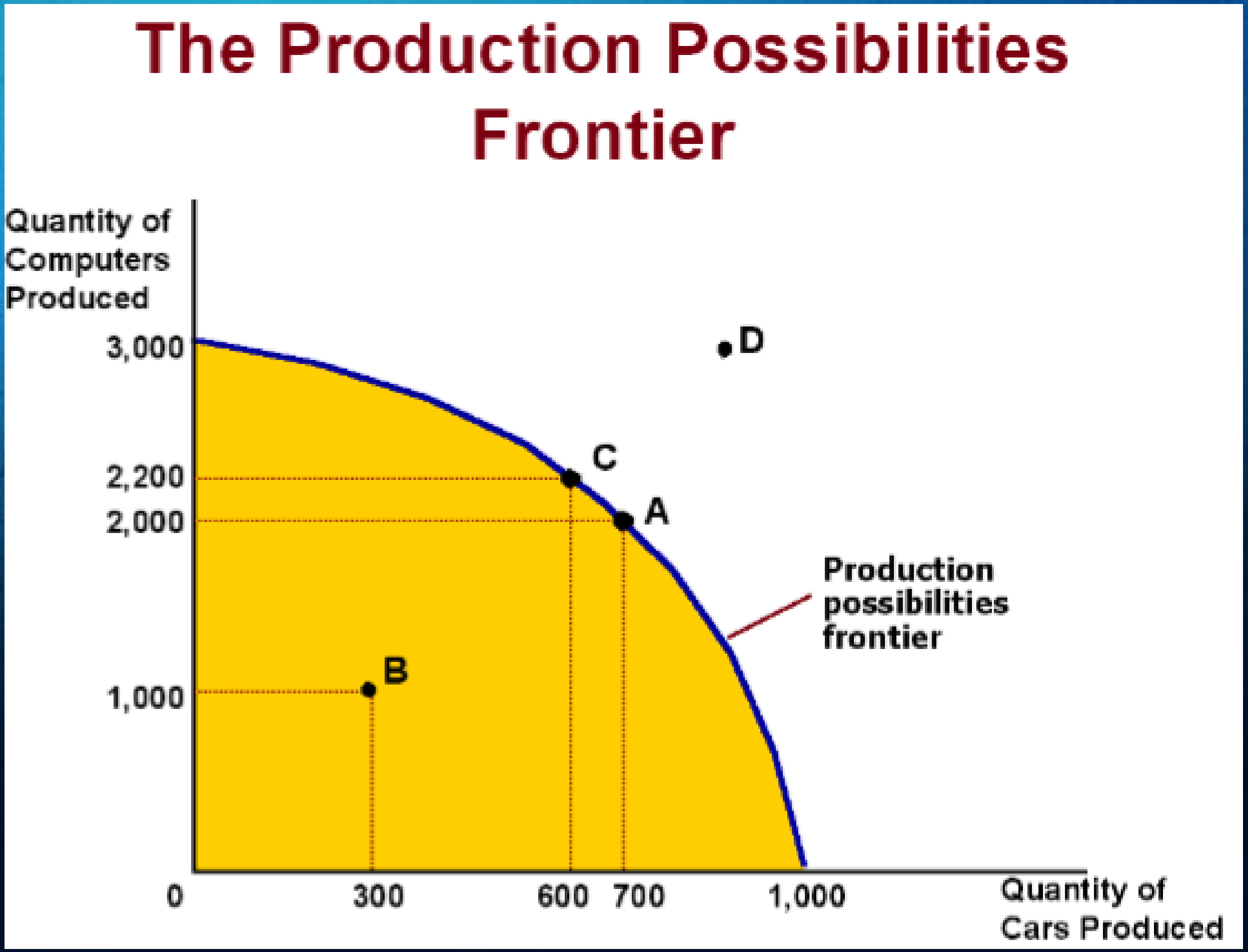
- Find opportunity costs for both nations
- Compare each product's opportunity cost from nation to nation
- Nation with the lowest opportunity cost has the comparative advantage
- If U.S. has 1A=.025B & G.B. has 1A=.05B, who has the comparative advantage?

Importance of Comparative Advantage

- To benefit from free trade, a nation does not have to be the lowest cost producer in the world
- A nation only has to have the lowest opportunity cost
- Remember, opportunity cost is what you give up to do something
- Use all the world’s resources in the relatively most productive ways

Production Possibilities Frontier

- The Production Possibilities Frontier is a diagram representing the various combinations of two goods or services an economy can produce when all productive resources are fully employed.



Analyzing PPFs (PPCs) SAME THING ☺

Production Possibility Curves (PPC)(PPF): A graph that shows the impact of scarcity on an economy
There are assumptions to PPC's (PPF), meaning that you can only read it accurately if you assume certain things: Resources are fixed, all resources are fully employed, only 2 things can be produced, technology is fixed.

Guns	Butter
0	21
4	17
9	12
14	8
18	5
24	0

Notice, the opportunity cost of producing more guns is the butter that cannot be made.

What is the opportunity cost of producing 14 guns?

What do we learn from PPC's?

Efficiency: produces the maximum amount of goods and services possible
ALL POINTS ALONG THE CURVE

Underutilization: producing fewer goods and services than possible
ALL POINTS BELOW THE CURVE

Production Impossibility: regardless of how resources are used this level of production cannot be reached
ALL POINTS ABOVE THE CURVE

Law of Increasing Opportunity Costs

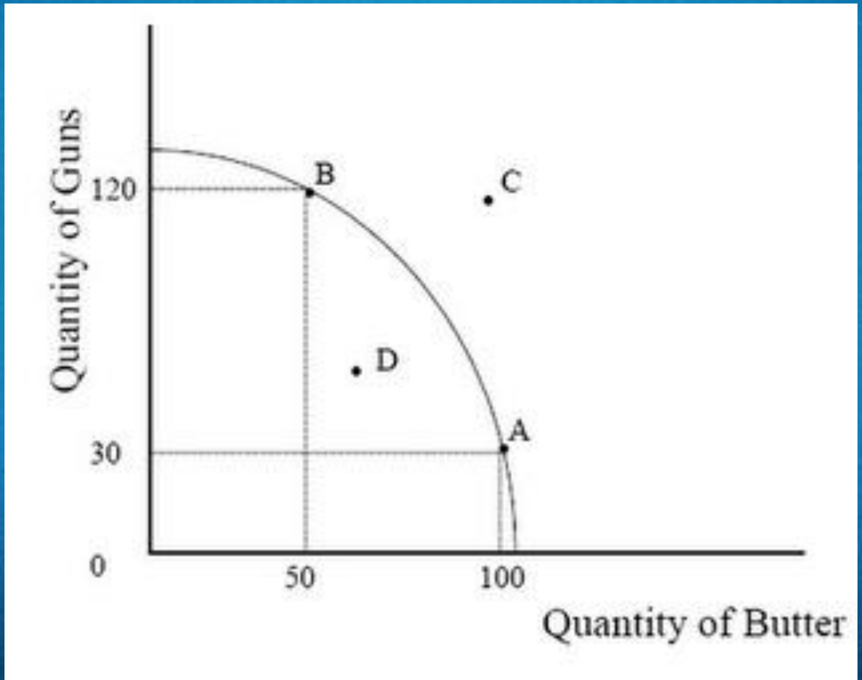
As production switches from one product to another, increasing amounts of resources are needed to increase the production of the 2nd product

More guns means less butter, more butter means less guns

Shifting the PPC

The curve can shift, but only if you change the rules of the model (game)
For example, if there is some new technology or if you discover more resources.

Production Possibilities Frontier



- What trade-offs are involved?
- What does point D illustrate?
- What is the opportunity cost of producing at point B?
- What is the opportunity cost of producing at point C?
- Is it possible to produce at option C?

Decision-Making

Problem: Sandy’s part-time job earns her only $25 income a week. This week her expenses are especially heavy. She wants to go to a rock concert, which will cost her $25. Her friend Rafael’s birthday is also this week, and the present she wants to buy him costs $25. In addition, Sandy’s car needs a brake repair, which costs $100. If Sandy pays for the first $25 of repairs, her dad will pay the remaining $75.

Question: How should Sandy spend her money? Why? What are the opportunity costs of her choice?