Opportunity Cost

Fundamental Economic Concepts and Reasoning

But first, a review of scarcity…

https://www.youtube.com/watch?v=Np-dZSdzymk&list=PL1oDmcs0xTD9Aig5cP8_R1gzq-mQHgcAH&index=10

Choice powers an economy, but what powers choice?

The choices people make are shaped by incentives.

- ***Definition:*** Benefits offered to encourage people to act a certain way.
- Examples: grades in school, wages paid to workers, praise or recognition

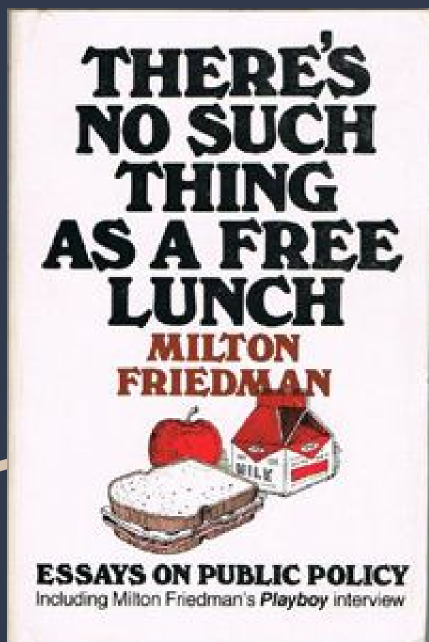
We make choices by weighing the costs against the benefits and choosing what represents the best mix.

Choice powers an economy, but what powers choice?

When making choices, we are guided by self-interest (not selfishly) - you look for ways to maximize the utility you would get from your decision.

- In economics, utility refers to the benefit or satisfaction gained from the use of a good or service.

“There is no such thing as a free lunch.”



Every choice involves costs.

- Costs could be money, but it could also be time or some other thing you value.
- Economist Milton Friedman popularized the concept.
- TANSTAAFL expresses the idea that even if something seems like it is free, there is always a cost, no matter how indirect or hidden.

Practice!

Complete the Applying the Principles: INCENTIVES activity in your packet.

Trade-Offs vs. Opportunity Costs

Trade-offs are the alternatives people give up when they make choices.

Trade-offs CREATE opportunity costs.

Opportunity cost is the “value” of something that is given up to get something else they wanted. In other words, it is the next-best alternative.

- Whenever you make a trade-off, the thing that you do *not* choose is your opportunity cost.

Examples of Opportunity Cost

(answer the questions in your notes as you watch)

Moneyball
http://www.imdb.com/videoplayer/vi3229326361

Extreme Couponing:
https://www.youtube.com/watch?v=ZdSxnGn4XSU

Whiplash
https://www.youtube.com/watch?v=MsWlktW0kj4

Big Bang Theory:
https://www.youtube.com/watch?v=gZA2770_f84

Cost-Benefit Analysis

This is one of the most useful tools for individuals, businesses, and governments when they need to evaluate the relative worth of economic choices.

Definition: The practice of examining the costs and the expected benefits of a choice as an aid to making a decision.

Costs and benefits change over time just like goals and circumstances do. These changes will influence the decisions made.

Marginal Costs and Benefits

In economics, the word marginal refers to "additional"

Marginal cost is the cost of using one more unit of a good or service.

Marginal benefit is the benefit or satisfaction from using one more unit of a good or service.

Analyzing marginal costs and benefits helps explain the decisions consumers, producers, and governments make in a world of scarcity.

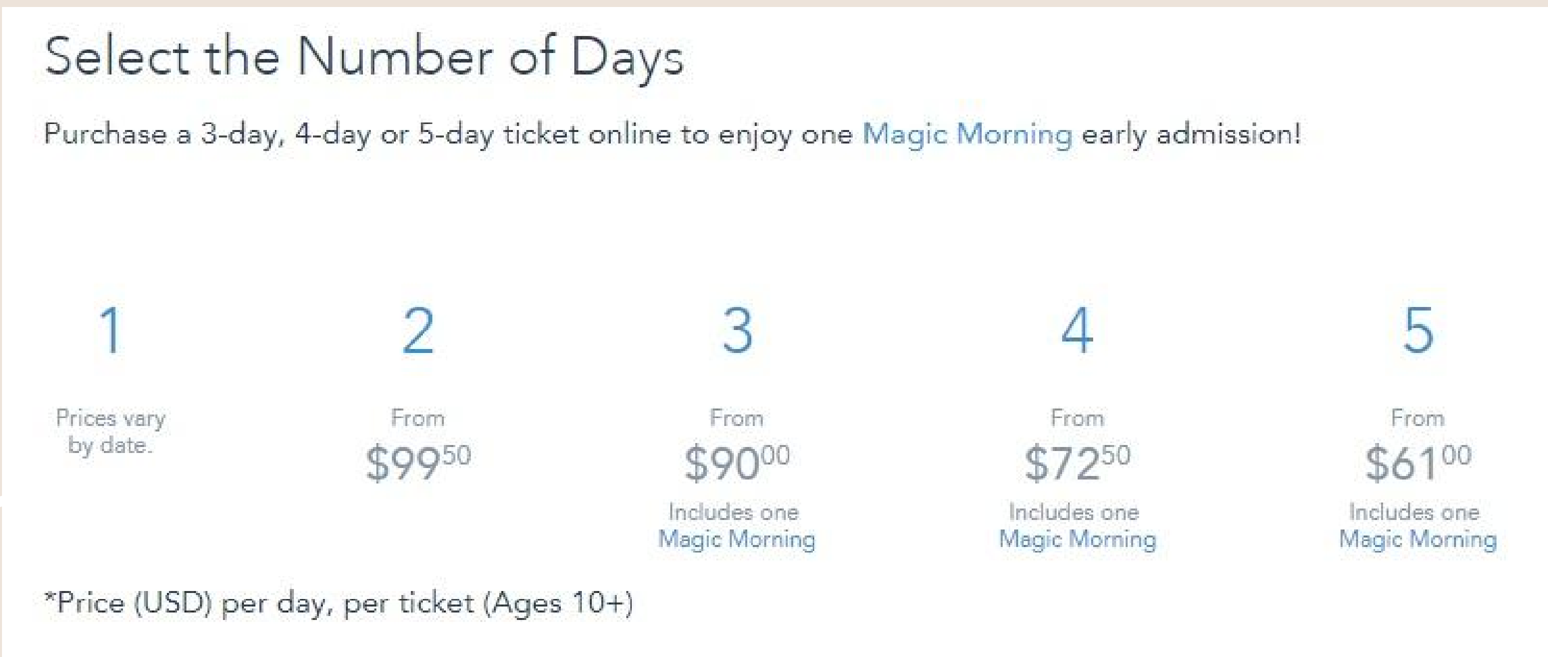
Marginal Costs and Benefits

The marginal utility of something diminishes as we get more of it.

Law of Diminishing Marginal Utility: the general observation that as the quantity of a good or service consumed increases, the benefits for the consumer of each additional unit decrease.

Many of our decisions are “how decisions” at the margin. “How much more…?” “How much longer…?”

Disney and the Law of Diminishing Marginal Utility



Disney and the Law of Diminishing Marginal Utility

Select the Number of Days

Save $20 when you purchase 3-day or longer tickets online!*

1	2	3	4	5	6	7	8	9	10
Prices vary by date and theme park.	From $99.50	From $96.34	From $87.50	From $74.00	From $65.00	From $58.58	From $52.50	From $47.78	From $44.00

Price (USD) per day, per ticket (Ages 10+) before tax.

Production Possibilities Curve

(*aka* Production Possibilities Frontier or PPF)

Economists create economic models to represent complex economic activities, systems, or problems.

A production possibilities curve is a graph used to illustrate the impact of scarcity on an economy.

A PPC shows the maximum number of goods or services that can be produced using limited resources.

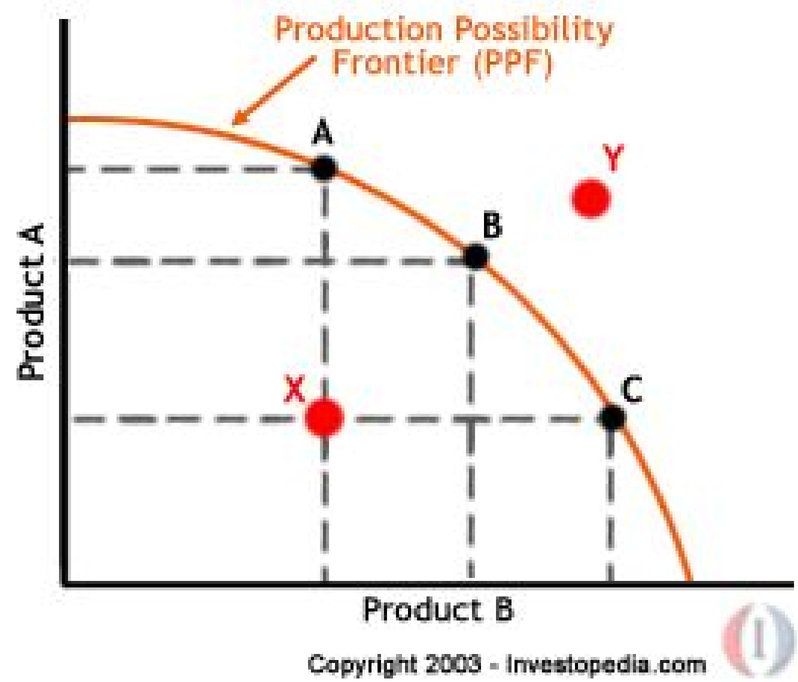
Production Possibilities Curve

Like most models that simplify complex concepts, the PPC is based on assumptions…

1. Resources are fixed.
2. All resources are fully employed (the economy is running at full production).
3. Only two things can be produced.
4. Technology is fixed.

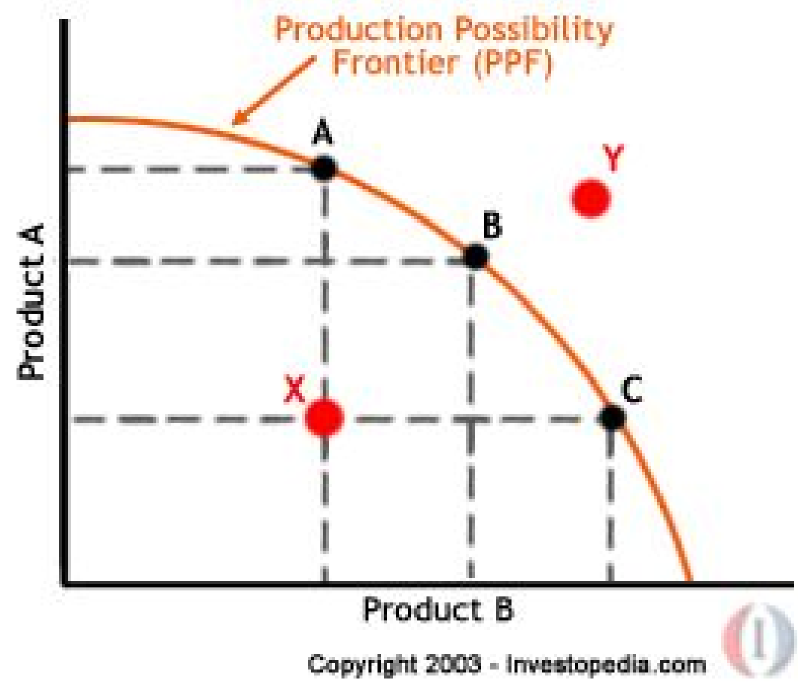
Production Possibilities Curve

The curve represents the border - or frontier - between what is possible to produce and what is not possible to produce.



Production Possibilities Curve

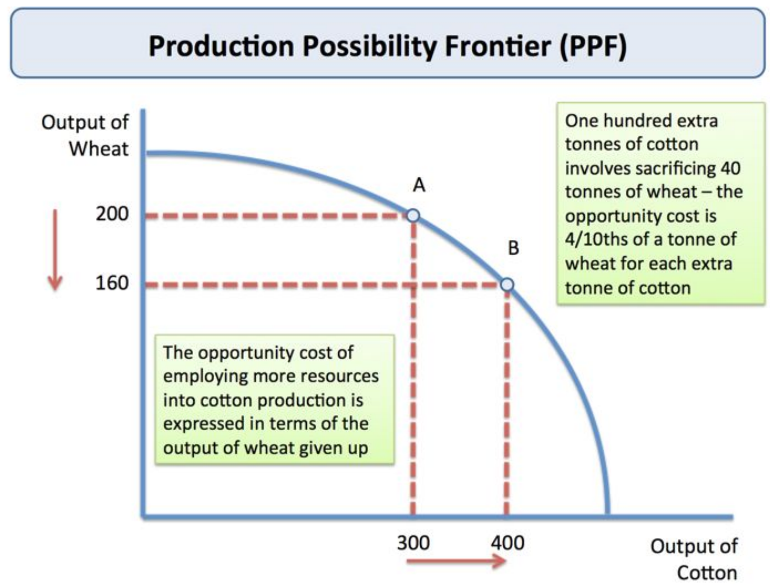
Each point on the curve represents the maximum number of Product A that can be produced relative to the number of Product B that can be produced.



PPC and Opportunity Cost

Tonne is a *metric ton* equaling 1,000 kilograms. It is a measurement used more commonly outside of the U.S.

The PPC visually shows opportunity cost because as you move along the curve from left to right you make less of one item and more of another. In this example, the opportunity cost of producing more cotton is the wheat that can not be produced.



What we learn from PPCs

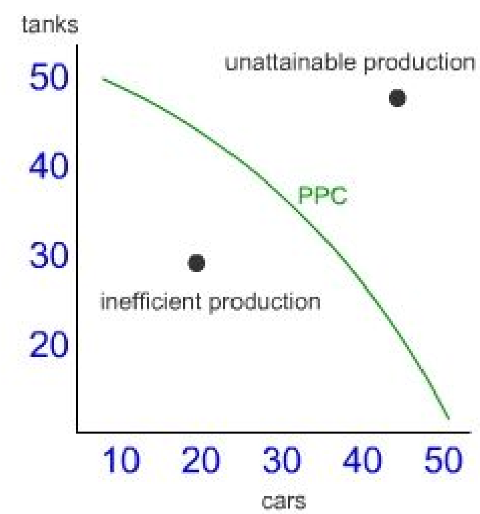
A quick summary from Investopedia using cars and trucks as an example.

http://www.investopedia.com/terms/p/productionpossibilityfrontier.asp

What we learn from PPCs

Efficiency: the condition in which economic resources are being used to produce the maximum amount of goods and services.

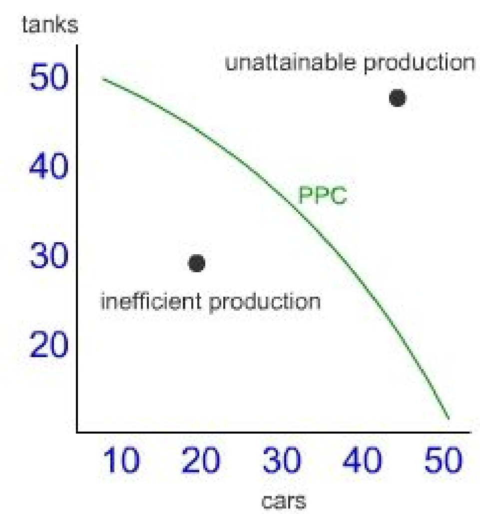
On a PPC, efficiency is represented by any point ON the curve.



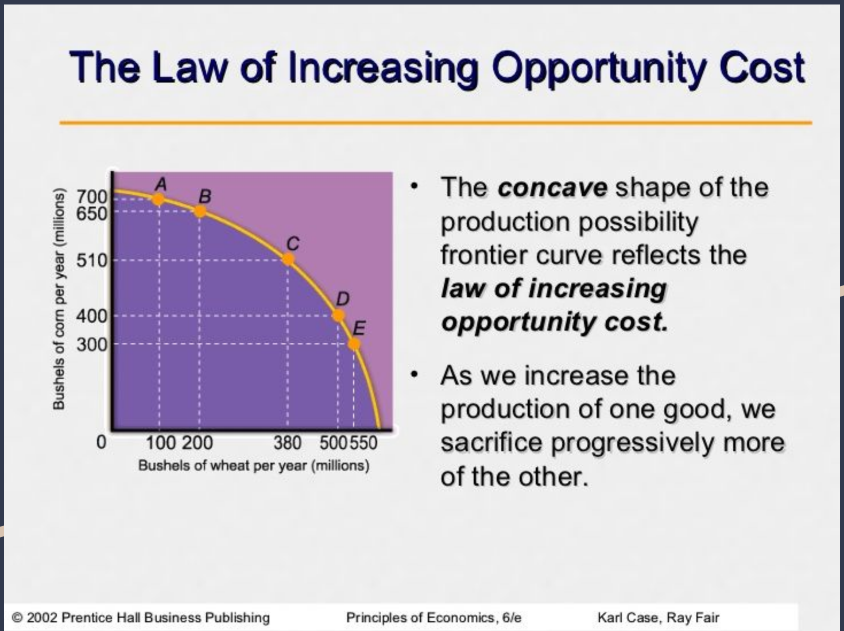
What we learn from PPCs

Underutilization: the condition in which economic resources are not being used to their full potential.

On a PPC, efficiency is represented by any point below the curve.



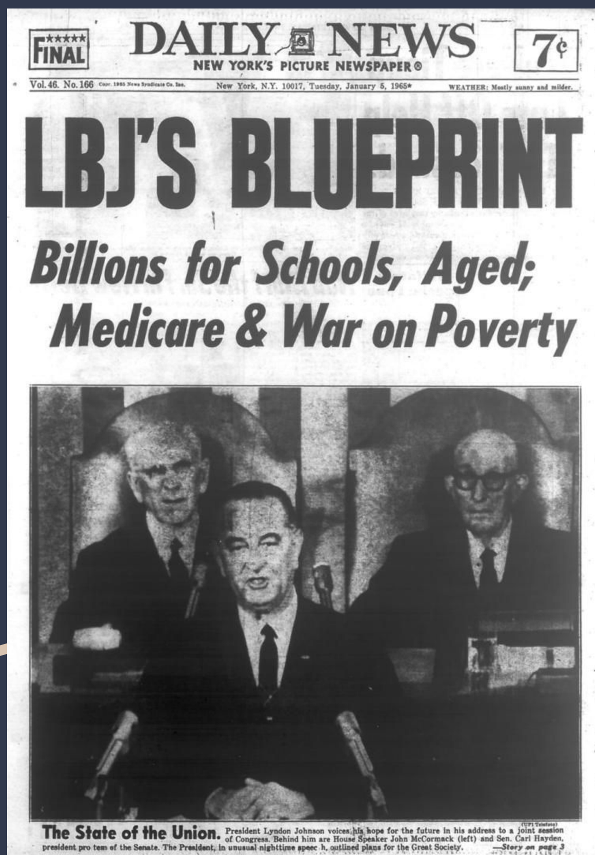
What we learn from PPCs



Law of Increasing Opportunity Cost: As production switches from one product to another, increasing amounts of resources are needed to increase the production of the second product.

The reason for the increasing cost is that converting production is not simple (new machinery, new factories, new training for workers).

"Guns vs. Butter"



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LBJ'S BLUEPRINT

Billions for Schools, Aged; Medicare & War on Poverty

(UPI Telefoto)

The State of the Union. President Lyndon Johnson voices his hope for the future in his address to a joint session of Congress. Behind him are House Speaker John McCormack (left) and Sen. Carl Hayden, president pro tem of the Senate. The President, in unusual nighttime speech, outlined plans for the Great Society. —*Story on page 3*

A major issue during the presidency of Lyndon B. Johnson during in the 1960s.

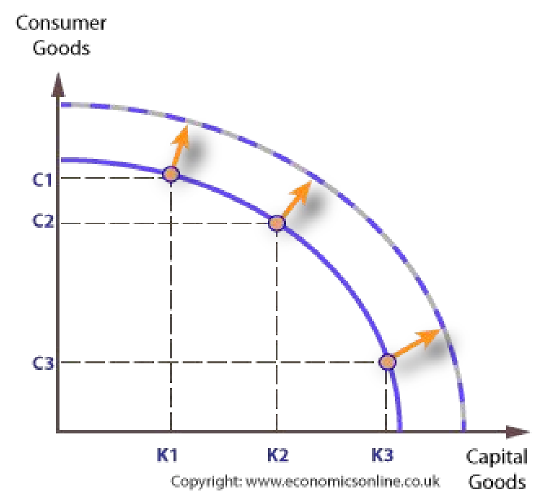
- Johnson's "Great Society" program called for a "war on poverty" which required government funding for many social programs.
- But an expanding war in Vietnam saw these government funds being switched from domestic programs ("butter") to defense spending ("guns").
- The opportunity cost of increasing defense production was that the social programs could not be funded.

Changing Production Possibilities

If additional resources became available or resources are used more efficiently, new production possibilities beyond the original frontier become attainable, and the PPC moves outward.

Capital goods are goods used to make consumers goods (factories, machines, etc.). They help increase future production.

Economic Growth



Changing Production Possibilities

A quick review of Production Possibilities
https://www.youtube.com/watch?v=tW4G5IPpzFY&index=8&list=PL1oDmcs0xTD9Aig5cP8_R1gzq-mQHgcAH

Causes of Economic Growth:

1. Discovery of more natural resources
2. An increase in physical capital
3. Population growth = larger labor force
4. Increases in human capital = a more skilled labor force
5. Technology that increases productivity
6. Laws and government regulations