

Introduction to Economics

What is Economics?

- Studies how individual agents coordinate their wants and desires, given their decision-making mechanisms, but constrained by social customs, and political realities of their individual societies.
- Coordination in Economics \Rightarrow 1. What & How much to produce? 2. How to produce it? For whom to produce it?
- However, an agent's wants are not easily satiated, and yet goods are scarce (**Scarcity**), and there is a limit to an individual's means (**Budget Constraint**).
- Scarcity is not a constant, and is guided by technology: Is Bio-diesel a real alternative when the oil runs out?
- Some questions for you to ponder:
 - Are there other constraints?
 - Do actions of other agents, guided by actions dissimilar from our own constrain our own actions as well?
- Positive Economics: Focuses on the workings of the economy.
- Normative Economics: Focuses on what the goals of the economy should be.

Economic Reasoning

- It must be unencumbered by/free of personal or otherwise, subjective opinions.
- Everything is analyzed from the perspective of the cost and benefit of an action to both an individual and society at large.
- Can such an approach that is so logical and rational be used to explain what may often seem like chaos?
- Key concepts:
 - **Marginal Benefit**: The additional benefit above what you've already derived.
 - **Sunk Cost**: The cost that has been incurred and cannot be recovered.
 - **Marginal Cost**: The additional cost above what you've already spent.
 - **Opportunity Cost**: The benefit that is lost or forsaken from all other activities that might have been engaged in, by performing an alternative to all those other activities.

- Economic forces refers to rationing mechanisms that may be utilized to distribute scarce resources and goods. What are some examples not found in your text?
- Market Forces refers to an economic force that is permitted to work unencumbered. Does it really exist?
- Invisible Hand is the price mechanism, i.e. the fluctuations in prices of goods, and services that balances the scarcity of production, and insatiable wants.
- The process: Examination of empirical relationships → Development of theoretical model that explains those relationship (generalization and abstraction of reality) → Test those theories by going back to data, or through forecasting and examining the degree of accuracy.
- An issue that we will constantly return to is the role of governments in influencing economic actions, and the tools available to them.

Microeconomics and Macroeconomics

Microeconomics: The study of individual choices, and how those choices are influenced by economic forces.

Macroeconomics: The study of the economy as a whole, and focuses on issues such as inflation, unemployment, business cycles, and growth.

Main Economic Systems

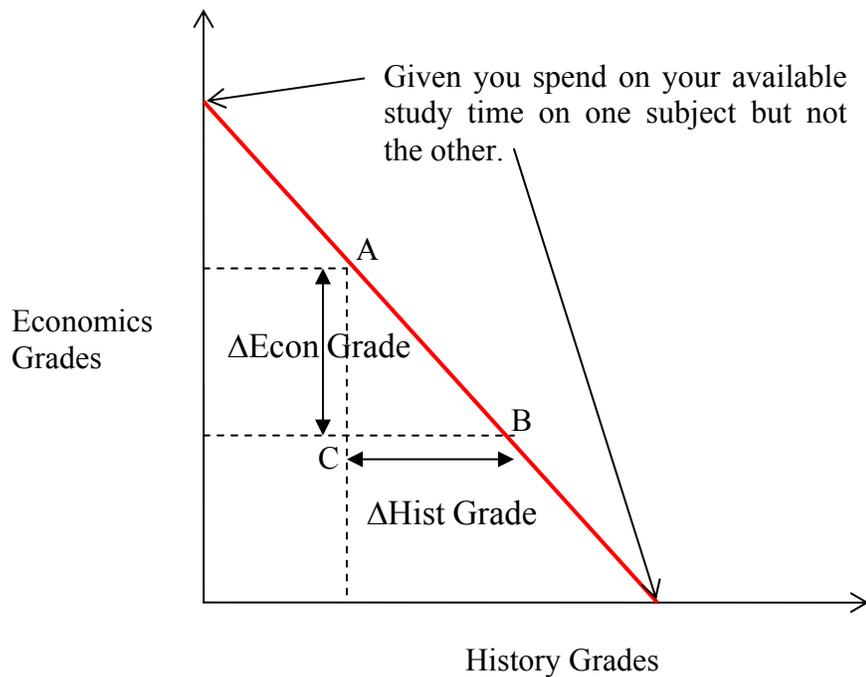
- **Capitalism:** Based on private property and the market in which individuals decide how, what, and for whom to produce. Principally relies on the market economy to coordinate and distribute scarce goods.
- **Socialism:** Based on individuals' goodwill toward others, not on self interest, and in which the society as a whole decides what, how and for whom to produce.

The Production Possibility Frontier

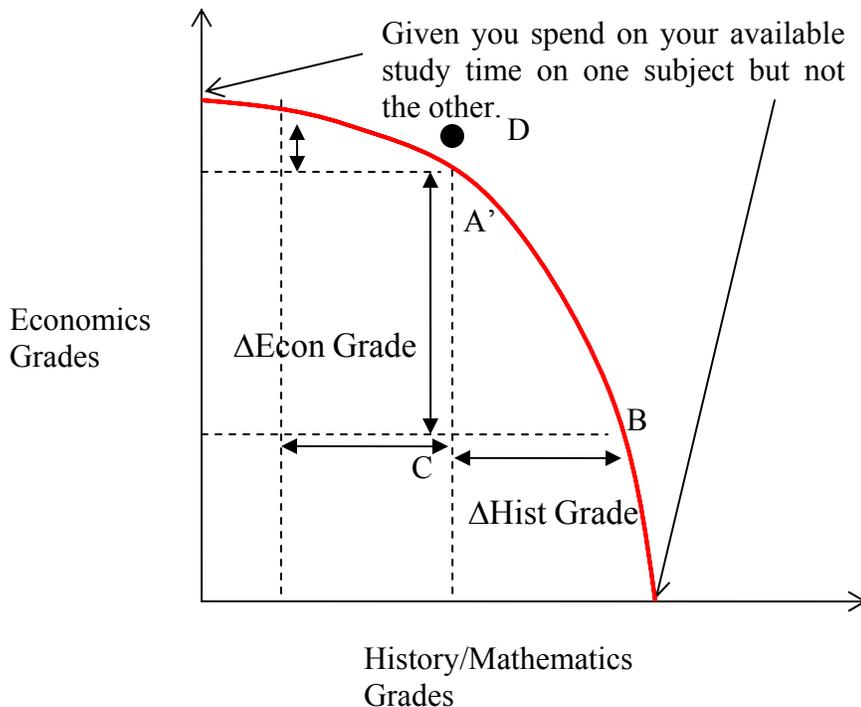
- The choices that a society may be summarized by the production possibility frontier which describes what combinations of goods or products it can produce with its limited resources, and available technology. Any point within the curve (below the curve) is possible, while everything above it is not possible.

Grade Production Example:

Suppose regular Chap: Given that he studies alone in his residence. This might be his production possibility frontier.



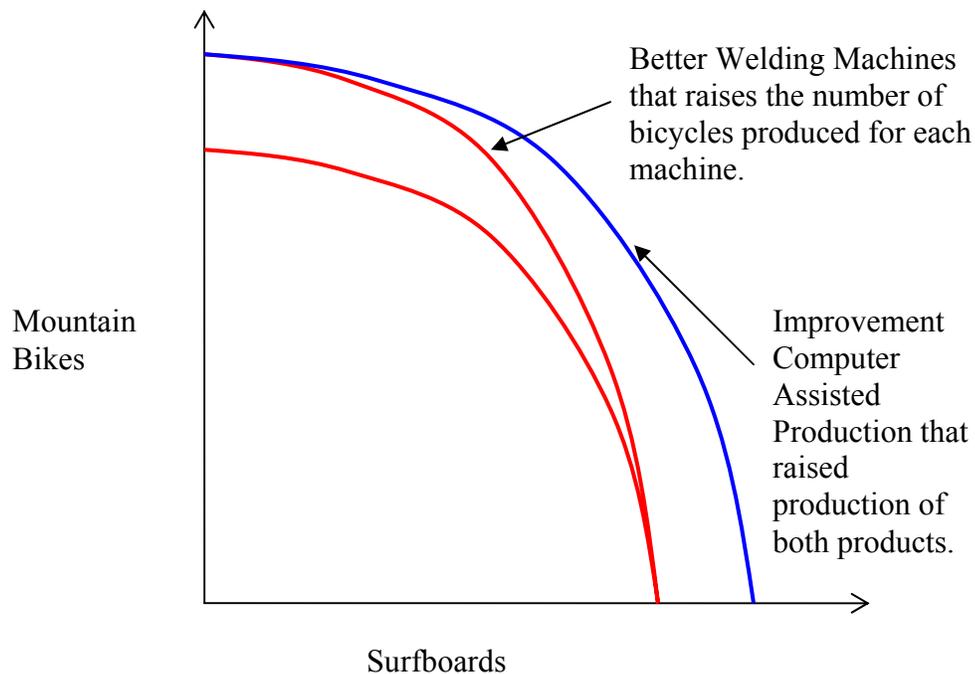
- It shows your opportunity cost if you choose to spend more time on one subject as opposed to the other. That is if he spends less time on History and more time on Economics (moving along the red line from point B to point A), his grades in Economics would rise while those in History would fall. In other words, the **opportunity cost** of raising the amount of time he spends in economics (consequently less time in history), is the lower grades he would get for history.
- Of course you (bright X-Men and X-Ladies) have a technology more akin to the following:



- What is the difference between the two diagrams? Notice that for the same decrease in history grade, you get a greater increase in economics grade? This means that you lot have a lower **opportunity cost**. Let the distance between C and B be 1 grade, then another way we can say this is that you have a lower **marginal opportunity cost** in improving your economics grade.
- What can explain the difference in the slope, besides the possibility that you are more intelligent?
- Why are we concerned with the boundary/frontier, how about points on the below the production possibility frontier? It's because those points are **inefficient**. Why would you want to get low grades for both history and economics when you could do well for both? **Productive Efficiency** is the attainment of as much output as possible from a given amount of inputs or resources, or as high grades as possible.
- Another interesting point to note is that if you were to reduce your history grade by spending even less time on it, the increase in economic grade is smaller than before. This is because you may be ultimately limited by for example your high school training. So someone with prior economics or mathematics training may be able to do better than another who does not. But even then, they may be limited

by their innate IQ. So your opportunity has just risen. This effectively describes the notion of the **principle of increasing marginal opportunity cost**.

- Is the point D possible in the diagram? No it is not, since it is above the possibility frontier, that is for 1 grade worsening in history, you get even more in economics. Well, at least not if you stuff yourself in your residence room like a hermit. But if you form a study group, and spread the work load, that point may be possible. So you can think of a study group as altering your study technology.
- The example above is ultimately limited by the set of grades you can attain, i.e. there is nothing more than 100 for every subject. But that is a virtual impossibility, or is it?
- Let's imagine an economy which produces only mountain bikes and surfboards.



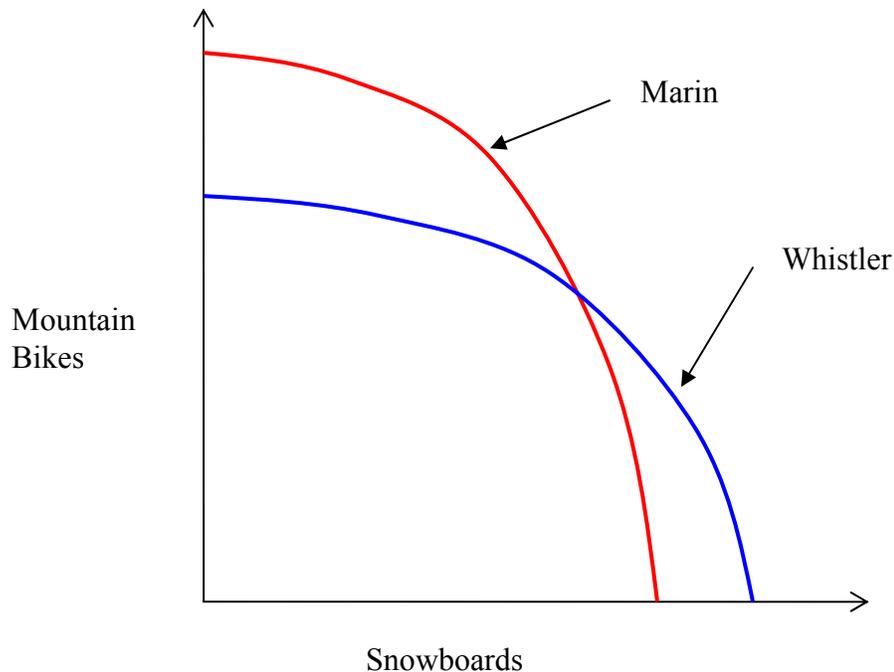
- Think about what other ways can the production frontier change?
- Thus far we have dealt with frivolous examples, but of course this can easily be translated to the production of healthy individuals, and conservation parks. What if the cure to all the worst diseases are hidden in the great wilderness, and once found, could be grown across all these land. Well, based on what we

have learned, the opportunity cost is a reduction in the amount of nature our children will be able to enjoy.

- Your text has an interesting section of the “timelessness” of the production possibility frontier. Read it.

Comparative Advantage, Specialization, and Trade

- The production possibility frontier tells us what we might be better at producing.



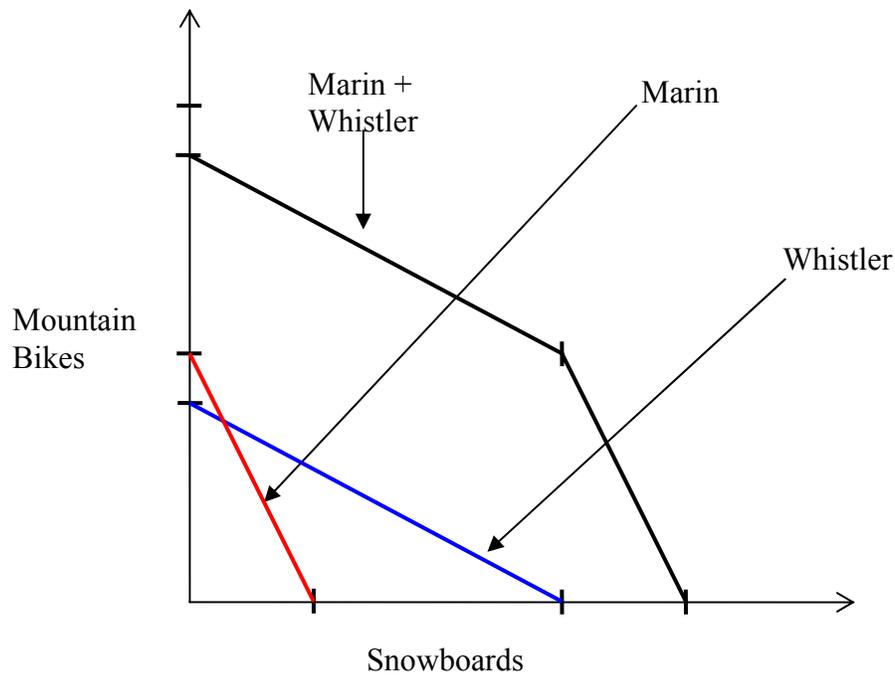
- So Whistler is better at producing snowboards than mountain bikes (A **comparative advantage in the production of snowboards**), while Marin is better at mountain bikes (A **comparative advantage in the production of mountain bikes**). (Can you see why?) So what would happen if they traded with each other (Assuming you can still snowboard in Marin, and you could bike in Whistler! Season permitting!).
- Lets have a numerical example:

Annual Production Quantities Without Trade if each Country Specializes in Production

	Mountain Bikes	Snowboards
Marin	100	50
Whistler	80	150

Annual Production Quantities With Trade

	Mountain Bikes	Snowboards
Both MTB	180	0
MaMTB &	100	150
Both SnB	0	200



- So should Marin and Whistler trade? Can you think of an example and try this yourself? Consider the gains of trading between two students, one who's good in economics, while the other who's good at history, but both are taking classes in history and economics. If each of them focus on the subject they are good at, then teach other, they might be able to fair better then striking it out individually?
- Extending to skill sets, as in the previous example on students with differing expertise, comparative advantage allows specialization. This is often referred to as **Division of Labor**.