BUSS1040 Economics for Decision Making (Week 1 - 5)

Week 1: Key Concepts & Comparative Advantages

Economics: Study of under scarcity, faced by consumers, businesses, governments, countries and so on.

- Key issues that need to be addressed in an economy are:
  (a) What to produce
  (b) How to produce it
  (c) Who should get what is made
- In a modern economy, these questions are typically resolved in a market.
- **Market**: A place where buyers and sellers of a particular good or service meet.
- Even in market economy, govts play a critical role in markets by imposing taxes and regulations.
- Our focus is on the behaviour of individuals (consumers, firms, government) in markets.

Micro: Deals with individual households, firms, industries and markets and focuses on relative prices and the allocation of output, employment, etc.
Macro: Deals with the economy as a whole, including both financial and real sides. It focuses on the overall price level, aggregate (total) output, aggregate employment and unemployment, IRs and ERs.

Scarcity: Limited resources so not all wants and needs can be met.

Opportunity Cost: Trade-off of any choice, the value of the next best foregone alternative.

- Concept applies to any resource used when making a choice or how an individual spends their time and other resources.
- Includes both explicit and implicit costs.
  - Explicit Costs: Costs that involve direct payment.
  - Implicit Costs: Opportunities foregone that don't involve an explicit cost.
- Opportunity cost does NOT include unrecoverable or sunk costs (money already spent).

Marginal: Additional or extra.

- **Marginal Benefit:** Additional benefit received from consuming an extra unit of something.
- **Marginal Cost:** Additional cost incurred through buying one more unit of something.
- **Marginal Analysis:** Helps with examining the behaviour of individuals in a market. Compare MB of activity with MC.
- If MB > MC, agent is better off doing activity. If MB < MC, agent is worse off if they do activity.
- Decision-making is thinking at the margin.

Correlation: An association between two or more factors whereby the factors are observed to be increasing/decreasing together or moving in opposite directions.

Causation: A change in one variable brings about or causes a change in another variable.

- Economic theory provides a framework for how the world works and how to distinguish between correlation and causation.
- Correlation does NOT imply causation.

Ceteris Paribus

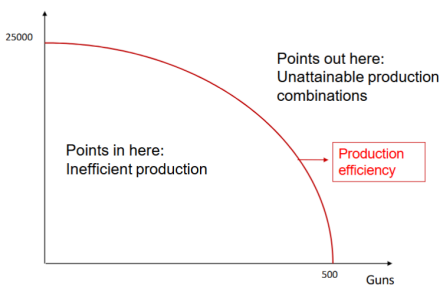
- Many things change at the same time (prices, income, tastes, taxes and so on).
- To isolate the impact of one factor, economists examine the impact of one change at a time, holding everything else constant, aka ceteris paribus.
- To examine the impact of change in price of a good on the quantity demanded, analyse the holding income and any other relevant variables constant.

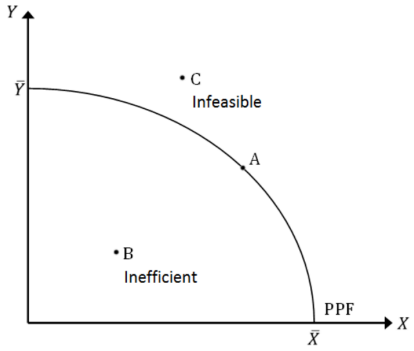
Production Possibility Frontier (PPF): Graphs the output an individual (or a country) can produce with a particular set of resources.

- A country's PPF shows all the combinations of g/s that a country can produce given its resources and current state of tech.
- If the country does not trade with others, PPF also describes the country's consumption choices.

	Guns	Butter
A	0	25000
B	100	24000
C	200	22000
D	300	18000
E	400	13000
F	500	0

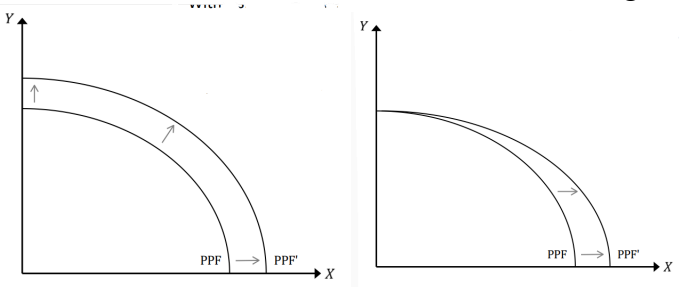
Increasing opportunity cost of guns





PPF traces out combos of the quantity of two goods (X and Y) that can be produced if all resources are used.

- A is attainable, as is B. C is unattainable given current tech and resources. Production efficiency is achieved at A, as at A, it's not possible to produce more X without producing less Y (and vv).
- B is not efficient more X can be produced while keeping the amount of Y the same (and vv).
- The PPF slope increases as we move down along it, or in other words, the PPF is concave because the opportunity cost of each good is increasing in the level of output of that good.
- If either the amount of resources available or the state of technology changes, the shape of the PPF can also change.
- An improvement of tech could shift the curve out (if it improves productivity for both goods) or rotate PPF out or up (if new tech only improves production for one of the goods).
- With a shock that boosts the production of both goods, PPF will shift outwards from origin along both axes (tech used in both industries improves, an increase in labour force, and so on).
- If a shock boosts the production of X, the PPF will shift outwards from origin along X-axis.



Slope of PPF is opportunity cost of producing an additional unit of good in terms of the other. Depends on the country's productive resources (labour, capital, land, etc) and current state of technology.

Trade can make everyone better off.

- Trade is economic interaction.
- It helps allocate goods to those who value them most. This is the gain from exchange.
- Gains from exchange may mean improvements in income, production or satisfaction owing to the exchange of goods or services.

Example (Pareto Improving Trade)

- Baz owns a bicycle he rarely rides and values at $10.

- Chloe would like to have a bike, she's willing to pay $100 (the value of bike).
- If Baz sells the bike to Chloe, Chloe is better off because she gets $100 value bike for $40, and Baz is better off because he gets $40 when he only valued the bike at $10.
- Trade is PARETO IMPROVING, where both agents are better off.

This exchange is voluntary and leaves both parties better off. Whether PARETO IMPROVING trade is weak or strong depends on the valuations of each of the parties. How much individuals benefit depends on the terms the trade occurs. Higher price suits the seller, a lower price the buyer.

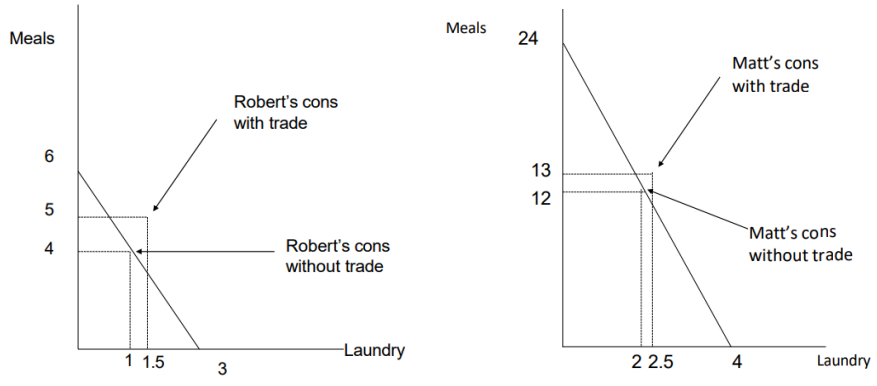
Trade also allows people to take gains from specialisation, reducing overall costs of producing and increasing output. This is related to comparative advantage in production.

Example (Gains from Specialisation)

- Rob can only wash clothes and Matt can only cook.
- When each can perform both tasks, but Robert can only cook at great cost and Matt can only wash clothes with a substantial effort, specialising lowers cost and can make both better off.
- But what if one party is better at producing both services?

	Hours needed for 1 meal	Hours needed for 1 basket	=> Amount produced in 12hrs: meals	Amount produced in 12hrs: baskets
R	2	4	6	3
M	1/2	3	24	4

- The proposed trade is that Rob does 1.5 laundry baskets for Matt, and Matt cooks 5 meals for Rob.



Without trade *With trade*

Prod. and cons		Prod	Trade	Cons	Gains from trade
R	**4 meals** **1 basket**	0 meals 3 bask	gets 5 meals for 1.5 bask	**5 meals** **1.5 bask**	**1 meal** **0.5 bask**
M	**12 meals** **2 baskets**	18 meals 1 basket	gives 5 meals for 1.5 bask	**13 meals** **2.5 bask**	**1 meal** **0.5 bask**

End results: **Both parties can consume outside of their ppf**

Absolute & Comparative Advantage

- Party A has an absolute advantage over Party B in the production of a good if, for a given amount of resources, A can produce a greater number of that good than B.
- Party A has a comparative advantage over Party B in the production of a good if A's opportunity cost of producing that good is lower than B's opportunity cost of producing the same good.

Gains From Trade (Continuing Example)