

Model – a simplified representation of reality

David Ricardo in 1817 - "Magic 4 Numbers"

1. there are only 2 productive activities
2. there are only 2 individuals
3. no transaction costs (negotiation costs, transportation costs), and no other barriers to trade (import quotas, tariffs)

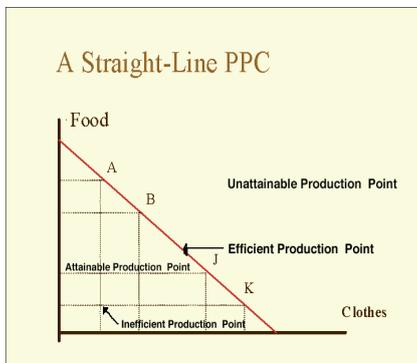
The amount of resources used to perform a productive activity determines **productivity**

- Productivity = Output / Input (1 Rabbit / 2 Hours)
- Resources are scarce as we operate in a constrained environment (labour constraints, time constraints etc.)

1.2 One Agent Economy

Production Possibility Curve - captures all maximum output possibilities for two (or more) goods, given a set of inputs (or resources - ie. time) if all the Available inputs are used efficiently

LABEL THE GRAPH (TITLE, X + Y AXIS)



Efficient Production Point - represents a combination of goods (bananas/rabbits) for which available resources (Alberto's time) **do not** allow an increase in the production of one good without a reduction in the production of another. **(inputs are used efficiently)**

Inefficient Production Point - represents a combination of goods (bananas/rabbits) for which available resources (Alberto's time) **allow** an increase in the production of one good without a reduction in the production of another. **(inputs are not used inefficiently)**

Attainable Production Point - represents a combination of goods (bananas/rabbits) that **can** be produced with the available resources **(does have enough resources)**

Unattainable Production Point - represents a combination of goods (bananas/rabbits) that **can't** be produced with the available resources **(doesn't have enough resources)**

1.3 Two Agent Economy

Absolute Advantage - an agent (or an economy) has an absolute advantage in a productive activity when they can carry on this activity with **less resources** (ie. less time) than another agent

Opportunity Cost of a given action is the value of **the next best alternative** to that particular action

- next best alternative - ie. between \$60 and \$50, the next best alternative is \$60.
- the **higher** the gradient, the **lower** the opportunity cost

$$\text{Opportunity Cost of 1 Unit (X-AXIS)} = \frac{\text{Rise}}{\text{Run}} \quad \text{OR} \quad \frac{\text{Loss in Y-Axis}}{\text{Gain in X-Axis}}$$

$$\text{Opportunity Cost of 1 Unit (Y-AXIS)} = \text{Inverse} \quad \text{OR} \quad \frac{\text{Loss in X-Axis}}{\text{Gain in Y-Axis}}$$

Comparative Advantage - an agent (or an economy) has a Comparative Advantage in a productive when they have a **lower opportunity cost** of carrying this activity than another agent.

Principle of Comparative Advantage - everyone is better off if each agent (or each country) **specialises** in the activities for which they have a comparative advantage