

CHAPTER 2

The Production Possibility Model, Trade, and Globalization

Chapter Goals

- Demonstrate tradeoffs with a production possibility curve.
- Relate the concepts of comparative advantage and efficiency to the production possibility curve.
- State how, through comparative advantage and trade, countries can consume beyond their individual production possibilities.
- Explain how globalization is guided by the law of one price.

The Production Possibility Model

A **production possibility model** conveys the tradeoffs society faces.

The production possibility model can be presented both in a table and in a graph.

Through specialization and trade, individuals, firms, and countries can achieve greater levels of output than they could otherwise achieve.

The Production Possibility Model

A **production possibility curve (PPC)** is a curve measuring the maximum combination of outputs that can be obtained from a given number of inputs.

It gives you a visual picture of the trade-off embodied in a decision.

A PPC is created from a production possibility table by mapping the table in a two-dimensional graph.

Application: A Production Possibility Table for Grades in Economics and History

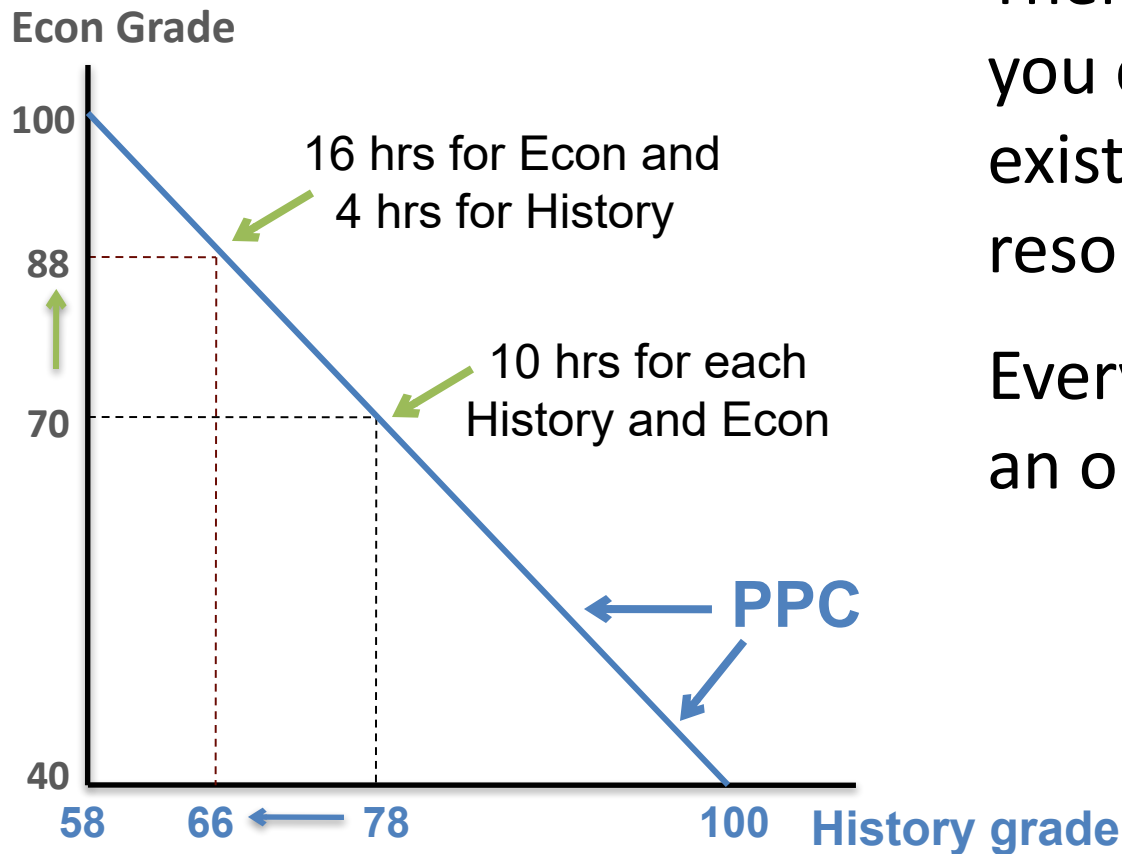
History		Economics	
Hrs of Study	Grade	Hrs of Study	Grade
20	98	0	40
18	94	2	46
10	78	10	70
4	66	16	88
0	58	20	100

Application: A Production Possibility Curve

A PPC demonstrates:

There is a limit to what you can achieve, given existing institutions, resources, and technology.

Every choice you make has an opportunity cost.

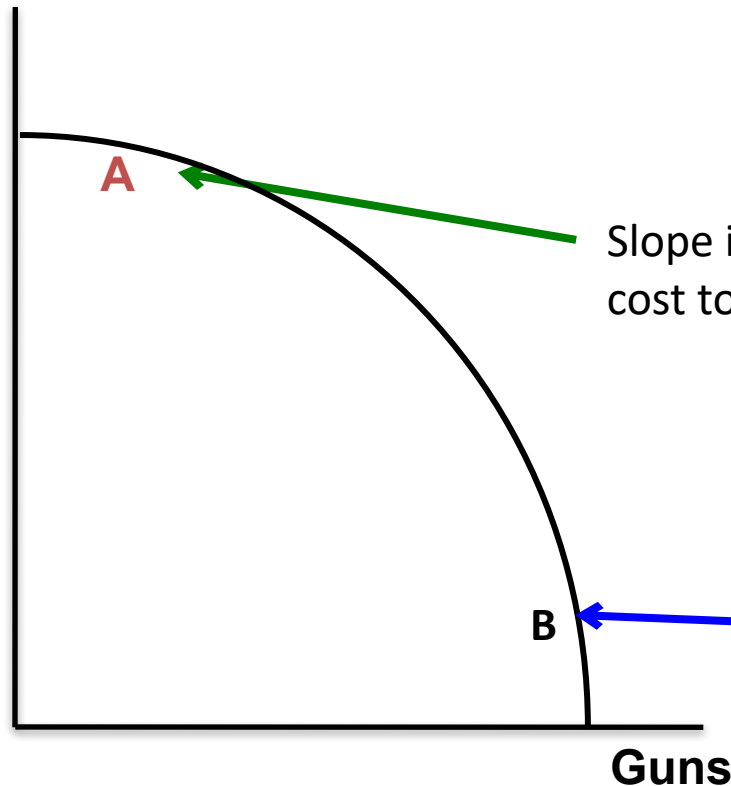


Increasing Opportunity Costs of the Tradeoff

The principle of increasing marginal opportunity cost tells us that opportunity costs increase the more you concentrate on the activity.

In order to get more of something, generally one must give up ever increasing quantities of something else.

Butter



Slope is **flat** at A. This means there is a **low** opportunity cost to produce more guns.

Slope is **steep** at B. This means there is a **high** opportunity cost to produce more guns.

Application: A Production Possibility Table for Guns and Butter

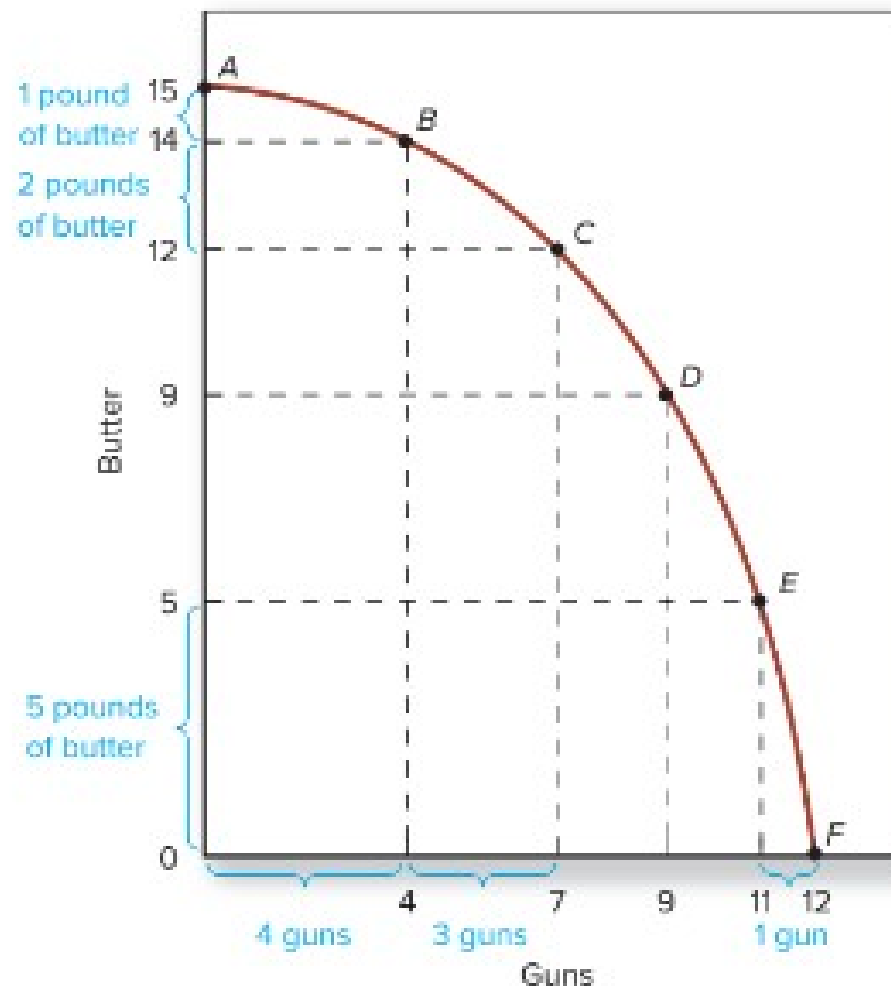
The table shows the trade-off between production of guns and butter.

% of Resources Devoted to Guns	Number of Guns	% of Resources Devoted to Production of Butter	Pounds of Butter	Row
0	0	100	15	A
20	4	80	14	B
40	7	60	12	C
60	9	40	9	D
80	11	20	5	E
100	12	0	0	F

Application: A Production Possibility Curve for Guns and Butter

Opportunity cost of choosing guns over butter increases as you increase the production of guns.

Production possibilities curves typically bow outward because some resources are better suited for certain kinds of goods than other kinds of goods.



(b) Production Possibility Curve

Efficiency

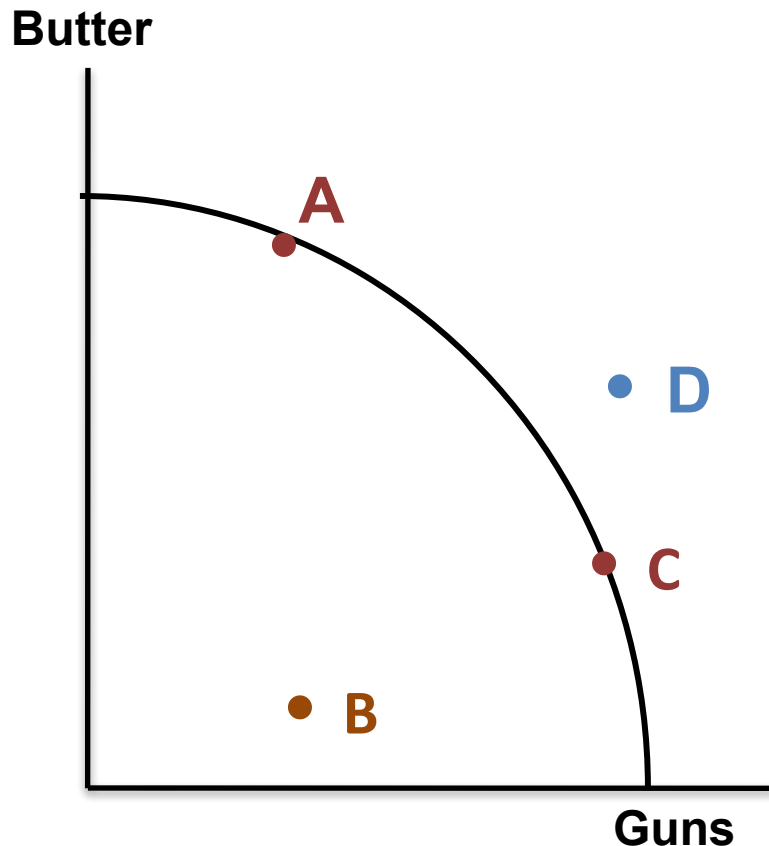
Productive efficiency is achieving as much output as possible from a given amount of inputs or resources.

Inefficiency is getting less output from inputs that, if devoted to some other activity, would produce more output.

Points A and C are points of efficiency.

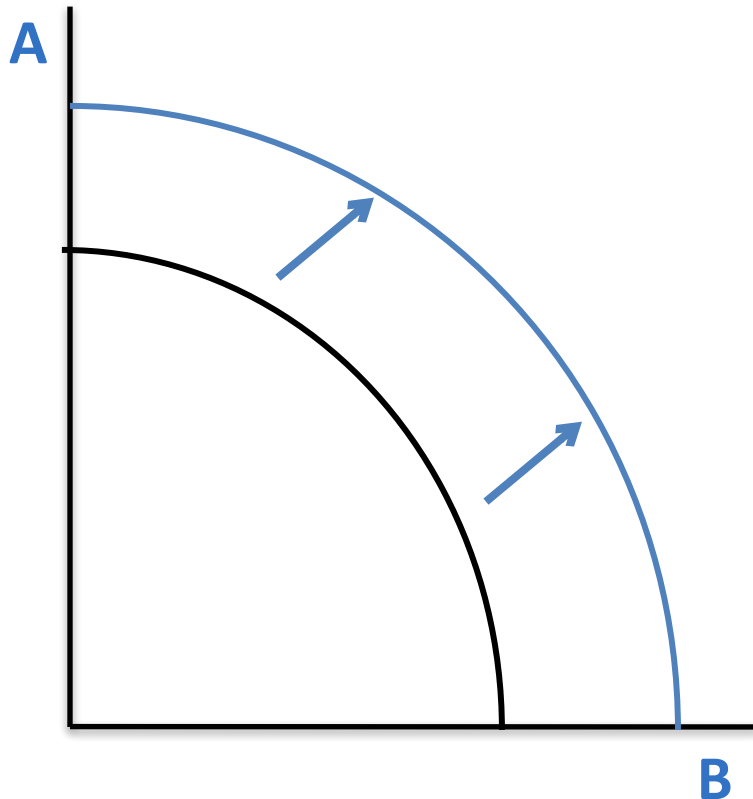
Point D is unattainable with given amounts of inputs.

Point B is a point of inefficiency.

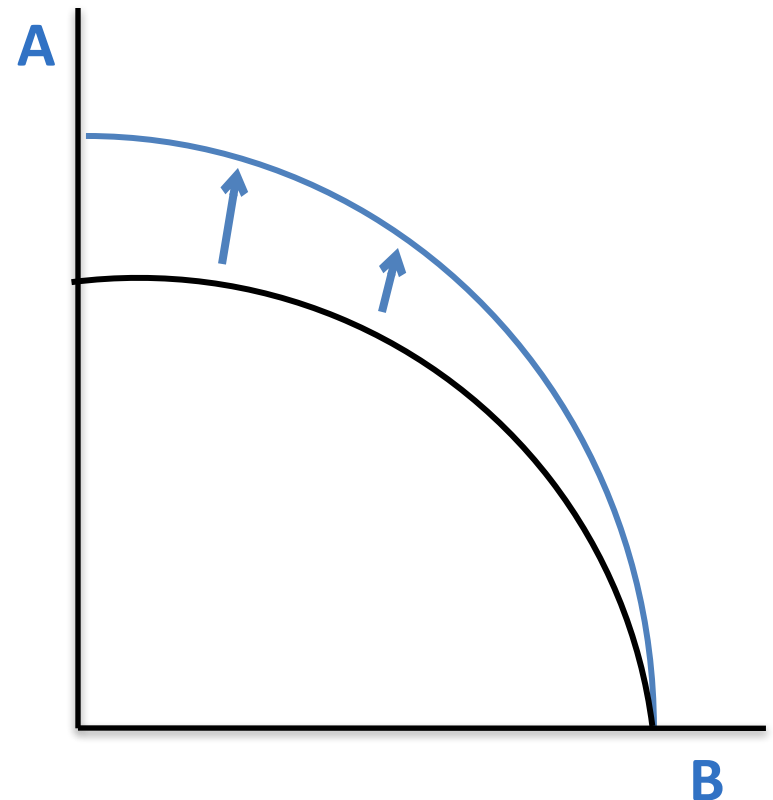


Efficiency and Technological Change

Neutral technological increase
or an increase in resources.



Biased technological increase.



Distribution and Productive Efficiency

The productive possibility curve focuses on efficiency and ignores distribution.

If a method of production will change income distribution we cannot determine if that method is efficient or not.

Efficiency has meaning when analyzing a particular goal.

In our society, most people prefer more to less, and many policies have relatively small distribution effects.