

Macroeconomics 201 Discussion Session #1: Production Possibilities

Construct a Production Possibilities Curve based on the following Production Possibilities Schedule:

<u>Missiles</u>	<u>Milk(millions of gallons)</u>
0	40
10	34
20	27
30	19
40	10
50	0

1. What are the assumptions behind the construction of the curve?

Two goods, resources land, labor and capital fixed in quantity, technology fixed, time (e.g., 1 year)

2. Explain the shape of the curve.

Bowed out exhibits the laws of diminishing returns and increasing opportunity costs

3. Calculate the opportunity cost of producing the first 10 missiles.

6 million gallons of milk

4. Calculate the opportunity cost of producing the last 10 missiles.

10 million gallons of milk

5. What two central facts of economic life (in the neoclassical view) are displayed by the curve?

Scarcity and opportunity cost

Graph the additional two points:

<u>Missiles</u>	<u>Milk(millions of gallons)</u>
30	15
35	25

6. What would it mean if the economy were operating at the first point?

Point inside the curve means unemployment, below full capacity utilization, waste, inefficiency

7. Interpret the second point.

Point outside the curve, since we are measuring in physical units, means it is unattainable, impossible given resources and technology (and time). If we were measuring in monetary units, it would mean higher prices, or inflation

8. What could cause a shift out of the production possibilities curve? What is the economic meaning of such a shift?

Increased resources and/or technological advance. Economic growth.

9. Draw a production possibilities curve that displays the laws of increasing opportunity costs and diminishing returns. Label the axes guns and butter. Draw another PPC that shows a sector-specific technological advance in the butter sector.

Should show a shift out of the curve on the butter axis, but the intercept on the gun axis should stay the same.