Scarcity, Opportunity Costs, and Production Possibilities Curves: Reviewing Chapter 2 through the Homework

Foundational Concepts

- •The <u>economizing problem</u> unlimited wants, limited resources
- Wants change and expand
- Economic resources property and human factors

Factors of Production

Four Factors

- Land and things from the land
- Capital tools, machinery, etc., manufactured items used to produce
- Labor physical & mental human contributions
- Entrepreneurial ability initiative, decisionmaking
- Income is derived from supplying these factors – rental/interest income, wages, profits (or losses)

Efficiency

- •Best use of scarce resources
- Custom defines full employment
- Productive efficiency Using the least for each product makes it possible to make more overall
- •Allocative efficiency Making what people actually *want*, the "right" mix of products

Productive Possibilities

The decision of what to produceAssumes full efficiency

Assumptions

- Fixed resources can be reallocated for different products
- Fixed technology A frozen moment in time, new products not being introduced
- Only two goods are being considered, so there is a tradeoff

Productive Possibilities

- What is the effect of choice?
- •How much of our limited resources do we give to each of two options? Tradeoff between the two
- •One underlying issue is whether we make consumer goods (for immediate satisfaction) or capital goods (for longterm growth)

Graphing Productive Possibilities Curves (PPC)

- •One product per axis, with each point representing some maximum output of the two products
- •Points to the right of the line ("outside") are impossible, as there aren't enough resources to produce at this level
- •Points to the left of the line ("inside") are inefficient, representing the economy not working at full potential

Law of Increasing Opportunity Cost

- •Opportunity cost arises because more of one product means less of another
- The amount sacrificed for one unit = opportunity cost
- •Constant, linear opportunity cost per unit is theoretical only.

Part A:

#1: A, B & C are all "two" – This is because it reflects (D) constant opportunity cost per unit of Good A.

Law of Increasing Opportunity Cost

- The (marginal) opportunity cost rises with each unit
- Could be expressed in money, but in a PPC we're looking at the tradeoff in terms of goods not made
- The more of a product being produced, the greater marginal opportunity cost – thus the shape of the PPC is bowed, with an increasing slope

Part A:

#2: A is two, B is four, C is six – This is reflective of (D) increasing opportunity cost per unit of Good A.

Shape of the PPC



Part B: Figure 1.3 is bowed

Figure 1.4 is linear

Why is there an Increasing Opportunity Cost?

• Resources being funneled to one purpose are less suited to it, so they are less productive than they might be for other uses

• This is the result of imperfect flexibility of resources

Allocative Efficiency & the PPC

- What is the BEST combination? What should be produced?
- The optimal point on the line is where MB=MC (marginal benefit=marginal cost)
- If we can find where MB=MC meet for each of the two products, we can choose the optimal point on the PPC curve

Real World Considerations

- OUnemployment means that an economy can only meet points <u>inside</u> the curve
- Economic growth (in terms of quantity of resources, quality, tech advances) shifts the PPC to the right

• Present choices impact future possibilities

- Focusing on immediate wants can sacrifice future growth
- International trade allows countries to specialize and to obtain results outside the curve

Shifting PPC



Part C:

#3: BD' shows a growth in consumer goods from B' to D'
#4: AA' shows a contraction of both products from BB'
#5: CC' shows an outward growth shift for both products from BB'
#6: Point X is outside the

#6: Point X is outside the realm of possibility with current resources and technology

#7: Point Y is inefficient and wasteful, possibly due to unemployment or war