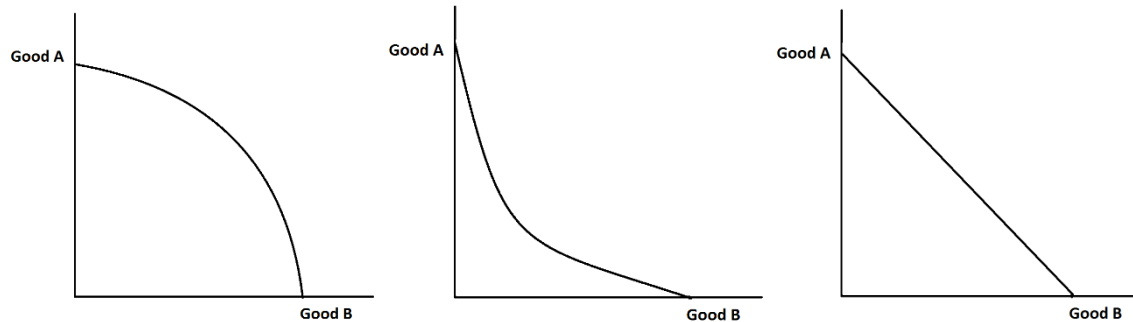


TUTORIAL 3 – WEEK 4

Introduction

Q1. What is the difference between productive and allocative efficiency?

Q2. Comment on the type of opportunity cost in each of the following diagrams:



Q3. An Australian economist is quoted in the Post Courier as saying: “Papua New Guinea should only export goods to the world that it is better at producing than Australia.” Comment on this quote. Are they right? Why / why not?

Ricardian Model

Q4. LukimLand is a small country that produces two goods: noodles (N) and cars (C). It has a total of 1,200 hours of labour available per year. The unit labour requirements are as follows:

$$\alpha_{LN} = 5$$

$$\alpha_{LC} = 50$$

- a. Create a general equation for production in LukimLand
- b. Graph the PPF for LukimLand, with noodles on the y-axis
- c. What is the opportunity cost of noodles in terms of cars?
- d. What is the opportunity cost of cars in terms of noodles?
- e. Compare your answers to (c) and (d) – what do you notice?
- f. If the price of noodles was \$5 and the price of a car was \$70, what would you expect to happen to LukimLand’s production?
- g. Using the same prices in (f), what would be the hourly wage in the car industry, and the hourly wage in the noodle industry?
- h. Starting with the prices in (f), what would you expect to happen to the price of noodles and cars in the long-run?

Now imagine another country called LikLikLand. LikLikLand has 1,000 hours of labour available per year, and its labour unit requirements for noodles and cars are:

$$\alpha_{LN} = 10$$

$$\alpha_{LC} = 40$$

- i. Graph the PPF for LikLikLand, with noodles on the y-axis
- j. What is the opportunity cost of noodles in terms of cars in LikLikLand?
- k. What product does LukimLand have a comparative advantage in? What product does LikLikLand have a comparative advantage in? Would it ever be possible that this could be the same product?
- l. Now assume that LukimLand and LikLikLand trade. If the equilibrium price of noodles in terms of cars with trade is 0.2 cars, then what will be the production in both countries?
- m. Draw the relative demand and relative supply curve in general equilibrium. Make sure to label everything you can in your graph.
- n. Draw the PPFs for both LukimLand and LikLikLand on the same graph, and draw in the line of trade (the 'consumption possibility line').
- o. What would we need to know in order to find the point on the trade line where both countries consume?
- p. Do both countries gain from trade? What would be one scenario where we could be sure that both countries would *not* gain from trade?