

EC 380: International Economic Issues
Instructor: P. Economides
Problem Set 1
Fall 2022
Due: 11:59 p.m. on Friday, October 7th

Setup

Answers must be submitted online through Canvas by the stated deadline (see above).

Questions

Q1. Answer the following short questions:

- 1) How is the Trade to GDP ratio measured? How has this value been trending over the years?
- 2) How does labor mobility far compared to the early 1900s?
- 3) Describe two features of contemporary international economic relations.

4) Briefly describe what a trade deficit is and the US track record on deficits.

5) Describe the employment possibilities and occupations open to students of international economics.

Q2. Suppose we are considering a Ricardian model setting, where countries have not yet opened up to trade. Two goods are produced exclusively by domestic labor supplies, Pots and Plants.

Home and foreign maintain the following marginal productivities of labor (MPL) in producing products. The two countries labor pools $\bar{L} = 35$ are equal in both countries.

MPL	Pots	Plants
Home	2	5
Foreign	3	7

Consider the autarky scenario where countries do not exchange goods. Complete the following questions to obtain the two countries consumption and production equilibria.

1) Which country has comparative advantage in producing Plants?

2) What are the max quantities of each good that Home and Foreign can produce?

Max Output	Pots	Plants
Home		
Foreign		

3) Sketch the PPFs of Home and Foreign in a single graph, given max output levels. Be sure to correctly label the graph for full points.

- 4) Suppose Home prefers consuming 3 plants for every pot consumed. Calculate the consumption bundle of Home and sketch it on a PPF graph.

- 5) Suppose Foreign prefers consuming 5 plants for every pot consumed. Calculate the consumption bundle of Foreign and sketch it on a PPF graph.
- 6) Consider a shock to the economy where Home suddenly becomes more productive at making pots. Do comparative advantages change for a case in which $MPL_{Pots}^H = 8$? How does Home's production bundle change?

Q3. Suppose we are considering a Ricardian model setting, where countries have not yet opened up to trade. Two goods are produced exclusively by domestic labor supplies, Air Pumps and Car Tires.

Home and foreign maintain the following marginal productivities of labor (MPL) in producing products. The two countries labor pools $\bar{L} = 50$ are equal in both countries.

MPL	Air Pump	Car Tires
Home	14	8
Foreign	9	12

Consider the autarky scenario where countries do not exchange goods. Complete the following questions to obtain the two countries consumption and production equilibria.

- 1) Which country has comparative advantage in producing Tires?

2) What are the max quantities of each good that Home and Foreign can produce?

Max Output	Air Pump	Car Tires
Home		
Foreign		

3) Sketch the PPFs of Home and Foreign in a single graph, given max output levels. Be sure to correctly label the graph for full points.

- 4) Suppose Home prefers consuming 8 tires for every pump consumed. Calculate the consumption bundle of Home and sketch it on a PPF graph.

- 5) Suppose Foreign prefers consuming 12 tires for every pump consumed. Calculate the consumption bundle of Foreign and sketch it on a PPF graph.
- 6) Consider a migrant boom occurs at foreign, where the Home workforce becomes $\bar{L} = 60$. Do comparative advantages change for either country? How does Home's production bundle change?