

Homework 2

Due at the beginning of the class on May 29 (Tuesday)

Answer the following questions as clearly as possible. Bullet points are fine. (TOTAL 100 Points)

▪ **Conceptual Questions:**

Q1. (25 Points)

- (5 points) State the Heckscher-Ohlin Theorem.
- (10 points) How did Leontief test this theorem? What did he find?
- (10 points) Does Leontief's result hold after adjusting for differences in productivity? If yes, why? If no, why not? Explain.

Q2. (25 Points)

Suppose Mexico receives an inflow of FDI. There are two factors (labor and capital), and two sectors (Food and Televisions). Televisions are capital intensive goods and Food is labor -intensive.

- (10 points) Using a box diagram show how the inflow of FDI is going to affect the economy in the long run. Point out the pre- and post- FDI allocation of L and K in the Food and Televisions sector.
- (10 points) How does factor earnings (Wage and Rentals on Capital) change due to the inflow of FDI? Explain.
- (5 points) What happens to the output of each good? Show and explain using a graph.

▪ **Numerical Questions: (40 Points)**

Q3.

Suppose Spain uses only capital and labor for production of two goods, cars and shoes. There are total 150 workers and 100 units of capital in the economy. Cars use 3 units of capital for each worker, so that $K_c = 3 * L_c$, whereas shoes use 0.5 unit of capital for each worker, so that $K_s = 0.5 * L_s$.

- (10 points) Solve for the amount of L and K used in each industry.
- (10 points) Suppose there is an inflow of 50 workers in the economy due to immigration, keeping total capital constant at 100. Solve for the amount of L and K used in each industry.
- (10 points) Suppose instead there is an inflow of 25 units of capital in the economy due to FDI, keeping total labor constant at 150. Solve for the amount of L and K used in each industry.
- (10 points) Explain how your results in parts (b) and (c) are related to Rybczynski Theorem.

▪ **Empirical Questions: (10 Points)**

Q4.

- (5 Points) What is/are the potential question(s) you are going to pursue in your Project?
- (5 Points) What is the potential dataset you are going to use in your project?