

**You are not allowed to consult any notes or books. You have to write your answers in the blue book that the persons proctoring the exam give you. Your answers should reflect only your knowledge. Attempting to consult with others or to look at someone else's work constitutes academic misconduct.**

**Please return this page with your blue book.**

**Econ 464  
Fall 2007**

**M. Muniagurria**

**Exam 2 (80 pts)**

**(I) Heckscher - Ohlin : 2 countries**

Consider two countries (Japan and Vietnam) that can produce two goods (Airplanes and Clothing) using two factors: production workers ( $L^P$ ) and non production workers ( $L^N$ ). The technology to produce each good is the same in either country and allows for substitution among inputs. Clothing production is  $L^P$  intensive while Airplane production is  $L^N$  intensive. Japan is relatively  $L^N$  abundant and Vietnam is relatively  $L^P$  abundant . Preferences are identical across countries.

**Answer the following questions. Justify fully using a clear explanation and a diagram and/or an equation in each case.**

- (1) (4 pts) Assume the two countries start trading freely. Draw a production and consumption point under free trade for Japan and identify exports and imports (use the horizontal axis for Clothing).
- (2) (6 pts) Show how the two types of nominal wages ( $w^P$  ,  $w^N$ ) change in Japan when the country goes from autarky to free trade with Vietnam (use horizontal axis for  $w^N$ )
- (3) (4 pts) Will Japanese non production workers be in favor or against free trade with Vietnam? (Show how the real wage of non production workers change).
- (4) (6 pts) What will happen to the ratio of non production to production workers ( $L^N / L^P$ ) in both sectors in Japan after opening to trade? (use horizontal axis for  $L^P$ )

**(II) Heckscher - Ohlin/ Capital Inflows: one small country trading with the rest of the world (10 pts)**

Assume now that Vietnam is a small country trading freely with the rest of the world (world prices are fixed). As before, Vietnam can produce two goods (Airplanes and Clothing) using two factors (production and non production workers).

Clothing production is production worker intensive while Airplane production is non production worker intensive, there is substitution among inputs, nice preferences and Vietnam is relatively  $L^P$  abundant.

Use a box diagram to evaluate the effect of an inflow of non production workers  $L^N$  on the production of Airplanes and Clothing.

### (III) Specific Factors Model : Capital Movements

Consider the Specific Factors model studied in class (all the **standard assumptions** hold : decreasing marginal products, “nice” preferences, etc ) . There are two countries (Chile and Germany), two commodities (equipment and grapes) and three factors (capital, land and labor). The production of equipment uses capital (K) and labor, while the production of grapes uses land (T) and labor. Suppose both countries have the same labor force , technologies and preferences. Assume land is relatively abundant in Chile (\*) and capital is relatively abundant in Germany.

Assume both countries are TRADING FREELY.

**Answer the following questions. Justify fully using a diagram or an equation.**

*Effects of a capital inflow into Germany*

Assume capital from the Rest of the World flows into Germany. Evaluate the effects of this inflow on

- (1)(8 pts) the amount produced of equipment and grapes in Germany (assuming world prices are fixed).
- (2) (6 pts) the real return of capital in Germany (assuming world prices are fixed)
- (3) (6 pts) the equilibrium free trade relative prices  $p_E/p_G$  .
- (4) (6 pts) Chilean level of welfare.

### (IV) Medium /Short Length Questions

(1) (6 pts) Which of the models studied in class supports Borjas’ position on th effect of immigration on wages?

(A paragraph is sufficient).

(2) (8 pts) A well known economist recently wrote “outsourcing is just a new way of doing international trade”.

Give a short and precise explanation of why this is the case (a paragraph is sufficient).

(3) (10 pts) Use a diagram to show how Consumer Surplus, Producer Surplus and Total Welfare change with the **removal of a tariff** (consider the case of a small country).