

**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 364  
Fall 2008**

**M. Muniagurria**

**Exam 2 (Total Points: 90 )**

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

Consider two countries (Japan and Vietnam) that can produce two goods (Trains and Clothing) using two factors (labor and capital). The technology to produce each good is the same in either country and allows for substitution among inputs. Clothing production is labor intensive while Train production is capital intensive. Japan is relatively capital abundant and Vietnam is relatively labor 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) (6 pts) Draw a production and consumption point under free trade for Japan (use the horizontal axis for Clothing). Identify Exports and Imports.
- (2) (8 pts) Show how the nominal wage and the rental price of capital change in Japan when the country goes from autarky to free trade with Vietnam. **Use a diagram with  $w$  in the vertical axis and  $r$  in the horizontal axis.**
- (3) (6 pts) Will Japanese workers be in favor or against free trade with Vietnam? (Show how the real wage in terms of Clothing and Trains change when the country goes from autarky to free trade).
- (4) (6 pts) What will happen to the capital/labor ratio ( $K/L$ ) in both sectors in Japan after opening to trade? Use a diagram with  $L$  in the vertical axis and  $K$  in the horizontal axis

**(II) Assume Costa Rica is a small country trading freely with the rest of the world (i.e. Costa Rica is trading at fixed prices).**

- (1) **(14 pts)** Use a specific factors model with 3 factors (land, machinery and labor) and two goods (vegetables and cars) to evaluate the effects of immigration from Mexico on the **real returns of labor and machinery**. Use diagrams and explanations. In this case the production of vegetables uses labor and land and the production of cars uses machinery and labor.
- (2) **(14 pts)** Use the Heckscher - Ohlin (H-O) model with 2 factors (machinery and labor) and two goods (vegetables and cars) to evaluate the effects of immigration from Mexico on the **real returns of labor and machinery**. Use diagrams and explanations. Assume that vegetable production is labor intensive and car production is machinery intensive.

### (III) Short/Medium Length Questions

(1) (12 pts) Consider a Chinese firm's production of TV sets including research and development (R&D) and component production. Use a PPF diagram to show the gains from outsourcing (starting from an autarky) if China has a comparative advantage in the production of components.

(2) (12 pts) Why are VER's (Voluntary Export Restraints) worse for a country's welfare than a tariff that results in the same amount of imports? Assume that the country is **small** (takes the world price as given)  
Justify fully.

(3) (12 pts) Use a diagram to show how Consumer Surplus, Producer Surplus, Gov. Revenue and Total Welfare change in the export market when a country **removes** an export subsidy. Assume the country is **small** (takes the world price as given).