

## INTERNATIONAL ECONOMICS

### TUTORIAL 6 (*Due Week 9*)

#### Modern Trade Models

**Q1.** Which modern trade model do you think is the most compelling? Why?

**Q2.** Which modern trade model do you think is the least compelling? Why?

#### Internal / External Economies of Scale

**Q3.** What is the difference between internal and external economies of scale?

**Q4.** What basic assumptions have we had in all our earlier models that we now change for internal/external economies of scale?

**Q5.** Germany has an established solar panel industry with the following functions:

$$Q_{D \text{ Germany}} = 20 - P; \quad ATC = 12 - 0.2Q$$

Units are in hundreds of dollars and millions of units.

- a. What is wrong with this ATC curve?
- b. What is the equilibrium price and quantity in Germany for solar panels?

Now Germany opens up its economy to the world, and is the only supplier of solar panels. The global demand curve is now:

$$Q_{D \text{ World}} = 40 - P$$

- c. What is the global equilibrium price and quantity?

China enters the market and tries to compete. Their ATC functions is:

$$ATC = 10 - 0.2Q$$

- d. Will China be able to compete with the pre-established German solar-panel industry? Why/why not?

**Q6.** Using the same functions for the German solar panel industry as in Q5a., assume that there are also **internal economies of scale**.

- a. What is the average quantity produced if there are 5 firms? Illustrate this on a PP-CC diagram.
- b. Once the German economy opens up to the world (and is the only supplier), and assuming that the number of firms does not change, illustrate the effect on a PP-CC diagram.