



**International Trade in Services**

**Exercise 4**

**Name:**

2. Population in USA: 100, in China: 1000.

**Utility per capita**  $D_i$  / population.

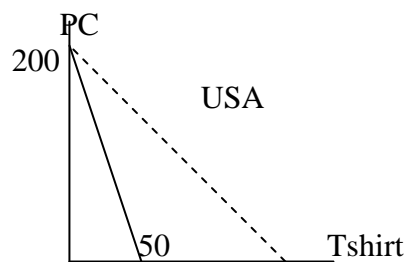
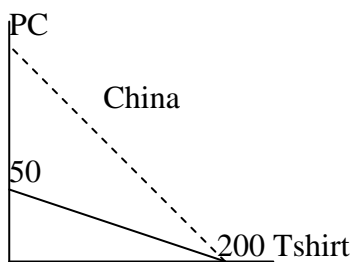
In USA the unit labor requirement for PC is:  $\frac{1}{2}$ , and for Tshirt is: 2. In China the unit labor requirement for PC is: 20, for Tshirt is: 5.

The opportunity cost and the relative price of Tshirt in terms of PC is: 4 in USA,  $\frac{1}{4}$  in China.

**Assume that consumers in China consume only PC, and those in USA consume only Tshirt.**

With trade, USA specializes in the production of PC (200) and China in Tshirt (200).

In addition, markets clear when the relative price ( $\frac{P_{Tshirt}}{P_{PC}}$ ) after trade becomes 1.



- A. What is the utility per capital before and after trade in USA and in China?
- B. Suppose that there has been technological progress in China. The productivity of labor for the production of Tshirt increases from  $\frac{1}{5}$  to  $\frac{4}{5}$ . Draw the effect on the graph above.
- C. What is the effect on the comparative advantage of China and USA? What would be the global production of PC and Tshirt? What would be the new utility per capital in USA and in China?
- D. What is the world relative price ( $\frac{P_{PC}}{P_{Tshirt}}$ ) that satisfies “Market Clearing” conditions?
- E. Show the derivation of the new consumption possibility frontiers in the graph above.
- F. Illustrate the situation using the graph below for the relative world supply and demand, and explain the impact on terms of trade of USA and China.

