Public Affairs 856
Spring 2019
University of Wisconsin-Madison

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Social Sciences 7418

Midterm Exam 1

The total time for the exam is 60 minutes, although you are given 70 minutes to complete it. Points are allocated proportionally to the time allocations**.**

1. [20 minutes total] Hecksher-Ohlin.

   a. (8 minutes) Draw the "Johnson Diagram", where cloth is labor intensive and food is land intensive, and home is land abundant, a*ssuming that both countries are initially specialized under free trade*. Analyze the effect of an increase in the amount of land in Foreign that causes both countries to be non-specialized.

   b. (8 minutes) Using a PPF/relative price/social indifference curve diagram for Home, show what happens when this event occurs. Is Home better off relative to conditions before Foreign increased its endowment of Land?

   c. (4 minutes) Is Home better off relative to the situation under autarky? Explain, using a diagram.

2. [20 minutes total] The following shows the labor time necessary to produce one unit of the good in a Ricardian model of trade:

	Biotech	Airliners
US	400 worker-days	200 worker-days
Europe	250 worker-days	500 worker-days

   a. (7 minutes) Which country has a comparative advantage in what good? If the US has 400,000 workers, draw and label the country's PPF. Show graphically the production and consumption point for the US under autarky (assume that you know the preferences of the country).

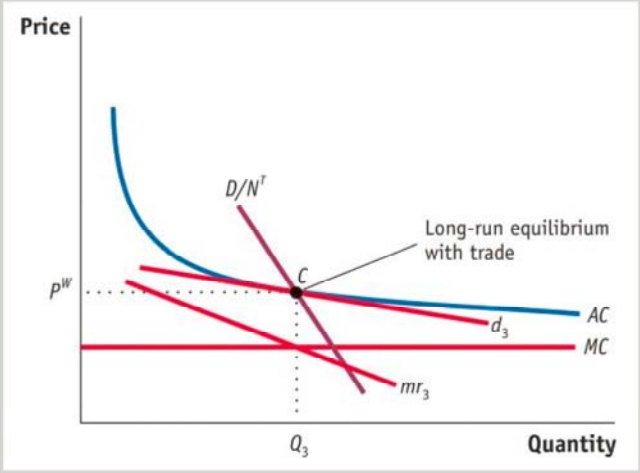
   b. (7 minutes) Suppose that trade opens up. Show graphically the US production and consumption points under trade (assume that you know the world prices of the goods).

   c. (6 minutes) Can the consumption of Biotech be smaller with trade? Can the consumption of Airliners be smaller with trade? In what sense is the country better off?

[Exam continues, Turn page over]

3. [20 minutes total] Suppose you are given long run equilibrium in home country (there is a symmetric foreign country, with which there is free trade).

FIGURE 6-7 (1 of 2) Long-Run Monopolistic Competition Equilibrium with Trade



The long-run equilibrium with trade occurs at point C.

At this point, profits are maximized for each firm producing Q_3 (which satisfies $mr_3 = MC$) and charging price P^W (which equals AC). Since monopoly profits are zero when price equals average cost, no firms enter or exit the industry.

2.1 (6 minutes) Suppose trade barriers are erected such that there is no longer any trade between and foreign. Show what happens in the short run, using a graph.

2.2 (4 minutes) Describe what happens in terms of exit and entry of firms.

2.3 (6 minutes) Show what happens over time, using a graph.

2.4 (4 minutes) Are consumers better off or worse off in the long run? Describe specifically in what terms they are better or worse off.

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