

Economics 165
FINAL EXAM

This is a three hour exam. Please make sure to provide both analytical support and economic intuition for your answers. You should spend the first ten minutes reading the exam. Good luck!

Part I: (50 points) Answer **two** of the following four questions.

1. Use the Continuum-of-Goods Ricardian Trade Model to argue that a reduction in a country's competitiveness is not a reliable indicator that it has suffered a decline in its living standard.
2. True/False Explain: If both the domestic and the foreign money supply are temporarily increased by the same percentage, there will be no short run impact on the exchange rate (s). Note: in answering this question, you may assume that domestic and foreign prices and output are exogenously fixed in the short run.
3. We saw in class that, when goods prices are fixed in the short run, an unexpected permanent increase in the U.S. money supply leads to an "overshooting" of the spot exchange rate in the short run. Now suppose instead that goods prices can change instantaneously (i.e., they are flexible in both the short and the long run). Would the exchange rate still overshoot in the short run in response to an unexpected permanent increase in the U.S. money supply? Note: in answering this question, you may assume that output is exogenously fixed in the short run.
4. Consider the Brander-Spencer Duopoly Rent Shifting Model. Show that, if the home government imposes the optimal export subsidy and the foreign government remains passive (i.e., does not intervene with a policy of its own), then the home-firm's market share will rise and the foreign firm's market share will fall.

Part II: (40 points)

Consider a "small" open economy (i.e., an economy that takes world prices as given). Suppose that this economy produces food and clothing with inputs of capital and labor. Finally, suppose that the government of this country is considering the imposition of a tight new pollution standard for its farmers (i.e., its food producers). The environmental implications of this new standard are well understood, but you have been asked by the government to provide an assessment of the short run and long run economic impacts.

Assuming that, in the short run, this new pollution standard will diminish the marginal physical product of labor in the food sector, use the Specific Factors Model (with sector-specific capital in each sector, and labor mobile between sectors) to assess the short run economic impacts of this new standard, and in particular show who will win and who will lose in economic terms if the new standard is implemented.

In the long run, the labor and capital in this economy can move freely between the food and the clothing sector, and food is produced with a capital-intensive technology relative to clothing. Assuming that, in the long run, this new pollution standard will lead to a “factor-neutral” change in input requirements in the food sector, so that the family of food isoquants still looks the same but each isoquant in this family is associated with a lower level of food output once the pollution standard is in place, use the Heckscher-Ohlin Model to assess the long run economic impacts of this new standard, and in particular who will win and who will lose in economic terms if the new standard is implemented.

Part III: (10 points)

Suppose that the foreign money supply is unexpectedly and temporarily increased. Using the AA-DD model covered in class, answer the following questions:

(a) What effect will this have in the short run on the spot exchange rate (s), the domestic output level (y), and the domestic current account balance (CA)?

(b) Now suppose that the domestic government wishes to counteract the effects you have identified in part (a) above by responding to the unexpected temporary increase in the foreign money supply with an unexpected temporary domestic policy change of its own. The domestic monetary authority claims that a change in the domestic money supply is the best way to prevent the temporary and unexpected increase in the foreign money supply from having any effect on s , y or CA . But the fiscal authority argues that a change in the level of domestic government spending is the best way to accomplish this goal. Who is right?