

Final Exam (March 11 2020)

Instructions: You have 120 minutes to answer all the questions. The total number of points is 120, so the number of points per question also indicates how much time you should devote to that question.

Make sure your answers are legible and concise. Make assumptions if you need to and make sure to explain the intuition behind your results. If you get stuck with the math in the theoretical exercise, try to guess the answers to the remaining questions providing intuition.

I. Short Questions (30 points)

Determine whether the following statements are TRUE, FALSE or UNCERTAIN, and justify your answer in one paragraph. Grading will be based on the justification (not on the simple TRUE, FALSE, UNCERTAIN answer). Please be concise.

1. Intra-industry trade between two countries requires differences in comparative advantage. **(5 points)**
2. According to Amiti, Redding, and Weinstein (2019), the costs of 2018 U.S. tariffs have been evenly split between domestic consumers and foreign exporters. **(5 points)**
3. According to the gravity model, the gains from trade are greater if the country's share of spending on its domestically-produced good is smaller. **(5 points)**
4. For any voluntary export restraint, there is an import quota that has the same effects on prices, quantities, and government rents. **(5 points)**
5. Import tariffs lead to higher consumer prices. **(5 points)**
6. After the US tariffs on solar panel imports, the domestic prices of solar panels continued to fall, so the tariffs had virtually no effect on the consumers. **(5 points)**

II. Exercise (30 points)

1. In the case of the import restrictions on washing machines, what was the key difference of the 2018 restrictions from the earlier import restrictions in 2012 and 2016? **(5 points)**
2. See the following excerpt from the Wall Street Journal interviewing the CEO of Whirlpool, Marc Bitzer, in May 2019.

WSJ: The tariffs on your competitors have raised the price of some washing machines by \$80. That cost U.S. consumers an additional \$1.5 billion since the tariff took effect, according to recent estimates. Is that fair, that Whirlpool is benefiting while consumers are paying more?

MR. BITZER: Take any of our products, 60% to 70% of product cost is material cost. Over the last two years we had more than \$600 million in material-cost inflation. There's just not enough margin in our business to just absorb it. So we had to pass on that cost. So to now say, well the safeguard measures [tariffs on appliance imports] drove the price, is just not a reflection of reality, because we're material-cost driven. We would have raised prices with or without safeguard measures.

How does the research design in Flaaen, Hortaçsu, and Tintelnot (2020) account for the explanation for price increases on washing machines (and dryers) provided by the Whirlpool CEO? **(5 points)**

3. Suppose you are invited as a trade expert to advise government leaders who propose leaving from a preferential trade agreement. Using the conceptual frameworks presented in this class, discuss both pros and cons of such proposals. **(10 points)**
4. Indonesia and Malaysia together make up 85% of the global supply of palm oil. Suppose the government of Malaysia proposes an export tax on palm oil. Do you think such a policy would raise the aggregate welfare of Malaysia? Do you think the producers of palm oil in Malaysia will be in favor or against this proposal? **(10 points)**

III. Exercise (30 points)

The U.S. government is considering levying a specific-import tariff on Food and asks you as an expert to help with the analysis. The U.S. demand curve for Food is $D = 12 - 3P$ and the U.S. supply curve is $S = 2 + P$. The foreign demand curve for Food is $D^* = 9 - 3P$ and the foreign supply curve is $S^* = 3 + P$. Assume that the U.S. is large relative to foreign.

1. In the absence of a tariff, what is the world price for Food, and which country will export and which country will import Food? **(10 points)**
2. The U.S. is considering levying a small import tariff for Food. Label this specific import tariff as t . Show graphically, how the domestic price and the foreign price will be affected. State the new domestic price and the new foreign price in terms of t . **(10 points)**
3. Will such an intervention increase or decrease the U.S. terms of trade? How will U.S. producer surplus and U.S. consumer surplus be affected? Provide expressions in terms of t . **(10 points)**

IV. Exercise (30 points)

Consider the specific factors model laid out in slides 8-15 of 5_Specific_Factors_Model. For **any 3 of the following 4 statements**, prove that it is true or provide a counterexample. You may use graphical illustrations to support your argument either way. Again, you need to provide answers only for 3 out of the 4 statements.

1. If the two countries are identical, there are no gains from trade. **(10 points)**
2. An increase in the relative price of a good will increase the real return to the specific factor used to produce that good and reduce the real return to the other specific factor. **(10 points)**
3. An increase in a factor endowment will increase the output of the good using it intensively and decrease the output of the other good. **(10 points)**
4. For each factor, there must be a good such that an *increase* in the price of that good will *lower* the real return to that factor. **(10 points)**