Name_____

UMID_____

Final Exam
December 18, 2015
Answers

Answer on these sheets. Note that the last page of the exam (page 11) is intentionally left blank for you to use if you run out of space to answer any of the questions, although I do not intend that you should need it.

The exam has a total of 80 points.

1. (20 pts.) Explain any ten (10) of the following twelve institutions, concepts, or policies. (If you answer more than 10, I will grade only the first 10, so be sure to cross out any answers you don't want me to grade.)

   a) International Trade Organization: *The institution that was proposed at the end of World War II to oversee international trade policy, but that was never ratified and whose purposes were served instead, but only partially, by the GATT.*

   b) Trade Facilitation Agreement: *The agreement reached at the December, 2013, Bali Ministerial of the World Trade Organization, intended to reduce the costs of international trade, such as the time required to clear customs and satisfy regulations. In order to go into effect, the TFA must be ratified by 2/3 of the WTO members.*

   c) International Trade Administration: *The unit of the United States Department of Commerce that determines whether there is dumping by, and/or subsidies to, foreign exporters.*

   d) Generalized System of Preferences: *The provision of the GATT and WTO permitting developed countries to provide reduced (but not necessarily zero) tariffs on selected exports of developing countries, thus an explicit exception to MFN.*

e) Variable Levy: *Part of the Common Agricultural Policy of the European Union, this is a tariff the size of which is adjusted as prices of imported agricultural products change in order to hold constant the resulting domestic price.*

f) Tariff-Rate Quota: *A combination of a tariff and a quota, in which a low tariff, possibly zero, is levied on imports up to a specified quantity, with a higher tariff on units above that quantity.*

g) Mercantilism: *Belief that imports are bad and exports are good, due to the desire to accumulate gold and national power.*

h) Reversal of Trade Diversion: *After a first Free Trade Agreement causes trade diversion away from a country outside it, the restoration of that trade when the outside country enters a new FTA with members of the first one.*

i) Safeguards: *The use of nondiscriminatory, temporary protection permitted by the GATT/WTO, usually by a tariff, against imports that have caused injury to a domestic industry.*

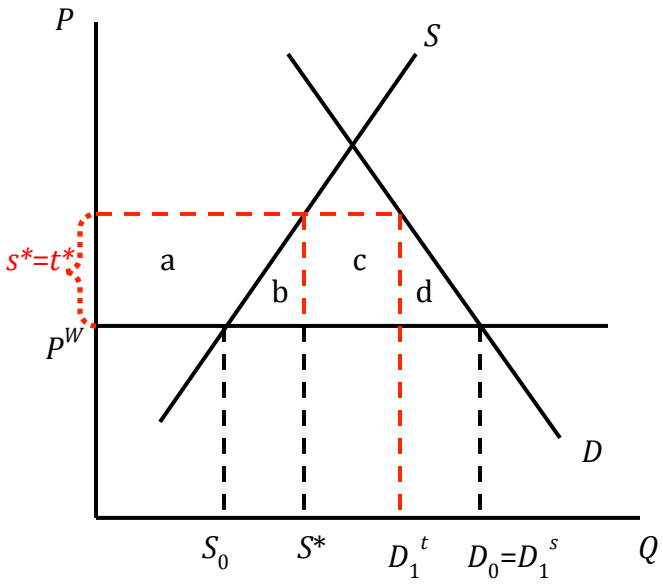
j) Wage Insurance: *A policy to help displace workers when they take a new lower paying job rather than while they are unemployed. It pays a fraction of that wage difference for a limited time. (It is not, as a concept, explicitly tied to displacement by international trade, although it is usually recommended in that context and is, indeed, a part of recent Trade Adjustment Assistance in the form of Alternative Trade Adjustment Assistance.)*

k) Dumping Margin: *In a case of dumping, the amount by which the export price is below the "fair price" – which may be either cost or the price the exporter charges in its home market.*

l) Amber Box: *The category of subsidies that are neither prohibited nor non-actionable, and therefore can be responded to by an importing country levying a countervailing duty.*

Country A

2. (20 points) The diagram at the right shows the domestic market for a good in Country A, which initially has no tariff or other policy affecting that market. It faces a world price P^W and therefore demands quantity D_0, supplies quantity S_0, and imports the difference. Now, for political reasons, the government of Country A becomes committed to increasing the output of this industry to the larger quantity shown as S^*.



a) (14 points) Suppose first that Country A is a small country, facing the fixed world price P^W.

i. Identify in the figure the size of the specific tariff, t^*, that will increase output from S_0 to S^*. Adding appropriate labels to the figure, determine the welfare effects on suppliers, demanders, the government, and the country as a whole of this tariff (without trying to quantify any political benefit to the government), and record them in the table below including plus or minus signs to indicate gain or loss compared to no policy.

ii. Indicate in the same figure the size of the subsidy to domestic production, s^*, that if used instead of the tariff, will increase output from S_0 to S^*. Record the welfare effects of this subsidy also in the table below.

iii. In the final column of the table below, indicate for each group, whether they would be better off (+), worse off (–), or equally well off (0) under the subsidy as compared to the tariff.

Welfare effects of			
	Tariff	Subsidy	Subsidy relative to tariff
Suppliers	*+a*	*+a*	*0*
Demanders	*–(a+b+c+d)*	*0*	+
Government	*+c*	*–(a+b)*	–
Country as a whole	*–(b+d)*	*–b*	+

b) (6 points) Now suppose that the government of Country A was mistaken, and that the country is in fact large enough to affect the world price. How will the same two polices that you examined in part (a) (which presumably will now fail to increase S to exactly S^*), differ in their effects from each other and from what they would have been if the country had been small? That is, without doing any formal analysis but just using your understanding of how these markets interact, answer the following:

i. Will the policies increase or decrease the world price, and which (t^* or s^*) will change it by more, and why?

Ans: The world price will fall for both policies, since the country will demand less from the world market, and world price will fall by more with the tariff t^* than with the subsidy s^*, because the tariff reduces import demand by more.

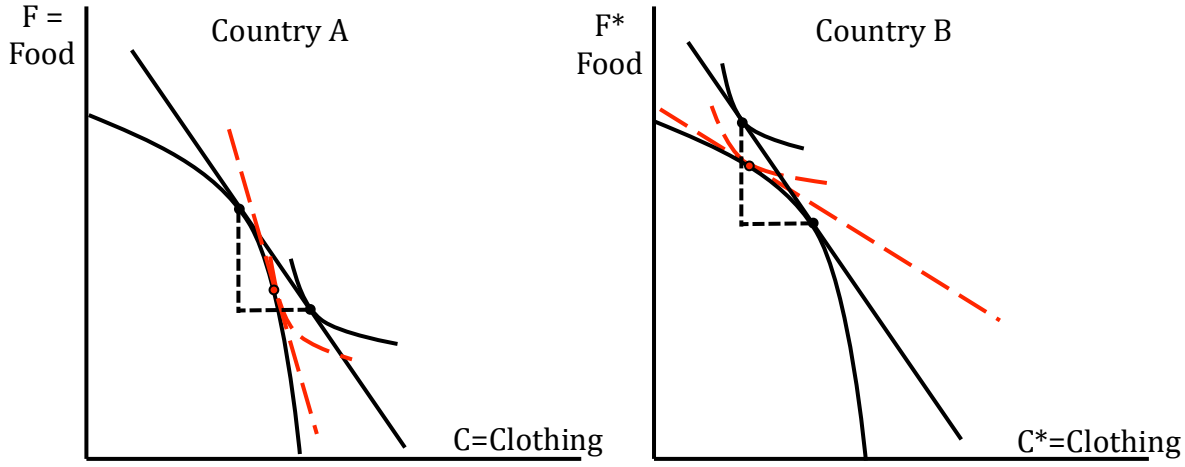
ii. Which policy (t^* or s^*) will now cause the greater increase in supply, and why?

Ans: The subsidy, s^*, will cause the greater increase in supply, because it will be offset by a smaller drop in the world price.

iii. If the country's government had realized that it was large, how might it have altered its policy decisions, and why?

Ans: First, it would realize that it needs a larger subsidy than s^* to increase output to S^*, say s^{**}, and it would need a still larger tariff, $t^{**}>s^{**}$, for the purpose. In addition, since both policies will improve the terms of trade by pushing down the world price, they may actually create a net benefit for the country. In fact, since the tariff pushes down the world price by more than does the subsidy, it is now possible that the tariff will benefit the country overall more than the subsidy. That is, it may not be "second best".

3. (10 pts.) The graph below shows a free trade equilibrium in the Standard Model for a world of two countries, A and B, with two special assumptions: i) The two countries have identical production possibilities, and therefore their production possibility curves are identical. ii) The countries differ in their preferences, perhaps because Country A has a colder climate than Country B. Specifically, if they face the same relative prices (as they do with free trade), Country A prefers more clothing and less food than Country B.



a) In the free trade equilibrium, which country produces more clothing? And which country exports food?
Ans: Neither country produces more clothing. (Because they face the same prices and have the same production possibilities, they produce the same.) Country A exports food. (Because, while it produces the same quantity of it, it consumes less.).

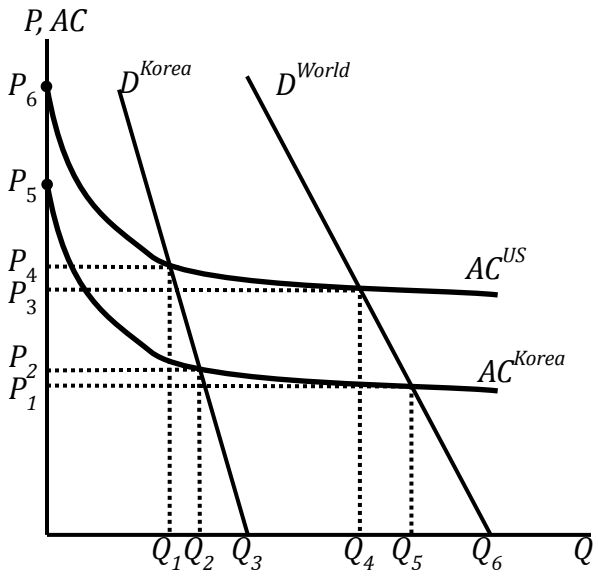
b) Add lines and/or curves to the figure as needed to show the autarky equilibria in each country.

c) Comparing the free trade equilibrium to the autarky equilibria you just drew, have either or both of these countries gained from trade?
Ans: Yes, both have gained. (Both have reached higher indifference curves with trade than without.)

d) In autarky, in which country is the price of clothing (relative to food) lower than in the other country?
Ans: The relative price of clothing in autarky is lower in Country B. (This relative price is given by the absolute value of the slope of the autarky price line, which is flatter in B than in A.)

e) In which country is the marginal cost of clothing (relative to the marginal cost of food) higher in autarky than in that same country with free trade? Why has the move from autarky to free trade caused the marginal cost of clothing in that country to fall?
Ans: The relative cost of clothing in Country A is higher in autarky than with free trade. (This relative cost is given by the slope of the production possibility curve, and it is equal to the relative price, thus the absolute value of the slope of the price line, which is steeper in autarky than in free trade in Country A.) Trade has caused the relative cost of clothing in A to fall because it was able to shift production out of clothing and into food, reducing the demand for and therefore the cost of the resources needed to produce clothing.

4. (10 pts.) Suppose that there are external increasing returns to scale in the industry for producing phones, in a world that consists only of the US and Korea. Their the average cost curves are shown in the graph at the right. Initially only the US has the technology for producing phones, but later Korea acquires it and, because of lower wages, has the lower cost curve shown.



a) Initially, with free trade and only the US able to produce phones, what will be the price and quantity of phones on the world market?

Ans: P_3 and Q_4.

b) When Korea now acquires the technology to produce phones, still with free trade, how much will it produce, and why?

Ans: None, because its cost of producing the first unit is P_5 which is higher than the world price P_3.

c) If Korea now imposes a prohibitive tariff on phones, what will become the price and quantity of phones in Korea? Has Korea gained or lost from prohibiting imports?

Ans: P_2 and Q_2. Korea has gained, since both its suppliers gain by producing and its demanders gain from the lower price. (Strictly speaking, you could argue that the suppliers do not gain, since they get a price equal to average cost. But they have not lost either, so the country gains.)

d) Once the equilibrium without trade is established in Korea, what will happen to the world market for phones if Korea now removes its barrier to trade?

Ans: Since its cost is now below the world price, it will export phones, and Korea's producers will displace the US producers, with world market price and quantity of P_1 and Q_5.

5. (20 pts.) The United States and eleven other countries recently completed negotiation of the Trans-Pacific Partnership, a free trade agreement. Write a paragraph answering each of the following questions:

   a) The TPP must still be approved by all 12 countries, including the US, before it can go into effect. What is the likelihood that the US Congress will either make changes in the agreement that would be unsatisfactory to other countries, or that it will find a way to prevent the agreement from coming to a vote?

      Ans: Because the US Congress earlier this year enacted Trade Promotion Authority (Fast Track), they are prevented from amending the agreement and must bring it up for a simple majority vote – that is, the Senate cannot filibuster it.

   b) Assuming that the TPP is implemented, who will be the gainers and who will be the losers from it, outside the United States, and why?

      Ans: The participating countries will gain from trade creation and lose from trade diversion, so it is possible that particular participating countries will lose (but that's not likely, in my view). There will be particular industries in other TPP countries that will lose from trade creation, as they buy cheaper products from other TPP countries. For example, the Canadian dairy industry will likely lose from cheaper imports of dairy products from New Zealand. But the biggest loser from the TPP will be countries that are not part of it, especially China. China's exports of many products to the US and other TPP participants will be undercut by higher-cost suppliers from within the TPP who will no longer face tariffs on their exports to TPP members.

c) Who will be the gainers and losers from the TPP inside the United States, and why?

Ans: Industries in which the US is a low-cost supplier will gain by exporting more to the partner countries, while industries with high costs, previously protected by tariffs, will lose. Examples of the former include many (but not all) agricultural products, while the latter is thought to include US producers of cars and, especially, trucks, whose tariff against imports from Japan will eventually be eliminated. The US government, and thus the taxpayers, will also lose due to a loss of tariff revenue, though since taxpayers are also the consumers who pay this tariff, they will gain more as consumers than they lose as taxpayers.

d) If particular industries lose from the TPP, what recourse will they and their employees have under US law?

Ans: The industries that lose from TPP, presumably because imports in those industries expand when tariffs are eliminated, will have the option of requesting Escape Clause (Safeguards) protection from the US government. If granted, they will get the benefit of a temporary increase in tariff. They also will have the option of requesting Trade Adjustment Assistance, which will provide extended income support for their trade-displaced workers and also funds for retraining and relocation, among other benefits. A few such workers, if they are over 50 years old and relatively low-paid, will be eligible for Alternative Trade Adjustment Assistance, which is wage insurance, providing half of any discrepancy between their old wage and their new one if they take another job.

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