

## Final Examination

Instructor: Biwei Chen  
1:00-3:30 PM May 15

**Please read this page carefully before you start. I expect you to follow all the instructions. Any cheating during exams will result in your failing the course and the matter being reported to the dean. Violating any of these instructions may also cost you several points!**

This exam is open-book. However, discussion on questions (or related topics) and item exchange between students are NOT allowed during the exam hours (except discussion with me). No digital product is allowed to use during the exam except for a regular calculator.

The definition of the honor code for this course: “I affirm that I will not plagiarize, use unauthorized materials, or give or receive illegitimate help during this examination. I will also uphold equity and honesty in the evaluation of my work and the work of others. I do so to sustain a community built around this Code of Honor.”

To avoid confusion of the graders for essay questions, make sure write your solutions as clean as possible.

Best of luck!

## Final Examination

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### I. Multiple Choice: Choose the best answer and fill in the table on the answer sheet. (30\*2=60 pts)

1. A country that becomes a member of the World Trade Organization agrees to bind its tariffs. "Binding" means that the country agrees not to increase existing tariffs and that it will not introduce new tariffs. However, GATT allows three exceptions to binding. Which of the following is NOT an exception to binding?

- A. antidumping duties against dumped imports
- B. countervailing duties against subsidized imports
- C. safeguard or escape clause tariffs
- D. tariff reductions negotiated in free-trade areas

2. What GATT provision did the United States use to justify levying tariffs on tire imports in fall 2009?

- A. antidumping duties
- B. export subsidization
- C. safeguard clause
- D. national security

3. GATT/WTO allows nations to impose tariffs in response to unfair trade practices such as:

- A. dumping.
- B. transportation costs.
- C. environmental degradation.
- D. import subsidies.

*Suppose that the free-trade price of a ton of steel is €500. (Note: € is the symbol for the euro, a common currency used in 16 European countries, including Finland.) Finland, a small country, imposes a €60 per-ton specific tariff on imported steel. With the tariff, Finland produces 300,000 tons of steel and consumes 600,000 tons of steel. (Scenario: Finnish Steel)*

4. (Scenario: Finnish Steel) Suppose that the €60-per-ton tariff caused Finnish production of steel to increase by 100,000 tons and Finnish consumption of steel to fall by 100,000 tons. What is the value of Finland's welfare loss due to the tariff?

- A. 200,000 tons
- B. €6 million
- C. €12 million
- D. €15 million

5. (Scenario: Finnish Steel) What is the value of the tariff revenue from the €60-per-ton tariff?
- A. €6 million
  - B. €12 million
  - C. €18 million
  - D. €30 million
6. (Scenario: Finnish Steel) What will happen to the Finnish price of steel if Finnish demand increases and the tariff remains at €60-per-ton?
- A. It will not change.
  - B. It will increase.
  - C. It will decrease.
  - D. It will first increase, then decrease.
7. (Scenario: Finnish Steel) Suppose that Finland decides to use an import quota to achieve the same effects on domestic steel production as the tariff. How large a quota must it use?
- A. €60
  - B. 100,000 tons
  - C. 200,000 tons
  - D. 300,000 tons
8. Which of the following describe why small nations impose tariffs, even though they reduce national welfare?
- I. Small, mostly poor, nations have no reliable means for collecting taxes to run their governments.
  - II. Politicians like to build favor with industrial interests, especially during political campaigns.
  - III. Raises for elected officials often hinge on whether enough tariff revenue is collected by the treasury department.
- A. I
  - B. II
  - C. I and II
  - D. I, II, and III
9. The politics behind tariff protection suggests that, other things equal, tariffs are more likely to be imposed when:
- A. the benefits to consumers and producers are concentrated on specific firms and states.
  - B. the benefits to producers and their labor forces are concentrated on specific firms and states.
  - C. the benefits to producers and their labor forces are spread nationwide.
  - D. the losses to consumers are concentrated on specific firms and states.
10. Suppose that the world price of steel is \$500 per ton. Now suppose that the United States imposes a 20% tariff on imported steel (as it did in 2002). What is the U.S. domestic price of steel after the 20% tariff is imposed (rounded to the nearest dollar) if exporters bear two-thirds of the tariff?
- A. \$433
  - B. \$467
  - C. \$533
  - D. \$567

11. Suppose that the United States is a large country. In fall 2009, the United States imposed tariffs on tires imported from China. The deadweight losses of these tariffs were larger than the terms-of-trade gains to the U.S. economy. Who was better off and who was worse off as a result of these tariffs?

- A. U.S. tire producers were better off and U.S. consumers, and Chinese tire producers were worse off.
- B. U.S. tire producers, U.S. consumers, and Chinese tire producers were all worse off.
- C. U.S. tire producers and Chinese tire producers were better off, and U.S. consumers were worse off.
- D. U.S. tire producers and U.S. consumers were better off, and Chinese tire producers were worse off.

12. (Table: Export Supply Elasticities) It is almost certain that the 2002 imposition of 13% to 15% tariffs on steel tubes and pipes resulted in:

Export Supply	Elasticity
Alloy Steel	0.27
Steel bars and rods	0.80
Steel tubes and pipes	90
Steel flat-rolled products	750

- A. terms-of-trade gains that were greater than deadweight losses.
- B. terms-of-trade gains that equaled deadweight losses.
- C. deadweight losses that were greater than terms-of-trade gains.
- D. no deadweight losses.

13. The GATT prohibits quotas. Why didn't the United States or other countries try to stop the voluntary export restraint on automobiles implemented by the Japanese during the early 1980s?

- A. At the time, the GATT did not prohibit quotas administered by the exporting country, that is, voluntary export restraints.
- B. Other countries did try to stop the voluntary export restraints but were unsuccessful in their efforts.
- C. The GATT only prohibited quotas after the WTO was established in 1995.
- D. The GATT only prohibits developing countries from using quotas.

14. Suppose that British Steel, Ltd., sells steel in Britain at \$600 per ton and the same steel in the United States at \$450 per ton. The price of equivalent steel produced in the United States is \$550 per ton. How large an antidumping tariff (in percentage) will be applied on imports from British Steel if it is found that it dumped steel on the U.S. market?

- A. 9.11%
- B. 22.22%
- C. 25%
- D. 33.33%

15. Which of the following groups were losers after the European Union's imposition of an antidumping duty on shoes imported from China?

- A. European consumers and European shoe manufacturers
- B. Chinese consumers and Chinese shoe manufacturers
- C. Chinese consumers and European shoe manufacturers
- D. European consumers and Chinese shoe manufacturers

16. In 2012, the United States imposed antidumping and countervailing duties totaling 24% and 36%, respectively, on imports of solar panels from two groups of Chinese solar panel exporters. Which of the following describes the process that led to these duties?

I. The U.S. Department of Commerce determined that China was dumping and subsidizing solar panels in the U.S. market

II. The U.S. International Trade Commission determined that Chinese solar panel imports caused material injury to U.S. solar panel producers.

III. The World Trade Organization determined that China was dumping and subsidizing solar panels in the U.S. market

- A. I and II
- B. I and III
- C. II and III
- D. I, II, and III

*Suppose that Far North Canadian Lumber, Ltd., sells lumber in Canada at a price of \$1,000 per 1,000 board feet and exports the same lumber to the United States at a price of \$600 per 1,000 board feet. U.S. Lumber, Inc., produces and sells lumber for \$700 per 1,000 board feet in the United States.*

*(SCENARIO: FAR NORTH CANADIAN LUMBER)*

17. (Scenario: Far North Canadian Lumber) Is Far North Canadian Lumber dumping lumber in the United States?

- A. Yes; its price in Canada is greater than its price in the United States.
- B. Yes; its price in Canada is greater than U.S. Lumber's price.
- C. No; its price in the United States is less than U.S. Lumber's price.
- D. No; it is maximizing its profits when it price discriminates between the United States and Canada.

18. (Scenario: Far North Canadian Lumber) How large an antidumping duty will the United States apply to lumber imports from Far North Canadian Lumber, Ltd.?

- A. \$100
- B. \$200
- C. \$300
- D. \$400

19. (Scenario: Far North Canadian Lumber) What might Far North Canadian Lumber, Ltd., do to avoid the antidumping duty?

- A. appeal to the U.S. International Trade Commission
- B. raise its price in the Canadian market
- C. raise its price in the U.S. market
- D. lower its price in the U.S. market

20. (Scenario: Far North Canadian Lumber) What other condition must be satisfied in order for the U.S. government to impose an antidumping duty on Canadian lumber imports?

- A. There must be material injury to a Canadian lumber producer.
- B. There must be material injury to a U.S. lumber producer.
- C. There must be material injury to both a U.S. and a Canadian lumber producer.
- D. All these conditions must be satisfied.

21. Suppose that the U.S. imposes a countervailing duty of 10% on coated paper imported from China to offset alleged Chinese subsidies. Suppose further that the U.S. duty-free price of Chinese coated paper imports is \$500 per 1,000 meter roll and that the price of an equivalent roll of U.S.-made coated paper is \$600 per 1,000 meter roll. What is the U.S. government's estimate of the dollar value of the Chinese subsidies?

- A. \$50 per 1,000 meter roll
- B. \$60 per 1,000 meter roll
- C. \$50 to \$60 per 1,000 meter roll
- D. \$100 per 1,000 meter roll

22. To make a correct decision about limiting imports on behalf of an infant industry, the government should look at:

- A. political pressure from key constituents.
- B. a cost-benefit analysis measuring the present value of the likely benefits from lower production costs compared with the cost to society of higher prices in the present.
- C. the value of retaining U.S. jobs versus the small cost of higher-priced units.
- D. the difficulty of keeping out imports from established trading partners and weighing the number of workers employed in the industry that could not easily get other jobs.

23. Why is it better to protect an infant industry with monopoly power with a tariff than a quota?

- A. A tariff causes domestic production to increase, whereas a quota causes production to decrease.
- B. A tariff causes domestic production to decrease, whereas a quota causes domestic production to increase.
- C. A tariff will raise the domestic price above the world price, whereas a quota will not.
- D. A quota will raise the domestic price above the world price, whereas a tariff will not.

24. Which of the following will happen when a small country enacts an export subsidy?

- I. The country will be able to sell more abroad.
  - II. The domestic price of the subsidized export will increase.
  - III. The country's demand for the subsidized product will increase.
- A. I
  - B. I and II
  - C. I and III
  - D. I, II, and III

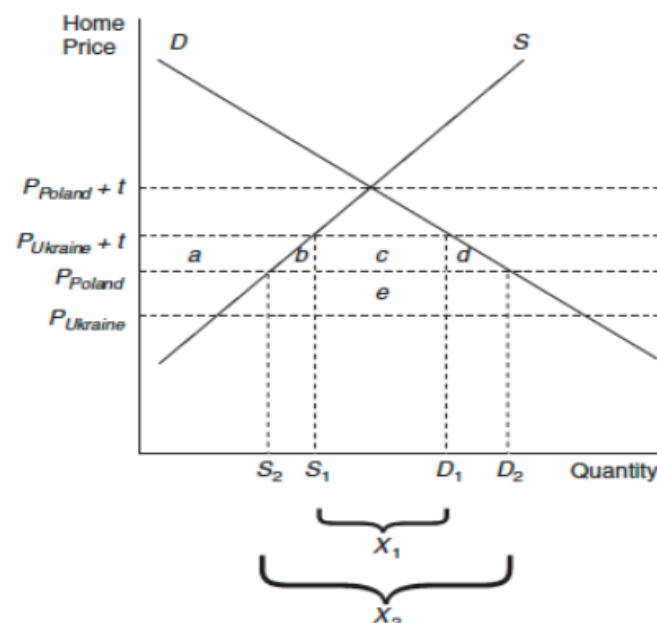
25. Which nations will be harmed the most if the WTO eliminates agricultural subsidies?
- A. agricultural exporters in smaller nations without subsidy programs because world food prices will rise
  - B. agricultural consumers all over the world because prices will be higher
  - C. agricultural producers in nations that subsidize their production
  - D. governments of rich nations that will have to provide support to farmers who are hurt
26. Who will gain if WTO members agree to eliminate or to substantially reduce agricultural export subsidies?
- A. consumers in industrialized countries who import agricultural products
  - B. farmers in developing countries who currently do not receive export subsidies
  - C. farmers in industrialized countries who currently receive export subsidies
  - D. consumers in developing countries who import agricultural products
27. Who will lose if WTO members agree to eliminate agricultural export subsidies?
- A. consumers in industrialized countries who import agricultural products
  - B. farmers in developing countries who currently do not receive export subsidies
  - C. governments of rich nations, which will have to prop up farmers who are hurt
  - D. None of these will lose if agricultural subsidies
28. Suppose that a large country decides to reduce its agricultural export subsidies by 50%. Will the country gain or lose?
- A. The country will always gain by reducing its subsidies.
  - B. The country will always lose by reducing its subsidies.
  - C. The country will gain if the reduction in its deadweight losses exceeds its terms-of-trade gains.
  - D. The country will gain if its terms-of-trade gains exceed the reduction in its deadweight losses.
29. Suppose that the U.S. federal government decides to increase its cigarette excise tax by \$1 per pack and also apply the increase to U.S. cigarette exports. What will happen to the price of cigarettes in the U.S. and abroad?
- A. They will both rise by \$1 per pack.
  - B. The U.S. price will rise by \$1 per pack, and the foreign price will rise by less than \$1 per pack.
  - C. The foreign price will rise by \$1 per pack, and the U.S. price will rise by less than \$1 per pack.
  - D. Both will rise by less than \$1 per pack.
30. Compare the effects on the importing country of an export subsidy and an export tariff imposed by a large country.
- A. The importing country will gain from both an export subsidy and an export tariff imposed by a large country.
  - B. The importing country will lose from both an export subsidy and an export tariff imposed by a large country.
  - C. The importing country will gain from an export tariff and lose from an export subsidy imposed by a large country.
  - D. The importing country will gain from an export subsidy and lose from an export tariff imposed by a large country.

**II. Analytical Short Answer Questions** (15+10+10+5=40 points)

1. Consider a small country importing goods from the rest of the world. The free trade price is  $P_1$  and it rises to  $P_2$  after imposing a tariff  $T$ . An equivalent quota is defined as the restricted import quantity that can achieve the same degree of protection as the tariff. Suppose all quota rent is kept at home. (15 points)

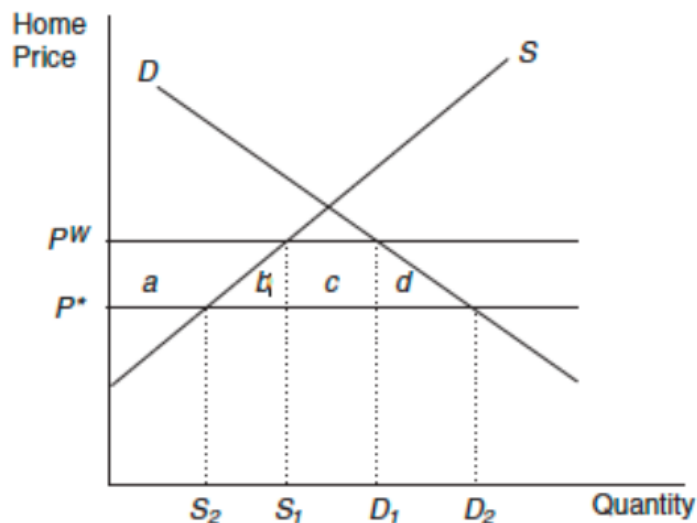
- 1) Draw the demand and supply model for home country under equivalent quota  $Q_m$  corresponding to  $T$ . Which is more beneficial to this small home country's welfare, tariff or equivalent quota?
- 2) Suppose domestic demand for imports increases, what would happen to home country's trade equilibrium (consumption and production) and welfare under the tariff  $T$ ?
- 3) When domestic demand rises, what would happen to home country's trade equilibrium and welfare under the equivalent quota  $Q_m$ ? Compare with (2) and provide graphical explanation: which is more harmful for national welfare when import demand rises?

2. Suppose Belarus, a small country, imposes a tariff in the amount of  $t$  per unit on imported coal. Assume that it imports coal from Ukraine rather than Poland because the former has a lower net-of-tariff price. Furthermore, suppose that the Belarusian government is considering whether to apply for membership to the EU. As a member of the EU, Belarus would have to remove its tariffs on all countries within the customs union, such as Poland. Using the following figure, analyze the welfare effect of EU membership on Belarus. Under what condition will Belarus join the EU? (10 points)





3. Suppose Home is a small country trading with a large exporter. The supply and demand curve for Home is illustrated by the following figure, where  $P^W$  denotes the free-trade world price. Assume that the Foreign government supports its producer with an export subsidy that lowers the world price to  $P^*$ . Should Home consider levying a countervailing duty that would raise the import price back to  $P^W$  (i.e., the level without the subsidy)? Answer by ranking the following situations. Be sure to justify your ranking. (1) Home without the foreign export subsidy (2) Home with the foreign export subsidy (3) Home with the foreign export subsidy and the countervailing duty. (10 points)



4. Summarize in a table home country's welfare effects (consumer, producer, government, total net) for all trade policy instruments studied: import/export tariffs, import/export quotas and VER, export/production subsidies. Indicate positive gain or negative loss with +/- sign for the welfare and differentiate between small and large home countries. (5 points)

**Final Examination Answer Sheet**

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**Multiple Choice Questions**

Please fill in your answers in the table:

01-05	
06-10	
11-15	
16-20	
21-25	
26-30	

**Name and UNI:**

**Answer Sheet for Analytical Questions**

**Name and UNI:**

**Answer Sheet for Analytical Questions**

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**Answer Sheet for Analytical Questions**

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