# 12

### **International Trade**

#### **PURPOSE**

The purpose here is to introduce the students to international economics. Indeed, this is the third global chapter, and all are equally relevant. It is probably the most technical of the three chapters (in terms of numerical examples), but nevertheless is straightforward and relies only on graphs the students have seen before: production possibilities and demand and supply. The focus of attention is international trade, with international finance discussed in Appendix 12–1.

#### LEARNING OBJECTIVES

The learning objectives for this chapter are:

- 1. to introduce the students to the international economy.
- 2. to explore with students the controversies over free trade and global capitalism that have culminated in protests, often over protection of labor and the environment.
- 3. to help students understand the significance of international trade to the United States and world economies, to realize that trade can be mutually beneficial, and to learn about absolute and comparative advantage.
- 4. to help students understand the distribution of benefits in the case of free trade, and why some groups oppose free trade and favor trade restrictions.
- 5. to continue to generate student interest in the developing countries of the world and to help them discover the special problems of developing countries with respect to trade.
- 6. to provide context for how the Great Recession of 2008–2009 spread internationally.
- 7. to assist students in recognizing the interaction between politics and trade in cases such as Iran, Cuba, Russia, and China, recently and in earlier years.
- 8. to help students learn about international trade agreements, including those rejected by Donald Trump (such as NAFTA and the TPP).
- 9. to help students understand the trade policies of Donald Trump, which are based on nationalistic-populism rather than economics (setting the state for the Chapter 17 discussion of newly elected global leaders and movements that are also embracing nationalistic-populism).
- 10. to provide a rebuttal to Trump's view that "trade wars are good and easily won" by looking at the impact of his tariffs on the United States.
- 11. to assist students in understanding exchange rate determination in the context flexible exchange rate systems (Appendix 12–1).

#### LECTURE SUGGESTIONS

- Because this is one of three chapters on international economics, you may want to break the ice by asking students where they have traveled. If you have international students in your classroom, you may want to ask them where they're from. (I realize this is a little tricky, because we don't want to embarrass these students by singling them out. It may help to ask them ahead of time if they want you to call on them or maybe even ask if they want to tell the class about their country.)
- I think that many students (as well as the American public) are somewhat intimidated by international economics. It may help to tell them that they can understand all of the concepts in the text by using the familiar production possibilities and demand and supply graphs.

Students may have some preconceived notions and viewpoints that will be challenged in this chapter. You may want at the outset to poll students on the following:

- How many of you believe that trade is good for the United States? How many believe that it is bad?
- How many of you are in favor of NAFTA? How many of you are opposed? Why?
- How many of you believe it would be good for the United States to be entirely self-sufficient rather than engage in trade? How many believe that it would be bad?

At the end of the chapter, repeat the poll!

- This chapter presents the opportunity to discuss international trade from the perspective of developing countries. Students (and teachers!) may find this information novel and interesting.
- While international trade in the developing world may not initially seem interesting to some students, we can heighten their interest (and perhaps their activism) by raising such issues as sweatshop and slave labor, fair trade, and the impact of U.S. agricultural subsidies and trade restrictions on people of the developing world. My students were so impressed with the DVD Black Gold that they organized a campus showing and discussion. They also initiated action on campus to encourage our food service to provide fair trade products.

#### (Appendix 12-1)

- I've found that it becomes too complicated for students when we try to explain the reasons for the downward sloped demand curve and upward sloped supply curve of a nation's currency. I leave this for a principles or international finance course. (Students are adequately familiar with demand and supply curves by now that they will "accept" the visual slopes we use in this course.)
- Similarly, when we consider changes that might occur to shift the demand or supply of a nation's currency, I use only examples that shift the demand curve, in order to keep the concepts as straightforward as possible.

#### ADDITIONAL DISCUSSION AND ACTION QUESTIONS

Some of the following additional discussion questions may be helpful in preparing lectures.

- 1. Set up a table showing that each U.S. worker can produce either 5 tables or 10 pineapples per day, while each Bolivian worker can produce either 1 table or 4 pineapples per day. Which country has an absolute advantage in table production, an absolute advantage in pineapple production, a comparative advantage in table production, and a comparative advantage in pineapple production? Can the United States benefit from trade with Bolivia?
- 2. Based on information in the previous question, draw the (straight line) production possibilities curve (for one worker) in the United States per day, placing the quantity of tables on horizontal axis and the quantity of pineapples on the vertical one. Draw the United States consumption possibilities curve with trade, assuming that the United States decides to specialize in table production and trades with Bolivia at a mutually beneficial trade ratio of 1 table for 3 pineapples. Is the United States better off with or without trade? How about Bolivia?

- 3. Draw a graph of the United States rice industry, assuming that the United States is a large producer of rice and that all rice is identical. Draw the shift that occurs if the United States begins to freely import rice and label the new free trade price (P<sup>T</sup>), quantity demanded (Q<sup>D</sup>), and quantity supplied (Q<sup>S</sup>) by U.S. producers of rice. Who gains and who loses?
- 4. Now suppose the United States producers of rice convince the government to place a quota on (or to restrict entirely) the import of rice. What is the effect on U.S. producers of rice, U.S. consumers of rice, U.S. producers of export products, the United States as a whole, and foreign producers of rice?
- 5. Ask students if they believe the demand for tea is inelastic. Draw an inelastic demand curve (relatively steep) in the market for tea. Ask students if they think the supply of tea fluctuates and why. Show this in the graph. What is the implication of these two characteristics of the tea market for tea prices?

#### (Appendix 12-1)

6. Assuming only 2 countries of the world (the United States and Mexico), draw a graph of the market for the United States dollar. (There is no need to use numerical values, though you may want to look up the exchange rate for the dollar relative to the peso and identify this value at the equilibrium.) Draw the shift in the demand for the dollar under various scenarios: more Mexican tourists coming to the United States, an increase in U.S. interest rates, and so on. What is the effect of the various changes on the value of the dollar relative to the peso? What is the effect on the value of the peso relative to the dollar?

## SOME ANSWERS AND COMMENTS ON THE TEXT DISCUSSION AND ACTION QUESTIONS

- 1. This one is wide open. It might be a good opportunity to encourage students to learn as much as they can from international students and faculty on your campus.
- 2. Student activity.
- 3. You may be self-reliant, but you'll never be efficient!
- 4. Be sure that students were thorough in their research.
- 5. Aircraft and automobiles. Shoes and textiles. Sugar and fruit.
- 6. Draw a (straight line) production possibilities curve for 1 worker in Greenland per day, placing the quantity of shoes on the horizontal axis (with units 1 and 2), and the quantity of DVDs on the vertical axis (with units increasing by 1/3 from 1/3 to 2). Draw in the consumption possibilities curve for Greenland with free trade, assuming that Greenland specializes in shoe production. (Greenland will receive 1-1/3 DVDs for each 1 pair of shoes it sells.) Yes, Greenland benefits from free trade with the United States
- 7. U.S. consumers of wine lose, U.S. producers of wine gain, French producers of wine lose, U.S. farmers lose, United States as a whole loses.
- 8. Companies and workers may be better organized and consequently have greater political influence. Consumers are a diffuse group, with poor understanding of the gains from trade.
- 9. U.S. aluminum producers with increased market power may use this market power to restrict output (and employment) in order to drive up prices and profits.
- 10. Some problems faced by developing countries include over-reliance on just a few products for export, price instability in markets for primary commodities, declining terms of trade, and overreliance on the import of essential products. Developing countries should specialize according to comparative advantage, as well as further process and diversify their exports.
- 11. Developing countries' commodity exports that face inelastic demand tend to experience price instability. Further processing will benefit the country.
- 12. Student activity.

- 13. Student activity.
- 14. Student activity.
- 15. Student activity.
- 16. Aside from the gains from specialization and exchange, NAFTA benefits U.S. consumers in the form of lower prices and it benefits U.S. producers of export goods. Some fear the loss of U.S. jobs as U.S. businesses move their operations to Mexico and as U.S. residents buy more products from Canada and Mexico, whereas others expect expanded U.S. employment as U.S. exports increase. There may be increased pollution and poor job conditions, particularly in Mexico. Economic growth in one country stimulates demand for other countries' products. Economic development in Mexico would reduce illegal immigration into the United States
- 17. U.S. agricultural subsidies harm poor farmers in developing countries by causing a glut of agricultural products on international markets, thereby lowering agricultural prices. Most of the poor people in developing countries are farmers.

#### (Appendix 12-1)

1. Japanese residents demand dollars with which to travel in the United States, purchase U.S. products, invest in U.S. financial markets, and buy and operate plants in the United States U.S. residents demand yen with which to travel in Japan, purchase Japanese products, invest in Japanese financial markets, and buy and operate plants in Japan.

#### SUGGESTED TEST QUESTIONS

#### **Multiple-Choice Questions**

- 1. Which of the following is true? Since 1960, as a share of GDP, both our imports and our exports have:
  - a. increased.
  - b. decreased.
  - c. remained remarkably constant.
  - d. This information is not provided in the text.
- 2. Exports minus imports is the:
  - a. budget balance.
  - b. trade balance.
  - c. exchange rate for the dollar.
  - d. international debt.
- 3. Which of the following contributes to higher labor productivity?
  - a. training
  - b. modern capital
  - c. modern technology
  - d. All of the above
- 4. A situation whereby one country can produce a good with lower opportunity cost than another country defines:
  - a. comparative advantage.
  - b. absolute advantage.
  - c. situational advantage.
  - d. advantage by proxy.

- 5. One benefit of trade is the improved \_\_\_\_\_ achieved by specialization according to comparative advantage.
  - a. equity
  - b. efficiency
  - c. political stability
  - d. government borrowing
- 6. A country with wages and labor productivity three times higher than another country will have:
  - a. much higher labor costs for each unit of production.
  - b. much lower labor costs for each unit of production.
  - c. identical labor costs for each unit of production.
  - d. We don't have enough information to answer this question.
- 7. Which of the following *does not* gain from free trade in imports of handbags?
  - a. the country as a whole
  - b. handbag consumers in the country
  - c. handbag producers in the country
  - d. export producers in the country
- 8. Producers of U.S. exported products may suffer when the United States imposes trade restrictions on imports because:
  - a. other countries may retaliate with their own trade restrictions.
  - b. other countries may purchase fewer U.S. products because their incomes may fall.
  - c. exchange rate changes may result in foreigners purchasing fewer U.S. exports.
  - d. All of the above
- 9. A tariff is:
  - a. a tax on an imported good.
  - b. a restriction on the quantity of an imported good.
  - c. a requirement for quality of imported goods.
  - d. All of the above
- 10. U.S. trade restrictions on imports result in:
  - a. a loss of gains from specialization for the United States as a whole.
  - b. a greater opportunity for market power in the United States.
  - c. losses to U.S. exporters.
  - d. All of the above
- 11. Primary commodities generally have:
  - a. inelastic demand.
  - b. stable prices.
  - c. supply that does not fluctuate.
  - d. All of the above
- 12. "A situation where the prices of a country's exports decline relative to the prices of its imports" is the definition for:
  - a. comparative advantage.
  - b. voluntary export restraint.
  - c. declining terms of trade.
  - d. retaliation.

- 13. Which of the following is not true? Demand for developing country exports has declined:
  - a. due to the development of synthetics.
  - b. due to developed country trade restrictions.
  - c. and contributed to declining terms of trade.
  - d. and contributed to rising prices of exports of developing countries.
- 14. Which of the following was not a member of the North American Free Trade Agreement?
  - a. Russia
  - b. Canada
  - c. United States
  - d. Mexico
- 15. Which of the following is an international trade problem for a developing country?
  - a. lack of diversity in exports
  - b. reliance on exporting primary commodities
  - c. price instability
  - d. All of the above
- 16. Which was not a result of the recent U.S. Great Recession?
  - a. foreign companies hired more workers
  - b. there was a decline in world trade
  - c. Americans lost jobs
  - d. foreign companies cut production

#### (Appendix 12-1)

- 17. Which of the following is *not* a current member of the Group of Seven (G-7)?
  - a. Russia
  - b. Canada
  - c. United States
  - d. Germany
- 18. The price of one country's currency in terms of another country's currency is:
  - a. the exchange rate.
  - b. the balance of payments.
  - c. the Group of Eight.
  - d. the current account.
- 19. In a two-country world consisting of the United States and Canada, an increase in the value of the United States dollar means:
  - a. the United States dollar appreciates relative to the Canadian dollar.
  - b. the Canadian dollar depreciates relative to the United States dollar.
  - c. the value of the Canadian dollar decreases relative to the United States dollar.
  - d. All of the above
- 20. Canada, Russia, and Germany belong to:
  - a. the Group of Seven
  - b. The Six Markets Group
  - c. Mercosur
  - d. All of the above

#### True-and-False Questions

- 1. Absolute advantage is defined as a situation whereby a country can produce a good with lower opportunity cost than another country. (F)
- 2. Assuming two countries and two goods, a country that has an absolute advantage in production of both goods cannot possibly benefit from trade. (F)
- 3. When considering labor costs to a firm, both wages and labor productivity must be considered. (T)
- 4. The benefits of trade to a country include increased market power. (F)
- 5. U.S. trade restrictions on imports may result in retaliation by other countries. (T)
- 6. If our exports are greater than our imports, we have a trade deficit. (F)
- 7. With trade, a country may achieve a consumption possibilities curve that is superior to its production possibilities curve. (T)
- 8. A quota is a restriction on the quantity of an imported good. (T)
- 9. The term "primary commodity" is defined as a country's most important export product. (F)
- 10. Increased competition made possible through trade can reduce the likelihood of market power. (T)
- 11. Inelastic demand and fluctuating supply result in relatively stable prices. (F)
- 12. Declining terms of trade means that the prices of a country's exports decline relative to the prices of its imports. (T)
- 13. An embargo is a restriction on trade for political reasons. (T)
- 14. Studies show that the United States has suffered a great deal of unemployment as a result of NAFTA. (F)
- 15. The General Agreement on Tariffs and Trade (GATT) has been replaced by the World Trade Organization (WTO). (T)
- 16. As a share of GDP, the United States has the world's largest exports plus imports. (F)
- 17. The United States trade balance was positive in 2016. (F)
- 18. As a share of GDP, U.S. exports are the largest in the world. (F)
- 19. U.S. producers of exported products benefit from U.S. trade restrictions on imports of other goods. (F)
- 20. Overall, the United States benefits from free trade. (T)
- 21. U.S. agricultural policies benefit poor, developing country farmers. (F)
- 22. U.S. economic conservatives have traditionally opposed free trade. (F)
- 23. U.S. agricultural policies weare a controversial aspect of the Doha Round of trade talks. (T)
- 24. The opening quotes to this chapter refer to the trade policies of Presidents Obama and Trump. (T)
- 25. Traditional economic conservatism is the basis for Donald Trumps trade policies. (F)

#### (Appendix 12-1)

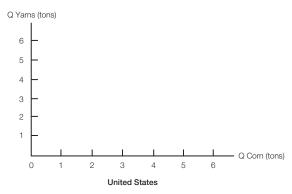
- 26. An exchange rate is the price of one country's currency in terms of another country's currency. (T)
- 27. Most of the industrialized world uses a (largely) flexible (floating) exchange rate system. (T)
- 28. In a two-country world consisting of the United States and Japan, the demand for yen by U.S. citizens is the same as the supply of dollars by U.S. citizens. (T)
- 29. An increase in U.S. interest rates will cause a decrease in the value of the dollar relative to other currencies. (F)
- 30. The Group of Seven refers to seven industrialized countries that cooperate on policies to influence exchange rates. (T)

#### **Short-Answer Questions**

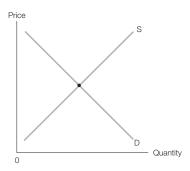
1. Consider the following table showing that each U.S. worker can produce either 6 tons of corn or 3 tons of yams per year and each Ugandan worker can producer either 1 ton of corn or 2 tons of yams per year.

<b>Country</b>	<b>Corn Production (tons)</b>	Yam Production (tons)
U.S.	6	3
Uganda	1	2

- a. Which country has an absolute advantage in corn production? (U.S.)
- b. Which country has an absolute advantage in yam production? (U.S.)
- c. Which country has a comparative advantage in corn production? (<u>U.S.</u>)
- d. Which country has a comparative advantage in yam production? (Uganda)
- 2. Based on question 1, draw in the straight-line production possibilities curve (for 1 worker) in the United States per day. Now suppose that the United States decides to specialize completely in corn production and trades with Uganda at a mutually beneficial trade ratio of 1 ton of corn for 1 ton of yams. Draw in the United States consumption possibilities curve with free trade. Is the United States better off with or without trade with Uganda? (with trade) Is Uganda better off with trade? (Yes)



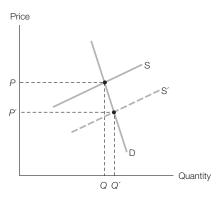
3. Consider a graph of the United States market for tobacco, assuming that the United States is a large producer of tobacco and that all tobacco is identical. Label the initial equilibrium price (P) along the price axis and equilibrium quantity (Q) along the quantity axis. Draw the shift that occurs if the United States begins to freely import tobacco, and label the new free trade price (P<sup>T</sup>) along the price axis, quantity demanded (Q<sup>D</sup>) by U.S. consumers of tobacco, and quantity supplied (Q<sup>S</sup>) by U.S. producers of tobacco along the quantity axis. (<u>The supply curve will shift forward.</u>) What is the effect of free trade in tobacco on the following groups of people (answer gain or lose)?



U.S. Tobacco Market

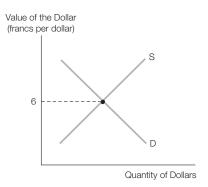
- a. U.S. consumers of tobacco (gain)
- b. U.S. companies that produce tobacco (<u>lose</u>)
- c. U.S. workers in the tobacco industry (<u>lose</u>)
- d. U.S. producers of export products (gain)
- e. The United States as a whole (gain)

- 4. Now suppose that U.S. producers of tobacco convince the government to place a quota on (or to restrict entirely) the import of tobacco. What is the impact of this trade restriction on each of the following groups of people (answer gain or lose)?
  - a. U.S. consumers of tobacco (<u>lose</u>)
  - b. U.S. companies that produce tobacco (gain)
  - c. U.S. workers in the tobacco industry (gain)
  - d. U.S. producers of export products (<u>lose</u>)
  - e. The United States as a whole (lose)
- 5. What two characteristics of the cocoa market are represented by the following demand and supply curves? (Hint: the combination of these two characteristics results in unstable cocoa prices.)
  - a. (inelastic demand)
  - b. (weather-related supply fluctuation)



Cocoa Market

6. (*Appendix 12–1*) Consider the following graph of the market for the United States dollar relative to the Japanese yen. (Assume that Japan and the United States are the only two countries in the world.) Draw the shift in the demand curve for the dollar that will occur if more Japanese people begin to travel in the United States. (<u>The demand curve will shift forward.</u>) What is the effect on the value of the dollar relative to the yen (increase or decrease)? (<u>increase</u>) What is the effect on the value of the yen relative to the dollar (increase or decrease)? (<u>decrease</u>)



Market for U.S. Dollars

#### **Critical Thinking Question**

Thinking about the world as a whole, and not just the United States, explain why you think the world would be better off with or without trade, and whether there should be any restrictions or regulations on free trade. Think about labor conditions and environmental effects.

#### **INTERNET RESOURCES**

Students often read their small town newspapers, but they need to be reading national papers as well for international news. Even international newspapers are useful because they provide international news from a non-United States viewpoint. The following are some useful websites.

http://www.nytimes.com (The New York Times)

http://www.washingtonpost.com (The Washington Post)

http://www.latimes.com (The Los Angeles Times)

The following websites are also useful.

#### http://www.wto.org

(This is the World Trade Organization.)

#### https://www.cia.gov/library/publications/the-world-factbook/index.html

(This CIA website provides trade statistics on a country by country basis.)

#### http://www.transfairusa.org

(This website provides information on fair trade products.)

#### http://www.worldbank.org

(This is the website of the World Bank.)

#### http://www.corpwatch.org

(This organization is dedicated to assuring human rights and environmental protection.)

Additional note: If you are not a seasoned traveler, and if this chapter has stimulated your desire to become one, check out the Internet sources for international faculty development seminars in Chapter 10 of this manual!