

CHAPTER 9

DISTRIBUTION: EXCHANGE AND TRANSFER

Microeconomics in Context (Goodwin, et al.), 2nd Edition

Chapter Summary

This chapter looks at the two ways in which resources are distributed in an economy: exchange and transfer. It explores the factors that have influenced distribution of resources through history, including legal arrangements about what can be owned and who is allowed to own. You will learn about some of the building blocks of economic analysis of international trade, introducing the concepts of specialization and comparative advantage.

The chapter deals with the real-world strengths and weaknesses of exchange as a form of distribution. Also covered is the role of transfers, such as those from governments to retirees and from parents to children, and an examination of the strengths and weaknesses of transfers as a form of distribution. Finally, you will learn about ways in which economists and others measure the extent of income and wealth inequality in an economy.

Objectives

After reading and reviewing this chapter, you should be able to:

1. Describe the difference between exchange and transfer.
2. Discuss how trade can expand a society's consumption opportunities.
3. Discuss the advantages and disadvantages of exchanges.
4. Discuss the advantages and disadvantages of transfers.
5. Define the difference between wealth and income.
6. Describe the distribution of income and wealth in the United States.
7. Describe how inequality is measured.
8. Present different definitions of equity.

Key Terms

barter
comparative advantage
free trade
tariffs
protectionist policy
in-kind transfers
ability to pay principle
Lorenz curve

use right
comparative advantage (principle of)
infant industry
quotas
import substitution policies
dependency needs
moral hazard
Gini ratio

Active Review Questions

Fill in the Blank

1. Tariffs and quotas are both examples of _____ policies.
2. A government policy undertaken to reduce reliance on inputs and encourage development of domestic industry can be referred to as an import _____ policy.
3. Joe's parents give him a small private jet for his 16th birthday. This is an example of a(n) _____ transfer.
4. The principle of comparative advantage says that a producer should specialize in producing goods for which its opportunity costs are relatively _____.
5. Income inequality in the US _____ (increased/decreased) between 1947 and 1968, and has _____ (increased/decreased) since 1968.
6. The distribution of wealth tends to be _____ (more/less) unequal than the distribution of income.
7. The graph that is used to depict income inequality, showing the percent of households along one axis and the percent of income along the other, is known as the _____ curve.
8. If income were perfectly equally distributed within a country, the value of the Gini ratio for that country would be _____.

True/False

9. The natural environment provides transfers to human society in the form of sunshine, fresh air, and other resources.
10. Suppose Costa Rica and Panama both produce two goods: bananas and beans. According to the principle of comparative advantage, if Costa Rica produces both bananas and beans less efficiently than Panama, it should simply buy both goods from Panama.
11. The principle of comparative advantage applies only to decisions concerning international trade.
12. Increasing capital mobility decreases the likelihood of a "race to the bottom" in social, health, and environmental standards among countries.

13. It is possible to organize an economy strictly on principles of exchange and eliminate all transfers.
14. Transfers can perpetuate inequality.
15. Mary grows tomatoes in her front yard and gives them to her two children to eat. Mary can be described as both a “producer” and a “distributor” of tomatoes.
16. Based on data collected in 2000, the poorest fifth of the US population receives one tenth of all the household income in the country.
17. Specialization in production always increases the prosperity of a country.

Short Answer

18. The US Census Bureau has experimented with a variety of possible definitions of personal income. The Gini ratio in the US varies somewhat, depending which definition of personal income is used. If the Census Bureau starts with a measure of pre-tax money income and then adds the value of health insurance fringe benefits paid by businesses for their employees, as well as the value of net capital gains, how does the Gini ratio change?

19. List five possible standards of equity on fairness.

Problems

1. Suppose that by devoting all its resources to coffee production, Ethiopia can produce 6 tons of coffee, while if it devotes all its resources to peanut production, it can produce 2 tons of peanuts. Senegal can produce 2 tons of coffee if it devotes all its resources there, or 4 tons of peanuts if it grows only peanuts.

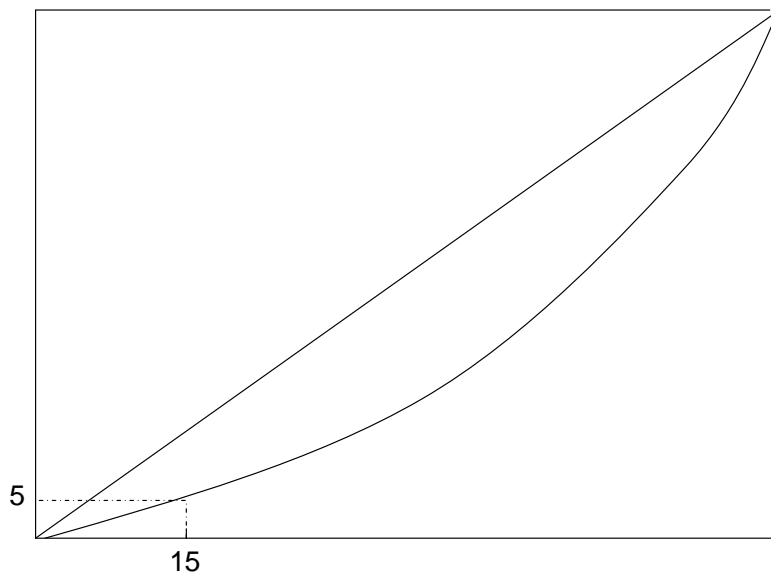
- a. Draw the PPFs for Ethiopia and Senegal. (Put the quantity of coffee on the vertical axes.)

b. Which country is the more efficient producer of coffee? Explain how you got your answer.

c. Suppose that Ethiopia would like to consume 4 tons of coffee and 1 ton of peanuts, while Senegal would like to consume 2 tons of coffee and 3 tons of peanuts. Could either country consume their desired consumption bundle, without trade? Show on your graphs above.

d. If the countries trade, could they each get their desired consumption bundle? If so, how?

Problem #2 refers to following graph.



1. The graph above shows a Lorenz curve for income distribution in the country of Utopia.
 - a. Label the horizontal and vertical axes on this graph.
 - b. In words, explain what information is communicated by the numbers shown on this graph.

 - c. Suppose that the government of Utopia introduces a new tax on the richest 10% of society, and uses the proceeds to supplement the income of the poorest members of society. On the graph, show the direction in which the Lorenz curve will change as a result of the new policy.

Self Test

1. Which of the following is an example of a transfer?
 - a. You get a new job.
 - b. You trade violin lessons for foot massages.
 - c. You buy a bag of groceries.
 - d. You make a donation to a local soccer team.
 - e. You buy stock in a start-up firm.

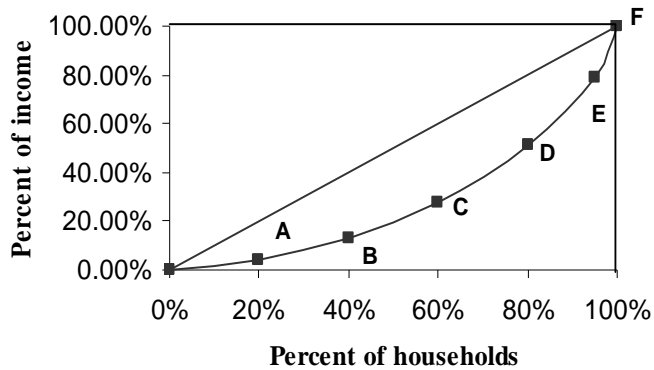
2. Which of the following statements is false?
 - a. Rules about what can be owned vary across time and across cultures.
 - b. If you have a use right to a good, you cannot necessarily sell that good.
 - c. Transfers are distinguished by being one-way.
 - d. Transfers are distinguished by being voluntary.
 - e. Controversy exists over what sorts of things may be privately owned.

3. According to the principle of comparative advantage:
 - a. Each country should specialize in the good it can produce most efficiently compared with its trading partner.
 - b. Buyers should compare goods before signing a contract.
 - c. Wealthier countries have significant advantages compared to poorer countries.
 - d. Each country should produce at least some quantity of every important consumer good.
 - e. Some countries should act strictly as consumers and not as producers.

4. Which of the following is not cited as an advantage of specialization and exchange?
- a. incentives to be productive
 - b. gains from trade
 - c. non-coercion
 - d. power differentials
 - e. creation of common interests
5. The notion of the gains from trade, looking specifically at the case of two countries exchanging goods based on comparative advantage, was first developed by:
- a. Adam Smith
 - b. Karl Marx
 - c. David Ricardo
 - d. John Maynard Keynes
 - e. John Rawls
6. Which of the following factors is not cited as a problem with exchange?
- a. convexity
 - b. vulnerability
 - c. coercion
 - d. The possibility of temporarily losing access to an essential good.
 - e. The possibility of supply disruptions.
7. According to the infant industry argument:
- a. Government should sometimes protect domestic firms from foreign competition until they can compete on their own.
 - b. Tariffs may be justified to protect an industry until it becomes more competitive.
 - c. Quotas are never justified in an international trade situation.
 - d. Both a and b
 - e. Both b and c
8. Which of the following is a disadvantage of import substitution policies?
- a. Decreased likelihood of lock-in
 - b. Loss of potential gains from trade in the short run
 - c. Loss of infant industry advantages
 - d. Loss of long run comparative advantage
 - e. Diversification of production

9. Marla is a compulsive gambler. Her cousin wants to help her out but is afraid that if he gives her cash, she'll lose it right away. As an alternative, he offers to give her a place to stay for free. This is an example of:
- a protectionist approach
 - marginal thinking
 - an infant industry approach
 - an exchange
 - an in-kind transfer
10. The graph used to describe inequality in a country is called:
- a Kuznets curve
 - a Gini curve
 - a Lorenz curve
 - a production possibilities frontier
 - a comparative advantage function
11. Which of the following is not a potential drawback to specialization and exchange in international markets?
- Creation of common interests.
 - Excessive dependence on another nation for crucial inputs.
 - Loss of domestic food security.
 - A "race to the bottom" in environmental standards.
 - Wars sparked by the need for products or raw materials provided by another country.
12. Which of the following is a potential advantage of using transfers?
- avoiding large transaction costs
 - ensuring a fair exchange
 - moral hazard
 - perpetuation of inequality
 - lock-in
13. Which of the following is an illustration of moral hazard?
- Bicyclists ride down the middle of a busy street.
 - A young man participates in an anti-war demonstration.
 - Parents save less for their children's college education because they know need-based financial aid is available.
 - A local government funds public education using tax dollars.
 - None of the above.

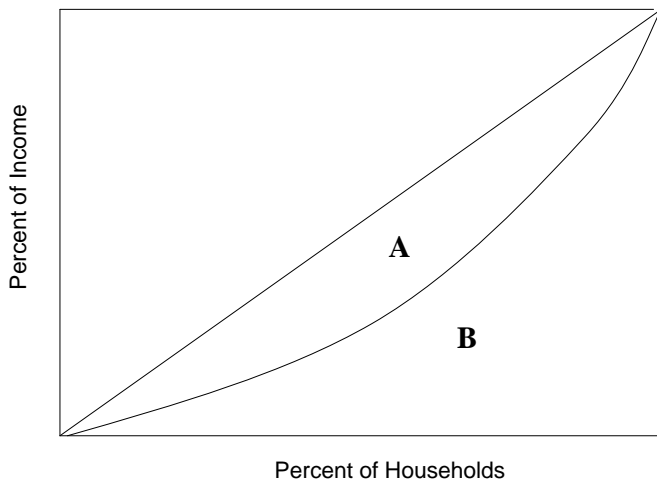
Question #14 refers to the following graph:



14. According to the Lorenz curve above, which of the following statements is true?

- a. The bottom 40% of households earn less than 20% of all income
- b. The bottom 20% of households earn 20% of all income
- c. The society shown here has complete income equality
- d. The more the curve sags downward, the greater income equality
- e. Both a and d are true

Questions #15 and #16 refer to the following graph:



15. Referring to the graph shown above, the Gini ratio is equal to:

- a. $A/(A+B)$
- b. $(A+B)/A$
- c. $B/(A+B)$
- d. A/B
- e. B/A

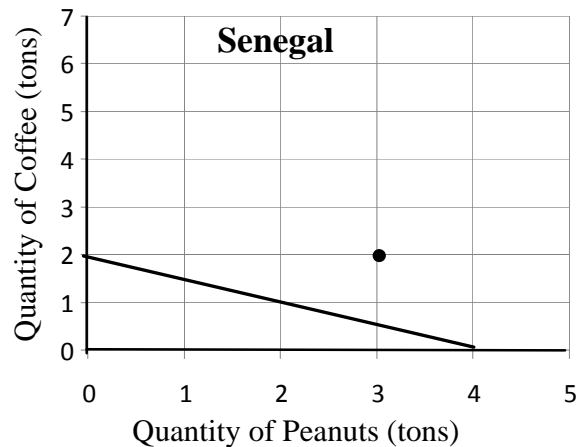
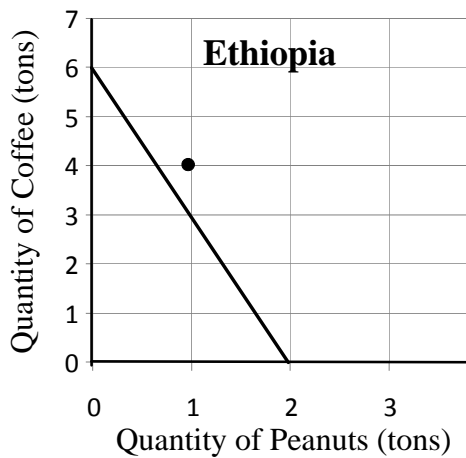
16. In the year 2010, suppose the Gini ratio for Canada is .3 and the Gini ratio for the US is .5. In the year 2015, the Gini ratio for Canada rises to .35. Which of the following statements is true?
- Canada has greater inequality than the US.
 - Canada has greater inequality in 2015 than it did in 2010.
 - The US has greater equality than Canada.
 - Between 2010 and 2015, Canada's Lorenz curve has become straighter (closer to the diagonal).
 - All of the above are false.
17. Which of the following statements is true?
- The US has the lowest Gini ratio of all major industrialized countries
 - The US has the highest Gini ratio of all major industrialized countries
 - The UK has a higher Gini ratio than the US.
 - Countries with high levels of equality have high Gini ratios.
 - The US has a straighter Lorenz curve (closer to the diagonal) than any other major industrialized country.
18. The philosopher John Rawls proposed an approach to equity based on:
- Equal rewards for equal contribution.
 - Equal opportunity.
 - Maximizing average welfare across society.
 - Equal rights.
 - Attention to the least fortunate.
19. Which of the following is an example of a protectionist policy?
- Ensuring equal pay for men and women.
 - Social Security.
 - An excise tax on cigarette consumption.
 - A quota on imports of sugar.
 - None of the above.
20. Which of the following statements about income inequality in the US is true?
- Income distribution was most equal in 1968.
 - Income distribution was most equal in 1947.
 - Income inequality has declined steadily from 1947 to the present.
 - Income inequality has risen steadily from 1947 to the present.
 - The US has greater income equality than most industrialized countries.

Answers to Active Review Questions

1. protectionist
2. substitution
3. in-kind
4. low
5. decreased; increased
6. more
7. Lorenz
8. zero
9. True
10. False
11. False
12. False
13. False
14. True
15. True
16. False
17. False
18. It rises, since these benefits are enjoyed primarily by the middle class and the relatively wealthy.
19. Equality of outcomes; equality of opportunity; equal rewards for equal contributions; equal rights; attention to the least fortunate.

Answers to Problems

1.a.



1.b. Ethiopia is the more efficient producer of coffee. Ethiopia can produce 1 ton of coffee at an opportunity cost of only $\frac{1}{3}$ ton of peanuts, while the opportunity cost of a ton of coffee in Senegal is 2 tons of peanuts.

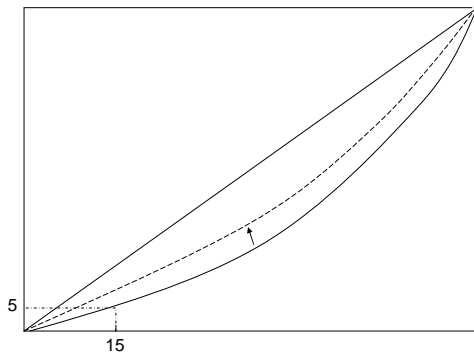
1.c. No. (See the points marked on the graphs above—they are outside the PPFs.)

1.d. Yes. If Ethiopia produces 6 tons of coffee and sells 2 tons to Senegal in exchange for 1 ton of peanuts, while Senegal produces only peanuts (keeping 3 tons, and using the fourth to buy 2 tons of coffee from Ethiopia), both countries will get their desired consumption bundle.

2. a. The horizontal axis should be labeled as “Percent of Households,” and the vertical axis should be labeled as “Percent of Income.”

2. b. Based on this graph, we can see that the poorest 15% of households in Utopia receive 5% of total household income.

2. c. The curve will shift upward, toward the diagonal:



Answers to Self Test Questions

1. d
2. d
3. a
4. d
5. c
6. a
7. d
8. b
9. e
10. c
11. a
12. a
13. c
14. a
15. a
16. b
17. b
18. e
19. d
20. a