

## Chapter 10

# ECONOMIC AND SOCIAL INEQUALITY

*Microeconomics in Context* (Goodwin, et al.), 5<sup>th</sup> Edition

### Chapter Summary

This chapter starts by defining economic inequality, deriving a Lorenz curve and then using it to calculate a Gini coefficient. It then presents data on income and wealth inequality in the United States, along with international comparisons. The fourth section considers the causes and consequences of inequality. The final section presents potential policies to address inequality.

### Objectives

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

1. Interpret a Lorenz curve, and construct one based on income distribution data.
2. Explain how a Gini coefficient is derived.
3. Comment on inequality trends in the United States.
4. State how the United States compares to other countries in terms of economic inequality.
5. Discuss the causes and consequences of rising inequality.
6. Discuss different policy proposals to address inequality.

### Key Terms

Lorenz curve

capital gains

labor income

rent

market income

universal basic income (UBI)

Gini ratio (or Gini coefficient)

economic mobility

capital income

Kuznets curve hypothesis

disposable income

## Active Review Questions

### *Fill in the Blank*

1. 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.
2. If income were perfectly equally distributed within a country, the value of the Gini ratio for that country would be \_\_\_\_\_.
3. The distribution of wealth tends to be \_\_\_\_\_ (more/less) unequal than the distribution of income.
4. Economists refer to payments for the direct or indirect use of any capital asset as \_\_\_\_\_.

### *True/False*

5. The richest fifth of American households receive more than half of all income.
6. The closer a Lorenz curve is to a 45-degree straight line, the more unequal the distribution of income.
7. A Gini coefficient of 0.80 would be considered a highly unequal distribution of income.
8. The income Gini coefficient for the United States is currently around 0.80.
9. A capital gain is the income from renting out personal property.
10. The highest Gini coefficient in United States history occurred in 1968.
11. The top 1% of American households own more than one-quarter of all national wealth.
12. The global income Gini coefficient is around 0.90.
13. The median assets of white households in the United States are more than ten times higher than the median assets of black households.
14. Most economists view technological change as a factor which decreases levels of economic inequality.
15. While global income inequality is decreasing, income inequality in most individual countries is increasing.

16. According to the Kuznets curve hypothesis, inequality is expected to first increase, then decrease, as a country develops economically.
17. The main reason the income Gini coefficient for the United States is higher than other developed countries is that the U.S. has a high Gini coefficient based on market income.
18. The economic consensus is that raising the minimum wage will significantly reduce income inequality in the United States.
19. The Bosa Familia program in Brazil has reduced income inequality by providing families with cash transfers as long as children stay in school and receive preventative health care.

*Short Answer*

20. Briefly described the trends in income inequality in the United States over the last 100 years.

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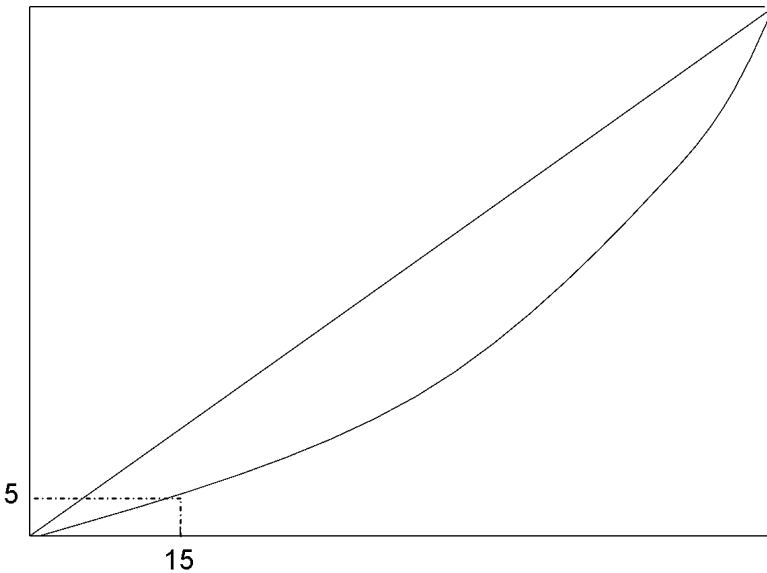
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**Problem**



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.

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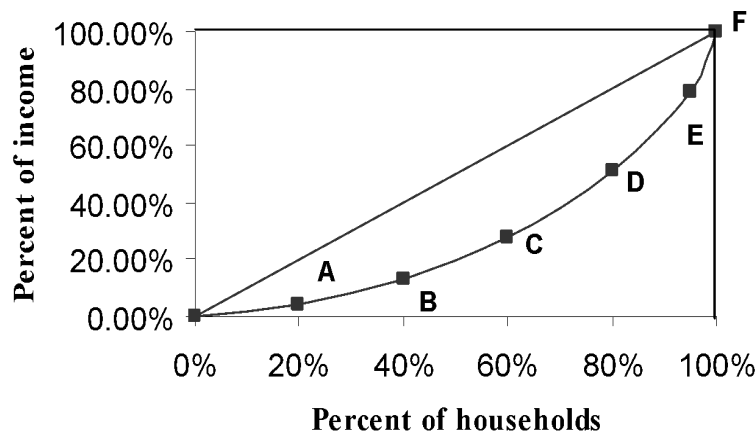
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c. Suppose that the government of Utopia introduces a new tax on the richest 10% of society, and uses the proceeds to supplement the income of the poorest members of society. On the graph, show the direction in which the Lorenz curve will change as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

## Self Test

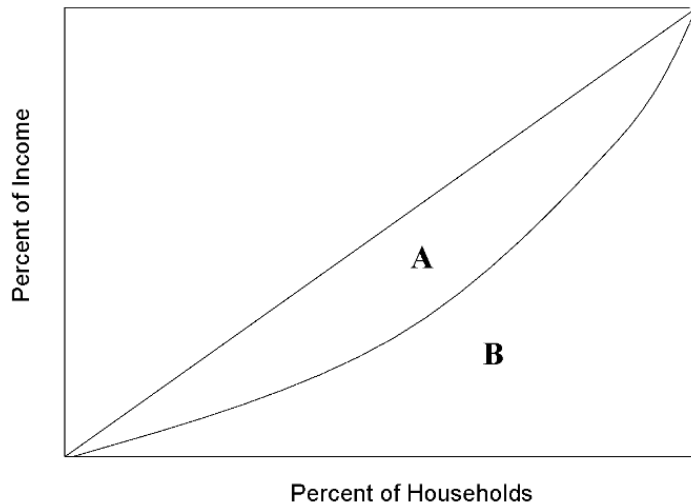
1. The graph used to describe inequality in a country is called ...
  - a. a Kuznets curve
  - b. a Gini curve
  - c. a Lorenz curve
  - d. a production possibilities frontier
  - e. a comparative advantage function
2. The richest fifth of Americans receive about what percent of all income?
  - a. 35%
  - b. 43%
  - c. 53%
  - d. 63%
  - e. 75%

Question #3 refers to the graph below.



3. 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

Question #4 refers to the graph below.



4. Referring to the graph shown above, the Gini ratio is equal to ...
- $A/(A+B)$
  - $(A+B)/A$
  - $B/(A+B)$
  - $A/B$
  - $B/A$
5. In the year 2010, suppose the Gini ratio for Canada was 0.30 and the Gini ratio for the US was 0.50. In the year 2020, suppose the Gini ratio for Canada rises to 0.35. Which of the following statements is true?
- Canada has greater inequality than the US.
  - Canada has greater inequality in 2020 than it did in 2010.
  - The US has greater equality than Canada.
  - Between 2010 and 2020, Canada's Lorenz curve has become straighter (closer to the diagonal).
  - All of the above are false.
6. Which one of the following Lorenz curves represents a country with perfect equality?
- A horizontal line
  - A vertical line
  - An L-shaped curve
  - A 45-degree line sloping downward
  - A 45-degree line sloping upward

7. About what is current income Gini coefficient in the United States?
- 0.25
  - 0.36
  - 0.47
  - 0.62
  - 0.80
8. In what year did the income Gini coefficient in the United States reach its historic low?
- 1929
  - 1947
  - 1955
  - 1968
  - 1979
9. The bottom half of households in the United States own about what percent of all wealth?
- 2%
  - 9%
  - 14%
  - 21%
  - 27%
10. Which one of the following statements is false?
- Median household income in the United States can vary significantly by race.
  - The median income of married couples is higher than the median income of single-adult households.
  - Median household assets tend to increase with higher levels of education.
  - Median household assets are nearly twice as high for white households as compared to black and Hispanic households.
  - Median household assets tend to increase as the age of the householder increases.
11. Which of the following statements is true?
- The U.S. has the lowest Gini ratio of all major industrialized countries.
  - The U.S. has the highest Gini ratio of all major industrialized countries.
  - The U.K. has a higher Gini ratio than the U.S.
  - Countries with high levels of equality have high Gini ratios.
  - The U.S. has a straighter Lorenz curve (closer to the diagonal) than any other major industrialized country.

12. Which of the following statements about income inequality in the U.S. 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 U.S. has greater income equality than most industrialized countries.
13. The term economists use for payments for the use of any capital asset is ...
- rent.
  - capital gains.
  - Lorenz payments.
  - economic mobility.
  - factor equalization.
14. Which one of the following impacts is most accepted by economists to be a consequence of increasing inequality?
- Greater economic growth
  - Lower economic growth
  - Higher homicide rates
  - Greater social cohesion
  - Greater public investment
15. Which one of the following policy proposals would not be expected to reduce inequality at least somewhat?
- More powerful labor unions
  - A higher minimum wage
  - Fewer job protections for part-time employees
  - An increase in public education spending
  - An increase in the tax rates on high-income households
16. Which one of the following factors has not contributed to increasing inequality in the United States?
- The declining power of labor unions
  - An increase in labor income
  - Rapid technological change
  - Globalization
  - An increase in single-parent households



17. Which of the following countries has the lowest Gini coefficient?

- a. The United States
- b. China
- c. The United Kingdom
- d. Sweden
- e. Brazil

18. What is the Kuznets curve hypothesis?

- a. That economic inequality increases with economic development.
- b. That economic inequality decreases with economic development.
- c. That economic inequality first increases, then decreases, with economic development.
- d. That economic inequality first decreases, then increases, with economic development.
- e. None of the above.

19. Which one of the following statements is false?

- a. The global income Gini coefficient is likely higher than the Gini coefficient for any individual country.
- b. Global income inequality has been increasing, while the Gini coefficient in most individual countries is decreasing.
- c. The growth of the global middle class is largely responsible for the decline in global income inequality.
- d. Median wealth in the United States is less than in Japan, the United Kingdom, and Canada.
- e. The global wealth Gini coefficient is around 0.80.

20. Market income includes all of the following except ...

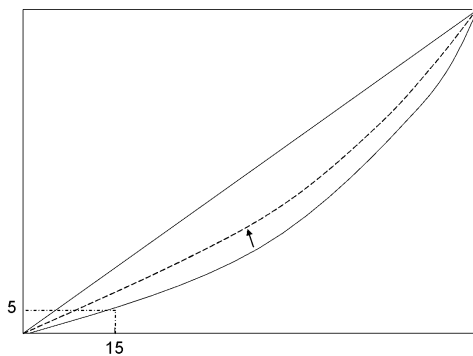
- a. wages.
- b. salaries.
- c. capital income.
- d. self-employment income.
- e. taxes.

*Answers to Active Review Questions*

1. Lorenz
2. zero
3. more
4. rent
5. True
6. False
7. True
8. False
9. False
10. False
11. True
12. False
13. True
14. False
15. True
16. True
17. False
18. False
19. True
20. Income inequality was relatively high leading up to the Great Depression. Then inequality decreased for several decades, until the late 1960s. Since then, inequality has generally increased. Current levels of inequality are similar to, or greater than, the levels observed in the early 20<sup>th</sup> century.

*Answer to Problem*

1. a. The horizontal axis should be labeled as “Percent of Households,” and the vertical axis should be labeled as “Cumulative Percent of Income.”
1. b. Based on this graph, we can see that the poorest 15% of households in Utopia receive 5% of total household income.
1. c. The curve will shift upward, toward the diagonal:



*Answers to Self Test Questions*

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