

## Chapter 14

# INEQUALITY: ECONOMIC AND SOCIAL PERSPECTIVES

*Macroeconomics in Context* (Goodwin, et al.)

### Chapter Overview

This chapter provides an overview of key issues on economic and social inequality, looking beyond income measures to explore inequalities based on demographic factors, such as race, ethnicity, and education. Empirical data on inequality in the U.S. and global inequality between and within countries is presented along with discussion on the impacts of the pandemic in increasing existing inequality. An analysis of some of the key factors contributing to the rising economic inequality in the United States in recent decades is presented next. The final section presents a detailed examination of impacts of macroeconomic policies on inequality and possible policy solutions. The debate over policy responses continues, and this chapter provides you with the background you need to assess the current state of macroeconomic policy.

### Chapter Objectives

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

1. Interpret the Lorenz curve and construct one based on income distribution data.
2. Explain how a Gini coefficient is derived.
3. Describe the trends in inequality in the United States in the past few decades.
4. State how the United States compares to other countries in terms of economic inequality.
5. Discuss recent trends in global inequality
6. Identify the underlying causes of rising wage inequality and the role of financialization and macroeconomic policies in contributing to the rise in inequality.
7. Discuss policy measures that might help reduce inequality.

### Key Terms

Lorenz curve

Gini ratio (or Gini coefficient)

capital gain

labor market discrimination

gender wage gap

occupational segregation

Kuznets curve hypothesis

labor income

capital income

rent

wage-productivity gap

skill-biased technical change

## Active Review

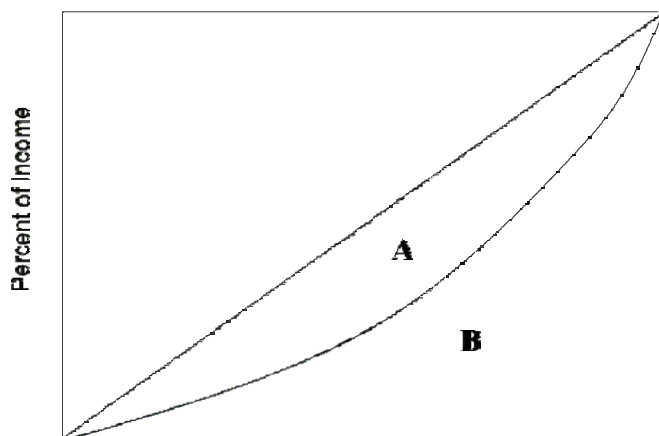
### *Fill in the Blank*

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 \_\_\_\_\_.
5. The increase in the value of an asset at the time it is sold compared to the price at which it was originally purchased is referred to as \_\_\_\_\_.
6. In the U.S. historically unemployment rates for blacks and Hispanics have been \_\_\_\_\_ than that for whites and Asian.
7. Part of the gender wage gap is associated with \_\_\_\_\_, which refers to the tendency of men and women to be employed in different occupations.
8. While global inequality has \_\_\_\_\_, inequality within countries has \_\_\_\_\_ in most cases over the last few decades.
9. The \_\_\_\_\_ hypothesis states that inequality increases during the initial stages of economic development, but eventually declines with further growth.
10. Union membership in the United States has \_\_\_\_\_ since 1950s.
11. Since the 1980s, the difference in effective tax rates paid by the rich and the poor has \_\_\_\_\_ with the decline in corporate taxes and an increase in payroll taxes.
12. Transfers designed to help people with insufficient resources are referred to as \_\_\_\_\_.

### *True or False*

13. The richest fifth of American households receive more than half of all income.

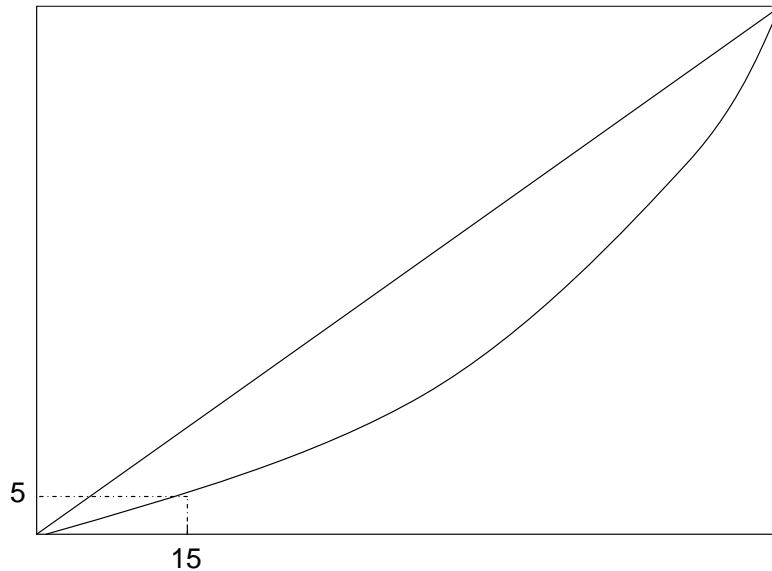
14. The closer a Lorenz curve is to a 45-degree straight line, the more unequal the distribution of income.
15. The income Gini coefficient for the United States is currently around 0.85.
16. The top 1% of American households own about the same amount of wealth as the bottom 90% combined.
17. Older displaced workers are more likely to find a job easily because of their higher experience level.
18. Labor market discrimination refers to differences in employment outcomes due to difference in educational background.
19. The global income Gini coefficient is around 0.90.
20. Most economists view technological change as a factor which increases levels of economic inequality.
21. 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.
22. The empirical evidence shows that smaller phased increases in minimum wage have little impact on overall employment.
23. The expansionary monetary policies implemented by the Federal Reserve since the 1980s have contributed to the rising income inequality in the U.S..
24. Referring to the graph below, the Gini ratio is equal to  $A/(A+B)$ .



*Short Answer*

25. What is a Lorenz curve? Explain how the Gini ratio uses the Lorenz curve to measure the level of inequality in a nation's income distribution.
  
  
  
  
  
  
  
  
  
  
26. Briefly describe the trends in income inequality in the United States over the last 100 years.
  
  
  
  
  
  
  
  
  
  
27. What are the two types of government cash transfer programs in the U.S., used to help households achieve income security? Provide examples of each.
  
  
  
  
  
  
  
  
  
  
28. What are some of the factors explaining the rise of inequality in the United States in the past few decades?
  
  
  
  
  
  
  
  
  
  
29. How was globalization related to increasing inequality?
  
  
  
  
  
  
  
  
  
  
30. Discuss some policies for addressing inequality.

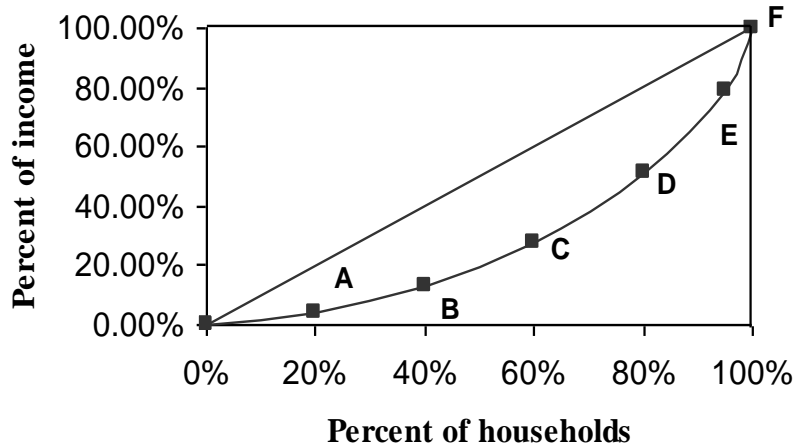
## Problems



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

Question #1 refers to the graph below.



1. 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
2. In the year 2015, 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 while that for the US rises to 0.55. Which of the following statements is true?
  - A. Canada has greater inequality than the US.
  - B. Canada has greater inequality in 2020 than it did in 2015.
  - C. The Lorenz curve for the US is closer to the diagonal than the Lorenz curve for Canada.
  - D. Between 2015 and 2020, Canada's Lorenz curve has become straighter (closer to the diagonal).
  - E. Both C and D are true.
3. The top 1% of households in the United States own about what percent of all wealth?
  - A. 26%
  - B. 31%
  - C. 45%
  - D. 52%
  - E. 63%

4. Which of the following statements is true?
- A. The U.S. has the lowest Gini ratio of all major industrialized countries.
  - B. The U.K. has a higher Gini ratio than the U.S.
  - C. The U.S. has the highest Gini ratio of all major industrialized countries.
  - D. Countries with high levels of equality have high Gini ratios.
  - E. The U.S. has a straighter Lorenz curve (closer to the diagonal) than any other major industrialized country.
5. Which of the following statements about income inequality in the U.S. is true?
- A. Income distribution was most equal in 1968.
  - B. Income distribution was most equal in 1947.
  - C. Income inequality has declined steadily from 1947 to the present.
  - D. Income inequality has risen steadily from 1947 to the present.
  - E. The U.S. has greater income equality than most industrialized countries.
6. Which of the following statements is TRUE?
- A. Median weekly earnings for workers with high school degree are lower than that for workers with a college degree.
  - B. In general, unemployment rate is higher among workers without a college degree than for workers with a college degree or higher.
  - C. Median weekly earnings for workers generally increases with increases in educational qualification.
  - D. Workers with a college degree earn higher wages than the median wages for all workers.
  - E. All of the above.
7. Which of the following statements about the impact of the COVID-19 pandemic in the U.S. is TRUE?
- A. Income inequality did not change as both the rich and poor faced similar impacts of the pandemic.
  - B. Fewer older workers went into retirement.
  - C. The impact of the pandemic was more severe for workers without a college degree.
  - D. The stock market surge after the pandemic resulted in huge gains for the richest 1% of the population, exacerbating inequality.
  - E. Both C. and D. are true.

8. Which of the following countries has the lowest Gini coefficient?
- A. The United States
  - B. China
  - C. The United Kingdom
  - D. Norway
  - E. Brazil
9. 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.
10. 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 France.
  - E. The global wealth Gini coefficient is around 0.89.
11. Occupational segregation refers to:
- A. Discrimination in wages based on race or ethnicity.
  - B. Tendency of older workers and younger workers to be employed in different industries.
  - C. Tendency of men and women to be employed in different industries.
  - D. Discrimination in wages based on differences in educational background.
  - E. Discrimination in wages based on age.



12. A regressive income tax refers to:

- A. Middle- and lower-income families paying a higher proportion of their income in payroll tax than higher-income families.
- B. Middle- and lower-income families paying a higher level of taxes in dollar values than higher-income families.
- C. Middle- and lower-income families paying a lower proportion of their income in payroll tax than higher-income families.
- D. Middle- and lower-income families paying a lower level of taxes in dollar values than higher-income families.
- E. Middle- and lower-income families paying the same proportion of their income in payroll taxes as higher-income families.

13. Which of the following statements is FALSE?

- A. Data from 1948 to 2017 shows that corporate profits have always grown faster than wages.
- B. Over time, the labor productivity in the U.S. has declined.
- C. The wage-productivity gap has narrowed in the last three decades.
- D. Union membership rate in the U.S. has gradually increased since the 1970s.
- E. All of the above.

14. The theory of skill-biased technological change proposes that:

- A. relative wage gains will be the greatest for workers who possess the education and skills to use modern technologies
- B. technological change leads to a decline in wages
- C. technological change increases worker productivity and their wages
- D. as technology replaces workers, the bargaining power of workers declines
- E. technological change could increase unemployment rates

15. Since the 1980s,

- A. top marginal tax rates have increased.
- B. payroll tax rates have declined.
- C. effective tax rates paid by the rich and poor has narrowed.
- D. spending on welfare has increased.
- E. All of the above.

16. Which of the following explains financialization as a factor in rising inequality in the U.S. economy?

- A. Wages in the financial sector has grown much faster than wages in other sectors.
- B. A greater share of income has gone to those who own assets, most of whom tend to be wealthier individuals.
- C. Executive pay has increased sharply due to a change in corporate pay structure, where a larger proportion of executive pay has come in the form of stock options and bonuses.
- D. Workers' bargaining power has declined as corporations have shifted their reliance on earnings through financial channels.
- E. All of the above.

17. An expansionary monetary policy could increase inequality because:

- A. low interest rates increase asset prices which are mostly owned by the rich
- B. low interest rates increase labor income faster than business income
- C. middle-income savers lose returns on savings when rates are low
- D. (a) and (c) only.
- E. (a), (b), and (c).

18. Which of the following statements about the impact of macroeconomic policy on inequality is TRUE?

- A. The impact of fiscal policies of the last few decades on inequality is ambiguous.
- B. Fiscal policies of the last few decades have contributed to a rise in inequality.
- C. Monetary policies of the last few decades have contributed to a rise in inequality.
- D. The impact of fiscal policy on increasing inequality is less clear than the impact of monetary policies.
- E. There is clear evidence that the equalizing effects of monetary policy is greater than its disequalizing effects.

19. Policies to reduce inequality include all the following, *except*:

- A. Lowering corporate taxes.
- B. Increasing minimum wages.
- C. Strengthening labor unions.
- D. Increasing investment in human capital.
- E. Providing support to low-income workers.

20. Which one of the following policy proposals would NOT be expected to reduce inequality?
- A. More powerful labor unions
  - B. A higher minimum wage
  - C. Fewer job protections for part-time employees
  - D. An increase in public education spending
  - E. An increase in the tax rates on high-income households

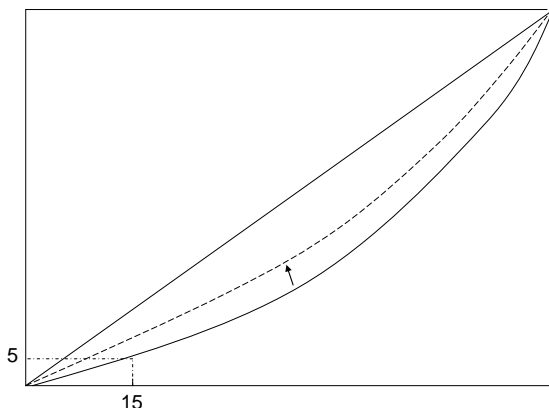
### Answers to Active Review Questions

1. Lorenz
2. zero
3. more
4. rents
5. capital gains
6. higher
7. occupational segregation
8. declined; increased
9. Kuznets curve
10. declined
11. narrowed
12. means-tested program.
13. True.
14. False. Closer the Lorenz curve is to the 45-degree straight line, the more equal the distribution of income
15. False. Income Gini for the U.S. is around 0.49.
16. True.
17. False. They are less likely to find a job.
18. False. Labor market discrimination exists when similarly qualified people are treated disadvantageously in employment based on their race, sex, age, sexual preference, physical appearance or disability.
19. False. Global income Gini ranges around 0.63-0.67.
20. True.
21. False. Less progressive tax policies along with decline in workers bargaining power are some of the reasons.
22. True.
23. False. The impact of monetary policy on inequality is not clear.
24. True.
25. A Lorenz curve is a line that portrays a nation's income distribution, by dividing up households by into quintiles from poor to rich, and then plotting the cumulative percent of income flowing each quintile of households. The Gini ratio measures the level of income inequality by taking the area between the Lorenz curve and line of perfect equality (A), divided by the total area under the line of perfect equality (A+B). The higher the Gini, the more inequality there is in the income distribution.

26. 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.
27. The two types of government cash transfer programs in the U.S., used to help households achieve income security are social insurance programs (like Social Security and Medicare) and means-tested programs (like welfare, food stamps, housing subsidies).
28. Rising wage-productivity gap due to decline of unions, globalization and trade, and technological change. The financialization of the economy and the fiscal policies of the past few decades have also contributed to the rise in inequality.
29. Globalization has lowered the bargaining power of workers as corporations have had to ability to look around the world and also relocate their production facilities to hire low-cost workers (mostly in developing countries). Additionally, competition from low-priced imports has also eliminated many jobs, especially in the industrial sector, and pushed many middle-income workers to move to lower-income jobs.
30. More progressive tax policies, increasing minimum wages, strengthening of unions, increased investment in infrastructure, expansion of transfer programs, income support to low-income households as well as encouraging cooperative-based organizations are policies that would help lower inequality

### Answers to Problems

1. a. The horizontal axis should be labeled as “Cumulative 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. A  | 11. C |
| 2. B  | 12. A |
| 3. B  | 13. E |
| 4. C  | 14. A |
| 5. A  | 15. E |
| 6. E  | 16. C |
| 7. E  | 17. D |
| 8. D  | 18. B |
| 9. C  | 19. A |
| 10. B | 20. C |