



Chapter 16 Exercises

Self-Check Questions

- Describe how each of the following changes is likely to affect poverty and inequality:
 - Incomes rise for low-income and high-income workers but rise more for high-income earners.
 - Incomes fall for low-income and high-income workers but fall more for high-income earners.
- Jonathan is a single father with one child. He can work as a server for \$6 per hour for up to 1,500 hours per year. He is eligible for welfare, so if he does not earn any income, he will receive a total of \$10,000 per year. He can work and still receive government benefits, but for every \$1 of income, his welfare stipend is \$1 less. Create a table that shows Jonathan's options. Use four columns, the first showing number of hours to work, the second showing his earnings from work, the third showing the government benefits he will receive, and the fourth column showing his total income (earnings plus government support). Sketch a labor-leisure diagram of Jonathan's opportunity set with and without government support.
- Imagine that the government reworks the welfare policy that was affecting Jonathan in the prior question, so that for each dollar someone like Jonathan earns at work, his government benefits diminish by only \$0.30. Reconstruct the table from the prior question to account for this change in policy. Draw Jonathan's labor-leisure opportunity sets, both for before this welfare program is enacted and after it is enacted.
- We've discovered that the welfare system discourages recipients from working because the more income they earn, the less welfare benefits they receive. How does the Earned Income Tax Credit (EITC) attempt to loosen the poverty trap?
- How does TANF attempt to loosen the poverty trap?
- A group of ten people have the following annual incomes: \$24,000, \$18,000, \$50,000, \$100,000, \$12,000, \$36,000, \$80,000, \$10,000, \$24,000, \$16,000. Calculate the share of total income received by each quintile of this income distribution. Do the top and bottom quintiles in this distribution have a greater or larger share of total income than the top and bottom quintiles of the U.S. income distribution?
- The following table shows the share of income going to each quintile of the income distribution for the United Kingdom in 1979 and 1991. Use this data to calculate what the points on a Lorenz curve would be, and sketch the Lorenz curve. How did inequality in the United Kingdom shift over this time period? How can you see the patterns in the quintiles in the Lorenz curves?

Share of Income	1979	1991
Top quintile	39.7%	42.9%
Fourth quintile	24.8%	22.7%
Middle quintile	17.0%	16.3%
Second quintile	11.5%	11.5%
Bottom quintile	7.0%	6.6%

- Using two demand and supply diagrams, one for the low-wage labor market and one for the high-wage labor market, explain how information technology can increase income inequality if it is a complement to high-income workers, like salespeople and managers, but a substitute for low-income workers, like file clerks and receptionists.

9. Again, using two demand and supply diagrams, one for the low-wage labor market and one for the high-wage labor market, explain how a program that increases educational levels for a substantial number of low-skill workers could reduce income inequality.
10. Consider this hypothesis: a well-funded social safety net can increase economic equality but will reduce economic output. Explain why this might be so, and sketch a production possibility curve that shows this tradeoff.
11. Consider this hypothesis: a well-funded social safety net may lead to less regulation of the market economy. Explain why this might be so, and sketch a production possibility curve that shows this tradeoff.
12. Which set of policies is more likely to cause a tradeoff between economic output and equality: policies of redistribution or policies aimed at the ladder of opportunity? Explain how the production possibility frontier tradeoff between economic equality and output might look in each case.
13. Why is there reluctance on the part of some in the United States to redistribute income so that greater equality can be achieved?

Review Questions

14. How is the poverty rate calculated?
15. What is the poverty line?
16. What is the difference between poverty and income inequality?
17. How does the poverty trap discourage people from working?
18. How can the effect of the poverty trap be reduced?
19. Who are the near-poor?
20. What is the safety net?
21. Briefly explain the differences between TANF, the EITC, SNAP, and Medicaid.
22. Who is included in the top income quintile?
23. What is measured on the two axes of a Lorenz curve?
24. If a country had perfect income equality, what would the Lorenz curve look like?
25. How has the inequality of income changed in the U.S. economy since the late 1970s?
26. What are some reasons why a certain degree of inequality of income would be expected in a market economy?
27. What are the main reasons economists give for the increase in inequality of incomes?
28. Identify some public policies that can reduce the level of economic inequality.
29. Describe how a push for economic equality might reduce incentives to work and produce output. Then, describe how a push for economic inequality might not have such effects.

Critical Thinking Questions

30. What goods and services would you include in an estimate of the basic necessities for a family of four?
31. If a family of four earned \$22,000, would they be able to make ends meet given the official poverty threshold?
32. Exercises 2 and 3 asked you to describe the labor-leisure tradeoff for Jonathan. Since there is no monetary incentive for Jonathan to work, explain why he may choose to work anyway. Explain what the opportunity costs of working and not working might be for Jonathan. Using your tables and graphs from Exercises 2 and 3, analyze how the government welfare system affects Jonathan's incentive to work.
33. Explain how you would create a government program that would give an incentive for labor to increase hours and keep labor from falling into the poverty trap.
34. Many critics of government programs to help low-income individuals argue that these programs create a poverty trap. Explain how programs such as TANF, EITC, SNAP, and Medicaid will affect low-income individuals and whether or not you think these programs will benefit families and children.
35. Think about the business cycle: unemployment increases during a recession and decreases during an expansionary phase. Explain what happens to TANF, SNAP, and Medicaid programs at each phase of the business cycle (recession, trough, expansion, and peak).
36. Explain how a country may experience greater equality in the distribution of income yet still experience high rates of poverty. (*Hint*: review the Clear It Up titled "How do economists measure poverty in low-income countries?" and compare to Table 1 from Lesson 16.4.)
37. The demand for skilled workers in the United States has been increasing. To increase the supply of skilled workers, many argue that immigration reform to allow more skilled labor into the United States is needed. Explain whether you agree or disagree.
38. Explain a situation using the supply and demand for skilled labor, in which the increased number of college graduates leads to depressed wages. Given the rising cost of going to college, explain why or why not a college education will increase income inequality.
39. What do you think is more important to focus on when considering inequality: income inequality or wealth inequality?
40. To reduce income inequality, should the marginal tax rates on the top 1% be increased?
41. Redistribution of income occurs through the federal income tax and government antipoverty programs. Explain whether or not this level of redistribution is appropriate and whether more redistribution should occur.
42. How does a society or a country make the decision about the tradeoff between equality and economic output? (*Hint*: think about the political system.)
43. Explain what the long- and short-term consequences are of not promoting equality or working to reduce poverty.

Problems

44. In Country A, the population is 300 million, and 50 million people are living below the poverty line. What is the poverty rate?
45. In Country B, the population is 900 million, and 100 million people are living below the poverty line. What is the poverty rate?
46. Susan is a single mother with three children. She can earn \$8 per hour and works up to 2,000 hours per year. However, if she does not earn any income at all, she will receive government benefits totaling \$16,000 per year. For every \$1 of income she earns, her level of government support will be reduced by \$1. Create a table patterned after the one in Exercise 2. The first column should show Susan's choices of how many hours to work per year, up to 2,000 hours. The second column should show her earnings from work. The third column should show her level of government support, given her earnings. The final column should show her total income, combining earnings and government support.
47. A group of ten people have the following annual incomes: \$55,000, \$30,000, \$15,000, \$20,000, \$35,000, \$80,000, \$40,000, \$45,000, \$30,000, \$50,000. Calculate the share of total income received by each quintile of this income distribution. Do the top and bottom quintiles in this distribution have a greater or larger share of total income than the top and bottom quintiles of the U.S. income distribution for 2019?