



CHAPTER 20

Income Inequality and Poverty

The great British Prime Minister Winston Churchill once summarized alternative economic systems as follows: “The inherent vice of capitalism is the unequal sharing of blessings. The inherent virtue of socialism is the equal sharing of miseries.” Churchill’s quip draws attention to two important facts. First, nations that use market mechanisms to allocate resources usually achieve greater prosperity than those that do not. This is the result of Adam Smith’s invisible hand in action. Second, the prosperity that market economies produce is not shared equally. Incomes can differ greatly between those at the top and those at the bottom of the economic ladder. The gap between rich and poor is a fascinating and important topic of study—for the comfortable rich, for the struggling poor, and for the aspiring and worried middle class.

From the previous two chapters, you should have some understanding about why different people have different incomes. A person’s earnings



depend on the supply and demand for that person's labor, which in turn depend on natural ability, human capital, compensating differentials, discrimination, and so on. Because labor earnings make up about two-thirds of the total income in the U.S. economy, the factors that determine wages are also largely responsible for determining how the economy's total income is distributed among the various members of society. In other words, they determine who is rich and who is poor.

In this chapter, we discuss the distribution of income—a topic that raises some fundamental questions about the role of economic policy. One of the *Ten Principles of Economics* in Chapter 1 is that governments can sometimes improve market outcomes. This possibility is particularly important when considering the distribution of income. The invisible hand of the marketplace acts to allocate resources efficiently, but it does not necessarily ensure that resources are allocated fairly. As a result, many economists—though not all—believe that the government should redistribute income to achieve greater equality. In doing so, however, the government runs into another of the *Ten Principles of Economics*: People face trade-offs. When the government enacts policies to make the distribution of income more equal, it distorts incentives, alters behavior, and makes the allocation of resources less efficient.

Our discussion of the distribution of income proceeds in three steps. First, we assess how much inequality there is in our society. Second, we consider some different views about what role the government should play in altering the distribution of income. Third, we discuss various public policies aimed at helping society's poorest members.

20-1 The Measurement of Inequality

We begin our study of the distribution of income by addressing four questions of measurement:

- How much inequality is there in our society?
- How many people live in poverty?
- What problems arise in measuring the amount of inequality?
- How often do people move between income classes?

These measurement questions are the natural starting point from which to discuss public policies aimed at changing the distribution of income.

20-1a U.S. Income Inequality

Imagine that you lined up all the families in the economy according to their annual income. Then you divided the families into five equal groups: the bottom fifth, the second fifth, the middle fifth, the fourth fifth, and the top fifth. Table 1 shows the income ranges for each of these groups, as well as for the top 5 percent. You can use this table to find where your family lies in the income distribution.

For examining differences in the income distribution over time, economists find it useful to present the income data as in Table 2. This table shows the share of total income that each group of families received in selected years. In 2011, the bottom fifth of all families received 3.8 percent of all income, and the top fifth of



“As far as I’m concerned, they can do what they want with the minimum wage, just as long as they keep their hands off the maximum wage.”

TABLE 1**The Distribution of Income in the United States: 2011**

| Group | Annual Family Income |
|---------------|----------------------|
| Bottom Fifth | Under \$27,218 |
| Second Fifth | \$27,218 – \$48,502 |
| Middle Fifth | \$48,502 – \$75,000 |
| Fourth Fifth | \$75,000 – \$115,866 |
| Top Fifth | \$115,866 and over |
| Top 5 percent | \$205,200 and over |

Source: U.S. Bureau of the Census.

TABLE 2**Income Inequality in the United States**

This table shows the percentage of total before-tax income received by families in each fifth of the income distribution and by those families in the top 5 percent.

| Year | Bottom Fifth | Second Fifth | Middle Fifth | Fourth Fifth | Top Fifth | Top 5% |
|------|--------------|--------------|--------------|--------------|-----------|--------|
| 2011 | 3.8% | 9.3% | 15.1% | 23.0% | 48.9% | 21.3% |
| 2010 | 3.8 | 9.5 | 15.4 | 23.5 | 48.8 | 20.0 |
| 2000 | 4.3 | 9.8 | 15.5 | 22.8 | 47.4 | 20.8 |
| 1990 | 4.6 | 10.8 | 16.6 | 23.8 | 44.3 | 17.4 |
| 1980 | 5.2 | 11.5 | 17.5 | 24.3 | 41.5 | 15.3 |
| 1970 | 5.5 | 12.2 | 17.6 | 23.8 | 40.9 | 15.6 |
| 1960 | 4.8 | 12.2 | 17.8 | 24.0 | 41.3 | 15.9 |
| 1950 | 4.5 | 12.0 | 17.4 | 23.4 | 42.7 | 17.3 |
| 1935 | 4.1 | 9.2 | 14.1 | 20.9 | 51.7 | 26.5 |

Source: U.S. Bureau of the Census.

all families received 48.9 percent of all income. In other words, even though the top and bottom fifths include the same number of families, the top fifth has more than twelve times as much income as the bottom fifth.

The last column in the table shows the share of total income received by the very richest families. In 2011, the top 5 percent of families received 21.3 percent of all income, which was greater than the total income of the poorest 40 percent.

Table 2 also shows the distribution of income in various years beginning in 1935. At first glance, the distribution of income appears to have been remarkably stable over time. Throughout the past several decades, the bottom fifth of families has received about 4 to 5 percent of income, while the top fifth has received about 40 to 50 percent of income. Closer inspection of the table reveals some trends in the degree of inequality. From 1935 to 1970, the distribution gradually became more equal. The share of the bottom fifth rose from 4.1 to 5.5 percent, and the

share of the top fifth fell from 51.7 percent to 40.9 percent. In more recent years, this trend has reversed itself. From 1970 to 2011, the share of the bottom fifth fell from 5.5 percent to 3.8 percent and the share of the top fifth rose from 40.9 to 48.9 percent.

In Chapter 19, we discussed some explanations for this recent rise in inequality. Increases in international trade with low-wage countries and changes in technology have tended to reduce the demand for unskilled labor and raise the demand for skilled labor. As a result, the wages of unskilled workers have fallen relative to the wages of skilled workers, and this change in relative wages has increased inequality in family incomes.

20-1b Inequality around the World

How does the amount of inequality in the United States compare to that in other countries? This question is interesting, but answering it is problematic. For some countries, data are not available. Even when they are, not every country collects data in the same way; for example, some countries collect data on individual incomes, whereas other countries collect data on family incomes, and still others collect data on expenditure rather than income. As a result, whenever we find a difference between two countries, we can never be sure whether it reflects a true difference in the economies or merely a difference in the way data are collected.

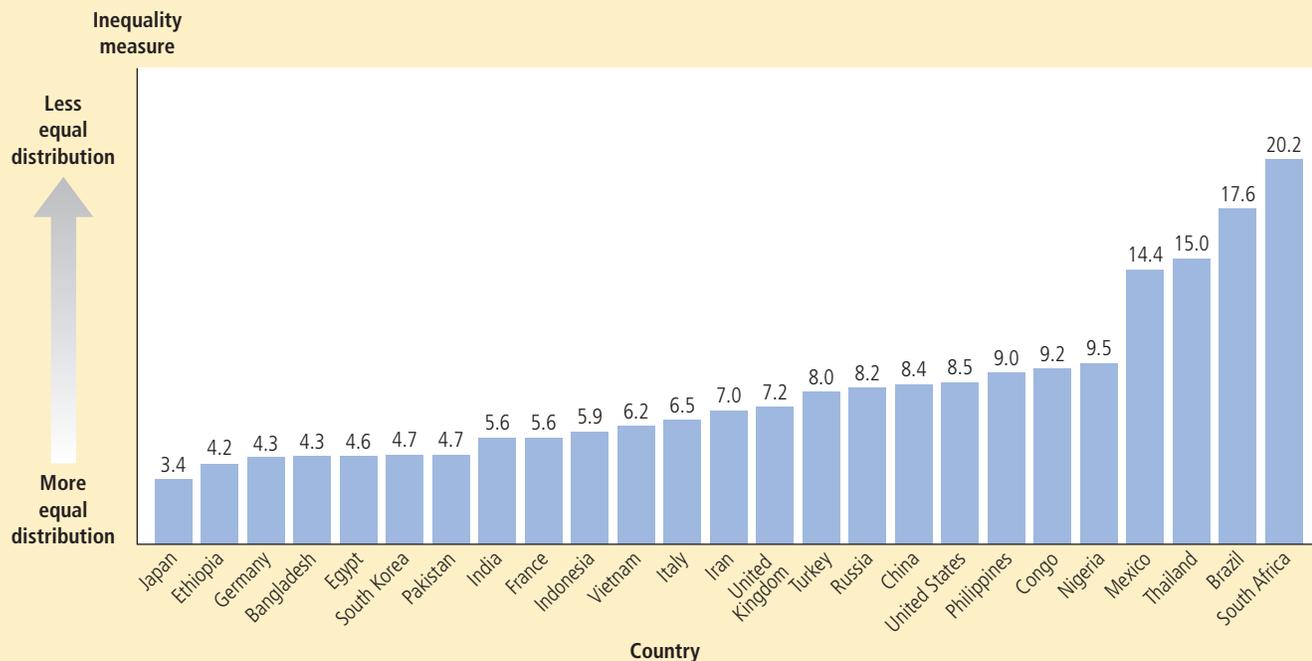
With this warning in mind, consider Figure 1, which compares inequality in the twenty-five most populous countries. The inequality measure is the ratio of

FIGURE 1

Inequality around the World

Source: Human Development Report 2011.

This figure shows a measure of inequality: the income (or expenditure) of the richest 20% of the population divided by the income (or expenditure) of the poorest 20%. Among these nations, Japan and Ethiopia have the most equal distribution of economic well-being, while South Africa and Brazil have the least equal.



the income received by the richest fifth of the population to the income of the poorest fifth. The most equality is found in Japan, where the top fifth receives 3.4 times as much income as the bottom fifth. The least equality is found in South Africa, where the top group receives 20.1 times as much income as the bottom group. All countries have significant disparities between rich and poor, but the degree of inequality varies substantially around the world.

When countries are ranked by inequality, the United States ends up with a bit more inequality than the typical country. The United States has greater income disparity than most other economically advanced countries, such as Japan and Germany. But the United States has a more equal income distribution than some developing countries, such as South Africa and Brazil.

20-1c The Poverty Rate

A commonly used gauge of the distribution of income is the poverty rate. The **poverty rate** is the percentage of the population whose family income falls below an absolute level called the **poverty line**. The poverty line is set by the federal government at roughly three times the cost of providing an adequate diet. This line is adjusted every year to account for changes in the level of prices, and it depends on family size.

To get some idea about what the poverty rate tells us, consider the data for 2011. In that year, the median family in the United States had an income of \$60,974, and the poverty line for a family of four was \$23,021. The poverty rate was 15.0 percent. In other words, 15.0 percent of the U.S. population were members of families with incomes below the poverty line for their family size.

Figure 2 shows the poverty rate since 1959, when the official data begin. You can see that the poverty rate fell from 22.4 percent in 1959 to a low of 11.1 percent in 1973. This decline is not surprising, because average income in the economy (adjusted for inflation) rose more than 50 percent during this period. Because the poverty line is an absolute rather than a relative standard, more families are pushed above the poverty line as economic growth pushes the entire income distribution upward. As John F. Kennedy once put it, a rising tide lifts all boats.

poverty rate

the percentage of the population whose family income falls below an absolute level called the poverty line

poverty line

an absolute level of income set by the federal government for each family size below which a family is deemed to be in poverty

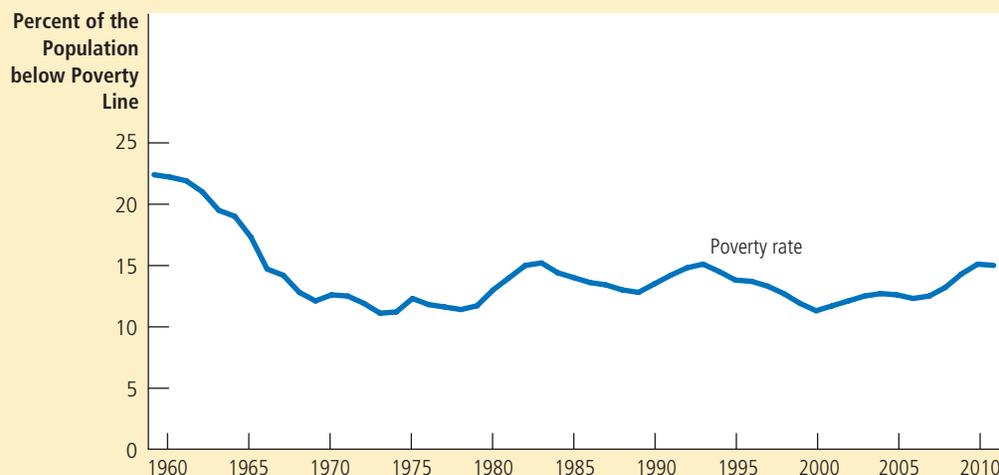


FIGURE 2

The Poverty Rate

The poverty rate shows the percentage of the population with incomes below an absolute level called the poverty line.

Source: U.S. Bureau of the Census.

Since the early 1970s, however, the economy's rising tide has left some boats behind. Despite continued growth in average income, the poverty rate has not declined below the level reached in 1973. This lack of progress in reducing poverty in recent decades is closely related to the increasing inequality we saw in Table 2. Although economic growth has raised the income of the typical family, the increase in inequality has prevented the poorest families from sharing in this greater economic prosperity.

Poverty is an economic malady that affects all groups within the population, but it does not affect all groups with equal frequency. Table 3 shows the poverty rates for several groups, and it reveals three striking facts:

- Poverty is correlated with race. Blacks and Hispanics are about three times more likely to live in poverty than are whites.
- Poverty is correlated with age. Children are more likely than average to be members of poor families, and the elderly are less likely than average to be poor.
- Poverty is correlated with family composition. Families headed by a female adult without a spouse present are about five times as likely to live in poverty as families headed by a married couple.

These three facts have described American society for many years, and they show which people are most likely to be poor. These effects also work together: Among black and Hispanic children in female-headed households, about half live in poverty.

20-1d Problems in Measuring Inequality

Although data on the income distribution and the poverty rate give us some idea about the degree of inequality in our society, interpreting these data is not always straightforward. The data are based on households' annual incomes. What people care about, however, is not their incomes but their ability to

TABLE 3

Who Is Poor?

This table shows that the poverty rate varies greatly among different groups within the population.

| Group | Poverty Rate |
|-------------------------------------|--------------|
| All persons | 15.0% |
| White, not Hispanic | 9.8 |
| Black | 27.6 |
| Hispanic | 25.3 |
| Asian | 12.3 |
| Children (under age 18) | 21.9 |
| Elderly (over age 64) | 8.7 |
| Married-couple families | 6.2 |
| Female household, no spouse present | 31.2 |

Source: U.S. Bureau of the Census. Data are for 2011.

maintain a good standard of living. For at least three reasons, data on the income distribution and the poverty rate give an incomplete picture of inequality in living standards.

In-Kind Transfers Measurements of the distribution of income and the poverty rate are based on families' *money* income. Through various government programs, however, the poor receive many nonmonetary items, including food stamps, housing vouchers, and medical services. Transfers to the poor given in the form of goods and services rather than cash are called **in-kind transfers**. Standard measurements of the degree of inequality do not take account of these in-kind transfers.

Because in-kind transfers are received mostly by the poorest members of society, the failure to include in-kind transfers as part of income greatly affects the measured poverty rate. According to a study by the Census Bureau, if in-kind transfers were included in income at their market value, the number of families in poverty would be about 10 percent lower than the standard data indicate.

The Economic Life Cycle Incomes vary predictably over people's lives. A young worker, especially one in school, has a low income. Income rises as the worker gains maturity and experience, peaks at around age 50, and then falls sharply when the worker retires at around age 65. This regular pattern of income variation is called the **life cycle**.

Because people can borrow and save to smooth out life cycle changes in income, their standard of living in any year depends more on lifetime income than on that year's income. The young often borrow, perhaps to go to school or to buy a house, and then repay these loans later when their incomes rise. People have their highest saving rates when they are middle-aged. Because people can save in anticipation of retirement, the large declines in incomes at retirement need not lead to similar declines in the standard of living. This normal life cycle pattern causes inequality in the distribution of annual income, but it does not necessarily represent true inequality in living standards.

Transitory versus Permanent Income Incomes vary over people's lives not only because of predictable life cycle variation but also because of random and transitory forces. One year a frost kills off the Florida orange crop, and Florida orange growers see their incomes fall temporarily. At the same time, the Florida frost drives up the price of oranges, and California orange growers see their incomes temporarily rise. The next year the reverse might happen.

Just as people can borrow and save to smooth out life cycle variation in income, they can also borrow and save to smooth out transitory variation in income. To the extent that a family saves in good years and borrows (or depletes its savings) in bad years, transitory changes in income need not affect its standard of living. A family's ability to buy goods and services depends largely on its **permanent income**, which is its normal, or average, income.

To gauge inequality of living standards, the distribution of permanent income is more relevant than the distribution of annual income. Many economists believe that people base their consumption on their permanent income; as a result, inequality in consumption is one gauge of inequality of permanent income. Because permanent income and consumption are less affected by transitory changes in income, they are more equally distributed than is current income.

in-kind transfers

transfers to the poor given in the form of goods and services rather than cash

life cycle

the regular pattern of income variation over a person's life

permanent income

a person's normal income

case study

Alternative Measures of Inequality

A 2008 study by Michael Cox and Richard Alm of the Federal Reserve Bank of Dallas shows how different measures of inequality lead to dramatically different results. Cox and Alm compared American households in the top fifth of the income distribution to those in the bottom fifth to see how far apart they are.

According to Cox and Alm, the richest fifth of U.S. households in 2006 had an average income of \$149,963, while the poorest fifth had an average income of \$9,974. Thus, the top group had about 15 times as much income as the bottom group.

The gap between rich and poor shrinks a bit if taxes are taken into account. Because the tax system is progressive, the top group paid a higher percentage of its income in taxes than did the bottom group. Cox and Alm found that the richest fifth had 14 times as much after-tax income as the poorest fifth.

The gap shrinks more substantially if one looks at consumption rather than income. Households having an unusually good year are more likely to be in the top group and are likely to save a high fraction out of their incomes. Households having an unusually bad year are more likely to be in the bottom group and are more likely to consume out of their savings. According to Cox and Alms, the consumption of the richest fifth was only 3.9 times as much as the consumption of the poorest fifth.

The consumption gap becomes smaller still if one corrects for differences in the number of people in the household. Because larger families are more likely to have two earners, they are more likely to find themselves near the top of the income distribution. But they also have more mouths to feed. Cox and Alms reported that households in the top fifth had an average of 3.1 people, while those in the bottom fifth had an average of 1.7 people. As a result, consumption per person in the richest fifth of households was only 2.1 times consumption per person in the poorest fifth.

These data show that inequality in material standards of living is much smaller than inequality in annual income. ▲

20-1e Economic Mobility

People sometimes speak of “the rich” and “the poor” as if these groups consisted of the same families year after year. In fact, this is not at all the case. Economic mobility, the movement of people between income classes, is significant in the U.S. economy. Movements up the income ladder can be due to good luck or hard work, and movements down the ladder can be due to bad luck or laziness. Some of this mobility reflects transitory variation in income, while some reflects more persistent changes in income.

Because family income changes over time, temporary poverty is more common than the poverty rate suggests, but persistent poverty is less common. In a typical 10-year period, about one in four families falls below the poverty line in at least 1 year. Yet fewer than 3 percent of families are poor for 8 or more years. Because it is likely that the temporarily poor and the persistently poor face different problems, policies that aim to combat poverty need to distinguish between these groups.

Another way to gauge economic mobility is the persistence of economic success from generation to generation. Economists who have studied this topic find that having an above-average income carries over from parents to children, but the persistence is far from perfect, indicating substantial mobility among income classes. If a father earns 20 percent above his generation’s average income, his son will most likely earn 8 percent above his generation’s average income. There is only a small correlation between the income of a grandfather and the income of his grandson.

One result of this intergenerational economic mobility is that the U.S. economy is filled with self-made millionaires (as well as with heirs who have squandered the fortunes they inherited). According to one study, about four out of five millionaires made their money on their own, often by starting and building a business or by climbing the corporate ladder. Only one in five millionaires inherited his fortune.

Quick Quiz What does the poverty rate measure? • Describe three potential problems in interpreting the measured poverty rate.

20-2 The Political Philosophy of Redistributing Income

We have just seen how the economy's income is distributed and have considered some of the problems in interpreting measured inequality. This discussion was *positive* in the sense that it merely described the world as it is. We now turn to the *normative* question facing policymakers: What should the government do about economic inequality?

This question is not just about economics. Economic analysis alone cannot tell us whether policymakers should try to make our society more egalitarian. Our views on this question are, to a large extent, a matter of political philosophy. Yet because the government's role in redistributing income is central to so many debates over economic policy, here we digress from economic science to consider a bit of political philosophy.

20-2a Utilitarianism

A prominent school of thought in political philosophy is **utilitarianism**. The founders of utilitarianism are the English philosophers Jeremy Bentham (1748–1832) and John Stuart Mill (1806–1873). To a large extent, the goal of utilitarians is to apply the logic of individual decision making to questions concerning morality and public policy.

The starting point of utilitarianism is the notion of **utility**—the level of happiness or satisfaction that a person receives from his circumstances. Utility is a measure of well-being and, according to utilitarians, is the ultimate objective of all public and private actions. The proper goal of the government, they claim, is to maximize the sum of utility achieved by everyone in society.

The utilitarian case for redistributing income is based on the assumption of *diminishing marginal utility*. It seems reasonable that an extra dollar of income provides a poor person with more additional utility than an extra dollar would provide to a rich person. In other words, as a person's income rises, the extra well-being derived from an additional dollar of income falls. This plausible assumption, together with the utilitarian goal of maximizing total utility, implies that the government should try to achieve a more equal distribution of income.

The argument is simple. Imagine that Peter and Paul are the same, except that Peter earns \$80,000 and Paul earns \$20,000. In this case, taking a dollar from Peter to pay Paul will reduce Peter's utility and raise Paul's utility. But because of diminishing marginal utility, Peter's utility falls by less than Paul's utility rises. Thus, this redistribution of income raises total utility, which is the utilitarian's objective.

At first, this utilitarian argument might seem to imply that the government should continue to redistribute income until everyone in society has exactly the same income. Indeed, that would be the case if the total amount of income—\$100,000 in our example—were fixed. But in fact, it is not. Utilitarians reject complete equalization of incomes because they accept one of the *Ten Principles of Economics* presented in Chapter 1: People respond to incentives.

utilitarianism

the political philosophy according to which the government should choose policies to maximize the total utility of everyone in society

utility

a measure of happiness or satisfaction

To take from Peter to pay Paul, the government must pursue policies that redistribute income. The U.S. federal income tax and welfare system are examples. Under these policies, people with high incomes pay high taxes, and people with low incomes receive income transfers. These income transfers are phased out: As a person earns more, he receives less from the government. Yet when the government uses higher income taxes and phased-out transfers to take away additional income a person might earn, both Peter and Paul have less incentive to work hard. As they work less, society's income falls, and so does total utility. The utilitarian government has to balance the gains from greater equality against the losses from distorted incentives. To maximize total utility, therefore, the government stops short of making society fully egalitarian.

A famous parable sheds light on the utilitarian's logic. Imagine that Peter and Paul are thirsty travelers trapped at different places in the desert. Peter's oasis has a lot of water; Paul's has only a little. If the government could transfer water from one oasis to the other without cost, it would maximize total utility from water by equalizing the amount in the two places. But suppose that the government has only a leaky bucket. As it tries to move water from one place to the other, some of the water is lost in transit. In this case, a utilitarian government might still try to move some water from Peter to Paul, depending on the size of Paul's thirst and the size of the bucket's leak. But with only a leaky bucket at its disposal, a utilitarian government will stop short of trying to reach complete equality.

20-2b Liberalism

A second way of thinking about inequality might be called **liberalism**. Philosopher John Rawls develops this view in his book *A Theory of Justice*. This book was first published in 1971, and it quickly became a classic in political philosophy.

Rawls begins with the premise that a society's institutions, laws, and policies should be just. He then takes up the natural question: How can we, the members of society, ever agree on what justice means? It might seem that every person's point of view is inevitably based on his particular circumstances—whether he is talented or less talented, diligent or lazy, educated or less educated, born to a wealthy family or a poor one. Could we ever *objectively* determine what a just society would be?

To answer this question, Rawls proposes the following thought experiment. Imagine that before any of us is born, we all get together in the beforelife (the pre-birth version of the afterlife) for a meeting to design the rules that will govern society. At this point, we are all ignorant about the station in life each of us will end up filling. In Rawls's words, we are sitting in an "original position" behind a "veil of ignorance." In this original position, Rawls argues, we can choose a just set of rules for society because we must consider how those rules will affect every person. As Rawls puts it, "Since all are similarly situated and no one is able to design principles to favor his particular conditions, the principles of justice are the result of fair agreement or bargain." Designing public policies and institutions in this way allows us to be objective about what policies are just.

Rawls then considers what public policy designed behind this veil of ignorance would try to achieve. In particular, he considers what income distribution a person would consider fair if that person did not know whether he would end up at the top, bottom, or middle of the distribution. Rawls argues that a person in the original position would be especially concerned about the possibility of being at the *bottom* of the income distribution. In designing public policies, therefore, we should aim to raise the welfare of the worst-off person in society. That is, rather than maximizing the sum of everyone's utility, as a utilitarian would do, Rawls would maximize the minimum utility. Rawls's rule is called the **maximin criterion**.

liberalism

the political philosophy according to which the government should choose policies deemed just, as evaluated by an impartial observer behind a "veil of ignorance"

maximin criterion

the claim that the government should aim to maximize the well-being of the worst-off person in society

Because the maximin criterion emphasizes the least fortunate person in society, it justifies public policies aimed at equalizing the distribution of income. By transferring income from the rich to the poor, society raises the well-being of the least fortunate. The maximin criterion would not, however, lead to a completely egalitarian society. If the government promised to equalize incomes completely, people would have no incentive to work hard, society's total income would fall substantially, and the least fortunate person would be worse off. Thus, the maximin criterion still allows disparities in income because such disparities can improve incentives and thereby raise society's ability to help the poor. Nonetheless, because Rawls's philosophy puts weight on only the least fortunate members of society, it calls for more income redistribution than does utilitarianism.

Rawls's views are controversial, but the thought experiment he proposes has much appeal. In particular, this thought experiment allows us to consider the redistribution of income as a form of **social insurance**. That is, from the perspective of the original position behind the veil of ignorance, income redistribution is like an insurance policy. Homeowners buy fire insurance to protect themselves from the risk of their house burning down. Similarly, when we as a society choose policies that tax the rich to supplement the incomes of the poor, we are all insuring ourselves against the possibility that we might have been members of poor families. Because people dislike risk, we should be happy to have been born into a society that provides us this insurance.

It is not at all clear, however, that rational people behind the veil of ignorance would truly be so averse to risk as to follow the maximin criterion. Indeed, because a person in the original position might end up anywhere in the distribution of outcomes, he might treat all possible outcomes equally when designing public policies. In this case, the best policy behind the veil of ignorance would be to maximize the average utility of members of society, and the resulting notion of justice would be more utilitarian than Rawlsian.

20-2c Libertarianism

A third view of inequality is called **libertarianism**. The two views we have considered so far—utilitarianism and liberalism—both view the total income of society as a shared resource that a social planner can freely redistribute to achieve some social goal. By contrast, libertarians argue that society itself earns no income—only individual members of society earn income. According to libertarians, the government should not take from some individuals and give to others to achieve any particular distribution of income.

For instance, philosopher Robert Nozick writes the following in his famous 1974 book *Anarchy, State, and Utopia*:

We are not in the position of children who have been given portions of pie by someone who now makes last minute adjustments to rectify careless cutting. There is no *central* distribution, no person or group entitled to control all the resources, jointly deciding how they are to be doled out. What each person gets, he gets from others who give to him in exchange for something, or as a gift. In a free society, diverse persons control different resources, and new holdings arise out of the voluntary exchanges and actions of persons.

Whereas utilitarians and liberals try to judge what amount of inequality is desirable in a society, Nozick denies the validity of this very question.

The libertarian alternative to evaluating economic *outcomes* is to evaluate the *process* by which these outcomes arise. When the distribution of income is achieved unfairly—for instance, when one person steals from another—the government has the right and

social insurance

government policy aimed at protecting people against the risk of adverse events

libertarianism

the political philosophy according to which the government should punish crimes and enforce voluntary agreements but not redistribute income

duty to remedy the problem. But as long as the process determining the distribution of income is just, the resulting distribution is fair, no matter how unequal.

Nozick criticizes Rawls's liberalism by drawing an analogy between the distribution of income in society and the distribution of grades in a course. Suppose you were asked to judge the fairness of the grades in the economics course you are now taking. Would you imagine yourself behind a veil of ignorance and choose a grade distribution without knowing the talents and efforts of each student? Or would you ensure that the process of assigning grades to students is fair without regard for whether the resulting distribution is equal or unequal? For the case of grades at least, the libertarian emphasis on process over outcomes is compelling.

Libertarians conclude that equality of opportunities is more important than equality of incomes. They believe that the government should enforce individual rights to ensure that everyone has the same opportunity to use his talents and achieve success. Once these rules of the game are established, the government has no reason to alter the resulting distribution of income.

Quick Quiz Pam earns more than Pauline. Someone proposes taxing Pam to supplement Pauline's income. How would a utilitarian, a liberal, and a libertarian each evaluate this proposal?

20-3 Policies to Reduce Poverty

As we have just seen, political philosophers hold various views about what role the government should take in altering the distribution of income. Political debate among the larger population of voters reflects a similar disagreement. Despite these continuing debates, most people believe that, at the very least, the government should try to help those most in need. According to a popular metaphor, the government should provide a "safety net" to prevent any citizen from falling too far.

Poverty is one of the most difficult problems that policymakers face. Poor families are more likely than the overall population to experience homelessness, drug dependence, health problems, teenage pregnancy, illiteracy, unemployment, and low educational attainment. Members of poor families are both more likely to commit crimes and more likely to be victims of crimes. Although it is hard to separate the causes of poverty from the effects, there is no doubt that poverty is associated with various economic and social ills.

Suppose that you were a policymaker in the government and your goal was to reduce the number of people living in poverty. How would you achieve this goal? Here we examine some of the policy options that you might consider. Each of these options helps some people escape poverty, but none of them is perfect, and deciding upon the best combination to use is not easy.

20-3a Minimum-Wage Laws

Laws setting a minimum wage that employers can pay workers are a perennial source of debate. Advocates view the minimum wage as a way of helping the working poor without any cost to the government. Critics view it as hurting those it is intended to help.

The minimum wage is easily understood using the tools of supply and demand, as we first saw in Chapter 6. For workers with low levels of skill and experience, a high minimum wage forces the wage above the level that balances supply and demand. It therefore raises the cost of labor to firms and reduces the quantity of labor that those

firms demand. The result is higher unemployment among those groups of workers affected by the minimum wage. Those workers who remain employed benefit from a higher wage, but those who might have been employed at a lower wage are worse off.

The magnitude of these effects depends crucially on the elasticity of labor demand. Advocates of a high minimum wage argue that the demand for unskilled labor is relatively inelastic so that a high minimum wage depresses employment only slightly. Critics of the minimum wage argue that labor demand is more elastic, especially in the long run when firms can adjust employment and production more fully. They also note that many minimum-wage workers are teenagers from middle-class families so that a high minimum wage is imperfectly targeted as a policy for helping the poor.

20-3b Welfare

One way for the government to raise the living standards of the poor is to supplement their incomes. The primary way the government does this is through the welfare system. **Welfare** is a broad term that encompasses various government programs. Temporary Assistance for Needy Families (TANF) is a program that assists families with children and no adult able to support the family. In a typical family receiving such assistance, the father is absent and the mother is at home raising small children. Another welfare program is Supplemental Security Income (SSI), which provides assistance to the poor who are sick or disabled. Note that for both of these welfare programs, a poor person cannot qualify for assistance simply by having a low income. He must also establish some additional “need,” such as small children or a disability.

A common criticism of welfare programs is that they create incentives for people to become “needy.” For example, these programs may encourage families to break up, for many families qualify for financial assistance only if the father is absent. The programs may also encourage illegitimate births, for many poor, single women qualify for assistance only if they have children. Because poor, single mothers are such a large part of the poverty problem and because welfare programs seem to raise the number of poor, single mothers, critics of the welfare system assert that these policies exacerbate the very problems they are supposed to cure. As a result of these arguments, the welfare system was revised in a 1996 law that limited the amount of time recipients could stay on welfare.

How severe are these potential problems with the welfare system? No one knows for sure. Proponents of the welfare system point out that being a poor, single mother on welfare is a difficult existence at best, and they are skeptical that many people would be encouraged to pursue such a life if it were not thrust upon them. Moreover, trends over time do not support the view that the decline of the two-parent family is largely a symptom of the welfare system, as the system’s critics sometimes claim. Since the early 1970s, welfare benefits (adjusted for inflation) have declined, yet the percentage of children living with only one parent has risen.

20-3c Negative Income Tax

Whenever the government chooses a system to collect taxes, it affects the distribution of income. This is clearly true in the case of a progressive income tax, whereby high-income families pay a larger percentage of their income in taxes than do low-income families. As we discussed in Chapter 12, equity across income groups is an important criterion in the design of a tax system.

Many economists have advocated supplementing the income of the poor using a **negative income tax**. According to this policy, every family would report its

welfare

government programs that supplement the incomes of the needy

negative income tax

a tax system that collects revenue from high-income households and gives subsidies to low-income households

income to the government. High-income families would pay a tax based on their incomes. Low-income families would receive a subsidy. In other words, they would “pay” a “negative tax.”

For example, suppose the government used the following formula to compute a family’s tax liability:

$$\text{Taxes owed} = (\frac{1}{3} \text{ of income}) - \$10,000.$$

In this case, a family that earned \$60,000 would pay \$10,000 in taxes and a family that earned \$90,000 would pay \$20,000 in taxes. A family that earned \$30,000 would owe nothing. And a family that earned \$15,000 would “owe” –\$5,000. In other words, the government would send this family a check for \$5,000.

Under a negative income tax, poor families would receive financial assistance without having to demonstrate need. The only qualification required to receive assistance would be a low income. Depending on one’s point of view, this feature can be either an advantage or a disadvantage. On the one hand, a negative income tax does not encourage illegitimate births and the breakup of families, as critics of the welfare system believe current policy does. On the other hand, a negative income tax would subsidize not only the unfortunate but also those who are simply lazy and, in some people’s eyes, undeserving of government support.

One actual tax provision that works much like a negative income tax is the Earned Income Tax Credit (EITC). This credit allows poor working families to receive income tax refunds greater than the taxes they paid during the year. Because the EITC applies only to the working poor, it does not discourage recipients from working, as other antipoverty programs may. For the same reason, however, it also does not help alleviate poverty due to unemployment, sickness, or other inability to work.

20-3d In-Kind Transfers

Another way to help the poor is to provide them directly with some of the goods and services they need to raise their living standards. For example, charities provide the needy with food, clothing, shelter, and toys at Christmas. The government gives poor families food stamps, which are government vouchers that can be used to buy food at stores; the stores then redeem the vouchers for money. The government also gives many poor people healthcare through a program called Medicaid.

Is it better to help the poor with these in-kind transfers or with direct cash payments? There is no clear answer.

Advocates of in-kind transfers argue that such transfers ensure that the poor get what they need most. Among the poorest members of society, alcohol and drug addiction is more common than it is in society as a whole. By providing the poor with food and shelter, society can be more confident that it is not helping to support such addictions. This is one reason in-kind transfers are more politically popular than cash payments to the poor.

Advocates of cash payments, on the other hand, argue that in-kind transfers are inefficient and disrespectful. The government does not know what goods and services the poor need most. Many of the poor are ordinary people down on their luck. Despite their misfortune, they are in the best position to decide how to raise their own living standards. Rather than giving the poor in-kind transfers of goods and services that they may not want, it may be better to give them cash and allow them to buy what they think they need most.

20-3e Antipoverty Programs and Work Incentives

Many policies aimed at helping the poor can have the unintended effect of discouraging the poor from escaping poverty on their own. To see why, consider the following example. Suppose that a family needs an income of \$20,000 to maintain a reasonable standard of living. And suppose that, out of concern for the poor, the government promises to guarantee every family that income. Whatever a family earns, the government makes up the difference between that income and \$20,000. What effect would you expect this policy to have?

The incentive effects of this policy are obvious: Any person who would make under \$20,000 by working has little incentive to find and keep a job. For every dollar that the person would earn, the government would reduce the income supplement by a dollar. In effect, the government taxes 100 percent of additional earnings. An effective marginal tax rate of 100 percent is surely a policy with a large deadweight loss.

The adverse effects of this high effective tax rate can persist over time. A person discouraged from working loses the on-the-job training that a job might offer. In addition, his children miss the lessons learned by observing a parent with a full-time job, and this may adversely affect their own ability to find and hold a job.

Although the antipoverty program we have been discussing is hypothetical, it is not as unrealistic as might first appear. Welfare, Medicaid, food stamps, and the EITC are all programs aimed at helping the poor, and they are all tied to family income. As a family's income rises, the family becomes ineligible for these programs. When all these programs are taken together, it is common for families to face effective marginal tax rates that are very high. Sometimes the effective marginal tax rates even exceed 100 percent so that poor families are worse off when they earn more. By trying to help the poor, the government discourages those families from working. According to critics of antipoverty programs, these programs alter work attitudes and create a "culture of poverty."

It might seem that there is an easy solution to this problem: Reduce benefits to poor families more gradually as their incomes rise. For example, if a poor family loses 30 cents of benefits for every dollar it earns, then it faces an effective marginal tax rate of 30 percent. This effective tax reduces work effort to some extent, but it does not eliminate the incentive to work completely.

The problem with this solution is that it greatly increases the cost of programs to combat poverty. If benefits are phased out gradually as a poor family's income rises, then families just above the poverty level will also be eligible for substantial benefits. The more gradual the phase-out, the more families are eligible, and the more the program costs. Thus, policymakers face a trade-off between burdening the poor with high effective marginal tax rates and burdening taxpayers with costly programs to reduce poverty.

There are various other ways to reduce the work disincentive of antipoverty programs. One is to require any person collecting benefits to accept a government-provided job—a system sometimes called *workfare*. Another possibility is to provide benefits for only a limited period of time. This route was taken in the 1996 welfare reform bill, which imposed a 5-year lifetime limit on welfare recipients. When President Clinton signed the bill, he explained his policy as follows: "Welfare should be a second chance, not a way of life."

Quick Quiz List three policies aimed at helping the poor, and discuss the pros and cons of each.

IN THE NEWS

International Differences in
Income Redistribution

Many nations have more generous social safety nets than the United States, but they also have very different tax systems.

Combating Inequality May Require Broader Tax

By Eduardo Porter

Rarely have we experienced such a confluence of arguments in favor of raising taxes on the rich. After a hard-won re-election fought mainly over taxes and spending, President Obama arguably has a mandate from voters to tap the wealthy to address our budget woes.

What's more, raising more money from the wealthy might go a long way toward righting our lopsided economy—which delivered 93 percent of our income growth in the first two years of the economic recovery to the richest 1 percent of families, and only 7 percent to the rest of us.

Yet while raising more taxes from the winners in the globalized economy is a start, and may help us dig out of our immediate fiscal hole, it is unlikely to be enough to address our long-term needs. The experience of many other developed countries suggests that paying for a government that could help the poor and the middle class cope in our brave new globalized world will require more money from the middle class itself.

Many Americans may find this hard to believe, but the United States already has one of the most progressive tax systems in the developed world, according to several studies, raising proportionately more revenue from the wealthy than other advanced countries do. Taxes on American households do more to redistribute resources and reduce inequality than the tax codes of most other rich nations.

But taxation provides only half the picture of public finance. Despite the progressivity of our taxes, according to a study of public finances across the industrial countries in the Organization for Economic Cooperation and Development, we also have one of the least effective governments at combating income inequality. There is one main reason: our tax code does not raise enough money.

This paradox underscores two crucial lessons we could learn from the experience of our peers around the globe. The first is that the government's success at combating income inequality is determined less by the progressivity of either the tax code or the benefits than by the amount of tax revenue that the government can spend on programs that benefit the middle class and the poor.



The second is that very progressive tax codes are not very effective at raising money. The corollary—suggested by Peter Lindert of the University of California, Davis in his 2004 book “Growing Public”—is that insisting on highly progressive taxes that draw most revenue from the rich may result in more inequality than if we relied on a flatter, more “regressive” tax schedule to raise money from everybody and pay for a government that could help every American family attain a decent standard of living.

Consider government aid for families. According to the O.E.C.D. study, our Temporary Assistance for Needy Families is the most progressive program of cash benefits for families among 22 advanced countries, accurately targeted to serve the poor.

But American family cash benefits are the least effective at reducing inequality. The reason is that they are so meager. The entire budget for cash assistance for families in the United States amounts to one-tenth of 1 percent of the nation's economic output. The average across the O.E.C.D. nations is 11 times bigger. Even including tax breaks and direct government services, we spend a much smaller share of our economic output

20-4 Conclusion

People have long reflected on the distribution of income in society. Plato, the ancient Greek philosopher, concluded that in an ideal society the income of the richest person would be no more than four times the income of the poorest person. Although the measurement of inequality is difficult, it is clear that our society has much more inequality than Plato recommended.

One of the *Ten Principles of Economics* discussed in Chapter 1 is that governments can sometimes improve market outcomes. There is little consensus, however, about how this principle should be applied to the distribution of income.

on family assistance than almost any other advanced nation.

The same pattern can be found across a range of government programs. The reason is always the same: their relatively small size. Over all, government cash benefits in the United States—including pensions, disability, unemployment insurance and the like—contribute about 10 percent to household income, on average, according to the study. The average across industrial nations is twice that.

Our budget reveals a core philosophical difference with other advanced countries. In the big-government social democracies like those of Western Europe, government is expected to guarantee a set of universal public services—from health care to child care to pensions—that are considered basic rights of citizenry. To pay for this minimum welfare package, everybody is expected to contribute proportionately into the pot.

Government in the United States has a different goal. Benefits are narrower. Social Security and Medicare follow a universal service template, but only for older Americans. Other social spending is aimed carefully to benefit the poor. Financed through a more progressive tax code, it looks more like charity than a universal right. On top of that, our philosophical stance virtually ensures a small government.

Progressive taxes make it hard to raise money because they distort people's behavior. They encourage taxpayers to reduce their tax liability rather than to increase their

pretax income. High corporate taxes encourage companies to avoid them. High taxes on capital income also encourage avoidance and capital flight. High income tax rates on top earners can discourage work and investment, too. So trying to raise a lot of money with our progressive tax code would probably not achieve the goal and could damage economic growth.

Big-government social democracies, by contrast, rely on flatter taxes to finance their public spending, like gas taxes and value-added taxes on consumption. The Nordic countries, for instance, have very low tax rates on capital income relative to income from work. And they have relatively high taxes on consumption. In Denmark, consumption tax revenue amounts to about 11 percent of the nation's economy. In the United States, sales taxes and excise taxes on cigarettes and other items amount to roughly 4 percent.

Liberal Democrats have long opposed them because they fall much more heavily on the poor, who spend a larger share of their incomes than the rich. But these taxes have one big positive feature: they are difficult to avoid and produce fewer disincentives to work or invest. That means they can be used to raise much more revenue.

Public finances are under strain today on both sides of the Atlantic, as governments struggle to cope with our long global recession and the aging of the baby boom generation. In Southern Europe, the pressure to pare back universal welfare systems is intense. In

the United States, political leaders on both sides of the partisan divide have realized that even our relatively meager package of social goods cannot be sustained with our slim tax take.

But the United States has one option that most of Europe's flailing economies do not. Its tax revenue is so low, comparatively, that it has more space to raise it. A more efficient, flatter tax schedule would allow us to do so without hindering economic activity.

Bruce Bartlett, a tax expert who served in the administrations of Ronald Reagan and George H. W. Bush, told me last week that he thought federal tax revenue could increase to 22 percent of the nation's economic output, well above its historical average of 18.5 percent, without causing economic harm. If President Obama tries to go down this road, however, he may have to build a flatter tax code.

"We should reform the tax system, no question," William Gale, a tax policy expert at the Brookings Institution and co-director of the nonpartisan Tax Policy Center, wrote in an e-mail. "We are going to need to move beyond the current set of tax instruments to raise the needed revenues—a VAT and/or a carbon tax seem like the obvious ways to go." And Mr. Bartlett also pointed out: "We can't get all the revenue we need from the rich. Eventually, everyone will have to pay more." ▲

Source: *New York Times*, November 28, 2012.

Philosophers and policymakers today do not agree on how much income inequality is desirable, or even whether public policy should aim to alter the distribution of income. Much of public debate reflects this disagreement. Whenever taxes are raised, for instance, lawmakers argue over how much of the tax hike should fall on the rich, the middle class, and the poor.

Another of the *Ten Principles of Economics* is that people face trade-offs. This principle is important to keep in mind when thinking about economic inequality. Policies that penalize the successful and reward the unsuccessful reduce the incentive to succeed. Thus, policymakers face a trade-off between equality and efficiency. The more equally the pie is divided, the smaller the pie becomes. This is the one lesson concerning the distribution of income about which almost everyone agrees.

Summary

- Data on the distribution of income show a wide disparity in U.S. society. The richest fifth of families earns more than twelve times as much income as the poorest fifth.
- Because in-kind transfers, the economic life cycle, transitory income, and economic mobility are so important for understanding variation in income, it is difficult to gauge the degree of inequality in our society using data on the distribution of income in a single year. When these other factors are taken into account, they tend to suggest that economic well-being is more equally distributed than is annual income.
- Political philosophers differ in their views about the role of government in altering the distribution of income. Utilitarians (such as John Stuart Mill) would choose the distribution of income to maximize the sum of utility of everyone in society. Liberals (such as John Rawls) would determine the distribution of income as if we were behind a “veil of ignorance” that prevented us from knowing our stations in life. Libertarians (such as Robert Nozick) would have the government enforce individual rights to ensure a fair process but then not be concerned about inequality in the resulting distribution of income.
- Various policies aim to help the poor—minimum-wage laws, welfare, negative income taxes, and in-kind transfers. While these policies help some families escape poverty, they also have unintended side effects. Because financial assistance declines as income rises, the poor often face very high effective marginal tax rates, which discourage poor families from escaping poverty on their own.

Key Concepts

poverty rate, *p. 417*
 poverty line, *p. 417*
 in-kind transfers, *p. 419*
 life cycle, *p. 419*
 permanent income, *p. 419*

utilitarianism, *p. 421*
 utility, *p. 421*
 liberalism, *p. 422*
 maximin criterion, *p. 422*
 social insurance, *p. 423*

libertarianism, *p. 423*
 welfare, *p. 425*
 negative income tax, *p. 425*

Questions for Review

1. Does the richest fifth of the U.S. population earn closer to three, six, or twelve times the income of the poorest fifth?
2. What has happened to the income share of the richest fifth of the U.S. population over the past 40 years?
3. What groups in the U.S. population are most likely to live in poverty?
4. When gauging the amount of inequality, why do transitory and life cycle variations in income cause difficulties?
5. How would a utilitarian, a liberal, and a libertarian each determine how much income inequality is permissible?
6. What are the pros and cons of in-kind (rather than cash) transfers to the poor?
7. Describe how antipoverty programs can discourage the poor from working. How might you reduce this disincentive? What are the disadvantages of your proposed policy?

Quick Check Multiple Choice

1. In the United States, the poorest fifth of the population earns about _____ percent of all income, while the richest fifth earns about _____ percent.
 - a. 2, 65
 - b. 4, 45
 - c. 10, 35
 - d. 15, 25
2. When income inequality is compared across countries, one finds that the United States
 - a. is one of the most equal nations in the world.
 - b. is one of the least equal nations in the world.
 - c. has more equality than most advanced nations but less equality than many developing countries.
 - d. has less equality than most advanced nations but more equality than many developing countries.

3. A utilitarian believes that the redistribution of income from the rich to the poor is worthwhile as long as
 - a. the worst-off members of society benefit from it.
 - b. those contributing to the system are in favor of it.
 - c. each person's income, after taxes and transfers, reflects his marginal product.
 - d. the distortionary effect on work incentives is not too large.
4. Rawls's thought experiment of the "original position" behind the "veil of ignorance" is meant to draw attention to the fact that
 - a. most of the poor do not know how to find better jobs and escape poverty.
 - b. the station of life each of us was born into is largely a matter of luck.
 - c. the rich have so much money that they don't know how to spend it all.
 - d. outcomes are efficient only if everyone begins with equal opportunity.
5. A negative income tax is a policy under which
 - a. individuals with low income get transfers from the government.
 - b. the government raises tax revenue without distorting incentives.
 - c. everyone pays less than under a conventional income tax.
 - d. some taxpayers are on the wrong side of the Laffer curve.
6. If the benefits from an antipoverty program are phased out as an individual's income increases, then the program will
 - a. encourage greater work effort from the poor.
 - b. lead to an excess supply of labor among unskilled workers.
 - c. increase the effective marginal tax rate that the poor face.
 - d. cost the government more than a program that benefits everyone.

Problems and Applications

1. Table 2 shows that income inequality in the United States has increased since 1970. Some factors contributing to this increase were discussed in Chapter 19. What are they?
2. Table 3 shows that the percentage of children in families with income below the poverty line far exceeds the percentage of the elderly in such families. How might the allocation of government money across different social programs have contributed to this phenomenon? (*Hint*: See Chapter 12.)
3. This chapter discusses the importance of economic mobility.
 - a. What policies might the government pursue to increase economic mobility *within* a generation?
 - b. What policies might the government pursue to increase economic mobility *across* generations?
 - c. Do you think we should reduce spending on current welfare programs to increase spending on programs that enhance economic mobility? What are some of the advantages and disadvantages of doing so?
4. Consider two communities. In one community, ten families have incomes of \$100,000 each and ten families have incomes of \$20,000 each. In the other community, ten families have incomes of \$200,000 each and ten families have incomes of \$22,000 each.
 - a. In which community is the distribution of income more unequal? In which community is the problem of poverty likely to be worse?
 - b. Which distribution of income would Rawls prefer? Explain.
 - c. Which distribution of income do you prefer? Explain.
 - d. Why might someone have the opposite preference?
5. This chapter uses the analogy of a "leaky bucket" to explain one constraint on the redistribution of income.
 - a. What elements of the U.S. system for redistributing income create the leaks in the bucket? Be specific.
 - b. Do you think that Republicans or Democrats generally believe that the bucket used for redistributing income is leakier? How does that belief affect their views about the amount of income redistribution that the government should undertake?
6. Suppose there are two possible income distributions in a society of ten people. In the first distribution, nine people have incomes of \$30,000 and one person has an income of \$10,000. In the second distribution, all ten people have incomes of \$25,000.
 - a. If the society had the first income distribution, what would be the utilitarian argument for redistributing income?
 - b. Which income distribution would Rawls consider more equitable? Explain.
 - c. Which income distribution would Nozick consider more equitable? Explain.
7. The poverty rate would be substantially lower if the market value of in-kind transfers were added to family income. The largest in-kind transfer is

Medicaid, the government health program for the poor. Let's say the program costs \$10,000 per recipient family.

- a. If the government gave each recipient family a \$10,000 check instead of enrolling them in the Medicaid program, do you think that most of these families would spend that money to purchase health insurance? Why? (Recall that the poverty level for a family of four is about \$23,000.)
- b. How does your answer to part (a) affect your view about whether we should determine the poverty rate by valuing in-kind transfers at the price the government pays for them? Explain.
- c. How does your answer to part (a) affect your view about whether we should provide assistance to the poor in the form of cash transfers or in-kind transfers? Explain.

8. Consider two of the income security programs in the United States: TANF and the EITC.
 - a. When a woman with children and very low income earns an extra dollar, she receives less in TANF benefits. What do you think is the effect of this feature of TANF on the labor supply of low-income women? Explain.
 - b. The EITC provides greater benefits as low-income workers earn more income (up to a point). What do you think is the effect of this program on the labor supply of low-income individuals? Explain.
 - c. What are the disadvantages of eliminating TANF and allocating the savings to the EITC?

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