How to Study for Chapter 25 Inequality and Poverty

Chapter 25 concludes the analysis of labor markets. It uses the tools developed in Chapters 22 to 24 to examine the distribution of income, the sources of great wealth, and poverty. It also examines some of the programs in America to aid the poor.

1. Begin by looking over the Objectives listed below. This will tell you the main points you should be looking for as you read the chapter.
2. New words or definitions and certain key points are highlighted in red color in the text. Other key points are highlighted in bold type and in blue color.
3. You will be given an In Class Assignment and a Homework assignment to illustrate the main concepts of this chapter.
4. There are a few new words in this chapter. Be sure to spend time on the various definitions. There are no new graphs.
5. The teacher will focus on the main technical parts of this chapter. You are also responsible for the cases and the ways by which each case illustrates a main principle.
6. When you have finished the text, the Test Your Understanding questions, and the assignments, go back to the Objectives. See if you can answer the questions without looking back at the text. If not, go back and re-read that part of the text. When you are ready, take the Practice Quiz for Chapter 25.

Objectives for Chapter 25 Inequality and Poverty

At the end of Chapter 25, you will be able to answer the following questions:

1. Describe the distribution of income in the United States. How has it changed over time? How does it compare to other countries? How does it compare to the distribution of wealth?
2. What are the effects of taxes and transfers on the distribution of income in the United States?
3. What is a **Lorenz Curve**? What is a **Gini Index**?
4. Explain why the distribution of income has become more unequal since the mid-1970s.
5. What arguments are made for or against the idea that equality should be promoted by government policies?
6. How were the great fortunes created?
7. Explain how it has been argued that a “winner-takes-all” society may generate market failure.
8. How is poverty measured? What is **"absolute poverty"**? What is **"relative poverty"**? How many people are officially poor?
9. What criticisms are made of the poverty measure?
11. What has been the trend of the official poverty rate over the past three decades?
12. Describe the composition of the poor by ethnicity, by age, and by family structure. Is poverty permanent or transitory for these people?
13. Describe the main public assistance programs in the United States?
14. What criticisms have been made of the Aid to Families with Dependent Children (AFDC) program?
15. Describe the welfare reforms of 1996.

Chapter 25 Inequality And Poverty (latest revision July 2004)

I. The Distribution of Income

At the beginning of this course, we named three questions that every society must answer. One of these questions was **"for whom is production taking place?"**. Who gets the goods and services that are produced is determined by people's incomes. In earlier chapters, we examined the factors that determine people's incomes in a market economy --- both wages and profits. Now, let us see how these incomes are actually distributed in the United States.

The most common portrayal of the distribution of income is to imagine that we could line up every household in the country according to income. At one end of the line is the household with the lowest income. At the other end of the line is the household with the highest income. Households stand in the line in order of their income. Then, assume that we divide the line into five equal parts (called ***quintiles***). The question that is asked is: "what percent of all of the income was earned by the households in that quintile? **For 2002, the answer is that the lowest quintile (those 20% of people with the lowest incomes) earned only 3.5% of all of the income earned. The second quintile earned 8.8% of all of the income earned. The third quintile earned 14.8% of all of the income earned. The fourth quintile earned 23.3% of all of the income earned while the top quintile earned 49.7%**. Therefore, the top 20% of income earners earned just about as much income in 2002 than the other 80%. Of the top 20%, those in the top 5% earned 21.7% of all of the income earned in 2002. A Dutch economist once tried to put this into human perspective. He imagined that the person with ***the median income (the income so that half of households earn more and half of households earn less)*** could be stretched or shrunk to be the average size (about 5' 6"). Then everyone else would be stretched or shrunk so that their size related to the average size as their income relates to the median income. How tall would each person be? A widow collecting full social security benefits would be about 1' 10". A woman with two children collecting full welfare benefits in California would be about 11". The person on General Relief would be much smaller than this. So, if you can imagine someone 5' 6" looking down on these people, you get a sense of the disparity. On the other hand, the person with the median income would have to look up to the person with the highest income. This person would be nearly 25,000 feet tall --- 25 times the height of the Empire State Building in New York.

Let us put some perspective on these numbers. What do we mean by "rich"? If I tell you I earned $1,000,000 this year, would you call me "rich"? The answer is probably "yes". What about $500,000? $250,000? $200,000? $150,000 $100,000? $75,000? $50,000? If you are like most people, you start to waver between $100,000 and $200,000. Most people say that people earning less than $100,000 are not "rich". Between $100,000 and $200,000 of income, people tend to differ with some saying they are "rich" while others say they are not. At $250,000 of income, most people say they are indeed "rich". Now, let us examine the quintiles. How much income do you believe that a household would need to make the top 20%? The top 5%? The answer is given is the data on the following pages. In 2002, there were 111,278,000 households in the United States (with an average of about 2.6 people per household). If your household had an income of $84,016, then 80% of American households earned less than you did while 20% of American households earned more. If your household had an income of

Share of Aggregate Income

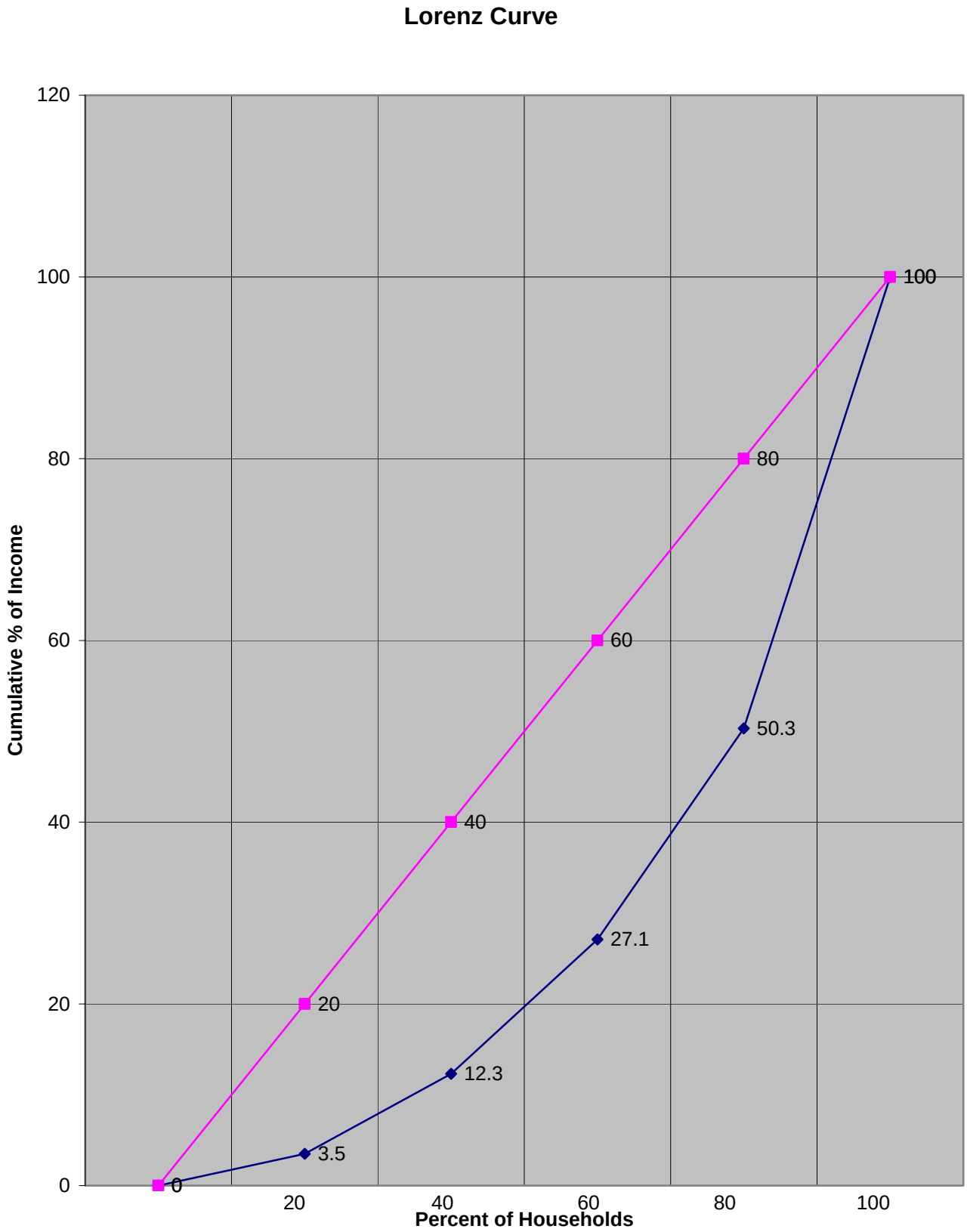
	Lowest Fifth	Second Fifth	Third Fifth	Fourth Fifth	Highest Fifth	Top 5 Percent
2002	3.5	8.8	14.8	23.3	49.7	21.7
2001	3.5	8.7	14.6	23.0	50.1	22.4
2000	3.6	8.9	14.8	23.0	49.8	22.1
1999	3.6	8.9	14.9	23.2	49.4	21.5
1998	3.6	9.0	15.0	23.2	49.2	21.4
1997	3.6	8.9	15.0	23.2	49.4	21.7
1996	3.7	9.0	15.1	23.3	49.0	21.4
1995	3.7	9.1	15.2	23.3	48.7	21.0
1994	3.6	8.9	15.0	23.4	49.1	21.2
1993	3.6	9.0	15.1	23.5	48.9	21.0
1992	3.8	9.4	15.8	24.2	46.9	18.6
1991	3.8	9.6	15.9	24.2	46.5	18.1
1990	3.9	9.6	15.9	24.0	46.6	18.6
1989	3.8	9.5	15.8	24.0	46.8	18.9
1988	3.8	9.6	16.0	24.3	46.3	18.3
1987	3.8	9.6	16.1	24.3	46.2	18.2
1986	3.9	9.7	16.2	24.5	45.7	17.5
1985	4.0	9.7	16.3	24.6	45.3	17.0
1984	4.1	9.9	16.4	24.7	44.9	16.5
1983	4.1	10.0	16.5	24.7	44.7	16.4
1982	4.1	10.1	16.6	24.7	44.5	16.2
1981	4.2	10.2	16.8	25.0	43.8	15.6
1980	4.3	10.3	16.9	24.9	43.7	15.8
1979	4.2	10.3	16.9	24.7	44.0	16.4
1978	4.3	10.3	16.9	24.8	43.7	16.2
1977	4.4	10.3	17.0	24.8	43.6	16.1
1976	4.4	10.4	17.1	24.8	43.3	16.0
1975	4.4	10.5	17.1	24.8	43.2	15.9
1974	4.4	10.6	17.1	24.7	43.1	15.9
1973	4.2	10.5	17.1	24.6	43.6	16.6
1972	4.1	10.5	17.1	24.5	43.9	17.0
1971	4.1	10.6	17.3	24.5	43.5	16.7
1970	4.1	10.8	17.4	24.5	43.3	16.6
1969	4.1	10.9	17.5	24.5	43.0	16.6
1968	4.2	11.1	17.5	24.4	42.8	16.6
1967	4.0	10.8	17.3	24.2	43.8	17.5

$150,002, then only 5% of Americans earned more than you did. The top 5% of American households ranged from an income of $150,002 to an income well over $100,000,000. If we define "rich" as having an income over $100,000, then perhaps 7% or 8% of Americans are rich. If we define it as an income over $150,000, then only about 5% of Americans are rich. ***The point of this is that the number of "rich" people is very small in the United States; however, those that are rich are much richer than the rest of the society***.

Early in this century, a graphic portrayal of these numbers was developed. Named for the person who developed it, it is called the ***Lorenz Curve***. The curve for 2002 is portrayed on the next page. **What is done is to compare the percent of households with the cumulative percent of income that they earned**. Refer back to the numbers. Point 1 on the Lorenz Curve shows that the **lowest 20%** of the households earned 3.5% of all income earned in 2002. Point 2 shows that the **lowest 40%** of the households earned 12.3% of all income earned (3.5% + 8.8%). Point 3 shows that the **lowest 60%** of the households earned 27.1% of all income earned (3.5% + 8.8% + 14.8%). Point 4 shows that the **lowest 80%** of the households earned 50.3% of all income earned (3.5% + 8.8% + 14.8% + 23.3%). Finally, Point 5 shows that 100% of the households earned 100% of the income. The line connecting these points is the Lorenz Curve. To evaluate the Lorenz Curve, we need a reference. ***The reference used is the line that would occur if there were perfect equality.*** This would mean that every family had the same income. 20% of the families would have received 20% of the income, 40% of the families would have received 40% of the income, etc. The line is the straight, diagonal line shown on the graph on the next page. ***The area between the actual Lorenz Curve and the line representing perfect equality is called the Area of Inequality***. It gives us a picture of how equal or unequal we are and allows us to make comparisons. Some of these comparisons are considered below.

A short time after Lorenz developed his curve, an Italian mathematician converted it into a number. What he did was to **take the area of inequality and divide by perfect inequality. Perfect inequality would mean that no one had any income at all except for one household, who had it all.** He named this number for himself; it is called the ***Gini Index***. We will not be concerned with the calculation here. However, we do need to know how to interpret the number. If perfect equality actually existed, what would the number be? The area of inequality would be zero; therefore, the Gini Index would be zero. If perfect inequality actually existed, what would the number be? Whatever the area of inequality for perfect inequality would equal, one would just divide that number by itself. Therefore, the Gini Index would be one. ***The Gini Index is a number between zero and one. The lower the number, the more equal is the distribution. The higher the number, the more unequal is the distribution***. So in 2002, the Gini Index for the United States was 0.462. In 2001, it was 0.466. Therefore, the United States became slightly more equal between 2001 and 2002. In 2000, the Index was 0.462. The United States became slightly more unequal between 2000 and 2001 and was just as unequal in 2002 as in 2000.

As with most statistics, there is controversy concerning these statistics. For example, **what exactly is income**? These statistics include all earnings in the labor market plus cash transfers, such as social security or welfare benefits. They do not consider the taxes people paid on their incomes. Nor do they consider in-kind transfers, such as Food Stamps or Medicaid. Also, **how should we consider households of different sizes**? A household of two adults with an income of $30,000 per year is in a very different situation from another with the same income but with


Lorenz Curve
120
100
80
60
40
20
0
Cumulative % of Income
20
40
60
80
100
Percent of Households
0
20
40
60
80
100
0
3.5
12.3
27.1
50.3
100

eight children. The Census Bureau has tried to calculate the income distribution in many different ways. What they find is the following. ***First, if one examine only earnings in the labor market (ignoring cash transfers and taxes), the distribution of income is more unequal than the distribution described above***. This means that cash transfers tend to make the distribution more equal than it otherwise would be. ***Second, if all of the taxes paid are taken into consideration, the distribution is affected very little. Third, if in-kind transfers, such as food stamps and Medicaid, are taken into consideration, the distribution becomes more equal.*** However, the conclusions discussed below do not seem to depend on the particular measure of income used.

One of these conclusions involves a comparison of the distribution of income in the United States over time. Have we been becoming more equal or unequal? In fact, ***inequality decreased slowly until the middle of the 1970s***. In these years, the share of the top 20% (or top 5%) fell, the share of the bottom 20% increased, and the Gini Index fell slightly from 0.399 in 1967 to 0.395 in 1974. If you graphed the Lorenz Curve for these years, the curve for 1974 would be inside the curve for 1967. ***Since the middle 1970s, inequality has increased considerably***. Inequality jumped in the 1980s. Then it took another jump in the middle 1990s. As one measure of this, the Gini Index rose from .398 in 1976 to .466 by 2001, before falling slightly in 2002. As another measure, a household at the 95th percentile had an income 8.4 times that of a household at the 20th percentile in 2002 compared to 6.3 times in 1967. If you drew the Lorenz Curve for these years, the curves for the later years would be outside the ones for the earlier years. The rising inequality in household income is largely due to the rising inequality in earnings (leaving out the cash transfers). We will try to explain this phenomenon below.

Another conclusion involves a comparison of the income distribution of the United States with that of other countries. Are we more equal or unequal than other countries? If one uses the Gini Index of .462 for the United States in 2002, ***one would find that the United States has a more unequal distribution than do the other countries with whom the United States normally compares itself***. Germany and France each have a Gini Index similar to the United States. Countries such as Canada, Britain, Belgium, Australia, and the Netherlands have Gini Indexes that are considerably lower. The Gini Indexes for the Scandinavian countries (Denmark, Norway, and Sweden) are lower still. The lowest Gini Indexes are found in East Asian countries, especially Japan and Taiwan. On the other hand, the United States has a more equal distribution than Mexico or the Latin American countries. The fact that there is greater income inequality in other countries that are also basically capitalist and market-oriented tells us that some aspects of income inequality are unique to the United States.

Yet another conclusion involves the distribution of wealth. Wealth represents the value of everything one owns (assets minus debts). When we say one is "rich", we really are referring to wealth rather than income. Unlike income, there have been only a few surveys of the distribution of wealth. In recent years, the Survey of Consumer Finances has provided data for 1983, 1989, and 1992. From these, ***we see that wealth is much more unequally distributed than income in the United States***. In 1992, the top **1%** of all wealth holders held **30%** of all of the wealth owned. The wealthiest 20% owned approximately **80%** of all of the wealth owned in the United States. The Gini Index for wealth was **.78** in 1992. ***Second, we see that wealth has also become more unequally distributed***. The share of the top 1% of households grew from 30% in

1983 to 37% in 1989, before falling back in the early 1990s. In 1992, an average household in the top 1% of wealth holders was 875 times wealthier than one in the bottom 40%. ***Third, we see that financial wealth (stocks, bonds, and so forth) is even more unequally distributed than overall wealth***. In 1989, the top 1% of families owned 48%, and the top 20% of families owned 94%, of all of the financial wealth owned in the United States. This means that the bottom 80% of families owned only 6% of all of the financial wealth. ***Finally, we find that wealth in the United States is more unequally distributed than in other countries***. For example, the top 1% of wealth holders held 18% of all wealth in Great Britain and 21% of all wealth in Sweden in 1990.

Our data on income inequality takes a "snapshot" every year. While the bottom 20% of households earn a lower percent than they did previously, ***we need to note that the people who comprise the bottom 20% (or any other percentile) are not the same from year to year***. Some people in the bottom 20% will move to higher levels in the future. And some people in the bottom 20% had been in higher percentiles in previous years. There have been studies that compare household incomes over varying periods of time. **These studies find considerable mobility**. For example, one study found that about 30% of households move between quintiles from one year to the next. Almost half will change quintiles over five years and almost two-thirds will change quintiles over a ten-year period. There is about equal probability that a household will move down to a lower quintile (usually due to loss of employment or to divorce) as will move up to a higher quintile (usually due to new employment, marriage, or a spouse becoming employed for the first time). Many in the lowest quintile are young people who will move up as they gain more work experience. ***On the other hand, recent studies have found evidence of low rates of intergenerational mobility***. Even though people do tend to find themselves in a higher or lower quintile than their parents were, ***there is a high correlation between one's income and that of one's parents.*** As just one example, a study from 1992 found that, if your father was in the bottom 20% of the income distribution, there was a 42% chance that you also would be in the bottom 20% of the income distribution. These data contradict one of the most deeply held values in the United States.

Test Your Understanding

1. If a household had an annual income of each of the following, would you consider the household "rich"?

$1,000,000	_____	$100,000	_____
$ 500,000	_____	$ 75,000	_____
$ 250,000	_____	$ 50,000	_____
$ 125,000	_____		

Using your answer to this question, what percent of American households would your group consider "rich"? _____

Based on your best guess as to your own family's income in 2003, approximately what percentile in the income distribution did your family fall? _____

2. Draw the Lorenz Curves for the following years using the data on Page 3: 1967, 1975, 1985, 1995, 2002. Also draw the line representing perfect equality. Has the United States become more equal or unequal?

Why Has Income Become More Unequal?

There has been concern about the increasing inequality in the United States over the past thirty years. Because of this concern, there have been many attempts to explain it. Some people blamed the policies of the government during the administrations of Presidents Reagan and Bush. **The argument here was that spending on government programs that aid the poor were reduced.** One of these programs, welfare, will be discussed later in this chapter. Another claim against the Reagan administration involved reductions in taxes. **It was argued that the taxes were reduced mainly for the richer people with little tax reduction to the middle and lower income groups**. ***But generally, the research shows that the changes in government programs and in the tax laws were not responsible for the increase in inequality***. **As noted above, most of the rise in inequality of incomes has been due to the increase in inequality of earnings from work, especially for men.** So let us consider some other explanations. As we do, keep in mind that the increase in inequality has been only partially explained.

People trying to explain the increase in inequality of earnings from work have considered supply-side factors, demand-side factors, and institutional factors. ***Supply-side factors are those that would cause the supply of less-skilled workers to rise faster than the supply of higher-skilled workers***. One supply-side factor might be the increasing number of less skilled immigrants in the labor market. **For the nation as a whole, immigration has had a small effect in increasing inequality.** But for California, the effect is much larger. **One recent study concluded that immigration explains 30% to 40% of the increase in inequality of earnings among men in California.** This means that, in California, inequality would have increased 30% to 40% less had there been no immigration from foreign countries. Immigration also seems to be mainly responsible for the fact that California now has greater inequality than the rest of the nation. Immigration has had a much larger effect on increasing inequality in California because immigrants comprise so much greater a proportion of the California labor force than they do for the nation as a whole. **Other supply-side factors would include the increased labor force participation rates of married women, who tended to have less work experience, or the increased labor force participation rates of teens**. However, since most of the rise in income inequality was due to a rise in inequality of wages for male workers, these changes must have had little effect in increasing income inequality.

Demand-side factors are those that cause the demand for higher-skilled workers to increase more than the demand for less-skilled workers. **An example of a demand-side factor would be changes in technology that have increased the demand for more educated, more experienced workers**, who are trained to use the new technologies, and decreased the demand for less-educated, less experienced workers, who may be replaced by the new technologies. **Another example of a demand-side factor would be the expansion of international trade because trade increased the demand for higher-skilled workers** who produce the goods America exports (such as computers or financial services) and decreased the demand for less-skilled workers who produce the goods America imports (such as textiles). International trade is discussed in the next chapter. Since 1980, the number of people attending and graduating from college has risen significantly. This increase in supply should have caused the gains from a

college education to diminish. However, the median college graduate, who earned about 30% more than the median high school graduate in 1980, now earns more than 70% more. **The income gains from experience have also increased substantially**. The wage difference between those with 25 years of work experience and those with 5 years of work experience is much greater now than it was 30 years ago. **These facts illustrate that the increase in the demand for college graduates and for workers with considerable work experience has been much greater than the increase in the supply.**

Institutional factors include the declining importance of unions and the decline in the inflation-adjusted value of the minimum wage. Both of these were discussed in earlier chapters.

Research seems to show that demand-side factors have been much more important than supply-side factors in explaining the increase in inequality of wages earned by male workers. Most people who have studied the question of increasing inequality conclude that **the main factor has been the changes in technology**. The expansion of international trade has had a small impact on increasing earnings inequality (as companies with little involvement with international trade have also reduced their demand for less-skilled workers). The decline of unions also seems to have had a small impact as did the decline in the purchasing power of the minimum wage. For California, but not for the nation as a whole, immigration has contributed to the increase in inequality. However, it must be stressed that there is still much about the increase in inequality that is not understood.

II. Is Equality Desirable?

If the distribution of income or wealth were very equal, no one would object. But as we have seen, these distributions are nowhere near equal in the United States and are becoming more unequal. The question then becomes "is this inequality a bad thing?". Should the government undertake policies to generate greater equality than the market generated?

There are several arguments that have been made that equality is a good thing and should be promoted. People who make these arguments do not mean that everyone should have exactly the same income or wealth. But they do mean that the distributions of income and wealth should be more equal than they presently are. ***One argument for equality that has been made derives from the law of diminishing marginal utility. Remember that this means that as more of a good is consumed, the additional satisfaction from consuming one more unit of the good diminishes***. Assume there are two people, A and B. A has an income of $10,000 per year. B has an income of $10,000,000 per year. Suppose that $1,000 were taken away from B and given to A. What would B lose from not having $1,000? Since B would still have $9,999,000 with which to buy goods and services, the answer must be "not much". After one has spent $9,999,000 on goods and services, how much additional utility (satisfaction) can one gain from spending yet another $1,000? What would A gain from getting the additional $1,000? Since A has very little, the extra $1,000 might mean that A would have better food or a place to live. The gain to A would seem to exceed the loss to B, making a net gain for society as a whole. (Most economists have shied away from this type of reasoning because they believe that accurately comparing utility between people is not possible.) ***A second argument for equality was made by***

a philosopher, John Rawls. In his argument, imagine that you are waiting to be born. You are allowed to create whatever distribution of income you desire for the world you will be born into. However, you do not know what your own position in the distribution will be. You could create a distribution that would have some very rich people and some very poor people. But you don't know whether you will be very rich or very poor. He argued that if people are risk-averse, they are most likely to choose a distribution that is relatively equal. This minimizes the worst outcome that could happen. Since people would choose relative equality, he argued, this is the most desirable distribution. ***A third argument for equality involves equality of opportunity.*** That people should have equal opportunity to pursue happiness is a strongly held American value. Yet, children of families with very high incomes or large amounts of wealth have much greater opportunity than others. They can go to the "best" universities. They have family funds to use to start businesses. It should be no surprise that many (but certainly not all) of the most successful entrepreneurs in the United States today, such as Bill Gates and Paul Allen of Microsoft, came from relatively affluent families. Earlier, it was noted that there seems to be a relatively low rate on intergenerational mobility in the United States. ***A fourth argument for equality involves citizenship***. It is hard to have a democracy work when some people are able to give large amounts of money to politicians while others are not. It is hard to be "one nation" when the rich live in gated communities in suburbs while the poor live in slums in the inner city. Societies that are more equal tend to have less crime and less violence. And societies that are more equal tend to have less adversarial work relations between workers and management. Japan and Scandinavia, where the distributions are relatively equal, tend to have much more harmonious work relationships than are found in the United States or in class-conscious Britain and have much less crime.

A final argument surrounding equality involves incentives. The argument used to be made that inequality is needed to generate incentives to succeed. The thought of some day being rich would lead one to work hard, to save, and to become entrepreneurial. But the very good economic performance of the countries of Asia, which have more equal distributions of income, has called this view into question. In Asia, relative equality, hard work, saving, and entrepreneurial behavior have all gone together. However, the distributions of income and wealth are relatively equal in Asia for historical reasons, not due to the actions of the Asian governments. In the countries of Europe and in the United States, the distributions were quite unequal but the government acted to increase equality by taking from the richer people (through high taxes) and giving to the poorer people (through transfers and spending programs). In this case, ***it is argued that the act of equalizing may have created negative incentives***. In particular, the higher taxes on the non-poor and the transfers to the poor may discourage work and savings. (This is ***the substitution effect*** – the high taxes paid or the cash transfers received reduce the opportunity cost of "not working for pay". This makes it more likely that people will "not work for pay".) **The analogy has been made to a leaky bucket.** (Water is taken from areas that have much water and brought to areas with little. But some of the water spills along the way.)

Recent research has cast doubt on the argument that redistributing income to the poor hurts overall production. **Studies have found no relationship between social spending and the level of production per person or the growth rate of production**. Basically, the countries that tax greatly in order to redistribute to the poor seem to have done a good job at choosing taxes and designing programs that have less effect on incentives to produce.

III. The Super-Rich

Earlier it was documented that the "rich", measured either by income or by wealth, are a small group of people. However, they can be very rich. In 1996, there were 132 billionaires in America. One billion dollars was equal to the income of about 25,000 average workers in that year. If we define billionaire in this way for comparison (having 25,000 times the income of the average worker), there were only 23 such people in 1982 and only 13 in 1968. How did they come to be this way? For many, the answer is that they inherited considerable wealth. But this only pushes the question back to a previous generation. Where did the great wealth originally come from? The answer in most cases is surprisingly similar. ***Great wealth typically began with economic profits from having some degree of monopoly power over a product that was in demand***. Eventually, market forces eliminated this monopoly power as new sellers provided the same or similar products, increasing supply and lowering prices until the economic profits disappeared. **The people possessing the monopoly power resisted the elimination of their power**. Sometimes they were able to maintain their power for a considerable time. Sometimes the power eroded rather rapidly. ***But, while the monopoly power lasted, these people were able to accumulate a considerable fortune.*** Once the power was eliminated, they were able to maintain the fortune by investing it into many different types of investments (stocks, bonds, and so on). It is rare to see an individual make a fortune on more than one venture in a lifetime.

The story of many of the great fortunes fits this scenario. Bill Gates was discussed in the chapter on monopolistic competition. His fortune came from purchasing the rights to DOS, having DOS installed on the IBM personal computers, and then having DOS become the industry standard. The Rockefeller fortune was accumulated by developing a monopoly in oil in the 19th century and, by some controversial means, maintaining this monopoly for over thirty years. The Duke fortune (Duke University) was accumulated by achieving a monopoly in tobacco (American Tobacco). In both the Rockefeller and the Duke cases, the monopoly power was ended by government anti-trust actions. Several of the great fortunes were accumulated by gaining monopoly power over railroads. In the east, the fortunes of Harriman and Vanderbilt and in the west, the fortunes of Stanford and Huntington came from this monopoly power (see below). The power of the railroad monopolies ended as more railroads came into various markets and as trucks and airlines came into existence. The great fortune of Carnegie came from domination (almost monopoly) of the steel industry. The great fortunes of Hunts and Getty came their power in oil and from artificially high prices of oil in the 1950s and the 1960s. These artificially high prices were the result of a cartel – one that was operated by a government agency called the Texas Railroad Commission. In San Diego, the fortune of Sol Price came from the development of a new type of shopping --- low prices available to people who buy in very large quantities in stores that are huge and that carry large numbers of different products. This began with Fed-Mart in the 1960s and was later followed by the Price Club (now Costco). Neither "monopoly" lasted long, as they were copied by others, but both provided a large amount of economic profit for awhile. On a national level, the fortune of Sam Walton was made in a similar manner. His Wal-Mart stores were always located just outside of small rural towns where they could gain market power over the much smaller stores that existed in the towns. The large fortune of Irwin Jacobs came from achieving a dominant position in telecommunications, particularly in wireless communications. His company, Qualcomm, gained a leading position in its industry.

Let us say that you start or buy a company that is earning economic profits. Because of its monopoly position, and because the product is in demand, you can earn a 20% return on ownership of your company. You put $10,000,000 into buying the company and the profits each year are $2,000,000 (20%). Let us say that the only alternative for the money is a savings account paying an interest rate of 5%. You can keep collecting your $2,000,000 each year. But this would not make you rich. To become rich, you need to sell your shares to the public (perhaps keeping some shares for yourself in order to be able to control the company). How much can you get for your shares? The answer is $40,000,000. This is so because, if they pay you $40,000,000, buyers will earn 5% on their money ($2,000,000 divided by $40,000,000), which is the same as they could earn on the best alternative, the savings account. You have quadrupled your money. All of the fortunes mentioned above, as well as most of the computer fortunes of the 1980s and 1990s, were gained in this way. Because of the need to sell shares, the company must use the services of a specialist in selling new shares – called ***an investment banker***. Providing these services is the source of the fortunes of J.P. Morgan in the early 20th century and of Michael Milken in the 1980s.

When one looks at the source of the great fortunes, one also commonly finds ruthless behaviors. Sometimes one also finds corruption. For example, in the mid 1860s, Leland Stanford, Colis Huntington, Charles Crocker, and Mark Hopkins put some of their money into the creation of the Central Pacific Railroad – the western part of the first transcontinental railroad. They used this, plus a subsidy they got from the federal government, to sell stocks and bonds worth $79 million. The $79 million then went to a company called the Central Pacific Credit and Finance Corporation. This company spent about $50 million in wages and for materials to build the railroad. The other nearly $30 million was given to its shareholders. Who were these shareholders? Stanford, Huntington, Crocker, and Hopkins. Who at the Central Pacific Railroad approved this? Stanford, Huntington, Crocker, and Hopkins. What happened to the other stockholders of the Central Pacific Railroad? They owned a railroad that was worthless. Today, there is Stanford University, Huntington Beach, Huntington Park, the Huntington Library, and the Mark Hopkins Hotel.

Test Your Understanding

1. A few years ago, an article told of Michael Robertson, a San Diegan who had founded a company called **MP3.** He sold MP3 shares to the public. In the first day, he received $141 million for the shares. Explain how he could become so rich in just one day.
2. In 2004, a major news story was the **Initial Public Offering (IPO) of Google**. Two people started Google, an Internet search engine. Look up stories about this IPO. How many shares of Google are to be sold? What is the market price? How much did then two founders gain from the sale? What would give Google its value? That is, why would people be willing to pay the required price for a share a Google.

IV. Winner Take All Markets

Large fortunes have been very controversial. Those who oppose them see them as illegitimate since they are derived from monopoly power or believe that they are divisive to society, as explained in the last section. Those who support them see the economic profits as lasting for a relatively short time and as providing incentives to provide new products that people like (personal computers or wireless communication) or to produce in ways that are more efficient (Price Club or Wal-Mart). The question then becomes whether the behaviors necessary

to gain large personal fortunes are good or bad for society? One interesting answer was put forth a few years ago. The authors started by assuming that there are indeed a few very talented people. These people are paid great sums because, most of the time, they generate great value. So, for example, Michael Eisner, who earned $200 million in 1993 as the Chief Executive Officer (CEO) of Disney, improved Disney from a poorly performing company to the best performing company in the entertainment industry. And certainly the computer billionaires have added great value.

In the past, it was common for companies to promote from within. Most of the top executives worked their entire careers in the same company. Now it is common for the best talent to move from company to company. **Just like free agency in sports, this has allowed the most talented people to receive their market pay --- to be paid according to the value they create**. Since much of the difference between success and failure of the company depends on the talents of very few people, these people are greatly in demand and command very high incomes. (For example, thousands of people work on a movie but the success of the movie depends mainly on the director, the writer, and the two or three main actors or actresses. And much of the success of the NBA Chicago Bulls depended on one player.) The authors call these ***"winner take all" markets***. These kinds of markets have increased in number as the amount of competition has increased.

Yet, according to the author, **these kinds of situations generate a market failure**. The fact that the "winner" will reap an enormous income generates intense competition to decide who the "winner" will be. As a result, ***too many people enter the competition***. Just as my presence fishing reduces the chances that others will catch fish (an external cost), so my presence in the competition makes it less likely that others can "win" (also an external cost). So just as we see too many people fishing, we see too many aspiring basketball players, too many aspiring rock musicians, too many aspiring lawyers, too many aspiring dentists, too many MBAs, and so forth. **Society loses the value of what these people could have produced had they done something else.** Since these people might have been better suited for engineering, teaching, civil service, and so forth, the value that society loses is much greater than the value it gains. This is the market failure.

V. Poverty

Just as we can examine the very rich, we can also examine the very poor. In the early 1960s, the President of the United States declared a "War on Poverty". The first necessity to "fight this war" was to find out just how many people were poor and who they were. At the time, there was no official definition of poverty. A staff economist at the Social Security Administration developed such a definition. She began with the cost of a minimally adequate diet. Such a minimally adequate diet had been developed by the U.S. Department of Agriculture in 1961. She then multiplied the cost of this minimum adequate diet by three, believing that people at the time spent one-third of their income on food. This calculation, estimated at around $3,100 for a family of two adults and two children in 1963, is called the ***poverty threshold*****.** Since that time, the threshold is adjusted every year to reflect price inflation. In 2003, the poverty threshold was $18,810 for a family of two adults and two children. $18,810 in 2003 represented approximately the same purchasing power as $3,100 did in 1963. The poverty thresholds are different for different family sizes. So, in 2002, the thresholds were $9,183 for a single person and $30,907 for a family of eight. They are also different in different areas of the country, being higher in

California to reflect the higher cost of living. (The poverty threshold in San Diego for a family of four in 2003 was $25,180.)

Does this official definition of poverty really tell us the extent of the problem of poverty? As important policy decisions are based on the official definition of poverty, you can imagine that the definition has been criticized by many people. ***One criticism is that people do not spend one-third of their incomes on food.*** Most Americans spend closer to 1/7 of their incomes on food. If we multiplied by 7, instead of 3, the number of poor people would be very much higher. ***A second criticism comes from people who believe that poverty is a relative concept, not an absolute one*.** This means that there should be no fixed standard to decide who is poor. Poverty must be determined in relation to the standards of living of the rest of society. People we consider poor have a standard of living many times greater than rich people did 200 years ago. But they are still poor if they have a standard of living well below the rest of today's population. (For example, if most people have indoor plumbing, then you have a problem if you do not. It does not help you to know that people did not have indoor plumbing 200 years ago.) In the early 1960s, the poverty threshold for a family of two adults and two children was between 50% and 60% of the median income. In 1997, this same poverty threshold was about 36% of the median income. People who believe that poverty is a relative concept suggest that the poverty threshold be set at some percent (say 50%) of the median income. Obviously, the number of poor people would have been much greater with this definition. (Using today's absolute measure of the poverty threshold, and adjusting for inflation, we would say that about 70% of Americans lived in poverty in 1900. Such an idea makes no sense.) ***A third criticism involves the manner by which income is measured***. In the poverty calculations, income includes income from work plus cash transfers from the government (such as social security or welfare). It is argued that non-cash transfers (such as Food Stamps or Medicaid) should also be included and that taxes paid should be subtracted. If this is done, the poverty rates are lower since the poor receive more in non-cash transfers than they pay in taxes. The government actually calculates poverty using several different measures of income. *A* ***fourth criticism involves the inflation rate that is used to adjust the thresholds.*** For reasons we shall not consider here, the inflation rate probably overstates the true rise in the cost of living. **If the inflation rate measure were more accurate, the thresholds should be lower, reducing the number of people categorized as poor.** Finally, the definition is absolute: one is either poor or not poor. The definition does not tell us how close to the poverty line people actually are. So, in 1999, the average dollar amount need to raise a poor family out of poverty was $6,687. Giving every poor family $1,000 would have only reduced the poverty rate by about one percentage point.

How many people are poor? In 2003, nearly 36 million people, 12.5% of all Americans, were considered officially poor. In 2003, 13.4% of all Californians and 14.5% of all San Diegans were officially poor (348,500 San Diegans). In addition, another 4.5% of Americans were within 125% of the poverty threshold, showing that many of those who are not officially poor live very close to the poverty threshold. ***Poverty rates fell considerably from the late 1950s until the early 1970s***. This result was widely hailed. The country was "winning the War on Poverty". ***But after that, the poverty rates leveled off before rising in the 1980s and 1990s. From 1995 to 2000, poverty rates fell once again (the poverty rate was 11.3% in 2000), before rising since 2001***. The poverty rates are higher today than they were from 1968 to 1980. This is a very disappointing result. The economic growth of the 1990s did lift many people out of poverty. But

there are many others who were not lifted out of poverty.

Who are the people who are poor? We can categorize them in many ways. Using the 2003 data, we find that of the nearly 36 million people officially categorized as poor, about 45% were white, 25.7% were black, 24.7% were Hispanic, and 4% were Asian and Pacific Islander. So, ***while most of the poor are while, minority groups are over-represented among the poor.*** **What seems especially disturbing is that poverty is largely a phenomenon of young people.** Just about 35% of all of the poor people were under the age of 18 in 2002 (and 17.6% of all people under the age of 18 – 12.9 million -- were officially poor). **Poverty also is connected to the breakdown of the traditional family**. Among people who live in married couples, with both husband and wife together, the poverty rate was 5.3% in 2002. But among those who live in female-headed families, the poverty rate in 2002 was 26.5%. **Many of those who are officially classified as poor do indeed work**. Of those classified as poor, 11% worked full-time for the full year and 20% worked part-time for the whole year. Another 27% worked for part of the year. Thus, only 38% of the poor age 16 and over worked at all in 2002. Of those who did not work, 24% were disabled, 27% were retired, and 23% cited family responsibilities. In 1999, only 2.6% of those who worked full-time, full year were officially poor, compared to 13.1% of those who worked part-time or part year and 19.9% of those who did not work at all. **Finally, there has been a large reduction in poverty among the elderly**. Only 10.4% of people age 65 and over were classified as poor in 2002. And only 10% of the poor were people age 65 and up. Forty years ago, the elderly comprised perhaps 40% of the poor. This reduction is often considered the greatest achievement of the War on Poverty. Poverty, which was once borne heavily by the elderly, is now borne heavily by young people.

While the data show the poverty rate for each year, it must be remembered that the same people are not poor every year. Some of the people who are poor in 2004 were not poor in 2003. And some of the people who were poor in 2003 are not poor in 2004. We need to examine the dynamics of poverty to assess how great the problem is. A major study of this was done using the data from 1968 to 1987. ***It found that most people who experience poverty do so for only a short time.*** Indeed, of people in poverty at any particular time, nearly 60% would be poor for less than one year. While they would rise out of poverty, many would have their incomes rise to only a bit above the poverty threshold. They were much less likely to rise into the middle class. **The most common reasons for falling into poverty were loss of a job or divorce. The most common reasons for rising out of poverty were finding a new job or re-marriage.** But while most people who experienced poverty did so for only a short time, ***the data also showed that there was a sizable group, perhaps 20% of the poor, who would be poor for a long time*** (at least seven consecutive years). For these people, the problem of poverty is a severe and persistent one. It is likely that these conclusions are still valid today.

Test Your Understanding

1. In 2002, the poverty threshold for a single person was approximately $765 per month. Form a budget for yourself, assuming that you have exactly this income. Consider all of your expenses. (If you are not single, the poverty thresholds are different: $1,000 for 2 adults, $1,050 for one adult and one child, $1,206 for 2 adults and one child or for one adult and two children, $1,520 for 2 adults and 2 children, etc. Use these numbers to prepare your budget.) Raise these numbers upward somewhat to account for the higher cost of living in San Diego.
2. The poverty rate in California over the period 2001 to 2002 was 12.8%. Based on what you know

about the causes of poverty and the type of people likely to be poor, what hypotheses can you develop to explain why the poverty rate is higher in California?

VI. Government Programs for Redistribution

At the end of the 18th century, there was no country that devoted as much as 3% of its total income to programs that redistribute income toward the poor. By 1980, this had risen so that over one-third of total income being redistributed toward to poor in some European countries. Most of this growth came in the second half of the 20th century, after World War II.

In the 18th and 19th centuries, redistribution took the form mainly of poor relief, mainly involving workhouses. There were no public pensions for the elderly. And private charities and churches gave little to the poor (instead funding hospitals and schools). Even though inequality and poverty were very large in this period, there was little redistribution. The increase in policies of redistribution does not begin until the vote was extended to poorer males and to women. These policies of redistribution are known as the ***"welfare state"***.

The origin of what we now call the "welfare state" is a pension law in Denmark in the 1890s. Programs of redistribution grew slowly until the 1930s. The great period of growth of these programs came between 1960 and 1980. Since 1980, spending on these "welfare state" programs has leveled off; however, this spending has not declined.

Several factors have been given to explain this growth of "welfare state" spending. **One, mentioned above, is the increase in democratization, raising the share of the population that votes. A second factor is the aging of the population**. Older people are more supportive of policies of redistribution (and not just redistribution to the elderly) and older people are very likely to vote. **A third factor involves the increase in international trade**. More trade increases the amount of change people will face and therefore increases the desire for a "social safety net". (It is no coincidence that the countries with the largest welfare states have the greatest exposure to international trade.)

Contemporary American Programs for Redistribution

The American government has had its programs designed to aid the poor. Some of these are ***"means- tested"*** while others are not. (***"Means-tested" means that one must have a low income to be able to receive the benefits of the government program***.) Of the total amount spent, about 2/3 was not means tested. Most of this amount was spent on Social Security and Medicare. ***Social Security*** provides income for retirees, income for survivors if a spouse or parent dies, and income for those who are disabled. ***Medicare*** provides medical care for people age 65 and up who qualify for social security. Only about 3% of the total amount was spent on education and training programs. About 9% of the total amount was spent on cash transfers to the poor --- mainly what was then called ***AFDC*** (see below) and ***Supplemental Security Income (SSI)*** for the elderly poor and the disabled. The other 22% of the amount spent was for in-kind transfers to the poor– mainly ***Food Stamps, Housing Assistance, and Medicaid.*** AFDC, SSI, Food Stamps, Housing Assistance, and Medicaid are means-tested programs.

Of all of the "welfare state" programs, the one that received by far the most attention was ***Aid to Families with Dependent Children (AFDC)***. Indeed, people usually said the word "welfare" when referring to AFDC. In a typical month prior to the reform of 1996, between 4 ½ million

and 5 million families were receiving this cash assistance. In all states, the AFDC program provided income for female-headed families – a mother and at least one child – if the family income fell below a certain amount. In some states, including California, aid was also provided for two-parent families if the main earner in the family became unemployed and family income fell below a certain amount. **As of the reform of 1996, a mother with two children and no other income received about $565 per month in California. (As of 2001, this same mother would receive a grant of $645 per month.) This benefit would decline $0.30 for every dollar of income earned by working. A household eligible for AFDC would also receive Food Stamps (which averaged $189 per household in 1997) and Medicaid**. Some would also be eligible for rent supplements (in this program, the household pays 30% of its income for rent and the government pays the rest, up to a limit on the total rent).

In January of 1996, there were about 2,649,000 people receiving AFDC payments in California. There were 12,877,000 people receiving AFDC benefits in the United States as a whole. **The large majority of these people collected AFDC for only a short period of time.** For these people, AFDC was a transitional program. It got them through especially rough periods in their lives, commonly brought on by divorce, by job loss, or by the need for a single woman to adjust to the birth of a new child. But while most people collected payments for only a short time, **most of the total spending on the AFDC program went to that minority of people who collected benefits for a long time period**. Perhaps ¼ of those who collected benefits did so for at least ten years. These people are often called ***"welfare dependent"***. Research showed that the critical time was two years. Most recipients collected benefits for less than two years. But those who collected benefits for more than two years were the ones likely to continue collecting it for a long time period.

AFDC was the target of frequent criticism. When the program was created in the 1930s, most of the recipients were widows with children. These people were expected to devote their time to raising their children and not to work. But values have changed now. The public now believes that women collecting welfare benefits should learn to work to support themselves. The AFDC system did little to encourage the women to work. Indeed, unless a woman could command a fairly decent wage and unless childcare costs were reasonably low, she was often no better off by working than by collecting the AFDC benefits. (Welfare benefits were reduced about 30 cents if the women earned $1 by working.) **One study concluded that the AFDC program decreased work hours of the recipients by 30%. Various other studies concluded that taxpayers must pay between $1.29 and $1.89 (depending on the study) to raise the incomes of welfare recipients by $1.00.** (This result occurred because recipients chose to earn less when the benefits were available.) Return to the metaphor of the leaky bucket. Apparently 20% to perhaps nearly 50% of the money "leaked out" as income was transferred to the poor.

AFDC was also criticized for other incentive effects. ***First the public believed that the fathers of their children should financially support their children***. But the welfare system did a very poor job at collecting child support from the absent parent. ***Second, the benefits paid to recipients required an increase in taxes.*** By reducing the reward from working, the higher taxes may have reduced work effort by the non-poor. ***Third, the presence of AFDC may have generated a greater number of female-headed families by allowing young single mothers to live separately from their own parents. Fourth, the existence of AFDC benefits may have encouraged more out-of-wedlock births.*** These points have been extensively studied. **Most**

studied found that these incentive effects were small. Nonetheless, they were major arguments as the case was made for reform of the welfare system.

Welfare Reform of 1996

The most recent, and most significant, reform of the welfare system occurred in 1996 with the ***Personal Responsibility and Work Opportunity Act***. AFDC no longer exists; the program is now called ***Temporary Assistance for Needy Families (TANF)***. The program in California is known as ***CalWorks***. California, with about 12% of the American population, has over 22% of the nation's welfare recipients. Basically, a woman who heads a family now is allowed to **collect benefits for no more than two years consecutively**. She is expected to use that two-year period work or to become ready for employment. (In California, the work requirement is 32 hours per week.) At the end of the two-year period, she must become self-supporting. The woman is allowed to return to the welfare system if needed, but **can collect benefits for no more than five years in a lifetime**. (Several states have shortened this five-year maximum.) This reform guaranteed that full-time work, even at the minimum wage, would make a family better off than would welfare. But the reform did create an issue as to whether the labor market could absorb perhaps three million new workers. Since about 40% of those collecting benefits had failed to finish high school and, on aptitude tests, 75% of recipients had scores that placed them in the bottom 25% of all test takers, it was feared that they would be hard for the labor market to absorb. **Between 1996 and 2001, the number of Americans receiving cash grants fell from 12,876,000 to 5,285,000 (a decrease from nearly 5 million families to about 2 million families). Over the same time period, the number of Californians receiving cash grants fell from 2,649,000 to 1,179,000 (a decline from 926,000 families to 464,000 families). The proportion of Americans on welfare fell from 5.5% in 1993 to 2.5%.** Since the reform was enacted at a time of a booming labor market, it seems to have worked well. In 1986, a single parent working full time at the minimum wage would earn only $2,000 more in a year than being on welfare. And that parent would lose Medicaid coverage by working. By 1997, the same single parent could increase earnings by $7,100 per year by working full time at the minimum wage. And while the parent would lose Medicaid coverage by working, her children would not. People seem to have responded to these incentives as it was hoped they would. (In addition, the birth rate for teenage women fell sharply.)

In 2001, the American economy entered a recession. The unemployment rate rose and is still over 5½ % as of this writing (July of 2004). It is possible that the reforms could have caused considerable suffering in this period of higher unemployment. No full study of this matter has been completed as of now.

Test Your Understanding

Assume that you are a major policy maker in the United States. Your goal is to devise policies to greatly reduce the number of people in poverty in the United States. What policies would you recommend? Why? Keep in mind that most of the policies your group would recommend have been tried in the past. Explain why these policies have not worked as well as the people who proposed them had hoped. (That is, what difficulties are your policies likely to encounter?)

Practice Quiz on Chapter 25

1. If the **Gini Index** is used, which number would illustrate greater **inequality**?
   a. 0 b. 0.25 c. 0.5 d. 0.75 e. 30

2. Which of the following is true about **the distribution of income of the United States**?
   a. It has been getting more unequal over time
   b. It is more unequal than most other countries
   c. It is more equal than the distribution of wealth
   d. All of the above

3. Which of the following would be closest to the percent of total income earned by the richest 20% of households?
   a. 20% b. 25% c. 50% d. 100%

4. On the **Lorenz Curve**, the straight diagonal line shows:
   a. the actual distribution of income b. perfect equality c. perfect inequality d. the Gini Index

5. Which of the following could explain why income has become more unequally distributed over the past 20 years?
   a. the demand for higher skilled workers has risen faster than the demand for lower skilled workers
   b. the expansion of immigration
   c. the decline of labor unions
   d. all of the above

6. The **poverty threshold**:
   a. was calculated as the cost of an adequate diet times three and then is adjusted for inflation
   b. measures income by wages plus cash transfers, excluding taxes and in-kind transfers
   c. has fallen as a percent of the median income
   d. all of the above

7. According to the text, the source of great fortunes is
   a. inheritance b. monopoly power c. education d. luck

8. Which of the following number would be closest to the percent of Americans officially poor?
   a. 0 b. 12% c. 25% d. 50%

9. Which of the following statements is/are true?
   a. The percent of Americans in poverty has been falling steadily since 1970
   b. Most poor people experience poverty for a long time period
   c. AFDC was an example of a means-tested program
   d. Raising the incomes of the poor by $1.00 costs taxpayers less than that $1.00
   e. All of the above

10. The program that replaced AFDC is called
    a. Social Security c. Food Stamps
    b. Medicare d. Temporary Assistance for Needy Families

Answers: 1. D 2. D 3. C 4. B 5. D 6. D 7. B 8. B 9. C 10. D