1. Describe the inequality in income and wealth in the United States and explain why wealth inequality is greater than income inequality.

2. Explain how economic inequality arises.

3. Explain the effects of taxes, social security, and welfare programs on economic inequality.

18.1 INEQUALITY IN THE UNITED STATES

We measure economic inequality by looking at the distributions of income and wealth.

A household’s income is the amount that it receives in a given period.

A household’s wealth is the value of the things it owns at a point in time.

Table 18.1 on the next slide shows the distributions of income and wealth in the United States in 1999.
18.1 INEQUALITY IN THE UNITED STATES

Lorenz Curves

A Lorenz curve is a curve that graphs the cumulative percentage of income (or wealth) against the cumulative percentage of households.

The farther the Lorenz curve is from a 45° line, the greater is the inequality.

Figure 18.1 on the next slide shows the Lorenz curves for the United States in 1999. They are based on the tables you’ve just seen.

The cumulative percentages of income and wealth are graphed against the cumulative percentage of households.

1. If each 20 percent of households received 20 percent of total income, there would be no rich and poor—there would be equality as shown by the line of equality.

2. The distribution of income shows that the poorest 20 percent of households received 3.6 percent of total income, and the richest 20 percent received 49.4 percent.

3. The distribution of wealth shows that the poorest 40 percent of households owned 0.2 percent of total wealth, and the richest 1 percent owned 38.1 percent.

### Lorenz Curves Example

#### Income Distribution: Median Household Income $48,814

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Percentage of Households</th>
<th>Percentage of Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Lower 50%</td>
<td>20</td>
<td>3.6%</td>
</tr>
<tr>
<td>B: Second 50%</td>
<td>40</td>
<td>8.9%</td>
</tr>
<tr>
<td>C: Third 50%</td>
<td>60</td>
<td>14.4%</td>
</tr>
<tr>
<td>D: Fourth 50%</td>
<td>80</td>
<td>21.1%</td>
</tr>
<tr>
<td>E: Highest 10%</td>
<td>100</td>
<td>46.4%</td>
</tr>
</tbody>
</table>

#### Wealth Distribution: Median Household Wealth $542,798

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Percentage of Households</th>
<th>Percentage of Wealth</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Lower 40%</td>
<td>40</td>
<td>0.2%</td>
</tr>
<tr>
<td>B: Next 20%</td>
<td>60</td>
<td>4.5%</td>
</tr>
<tr>
<td>C: Next 20%</td>
<td>80</td>
<td>13.3%</td>
</tr>
<tr>
<td>D: Next 1%</td>
<td>99</td>
<td>21.3%</td>
</tr>
<tr>
<td>E: Top 1%</td>
<td>100</td>
<td>31.0%</td>
</tr>
</tbody>
</table>

The Lorenz curve shows a significant degree of inequality in both income and wealth distribution.
The distribution of wealth is much more unequal than the distribution of income.

**Inequality over Time**

Income and wealth have become unequal over the past few decades.

**Change in Income Distribution**

The share of income received by the richest 20 percent of households has increased from 43.7 percent in 1983 to 49.4 percent in 1999.

The share of income received by all four other groups has decreased.

The decreased share is the largest for the second and third groups.

Figure 18.2(a) on the next slide shows how the distribution of income has changed.
18.1 INEQUALITY IN THE UNITED STATES

Change in Wealth Distribution

The share of wealth received by the richest 1 percent of households has increased from 34 percent in 1983 to 38 percent in 1998.

The share of wealth owned by all four other groups has decreased.

The decreased share is the largest for the next richest 4 percent.

Figure 18.2(b) on the next slide shows how the distribution of wealth has changed.

Who are the Rich and the Poor?

The lowest-income household in the United States today is likely to be a black woman over 65 years of age who lives alone somewhere in the South and has fewer than nine years of elementary school education.

The lowest-income household in the United States today is likely to be a college-educated white married couple between 45 and 54 years of age living together with two children somewhere in the West.

The distribution of wealth became more unequal between 1983 and 1998.

The percentage of total wealth owned by the top 1 percent increased, and the percentages earned by all other groups decreased.

The median income in 1999 was $40,816.

Education is the single biggest factor affecting household income distribution.

Size of household, marital status, and age of householder are also important.

Race and region are the least important.
Poverty is a state in which a household’s income is too low to be able to buy the quantities of food, shelter, and clothing that are deemed necessary.

In 1999, the poverty level for a four-person household was an income of $17,029.

In that year 32.3 million Americans lived below the poverty level.

Figure 18.4 on the next slide shows the changing poverty rate in the United States.

The Hispanic poverty rate is similar to the black poverty rate but it increased during the 1980s before falling during the 1990s.

Comparing Like with Like

To determine the degree of inequality, we must compare one person’s economic situation with another person’s.

Wealth Versus Income

Wealth is a stock, and income is a flow of earnings that results from the stock of wealth.
18.1 INEQUALITY IN THE UNITED STATES

Table 18.2 shows capital, wealth, and income.

<table>
<thead>
<tr>
<th></th>
<th>Lee</th>
<th>Peter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wealth</strong></td>
<td>$200,000</td>
<td>$499,000</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td>$10,000</td>
<td>$24,950</td>
</tr>
<tr>
<td><strong>Tangible assets</strong></td>
<td>$800,000</td>
<td>$1,000</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td>$40,000</td>
<td>$50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$1,000,000</td>
<td>$500,000</td>
</tr>
</tbody>
</table>

Measured wealth excludes human capital, so income is a better measure than wealth.

18.2 HOW INEQUALITY ARISES

A household’s income depends on three things:
- Resources prices
- Resource endowments
- Choices

Resources Prices

People face differing wage rates in the labor market. Variations in wage rates do not account for all income inequality. There is a range of incomes that people earn from their work.
18.2 HOW INEQUALITY ARISES

Resources Endowments

The distribution of individual ability across individuals is a major source of inequality in income and wealth. It is not the only source.

The distributions are skewed toward high incomes and look like the curve in Figure 18.5 on the next slide.

18.1 INEQUALITY IN THE UNITED STATES

The distribution of income is not symmetric.

The mode income is the most common income.
The median income is the middle income—half get more and half get less than the median.
The median income is greater than the mode income.

The mean income is the average income—total income divided but total population.
The mean income is greater than the median income.

There are many more people with incomes below the mean income than above it.

Also, the distribution has a long, thin upper tail representing a small number of people who earn very large incomes.
18.2 HOW INEQUALITY ARISES

Choices

The choices people make:
- Exaggerate the differences among them.
- Make the distribution of income more unequal than the distribution of abilities.
- Make the distribution of income skewed.

Wages and the Supply of Labor

At a high enough wage rate, an individual labor supply bends backward.

Over a large range of wage rates, the quantity of labor that a person supplies increases as that person’s wage rate increases.

Because the quantity of labor increases as the wage rate increases, the distribution of income is more unequal than the distribution of hourly wages.

It is also skewed, as shown in Figure 18.5.

Saving and Bequests

Bequest
- A gift from one generation to the next.

Two features of bequests make intergenerational transfers of wealth a source of increased inequality:
- Debts cannot be bequeathed.
- Mating is assortive.

Debts Cannot Be Bequeathed

Debts cannot be forced onto other household members.

Because a zero inheritance is the smallest inheritance that anyone can receive, bequests can only add to future generations’ wealth and income potential.

Asortative Mating

The tendency for people to marry within their own socioeconomic class.

Wealth becomes more concentrated.
## Income Taxes

Income taxes may be progressive, regressive, or proportional.
- **A progressive tax**
  - One that taxes income at an average rate that increases with the level of income.
- **A regressive tax**
  - One that taxes income at an average rate that decreases with the level of income.
- **A proportional tax**
  - One that taxes income at a constant rate, regardless of income.

## Income Maintenance Programs

**Social Security**
A public insurance program.
- **OASDHI**
  - Old age, Survivors, Disability, and Health Insurance
- **Medicare**
  - Provides hospital and health insurance for the elderly and disabled.

## Unemployment Compensation

To provide an income to unemployed workers.

A tax is paid based on the income of each covered worker.

Each worker receives a benefit when he or she becomes unemployed.

## Welfare Programs

1. To provide incomes for people to help the neediest elderly, disabled, and blind people.
2. Temporary Assistance for Needy Families (TANF) program, designed to help households that have inadequate income.
3. Food Stamp program, designed to help the poorest households obtain a basic diet.
4. Medicaid, designed to cover the costs of medical care for households receiving help under the SSI and TANF programs.
18.3 INCOME REDISTRIBUTION

- **Subsidized Services**
  Services provided by the government at prices far below the cost of production. The most important of these are:
  - Education
  - Health care

18.3 INCOME REDISTRIBUTION

- **The Scale of Income Redistribution**
  Market income is the income a household earns in factor markets before tax and excluding transfers from the government.
  Money income is market income plus money benefits paid by the government.
  We can measure the scale of income redistribution by calculating the percentage of market income paid in taxes minus the percentage received in benefits at each income level.

Figure 18.6 shows income redistribution.

In part (a), the Lorenz curve for the distribution of income after taxes and benefits is closer to the line of equality than the money income distribution and the market income distribution.

In part (b), the three lowest income groups gain and the top two income groups lose.

18.3 INCOME REDISTRIBUTION

- **The Big Tradeoff**
  The redistribution of income creates a big tradeoff between equity and efficiency that arises because redistribution decreases the total size of the economic pie to be shared.
18.3 INCOME REDISTRIBUTION

A Major Welfare Challenge
Passed in 1996, the Personal Responsibility and Work Opportunities Reconciliation Act created the Temporary Assistance for Needy Families (TANF) program.

18.3 INCOME REDISTRIBUTION

Negative Income Tax
A negative income tax is a tax and redistribution scheme that provides every household with a guaranteed minimum annual income and taxes all market income at a fixed marginal tax rate.

A negative income tax removes the welfare trap and gives greater encouragement to low-income households to seek more employment, even at a low wage.

Figure 18.7 on the next slide shows this outcome.

18.3 INCOME REDISTRIBUTION

With no income redistribution, income after redistribution (the y-axis) would equal market income (the x-axis). Current programs and taxes redistribute along the blue line.

At low incomes, benefits are withdrawn as market income rises, to create a welfare trap.

As incomes increase from A to C, there is no redistribution. As incomes increase above C, income taxes are paid at successively higher rates.

The red line shows how market incomes translate into income after redistribution with a negative income tax gives a guaranteed annual income of G and decreases benefits at the same rate as the tax rate on incomes.

Households with market incomes below B, the break-even income, receive net benefits. Those with market incomes above B pay net taxes.