

CHAPTER 18

Who Gets What? The Distribution of Income

Chapter Goals

- Explain how income, wealth, and poverty are measured, and how their real-world measures changed over time.
- Summarize the socioeconomic tensions that high income and wealth inequalities can cause.
- Explain why there are so many philosophical debates about equality and fairness, and summarize some of them.
- Discuss the practical and theoretical problems of redistributing income.

Measuring the Distribution of Income, Wealth, and Poverty

Share distribution of income is the relative division of total income among income groups. For example, it measures how much income the top 5% or 15%, or the bottom 10% gets.

Socioeconomic distribution of income is the allocation of income among relevant socioeconomic groupings.

The Lorenz Curve

A **Lorenz curve** is a geometric representation of the share distribution of income among families in a given country at a given time.

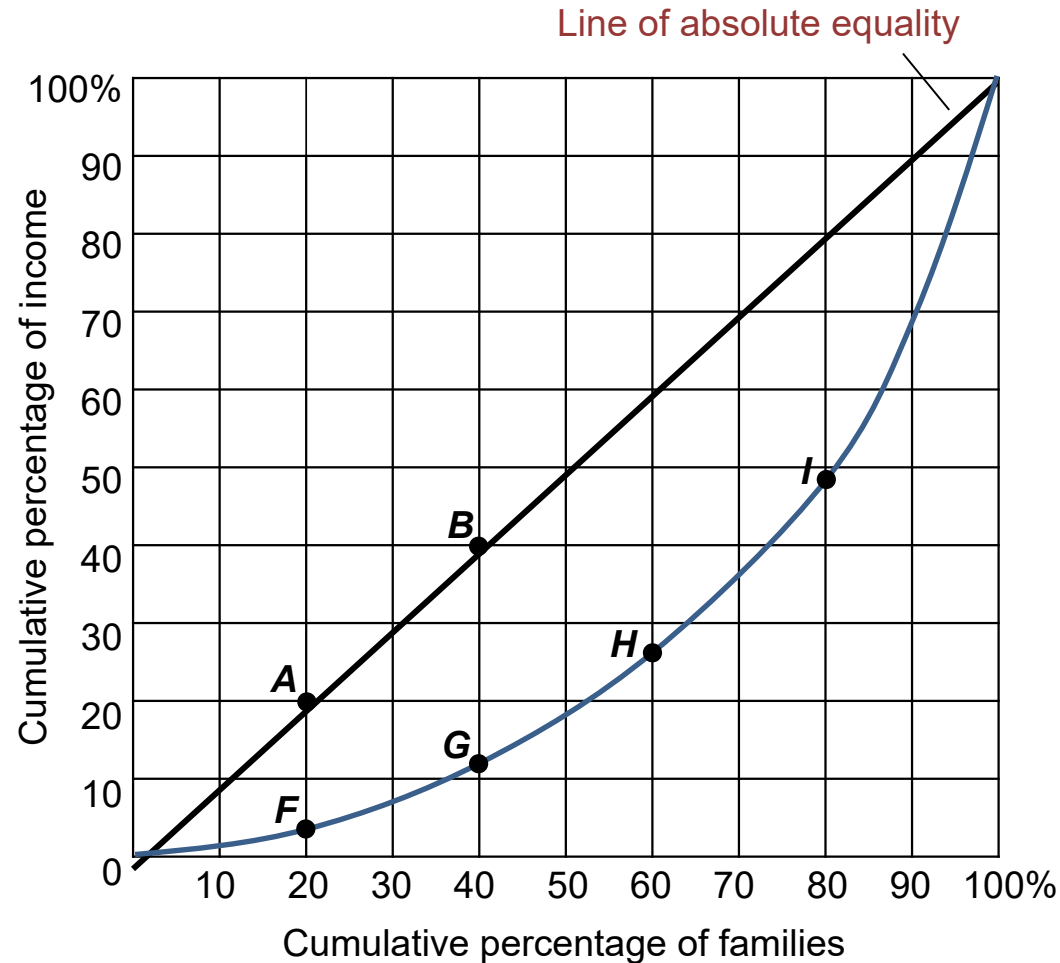
It measures the cumulative percentage of *families* on the horizontal axis, arranged from poorest to richest, and the cumulative percentage of *family income* on the vertical axis.

Both axes start at zero and end at 100%.

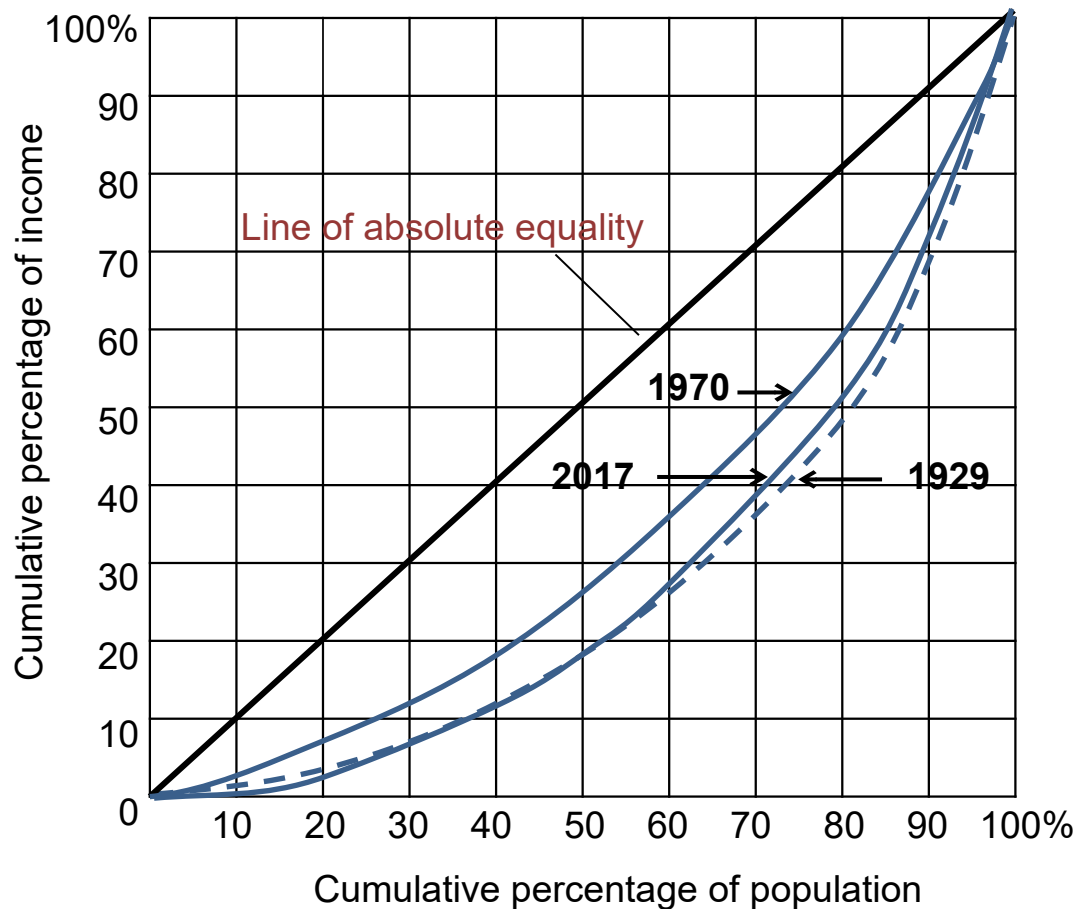
A Lorenz Curve of U.S. Income

Income Quintile	Percentage of Total Family Income	Cumulative Percentage of Total Family Income
Lowest fifth	3.1%	3.1%
Second fifth	8.2	11.3
Third fifth	14.3	25.6
Fourth fifth	23.2	48.8
Highest fifth	51.2	100.0

In the graph, we see the U.S. Lorenz curve based on the numbers in the table compared to a Lorenz curve reflecting a perfectly equal distribution of income.



Lorenz Curves for the United States: 1929, 1970, and 2017



From **1929** to **1970**,
income inequality decreased.

From **1970** to **2017**,
income inequality increased.

Defining Poverty

- Poverty can be defined as a relative or absolute concept.
- The U.S. government definition of poverty is a combination of a relative and an absolute measure.
- The poverty threshold is the income below which a family is considered to live in poverty.
- Equal to or less than three times an average family's USDA-calculated minimum food expenditures.

Number and Percentage of Persons in Poverty

Year	Number of People (millions)	Percentage of Population	Poverty Income of a 4-Person Family (in current \$)
1960	39.9	22.2%	3,022
1970	24.4	12.6	3,986
1980	29.3	13.0	8,351
1990	33.6	13.5	13,254
2000	31.6	11.3	17,463
2010	46.2	15.1	22,113
2015	43.1	13.5	24,036
2016	40.6	12.7	24,339
2017	39.7	12.3	25,858

Source: Current Population Reports, U.S. Bureau of the Census (www.census.gov).

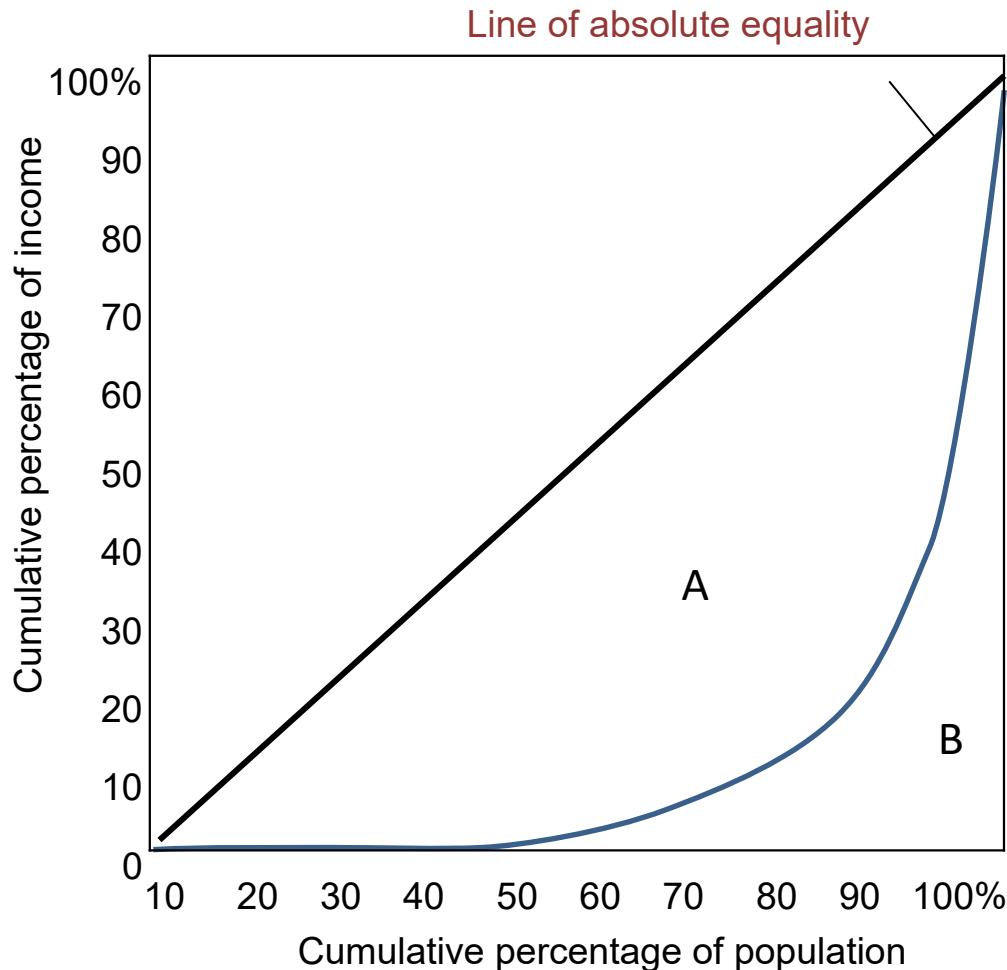
Debates about the Definition of Poverty

- Those who feel that the poverty line is too low point out that food is now closer to one-seventh of a family's total budget, so food is no longer a good basis for determining the poverty level.
- Some argue that the current measure is too high because poverty figures do not include in-kind transfers, underreporting of income or savings recipients may have.
- Like most economic statistics, poverty statistics should be used with care.

The Costs of Poverty and Social Mobility

- Some feel that society suffers when some of its people are in poverty.
- When poverty decreases, the incentives for crime also decrease.
- Individuals who work hard can escape poverty.
- Concern about poverty has been lessened by the belief that the United States has significant economic and social mobility.
- Recent studies have found that income mobility has significantly declined in the United States.

The Gini Coefficient



Economists use the Gini coefficient to talk about the degree of income inequality.

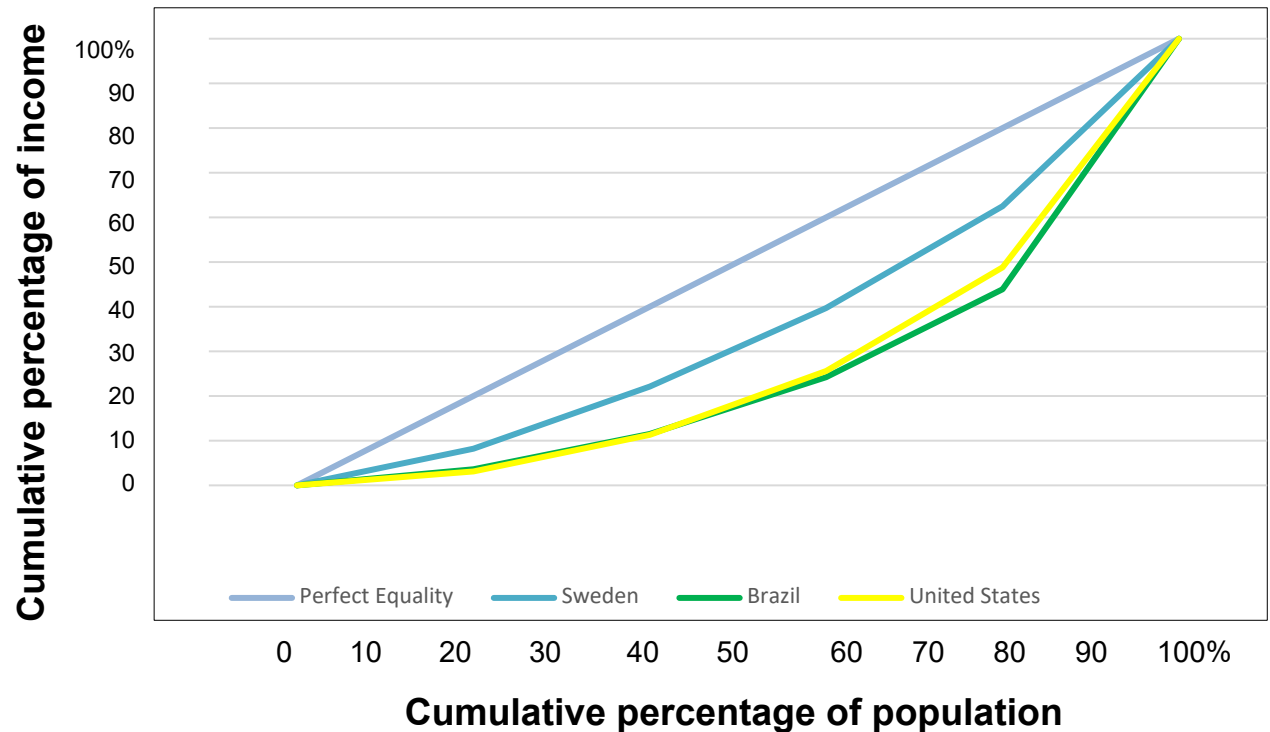
The Gini coefficient is derived from the Lorenz curve.

Gini coefficient = $\text{Area A} / (\text{Areas A} + \text{B})$

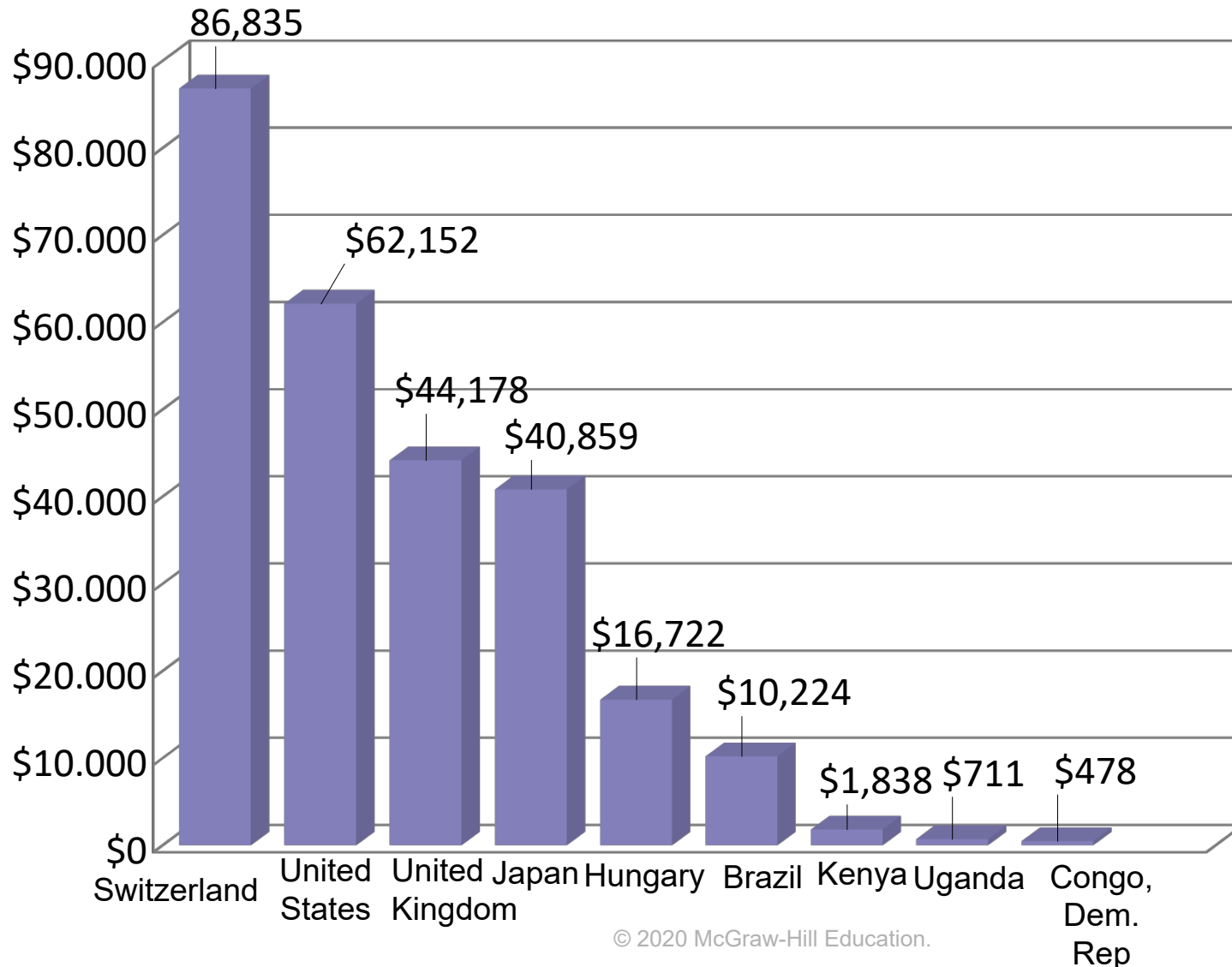
International Dimensions of Income Inequality

Among countries of the world, the United States has the neither the most equal nor the most unequal distribution of income.

U.S. Income Distribution Compared to That of Other Countries



Per Capita Income (GNP) in Various Countries



World
income
inequality
is much
greater
than
country
income
inequality.

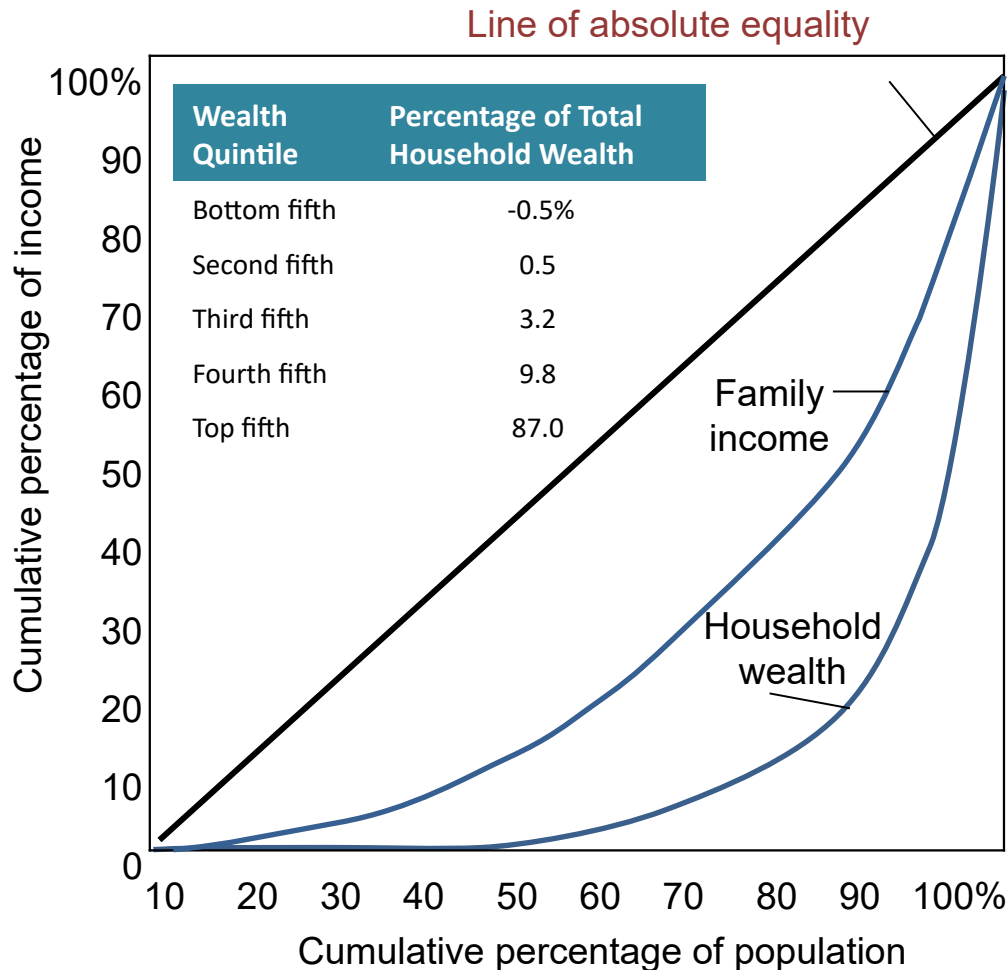
The Distribution of Wealth

Wealth is the value of things individuals own less the value of what they owe. It is a stock concept representing the value of assets such as houses, buildings, and machines.

Income is payments received plus or minus changes in value of a person's assets in a specified time period. It is a flow concept, a stream through time.

In the United States, wealth is significantly more unequally distributed than is income.

Wealth Distribution in the United States and Wealth Compared to Income



Wealth is much more unequally distributed than income in the United States. The lowest 40% of the population has only 0.4% of the wealth. These people have borrowed nearly as much as they own.

Socioeconomic Dimensions of Income Inequality

The share distribution of inequality is only one of the dimensions that inequality of income and wealth can take.

Unequal distribution of income based on race, ethnic background, geographic region, and other socioeconomic factors such as gender and type of job exists.

The United States has socioeconomic classes with some mobility among classes.

Socioeconomic Dimensions of Income Inequality

Median Income, 2017

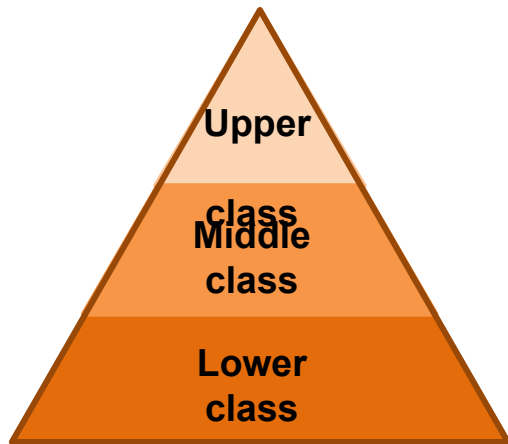
Occupational Category	Male (\$)	Female (\$)
Financial analysts	82,680	71,188
Management	81,796	60,996
Healthcare Practitioners	69,732	55,536
Protective services	46,488	35,880
Sales and Office	43,368	34,944

Year	Male (\$)	Female (\$)
1990	20,293	10,070
2000	28,343	16,063
2010	32,205	20,775
2016	40,396	25,486

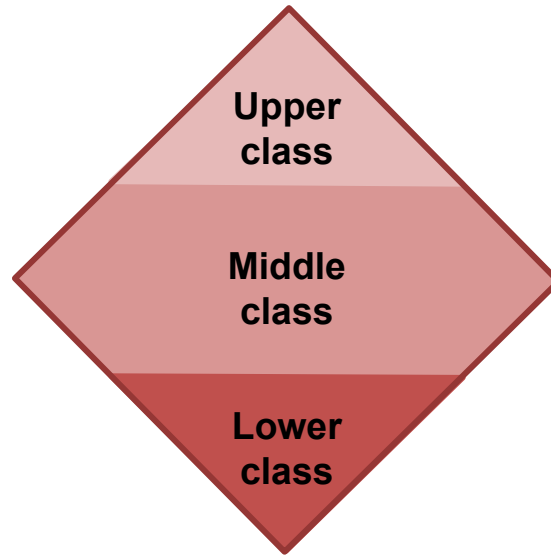
Race, 2017	Median Income (\$)
White	40,601
Asian	38,698
Hispanic Origin	23,431
Black	20,937

Income Distribution According to Class

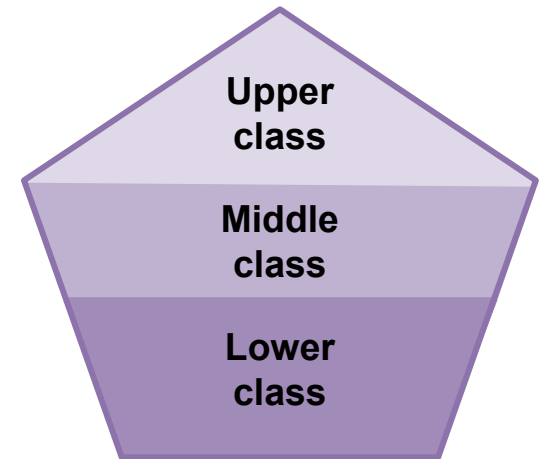
The class system as a pyramid, a diamond, and a pentagon.



A developing country's class system



U.S. class system in the 1960s and 1970s



U.S. class system in recent years

Globalization and the Splitting of the Middle Class

Outsourcing increased unemployment and pushed down wages in tradable sector such as manufacturing.

Nontradable sectors were safe from outsourcing and benefited from lower prices on the consumer side, moving them into the upper middle class.

With globalization, those in the lower class are less likely to move up the ladder, and those in the upper class are less likely to move down the ladder.

Philosophical Debates about Equality and Fairness

Some philosophers argue that inequality creates diversity that enriches the lives of everyone.

Others maintain that equality is the overriding goal.

The Declaration of Independence asserts that “all men are created equal.”

Objective economists limit themselves to explaining the effect of various policies on the distribution of income.

Fairness and Equality

Most Americans see fairness as equality of opportunity.

There are great differences of opinion as to what constitutes “equal opportunity.”

There are three problems in determining whether an equal income distribution is fair:

1. People's abilities differ.
2. People's needs differ.
3. People's efforts differ.

Three Important Side Effects of Redistributive Programs

Society may decide to redistribute income from rich to poor to meet its ideal of fairness.

There are three side effects of redistribution of income:

1. The labor to leisure incentive effect.
2. The tax avoidance or evasion incentive effect.
3. The incentive to appear more needy than you actually are.

Often politics, not value judgment, plays a central role in determining what taxes and individual will pay.

Income Redistribution Policies

The government redistributes income through direct and indirect methods.

The direct methods include:

- Taxation which are policies that tax the rich more than the poor.
- Expenditures which are programs that help the poor more than the rich.

Income Redistribution Policy, Fairness, and Takeaway Principle

Discussions of income distribution often focus on *redistribution* policy. One solution is to focus not on redistribution policy but a policy to affect the structure of society that underlies the distribution of income to society.

Examples:

- Structure of intellectual property rights
- Licensing and restrictions on entry into different types of work

Taxation to Redistribute Income

A **progressive tax** is a one in which the average tax rate increases with income. It redistributes income from the rich to the poor.

A **proportional tax** is a one in which the average tax rate is constant regardless of income. It is neutral in regard to income redistribution.

A **regressive tax** is a one in which the average tax rate decreases as income increases. It redistributes income from poor to rich.

Taxation to Redistribute Income

The **federal government** gets most of its tax revenue from:

- Personal income tax
- Corporate income tax
- Social Security tax

State and local governments get most of their tax revenue from:

- Income tax
- Sales tax
- Property tax

Expenditure Programs to Redistribute Income

Social Security is a social insurance program that provides financial benefits to the elderly and disabled and to their eligible dependents and/or survivors.

Expenditure programs have been more successful than taxation for redistributing income.

Medicare is a medical insurance system for retired people.

Expenditure Programs to Redistribute Income

Public assistance programs are means-tested social programs that provide financial, nutritional, medical, and housing assistance to the poor and include:

- Temporary Assistance for Needy Families (TANF)
- Supplemental Nutritional Assistance Program (SNAP)
- General assistance

Expenditure Programs to Redistribute Income

Medical programs provides significant medical assistance for lower income individuals.

Supplemental Security Income (SSI) is a federal program that pays benefits, based on need, to the elderly, blind, and disabled.

Unemployment compensation is short-term financial assistance, regardless of need, to eligible individuals who are temporarily out of work.

Housing programs are federal and state programs to improve housing or to provide affordable housing.

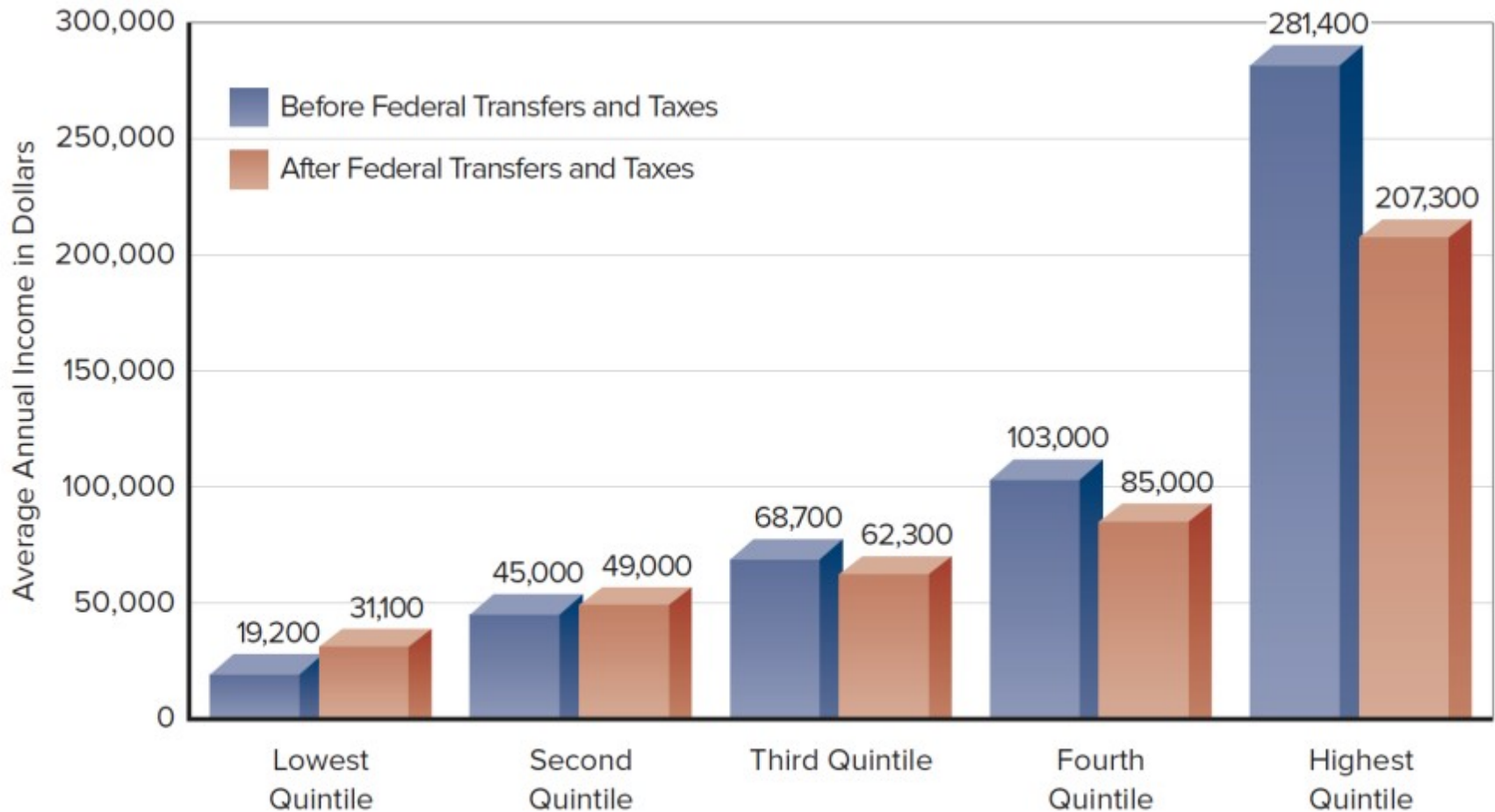
How Successful Have Income Redistribution Programs Been?

Government programs have a slight effect on income equality, but it is very small.

The incentive effects of collecting and distributing the money has come at the cost of a reduction in the total amount of income earned by the society.

Decisions on property rights issues have enormous distributional consequences that are often little discussed, even by economists.

Impact of Transfers and Taxes on Income



Chapter Summary (1 of 2)

The Lorenz curve is a measure of the distribution of income among families in a country.

The farther the Lorenz curve is from the diagonal, the more unequally income is distributed.

The official poverty measure is an absolute measure because it is based on the minimum food budget for a family; it is a relative measure because it is adjusted for inflation.

There is more income inequality among countries than income inequality within a country.

Wealth is distributed less equally than income.

Chapter Summary (2 of 2)

Income differs substantially by class and by other socioeconomic factors, such as age, race, and gender

Fairness is a philosophical question, so people must judge a program's fairness for themselves.

Income is difficult to redistribute because of incentive effects of taxes, avoidance and evasion of taxes, and incentive effects of distribution programs

Government spending programs are more effective than taxes in reducing income inequality in the United States.