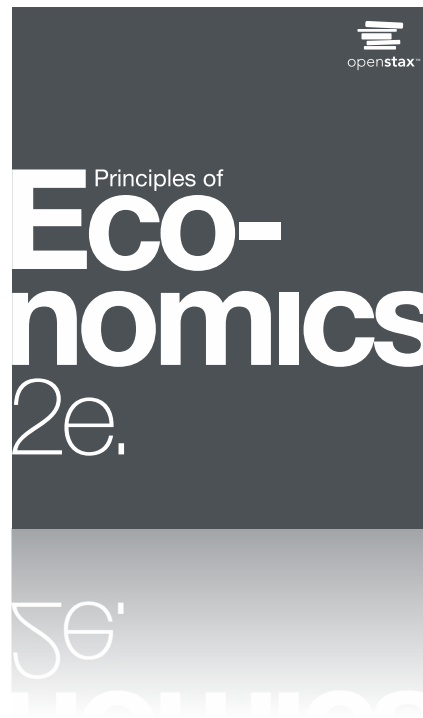


PRINCIPLES OF ECONOMICS 2e

Chapter 15 Poverty and Economic Inequality



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CH.15 OUTLINE

15.1: Drawing the Poverty Line

15.2: The Poverty Trap

15.3: The Safety Net

15.4: Income Inequality: Metrics and Causes

15.5: Government Policies to Reduce Income
Inequality

US Poverty Line (or Poverty Threshold)



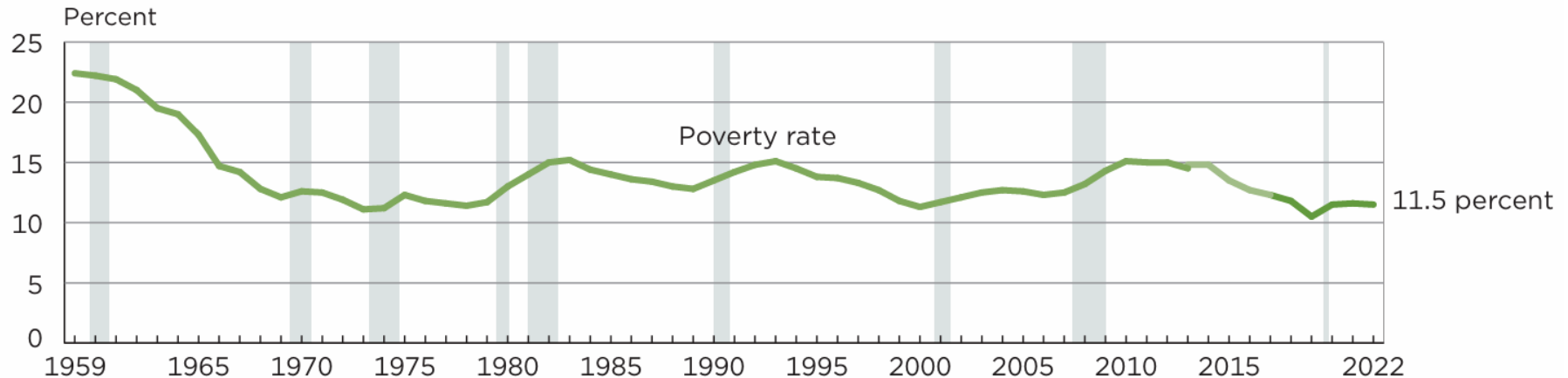
Mollie Orshansky (Source: SSA)

During the 1960s, Mollie Orshansky (at the SSA) developed the poverty threshold (“poverty line”) that is used in the federal government's official statistical measure of poverty:
three times the cost of a minimum 1963 food diet (in today’s prices).

15.1 Drawing the Poverty Line

- **Measuring Poverty:** people who fall below a certain level of income, called the *poverty line*, are in poverty.
- **Poverty line:** amount of income one requires for a basic standard of living.
 - US: $3 \times$ (basic food requirement)
 - OECD and the European Union: “economic distance” (60% of the median household income)
- **Poverty rate:** percentage of the population below the poverty line in any given year.
- **Income inequality:** differing shares of the total income (or wealth) in society that different groups receive.

The U.S. Poverty Rate since 1960



Source: [U.S. Bureau of the Census](https://www.census.gov/pov/data/status/)

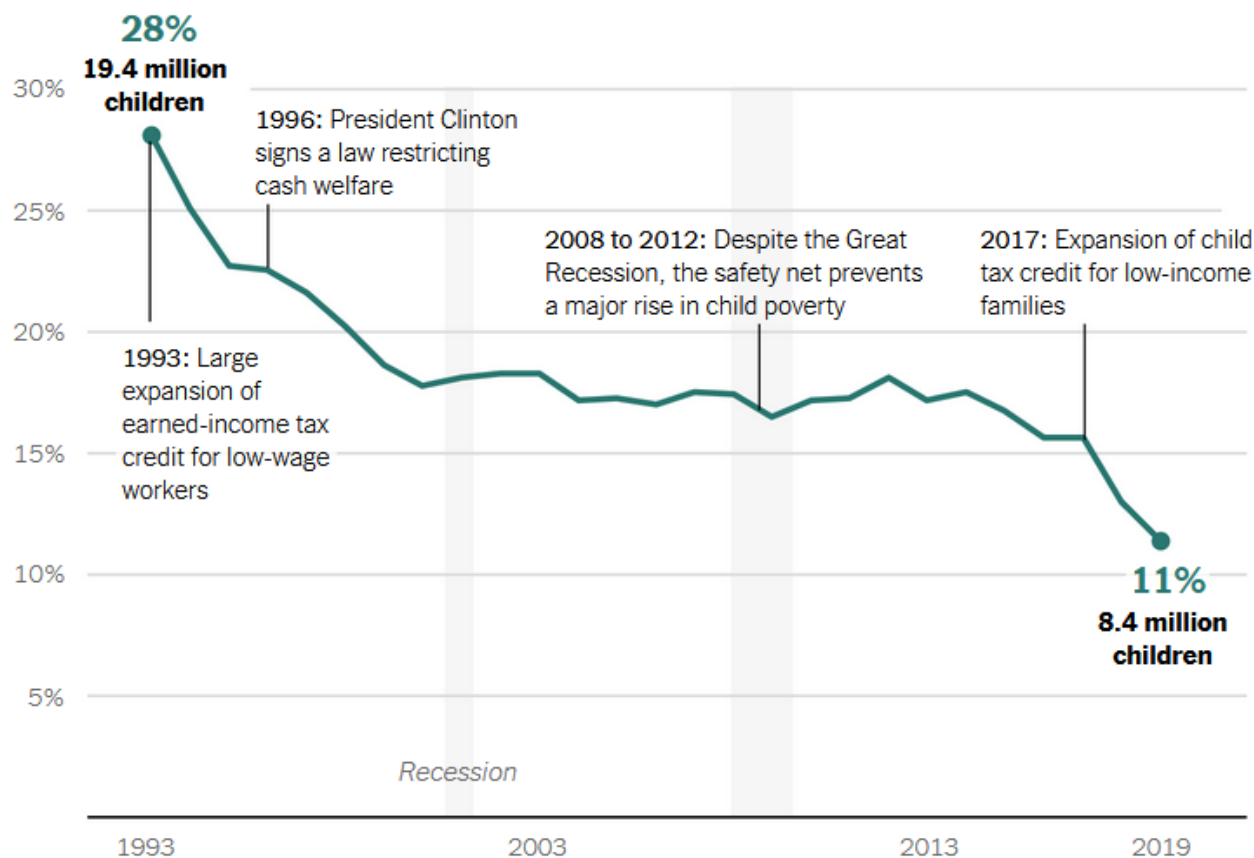
Use this figure rather than the one in your textbook

- Fell dramatically during 1960s War on Poverty.
- Rose in the early 1980s and early 1990s.
- Declines in the 1990s through mid-2000s.
- Rose to 15% in 2011.
- In 2022: 11.5%.

Child Poverty

The Downward Trajectory of Child Poverty

Millions fewer children are considered poor today than were a quarter-century ago, according to the Supplemental Poverty Measure, a rate calculated by the Census Bureau that best takes government aid into account.



Source: Child Trends analysis of data from the Census Bureau and the Center on Poverty and Social Policy at Columbia University • By Alicia Parlapiano

Recent Child Poverty in US

Child poverty hits record low in 2021, then more than doubles in 2022 after federal programs expire.

Percent of American children in poverty, by the historical supplemental poverty measure that includes government programs.

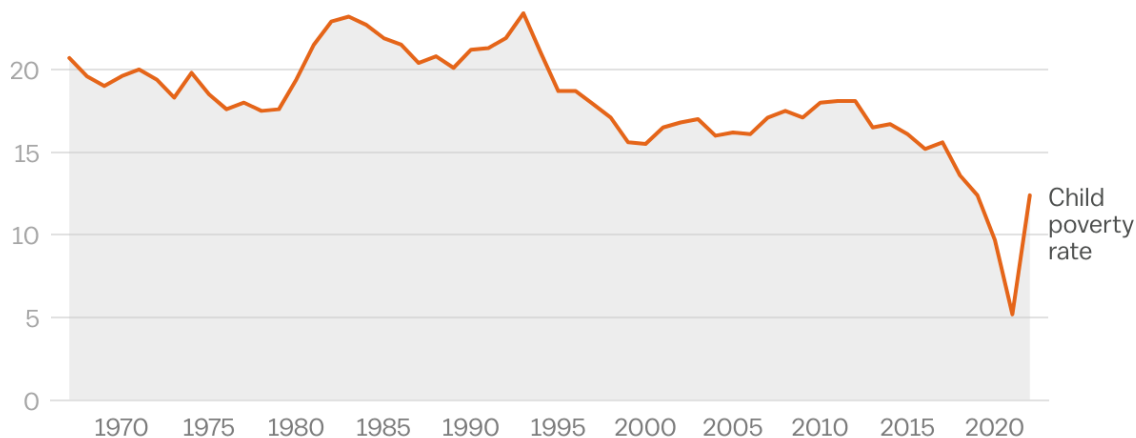


Chart: Oshan Jarow/Vox • Source: Columbia Center on Poverty and Social Policy, US Census Bureau.

Vox

Source: <https://www.vox.com/future-perfect/2023/9/21/23882353/child-poverty-expanded-child-tax-credit-census-welfare-inflation-economy-data>

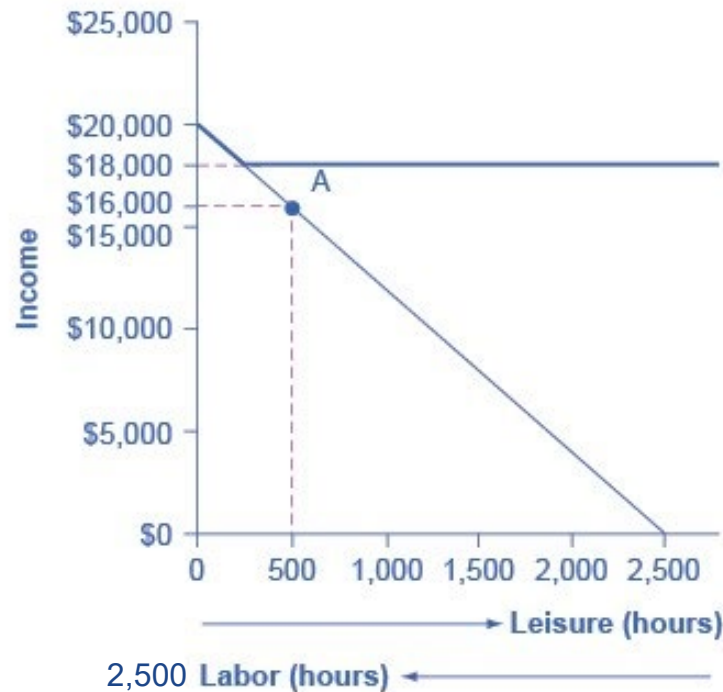
15.2 Poverty Trap

Can you give people too much help, or the wrong kind of help?

- Too much: do people who are provided with food, shelter, healthcare, income, and other necessities have less incentive to work? (“lazy rich kid”)
- Wrong kind: benefit loss caused by working.
- Nevertheless, “housing first” appears effective against homelessness.
- **Poverty trap:** antipoverty program benefits often decline substantially as people earn more income -> working provides little financial gain.
 - Incentives matter.
 - Policy makers have tried to respond to this problem.
 - But cutting benefits slowly is often expensive

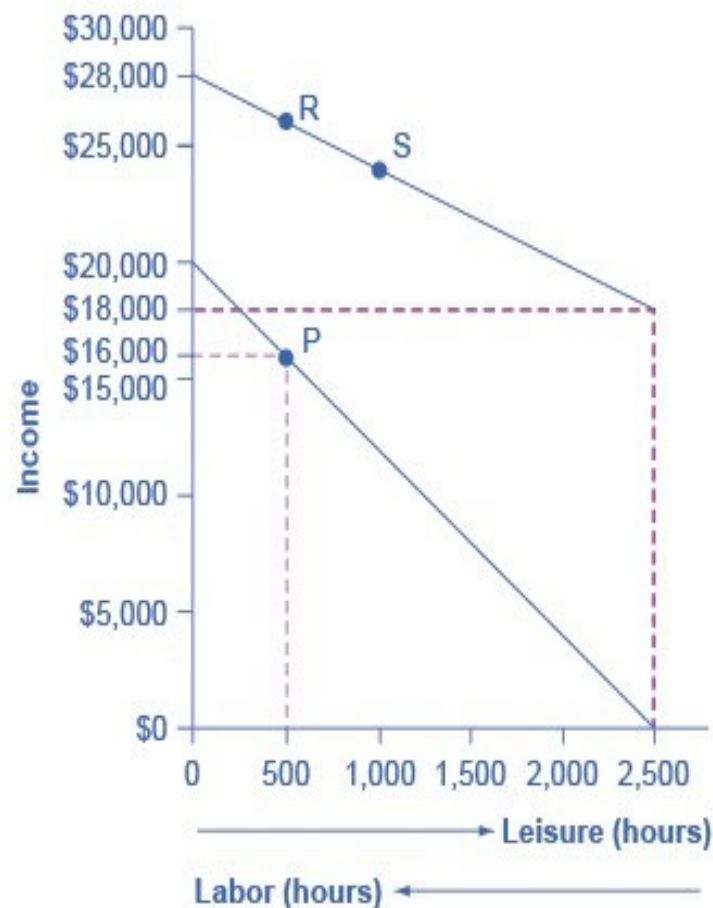
The Poverty Trap in Action :

A Labor-Leisure Budget Constraint



- original choice: 500 hours of leisure, and 2,000 hours of work at point A, and income of \$16,000 (at \$8/hr).
- new policy: guaranteed income floor of \$18,000 (whether zero hours of work or 2,000 hours of work).
 - BUT: \$1000 in income -> lose \$1000 in benefits
- This family must work 2,300 hours to raise its income rise above the guaranteed level of \$18,000 - and even then, the marginal gain to income from working many hours is small.

Loosening the Poverty Trap: Benefit loss is 50 Cents for Every \$1 Earned

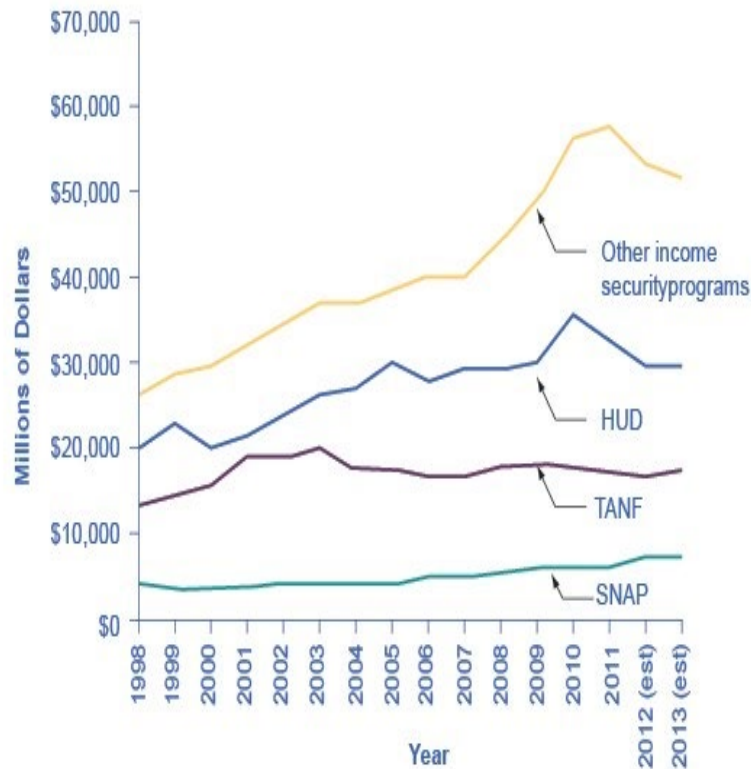


- Same income floor, but lower benefit loss to 50%
- Now a recipient could choose a point on the new budget set like S, with less work, more leisure, and greater income.
- Or a point like R, with the same work and greater income.
- Or even a point to the left of R that involves more work and income.

15.3 The Safety Net

- **Near-poor** - those who have incomes just above the poverty line.
- **Safety-net** - the group of government programs that provide assistance to the poor and the near-poor.
 - **Temporary Assistance for Needy Families (TANF)**
 - **The Earned Income Tax Credit (EITC)** - a method of assisting the working poor through the tax system.
 - **Supplemental Nutrition Assistance Program (SNAP)** - federally funded program in which each month poor people receive a card that they can use to buy food. (“Food stamps”.)

Expenditure Comparison of TANF, SNAP, HUD, and Other Income Security Programs, 1988–2013 (est.)



(Source: Table 12.3 Section 600 Income Security, <http://www.whitehouse.gov/sites/default/files/omb/budget/fy2013/assets/hist.pdf>)

- Total expenditures on income security continued to rise between 1988 and 2010.
- Payments for TANF have increased from \$13 billion in 1998 to an estimated \$17.3 billion in 2013. SNAP has seen relatively small increments.
- These two programs comprise a relatively small portion of the estimated \$106 billion dedicated to income security in 2013.
- Note that other programs and housing programs increased dramatically during the 2008 and 2010 time periods.

Housing First History: Hospitality Houses



Source: [Wikimedia](#)

During the Great Depression, Dorothy Day's Catholic Worker Movement (CWM) was concerned with the plight of the homeless. In 1933, the CWM opened the first House of Hospitality for women in New York.

It could accommodate fifteen women, and it had heating and hot water.

“The rent was paid by contributions from working girls in the parish of the Immaculate Conception Church, girls who themselves lived in cold water flats.”

Housing First

Premise: housing is a basic human right, and so should not be denied to anyone, even if they are abusing alcohol or other substances.

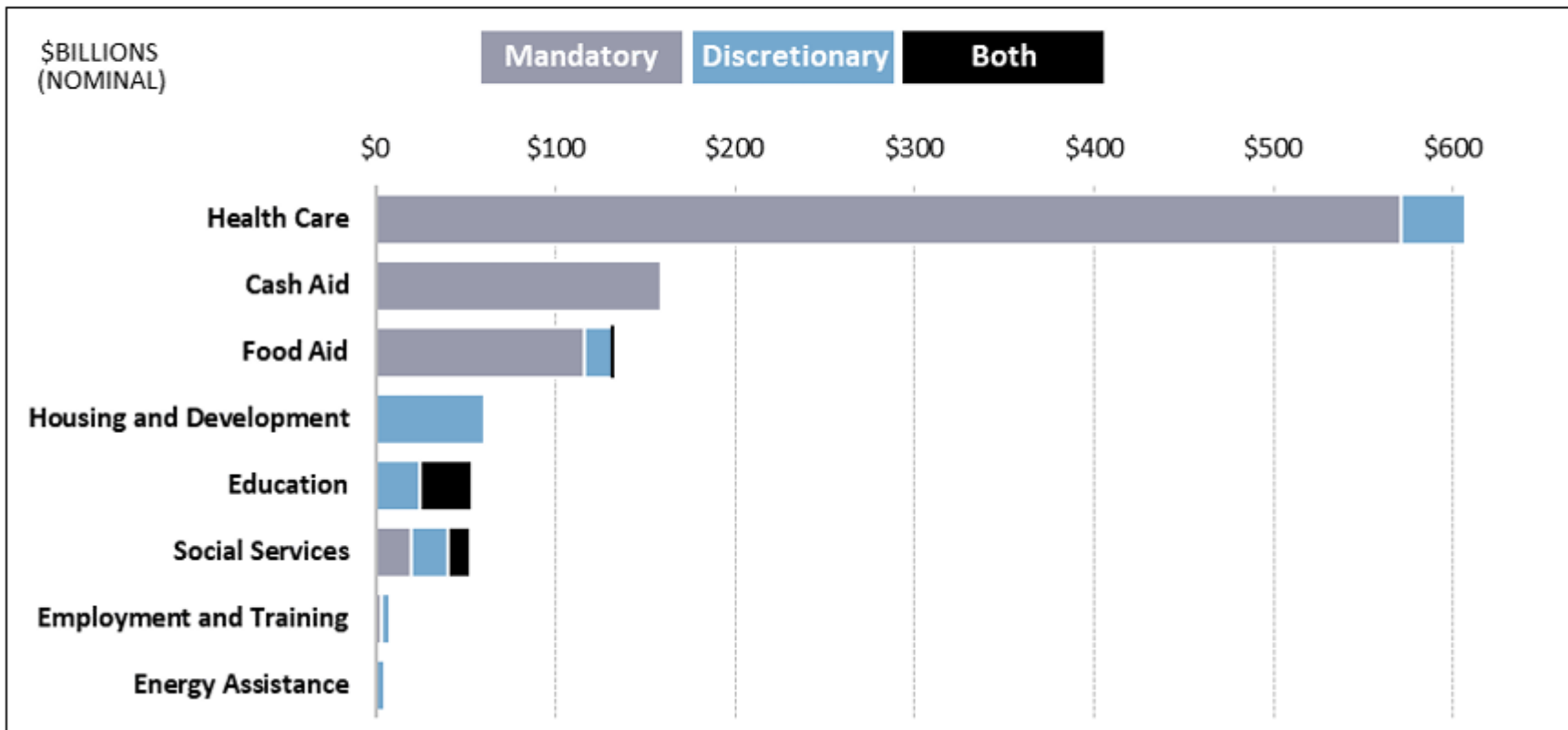
Housing First, when supported by the United States Department of Housing and Urban Development (HUD), includes wraparound case management services to the tenants to foster accountability and stability.

The housing provided through government supported Housing First programs is permanent and "affordable" (tenants pay 30% of their income towards rent).

Housing First is supported through two HUD programs:
the Supportive Housing Program, and the Shelter Plus Care Program.

Medical Care is Most of Federal Aid to Low Income Families

Figure 3. Federal Spending on Benefits and Services for People with Low Income, by Budget Classification, FY2020



Source: <https://crsreports.congress.gov/product/pdf/R/R46986>

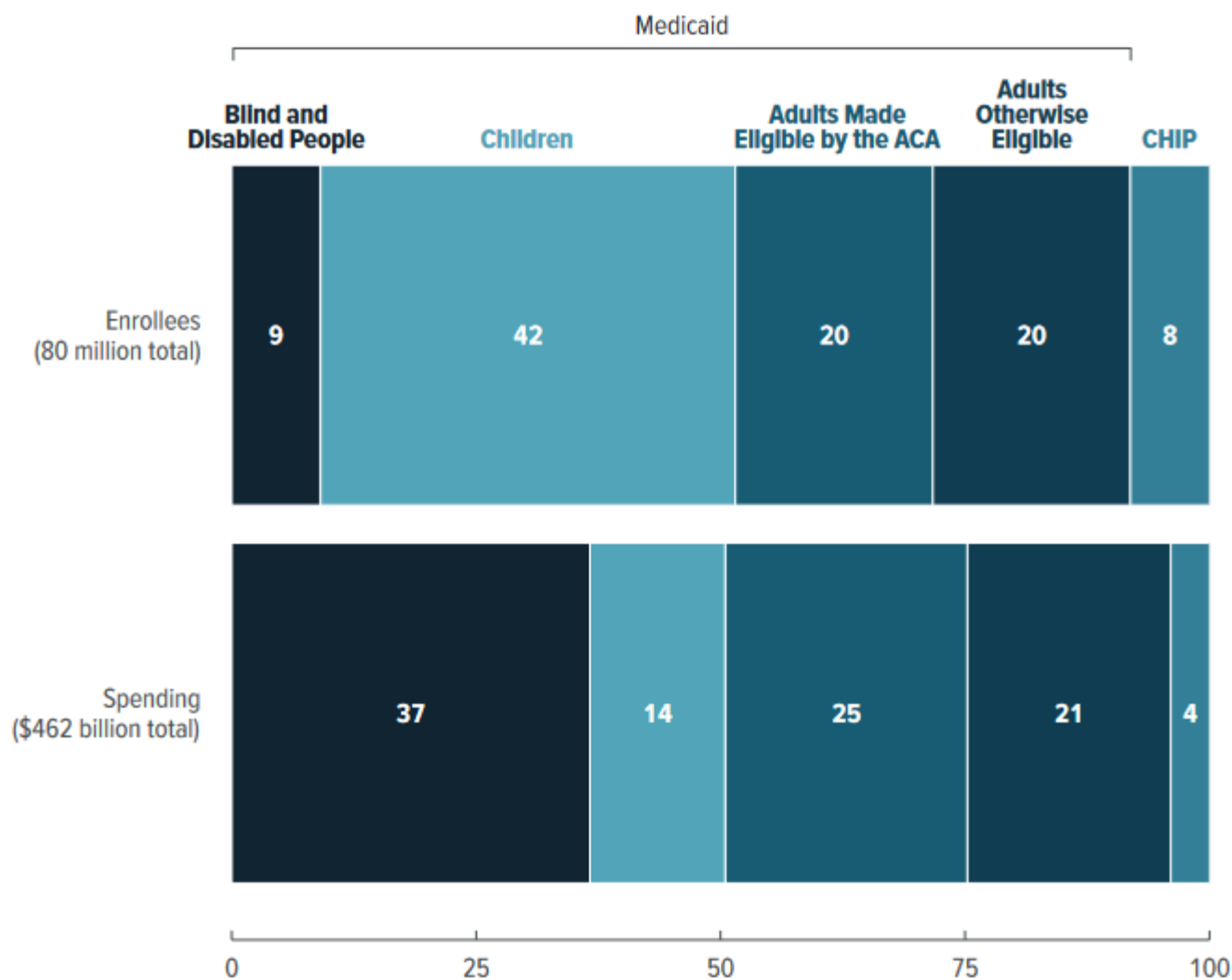
Medicaid

- A joint health insurance program between states and the federal government.
- Provides medical insurance for certain low- income people, with a focus on families with children, the elderly, and the disabled.
- Includes the near-poor as well as those below the poverty line.

Medicaid Enrollment and Spending

Enrollment in and Spending for Medicaid and CHIP, by Eligibility Category, 2022

Percentage of Total



15.4 Income Inequality

Income inequality: measured by comparing the shares of a nation's total income that comparable groups receive.

For example, compare the share of income that the top 10% receive to the share of income that the bottom 10% receive.

Occupy Wall Street



Credit: modification of work by David Shankbone/Flickr Creative Commons

On September 17, 2011, *Occupy Wall Street* began in New York City's Wall Street financial district to protest income inequality.

Distribution of Income between Labor and Capital

Capital income is income from the use of fixed assets (e.g., property, plant, and equipment). The capital share is capital income as a proportion of total income (or output).

The rest is the labor share.

$$\text{Labor share} = \frac{\text{Employee compensation} + \text{Proprietors' labor compensation}}{\text{Output}}.$$

Most of labor compensation is employee compensation.

Labor compensation (you don't need to know these details):

Wages and salaries

Commissions

Tips

Bonuses

Severance payments and early retirement buyout payments

Regular supplementary allowances, such as housing allowances

The exercising of nonqualified stock options

In-kind earnings such as transit subsidies, meals, and lodging

Employer contributions to employee pension and insurance funds and to government social insurance

(Source: [Estimating the U.S. labor share : Monthly Labor Review: U.S. Bureau of Labor Statistics \(bls.gov\)](https://www.bls.gov/news.release/laborshare.htm))

Declining Labor Share of National Income

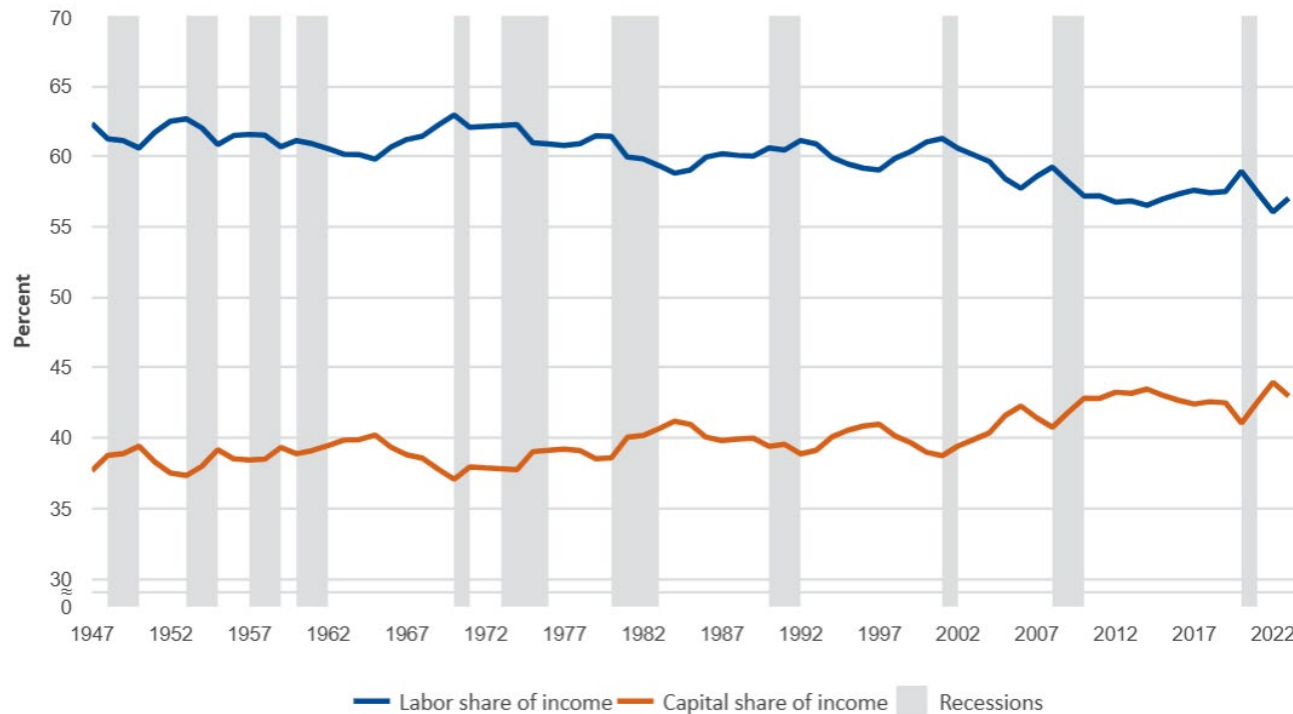


Image Source: BEA (<https://apps.bea.gov/well-being/>)

Data: BEA NIPA table 1.10

Labor's share reached 63 percent in 1970 and has generally declined since. In 2023 stood at 57 percent.

Capital's share of income increased from 37 percent in 1970 to 43 percent in 2023.

15.4 Income Inequality: Measurement and Causes

- Income inequality involves comparing those with high incomes, middle incomes, and low incomes - not just looking at those below or near the poverty line.
- **Quintiles:** dividing a sorted group into fifths,
 - often used to look at distribution of income.
- **Lorenz curve:**
 - compares the **cumulative** income received to a perfectly equal distribution of income.
 - shows the **cumulative** share of population on the horizontal axis and the **cumulative** percentage of total income received on the vertical axis.

The Lorenz Curve



- A Lorenz curve graphs the **cumulative** share of income received by everyone up to a certain population quintile.
- From 1980 to 2011, the Lorenz curve bowed further away from the perfect equality line.
 - This means the U.S. income distribution became more unequal over this time.

Recent Lorenz Curve (Optional Data Exercise)

1. Get income shares by population quintile from Census Table A.3
<https://www.census.gov/topics/income-poverty/data/tables.html>
2. Compute cumulative population proportions and cumulative income shares.
3. Plot cumulative income shares against cumulative population proportions. (Include the origin: $\langle 0,0 \rangle$.)

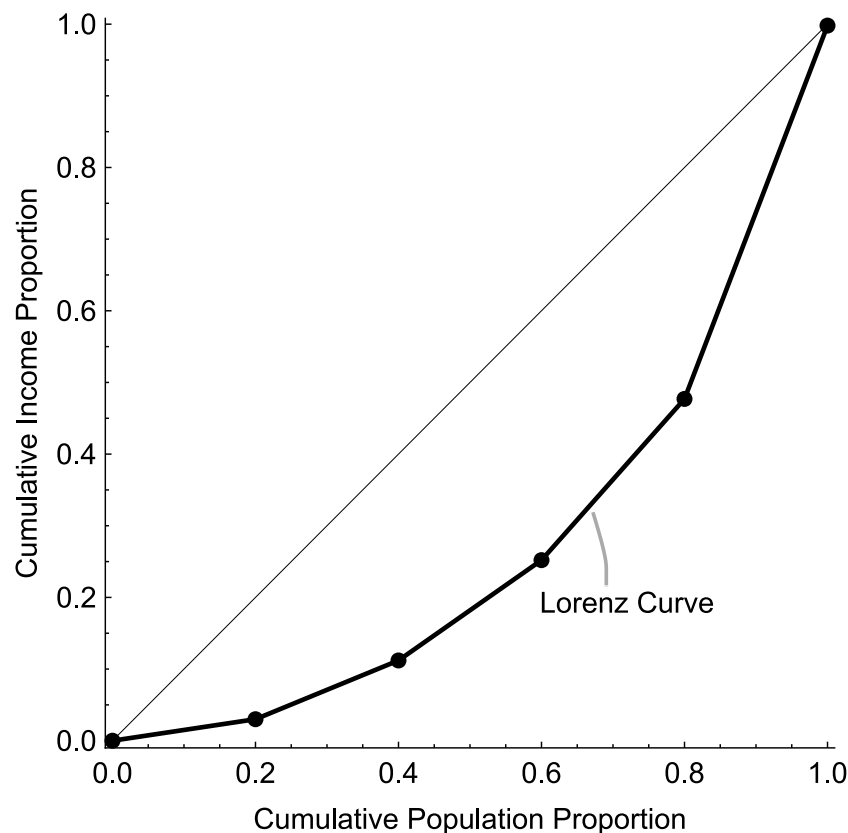
Illustration

Raw data 2022 (quintile shares *as pct*): 3.0, 8.2, 14.0, 22.5, 52.1

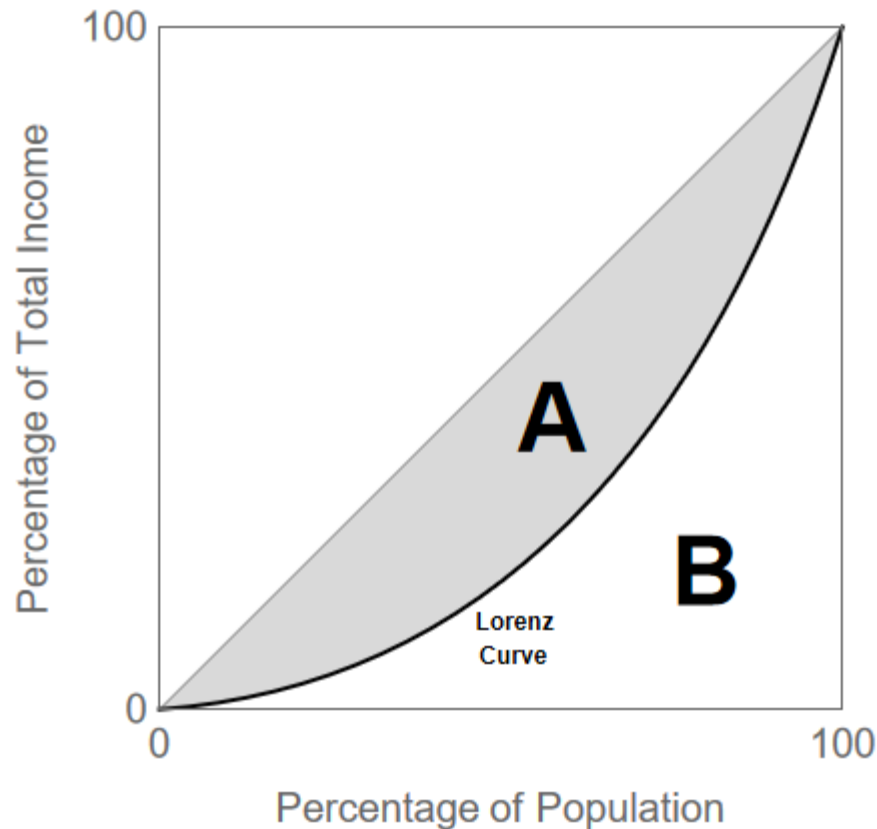
Compute cumulative *proportions*: 0.030, 0.112, 0.252, 0.477, 0.998

(note: slight rounding error; the last should be 1.0)

Plot cumulative proportions vs cumulative population proportions (starting at 0).



Gini Coefficient



Gini Coefficient of Inequality:

- a summary measure of inequality, based on the Lorenz Curve.
- Calculate the Gini as $A/(A+B)$

US Income Inequality



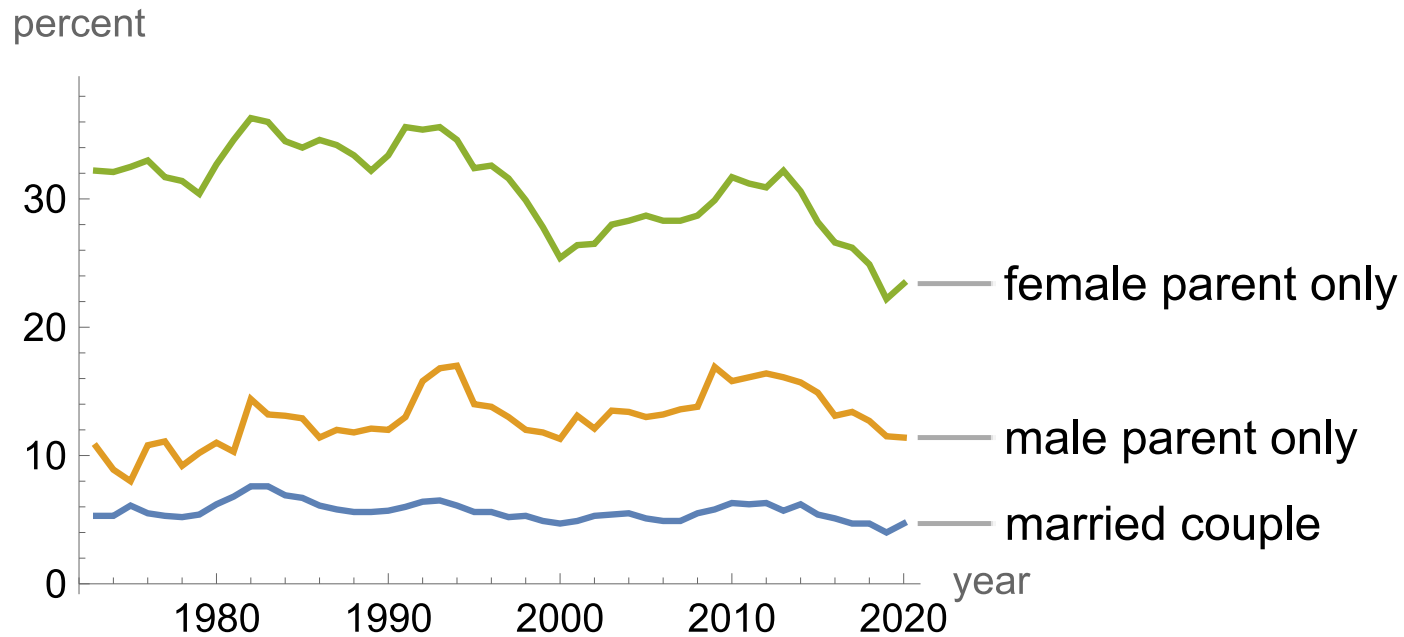
Created 2024-05-25 by Alan G. Isaac
Data Source: FRED Series SIPOVGINIUSA

Inequality has drifted upwards since the early 1980s.

Causes of Growing Inequality: Changing Households Composition

- Assortative mating: (one high earner marries another high earner) tends to increase the proportion of high-earning households.
 - pattern of households with two high earners
- The number of single-parent households, usually headed by a single mother, has increased
 - poverty rate of these households tends to be relatively high.

Family Poverty Rates by Family Type



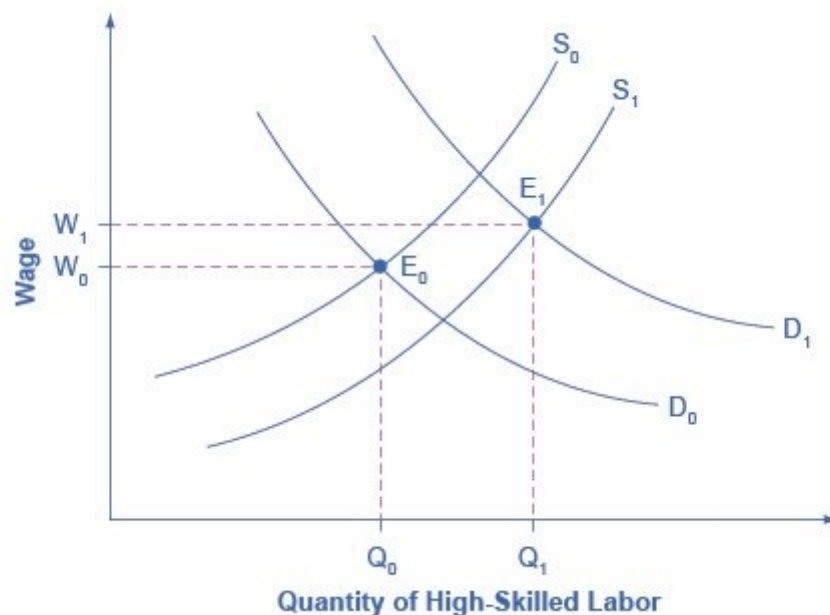
Data Source: Bureau of the Census

- Poverty rates differ dramatically by family structure.
- Divorce often produces a female-headed family in poverty.

Causes of Growing Inequality: Shifts in the Wage Distribution

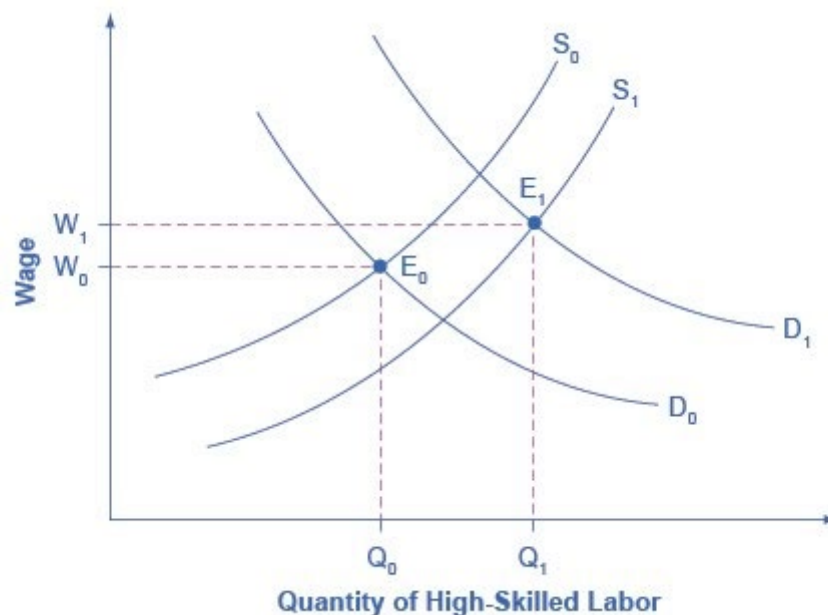
- Winner-take-all labor markets result from changes in technology, which have increased global demand for “stars”.
 - This global demand pushes salaries far above productivity differences versus educational differences.
 - Argues that the salary gap between the median and the top earners is not due to educational differences.

Why Would Wages Rise for High-Skilled Labor?



- Earnings of high-skilled relative to low-skilled labor increased.
- Puzzle: The proportion of workers attending college has increased in recent decades, so the supply curve for high-skilled labor has shifted from S_0 to S_1 . So why did their wages increase?
- Resolution: demand shifted.
 - If high-skilled demand had remained at D_0 , then the shift in supply would have lowered wages for high-skilled labor.

Why Would Wages Rise for High-Skilled Labor?, Continued



- However, the wages for high-skilled labor have increased even with the shift in supply to the right.
- The explanation must lie in a shift to the right in demand for high-skilled labor, from D_0 to D_1 .
- The combination of the shift in supply and demand led to both an increase in the quantity of high-skilled labor hired and also to a rise in the wage for such labor, from W_0 to W_1 .

15.5 Government Policies to Reduce Income Inequality

- If a society decides to reduce the level of economic inequality, it has 3 main sets of tools:
 - Redistribution from those with high incomes to those with low incomes.
 - Trying to assure that a ladder of opportunity is widely available.
 - A tax on inheritance and estates.
- **Income** - a flow of money received, often measured on a monthly or an annual basis.
- **Wealth** - the sum of the value of all assets, including money in bank accounts, financial investments, a pension fund, and the value of a home.

Income Redistribution

- **Income Redistribution** - taking income from those with higher incomes and providing income to those with lower incomes.
- **Progressive tax system** - a tax system in which the rich pay a higher percentage of their income in taxes, rather than a higher absolute amount.
- **Effective income tax** - total taxes paid divided by total income.

Building a Ladder of Opportunity

Ladder of Opportunity:

Although children never come from identical families or attend identical schools, society can ensure that each child has a reasonable opportunity to earn a living and flourish.

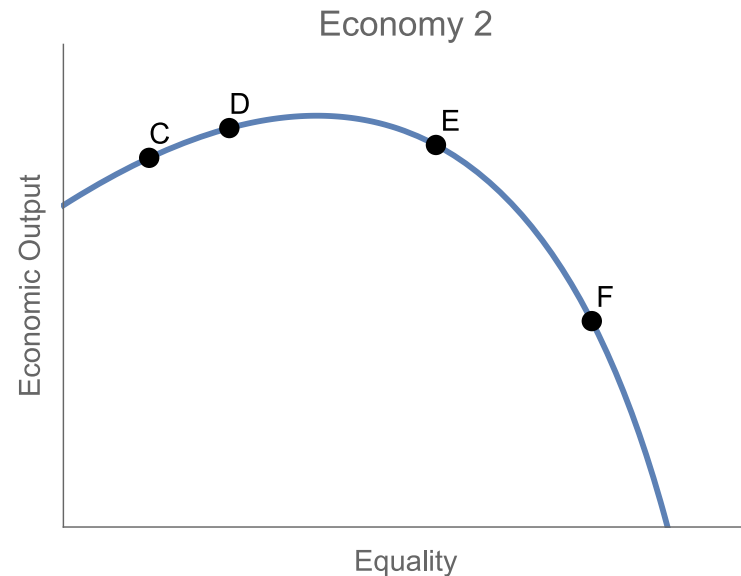
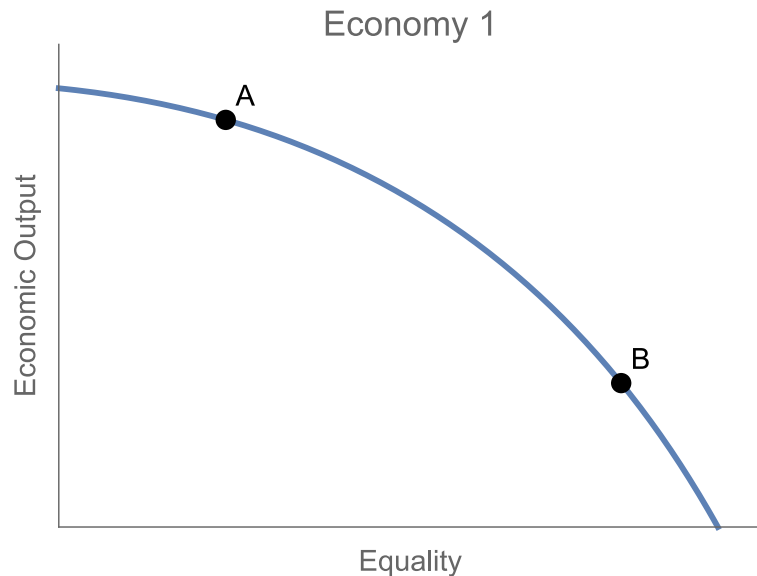
Examples of Ladder of Opportunity public policy:

- Improve day care
- Fund enrichment programs for preschoolers
- Improve public schools
- Provide college loans and grants for those in financial need
- Subsidize opportunities for retraining and acquiring new skills
- Prohibit discrimination in job markets and housing

Inheritance and Estate Taxes

- **Inheritance tax:** imposed on amount *inherited*
 - there is no federal inheritance tax
- **Estate tax:** a tax imposed on the value of an *estate*.
 - Applies to a few high-wealth households
 - Federal tax applies only to those leaving inheritances of more \$13.6 million as of 2024

Tradeoff: Incentives vs Economic Equality



- In Economy 1, movement toward greater equality, like moving from choice A to B, always reduces economic output.
- In Economy 2, at points like C, it is possible both to increase equality and to increase economic output, e.g. move to D.
- In Economy 2, moving from D to E increases equality with little impact on economic output.
- However, pushing for additional equality reduces economic output, as in the movement from E to F.

END