

Inequality and Redistribution

Topic 8

Learning Objectives

- Learn where differences in income and wealth originate.
- Develop a measure of income inequality – the Gini Coefficient – using the Lorenz Curve.
- Define the concept of poverty and poverty thresholds.
- Identify arguments for and against Redistribution.
- Analyze redistribution policies.

Revision

- Three Fundamental Economic Questions address how society uses its scarce productive resources.
 - Production decision: What to produce?
 - Resource decision: How to produce?
 - Distributional decision: For whom to produce?
- The Circular Flow Diagram
 - Households:
supply factors of production, earn income, and buy goods and services
 - Firms:
produce goods and services, earn revenues, and pay wages

Income Inequality

- Nancy
 - A real estate agent
 - Earns \$40,000 a year
 - Owns a Honda Civic, two-bedroom apartment
 - Goes on a vacation to Orlando, FL
- Michelle
 - An architect
 - Earns \$80,000 a year
 - Owns a Mercedes, four-bedroom house
 - Goes scuba diving in Australia for two weeks
- Leo
 - A janitor
 - Earns \$20,000 a year
 - Cannot afford a car, lives in a studio apartment
 - Does not get to travel outside the state

Where Differences Come From

- In a free market based system
 - A household's capacity to consume goods and services is limited by its access to money
 - A household's access to money is in turn limited by its wealth and income
- Wealth and income depend upon
 - The results of decisions by individuals
 - The results of socio-economic factors beyond the control of individuals

Determinants of Income

- **Income**: the flow of money earned during a period of time.
- Most households earn the majority of their income by supplying labor to firms
- Among other factors, the wage rate of a worker depends on
 - Natural talent
 - Ability
 - Acquired skills
 - Effort
- **Compensating differentials** refer to the differences in labor market wage rates due to differences in working conditions.

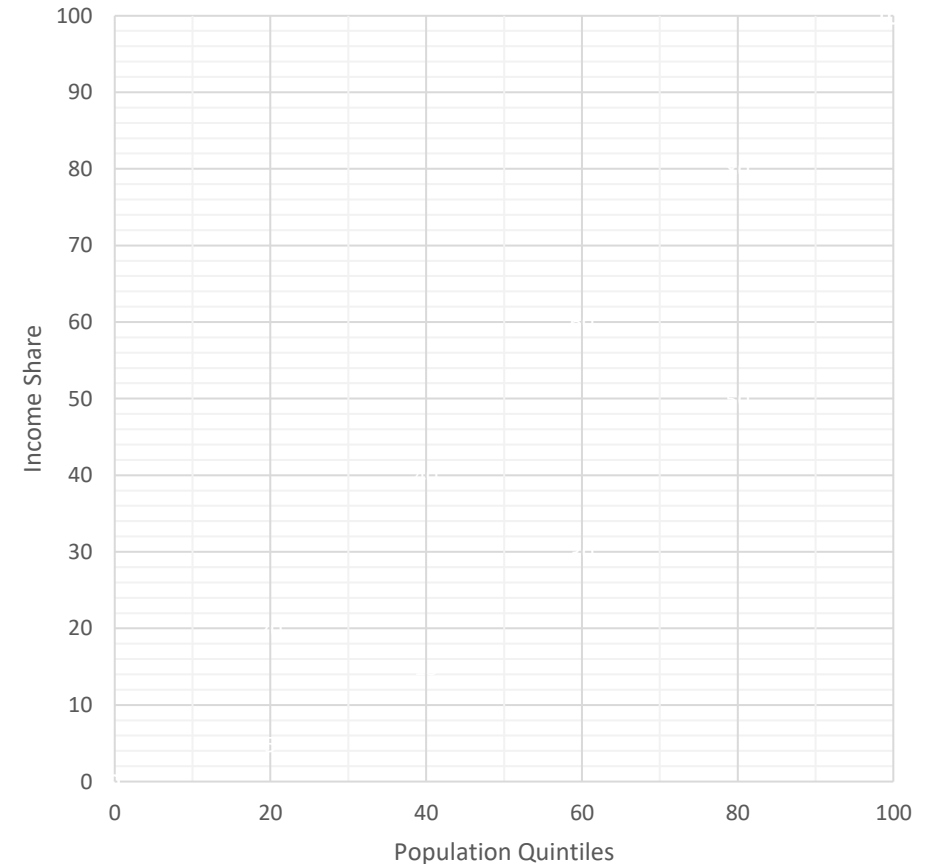
Determinants of Wealth

- **Wealth:** the current stock of valuable assets owned at a point in time
- The amount of wealth depends primarily upon
 - accumulated savings (or debts)
 - previous inheritance

Measuring Income Inequality

- The **Lorenz Curve** plots the relation between the cumulative fraction of the population and their cumulative fraction of total income earned with people ordered from lowest income to highest income.

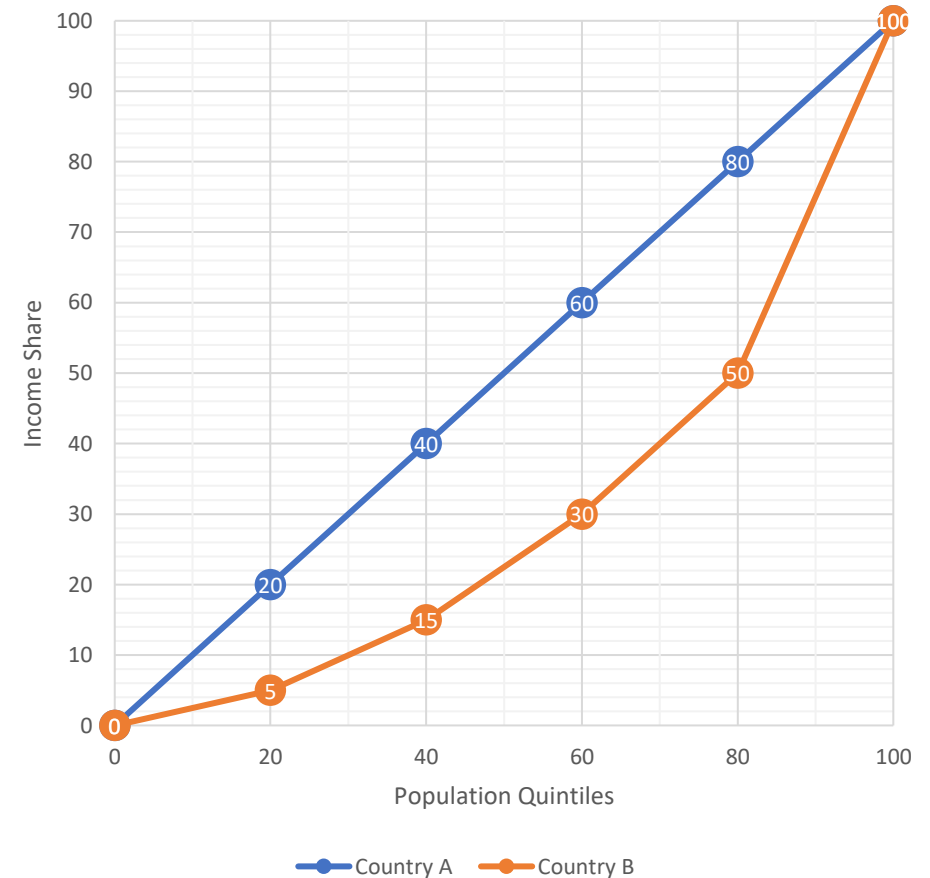
Cumulative Population Quintiles	Country A's Cumulative Income Share	Country B's Cumulative Income Share
20	20	5
40	40	15
60	60	30
80	80	50
100	100	100



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$$\begin{aligned} & \text{GINI Country A} \\ &= \frac{5000 - (200 + 600 + 1000 + 1400 + 1800)}{5000} \\ &= \frac{0}{5000} \\ &= 0.0 \end{aligned}$$

$$\begin{aligned} & \text{GINI Country B} \\ &= \frac{5000 - (50 + 200 + 450 + 800 + 1500)}{5000} \\ &= \frac{2000}{5000} \\ &= 0.4 \end{aligned}$$

Poverty

- **Poverty** is the condition of having very limited access to goods and services
- **Poverty Thresholds** are levels below which the household is deemed to be living in poverty.
 - In the US (Census Bureau, 2019):
 - Under age 65: Annual income below \$13,300 (ca. \$36.50 a day)
 - Aged 65 and older: Annual income below \$12,261 (ca. \$33.50 a day)
 - World Bank:
 - \$1.90 a day – international poverty line
 - \$3.20 a day – lower middle income class poverty line
 - \$5.50 a day – upper middle income class poverty line
- **Poverty Rate** refers to the % of the population living below the poverty line.

Arguments for and against Redistribution

- **Redistribution** refers to policies designed to alter the levels of income of households within a society.
- **Utilitarian Justice** posits that total social welfare can be increased by transferring income/wealth from the rich to the poor, so long as people have diminishing marginal utility for money.
- **Rawlsian Justice** argues that the morally best distribution of society's income is the one which maximizes the well-being of the worst-off members of society.
- **The Labor Theory of Value** argues that the value of a produced good is measured by the amount of labor used to produce the good and therefore the rightful amount which should accrue to workers is the full surplus.
- **Overcoming the Free Rider Problem** with government mandated redistribution.

Arguments for and against Redistribution

- Redistributive policies to reduce income inequality lower the cost of having a low income and lower the benefits of having a high income and may lead to **disincentive effects**.
 - Individuals have little incentive to work or invest in their human capital.
 - Individuals remain stuck in the poverty trap.
- **Libertarian Justice** holds that a society should establish institutions and rules which create equality of opportunity and then allow individuals to pursue their own self-interest. Any income distribution resulting from equal opportunity is fair.

Redistribution Policies

- **In-kind Transfer** refers to a transfer of goods and services to someone which directly increases their consumption of that good and/or service.
- **Income Support (Cash Transfer)** refers to a transfer of money to someone which indirectly increases their consumption.
- **Negative Income Tax** refers to a tax structure under which taxpayers with incomes below a certain threshold receive a transfer payment from the government instead of having to pay taxes to the government.
- **Guaranteed Minimum Income** refers to a program which would provide each person in a society with a large lump-sum payment every period (in place of all other welfare benefits)

Summary

- Income Inequality can be measured by the GINI coefficient using the Lorenz curve.
- Poverty is a relative concept.
- Utilitarian and Rawlsian Justice and the Labor Theory of Value argue for redistribution, disincentive effects and libertarian justice offer arguments against redistribution.
- Cash transfers are more effective than In-kind transfers
- Guaranteed Minimum Income may replace all other welfare benefits.