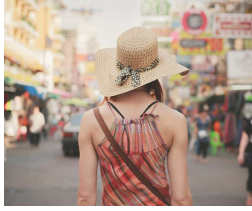## Slide 1

N. GREGORY MANKIW   NINTH EDITION

PRINCIPLES OF
ECONOMICS

CHAPTER
20

Income Inequality
and Poverty

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Slide 2

IN THIS CHAPTER

- How much inequality and poverty exist in our society?
- What are the problems measuring inequality?
- What are some of the leading philosophies on the proper role of government in altering the distribution of income?
- What policies are used to fight poverty? What are the problems with these policies?

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Slide 3

Review

- Market economies
  - Usually achieve greater prosperity
  - But prosperity is not shared equally
- A person's earnings depend on
  - Supply and demand for that person's labor
  - Natural ability
  - Human capital
  - Compensating differentials
  - Discrimination, and so on

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Slide 4

Income Distribution

- Labor earnings make up about two-thirds of the total income in the U.S. economy
  - The factors that influence wages also largely determine the distribution of the economy's total income
  - Determine who is rich and who is poor
- Resource allocation in free markets
  - Is efficient but not necessarily fair
- The government
  - Should redistribute income for greater equality

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Slide 5

Measuring Inequality

- Four questions of measurement:
  - How much inequality is there in our society?
  - How many people live in poverty?
  - What problems arise in measuring the amount of inequality?
  - How often do people move between income classes?

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Slide 6

The U.S. Income distribution: 2017

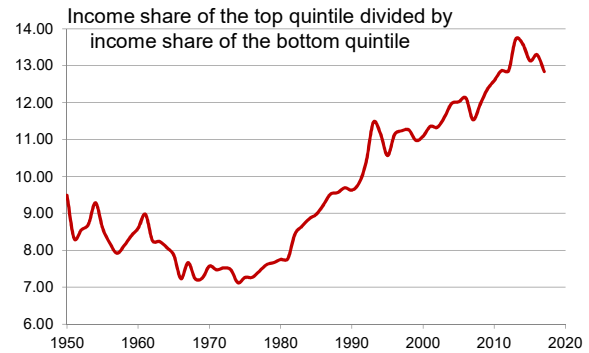| Group	Annual household income
Bottom quintile	Under $24,827
Second quintile	$24,827 – $47,218
Middle quintile	$47,218 – $77,158
Fourth quintile	$77,158 – $126,605
Top quintile	$126,605 and over
Top 5 percent	$244,088 and over

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Inequality Measure

- Inequality measure: *quintile ratio*
  - Income received by the richest quintile of the population divided by the income of the poorest quintile
- Degree of inequality
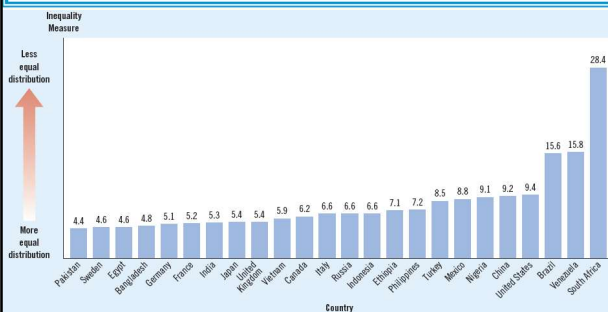 - Varies substantially over time
  - Varies substantially around the world

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U.S. income inequality, 1950–2017

Income share of the top quintile divided by income share of the bottom quintile

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Inequality around the world, 2018

Income share of the top quintile divided by income share of the bottom quintile

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Poverty

- Poverty rate
  - Percentage of the population whose family income falls below an absolute level (poverty line)
- Poverty line
  - Set by the federal government (three times cost of providing an adequate diet)
    - Depends on family size
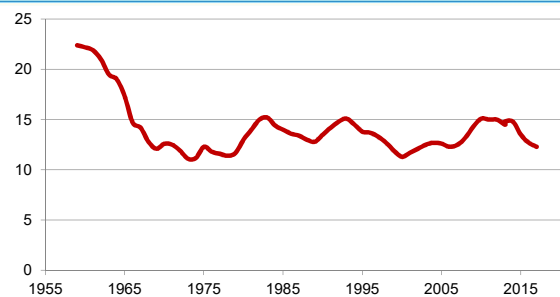   - Adjusted every year to account for changes in the level of prices

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Poverty in the U.S.

- In 2017 in the U.S.,
  - Median family income = $75,938
  - Poverty line for family of four = $24,858
  - Poverty rate = 12.3%
  - 39.7 million people living in poverty

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U.S. Poverty over time, 1959-2017

Percent of the population below poverty line

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2

Who Is Poor?

- Poverty is correlated with race:
  - Blacks and Hispanics are more than twice as likely to live in poverty as whites
- Poverty is correlated with age:
  - Children are more likely than average to be members of poor families
  - Elderly are less likely than average to be poor
- Poverty is correlated with family composition
  - Families headed by a single mother are about five times as likely to live in poverty as families headed by a married couple

U.S. Poverty rate by group, 2017

Group	Poverty Rate
All persons	12.3%
White, not Hispanic	8.7
Black	21.2
Hispanic	18.3
Asian	10.0
Children (under age 18)	17.5
Elderly	9.2
Married-couple families	4.9
Female household, no husband present	25.7

Problems in Measuring Inequality – 1

- Data on income distribution & poverty rate
  - Give us some idea about the degree of inequality in our society
  - Based on annual incomes families earn
  - Incomplete picture of inequality
1. In-kind transfers and tax credits
   - Transfers to the poor in the form of goods and services rather than cash
   - Tax credits aimed at helping the poor

Problems in Measuring Inequality – 2

2. The economic life cycle
   - Causes inequality in the distribution of annual income
   - May not represent true inequality in living standards
   - Life cycle: regular pattern of income variation over a person's life
   - People can borrow and save to offset life-cycle changes in income (e.g., saving for retirement).

Problems in Measuring Inequality – 3

3. Transitory vs. permanent income
   - Transitory changes - need not affect standard of living
   - A family's ability to buy goods and services depends largely on its permanent income
   - Permanent income: a person's normal income

Economic Mobility

- Economic mobility
  - Many people move among income classes
  - Some reflects transitory variation in income, others more persistent changes in income
  - Many of those below the poverty line are there only temporarily
    - Temporary poverty is more common than the poverty rate suggests, but persistent poverty is less common
  - Persistence of economic success from generation to generation

Political Philosophy

What should the government do about economic inequality?

- Political philosophies of redistributing income
  - Utilitarianism
  - Liberalism
  - Libertarianism

Utilitarianism – 1

- Utility:
  - A measure of happiness or satisfaction
- Utilitarianism:
  - Government should choose policies to maximize society's total utility
- Diminishing marginal utility
  - As a person's income rises, the extra well-being derived from an additional dollar of income falls

Utilitarianism – 2

- Because of diminishing marginal utility
  - Redistributing income from rich to poor increases utility of the poor more than it reduces utility of the rich.
- Yet, utilitarians do not advocate equalizing incomes
  - Would reduce total income of everyone due to incentive effects and efficiency losses.

Liberalism – 1

- Liberalism:
  - Government should choose policies deemed to be just by an impartial observer behind a "veil of ignorance."
- Maximin criterion:
  - Government should aim to maximize the well-being of society's worst-off person

Liberalism – 2

- Liberalism:
  - Calls for more redistribution than utilitarianism (though still not complete equalization of incomes).
  - Income redistribution is a form of <u>social insurance</u>, a government policy aimed at protecting people against the risk of adverse events.

Libertarianism

- Libertarianism:
  - Government should punish crimes and enforce voluntary agreements but not redistribute income
- Libertarians focus on the process not outcome:
  - Government should enforce individual rights, should try to equalize opportunities.
  - If the income distribution is achieved fairly, government should not interfere, even if unequal

Policies to Reduce Poverty

- Poor families more likely to
  - Experience: homelessness, drug dependence, health problems, teenage pregnancy, illiteracy, unemployment, and low educational attainment.
  - Commit crimes and to be victims of crimes
- Most people believe government should provide a "safety net."
- We now consider a few such policies…

1. Minimum-Wage Laws

- Arguments for:
  - Helps the poor without any cost to government
  - Little impact on employment if demand for unskilled labor is relatively inelastic.
- Arguments against:
  - In the long run, demand for unskilled labor is likely elastic, so minimum wage causes substantial unemployment among the unskilled.
  - Those helped by minimum wage are more likely to be teens from middle-income families than low-income adult workers.

2. Welfare

- Welfare: government programs that supplement the incomes of the needy
  - Temporary Assistance for Needy Families (TANF): assists families with children and no adult able to support the family
  - Supplemental Security Income (SSI): provides assistance to the poor who are sick or disabled

2. Welfare: Critics vs. Proponents

- Critics:
  - Programs create incentives to become "needy"
  - Contributed to the rise of single-parent family
  - However, the severity of such incentive problems is unknown.
- Proponents:
  - Being a poor, single mother on welfare is a difficult existence at best
  - Inflation-adjusted welfare benefits fell as single-parent families increased.

3. Negative Income Tax

- Negative income tax: Universal basic income
  - A tax system that collects revenue from high-income households
  - And gives subsidies to low-income households
- The Earned Income Tax Credit (EITC)
  - Applies only to the working poor
  - It doesn't discourage recipients from working
  - Doesn't help alleviate poverty due to unemployment, sickness, or other inability to work

EXAMPLE 1: Universal Basic Income (UBI)

- Assume the government uses the following formula to compute a family's tax liability:
  Taxes owed = (1/4 of income) – $20,000
- Calculate the tax liability:

Family's earned income	Calculations	Taxes to pay
$160,000	160,000/4 – 20,000 =	$20,000
$80,000	80,000/4 – 20,000 =	$0
$40,000	40,000/4 – 20,000 =	- $10,000
$0	0/4 – 20,000 =	- $20,000

4. In-Kind Transfers

- In-kind transfers: goods or services provided to the needy
  - Examples: homeless shelters, soup kitchens
  - Supplemental Nutrition Assistance Program (SNAP): Gives low-income families a plastic card that can be used to buy food at stores
  - Medicaid, government-provided healthcare for the poor
- An alternative: cash payments
  - People - buy what they most need; but critics argue could be used for drugs, alcohol

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Anti-Poverty Programs & Work Incentives – 1

- Assistance from anti-poverty programs declines as income rises.
  - The result: Poor families face high effective marginal tax rates (exceeding 100% in some cases!).
  - Such policies therefore discourage the poor from escaping poverty on their own.

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Anti-Poverty Programs & Work Incentives – 2

- Reduce the work disincentive of antipoverty programs:
  - Reduce benefits to poor families more gradually as their incomes rise
    - But it greatly increases the cost of programs to combat poverty
  - "Workfare" - system requiring people to accept government jobs while collecting benefits.
  - Provide benefits for only a limited period of time
    - 1996 welfare reform bill: 5-year lifetime limit

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THINK-PAIR-SHARE

Suppose a friend comments to you, "I think welfare recipients are simply lazy. I have a friend who receives Temporary Assistance for Needy Families and when she was offered a part-time job, she turned it down."

A. What happens to a welfare recipient's benefits if they increase their earnings?

B. What is the effective tax rate on their additional income if they were to lose $1 in benefits for each dollar of additional income?

C. How does this system affect a welfare recipient's incentive to work? Are welfare recipients necessarily lazy if they turn down part-time jobs?

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CHAPTER IN A NUTSHELL

- Data on the distribution of income: wide disparity in U.S. society. The richest fifth of families earns more than twelve times as much income as the poorest fifth.
- Important for understanding variation in living standards: in-kind transfers, tax credits, the economic life cycle, transitory income, and economic mobility.
  - When taken into account: economic well-being is more equally distributed than annual income.

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CHAPTER IN A NUTSHELL

- Political philosophers:
  - Utilitarians: choose the distribution of income that maximizes the sum of utility of everyone in society.
  - Liberals: determine the distribution of income as if we were behind a "veil of ignorance" that prevented us from knowing our stations in life.
  - Libertarians: have the government enforce individual rights to ensure a fair process but then would not be concerned about inequality in the resulting distribution of income.

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CHAPTER IN A NUTSHELL

- Various policies aim to help the poor
  - Minimum-wage laws, welfare, negative income taxes, and in-kind transfers.
  - Help alleviate poverty
  - Have unintended side effects: because financial assistance declines as income rises, the poor often face very high effective marginal tax rates, which discourage poor families from escaping poverty on their own.

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Chap 20: Income Inequality and Poverty

- Income Inequality
- Utilitarianism, Liberalism, Libertarianism
- Anti-poverty Policies
  - Minimum-Wages
  - Welfare: TANF, SSI
  - Negative Income Tax: UBI vs. EITC
  - In-kind Transfers: SNAP, Madicaid
- Homework: Mankiw, Ch.20, Problem 3-4, 7-8
  - Challenge Questions (Past Finals): TBA

2020/12/6   Monopolistic Competition   Joseph Tao-yi Wang