Introduction

ECON 499: The Economics of Inequality

Winter 2017

Thinking about inequality: Pen's parade

- Suppose each person's height is proportional to their income (in the US)
- People with 0 income are invisible
- People with the average income are average height (5'10'', 177cm)
- Everyone lines up for a parade, and we sit in one place and watch them walk by at a constant speed
- The entire parade lasts 1 hour

The first people to walk by are invisible

- People with negative incomes from business losses

After 10 minutes, the people are 11 inches (27 cm) tall

- 1/12 of the population earns less than $9,500 per year

Halfway through, the people are 3'4'' (103 cm) tall

- Half the population earn less than $36,000 per year (median income)

After 42 minutes, we finally see people with the average height

- 70% of the population earn less than the average

At 50 minutes, the people are 9 feet tall (277 cm)

At 57 minutes, the people are 28'6'' (871 cm) tall

With 6 seconds left in the parade, the people are 342 feet (104 meters) tall

With 1 second left, people are 480 feet (146 meters) tall

The last few people in the parade are 11,500 feet (3.5 km) tall

- Mt Hood: 11,250 feet

In this class we will try to answer four questions about economic inequality:

1. What is it?
2. What causes it?
3. What are the consequences?
4. How do we reduce it?

1. What is inequality?

"Economic" inequality:

- Income vs wealth
- Individual vs household
- Adults vs children

Other outcomes:

- Race
- Gender
- Health

What do we mean when we say "inequality?"

- We know what "no inequality" looks like
- We (probably) know what "perfect inequality" looks like
- In between, what does it mean for one distribution to have "more inequality" than another?

An example

- Consider an "economy" with five agents, each with a different amount of resources (income, wealth, etc)
- Can we compare distributions?

Example 1

Which distribution has more inequality?

Distribution A:

Obie	Michael	Llewelyn	Rudy	Kitty
2	5	9	20	30

Distribution B:

Obie	Michael	Llewelyn	Rudy	Kitty
2	6	8	20	30

Example 2

Which distribution has more inequality?

Distribution A:

Obie	Michael	Llewelyn	Rudy	Kitty
2	5	9	20	30

Distribution B:

Obie	Michael	Llewelyn	Rudy	Kitty
2	6	9	19	30

Example 3

Which distribution has more inequality?

Distribution A:

Obie	Michael	Llewelyn	Rudy	Kitty
10	10	10	10	30

Distribution B:

Obie	Michael	Llewelyn	Rudy	Kitty
10	10	10	20	20

2. What causes inequality?

On one side:

- Immigration
- Unnecessary regulations
- Welfare discourages work
- Excessive taxation
- Obamacare

On the other side:

- Barriers to education
- Corrupt executives
- Taxes too low for the wealthy
- Technology and automation
- Access to health care

3. What are the consequences of inequality?

- Is inequality bad for the economy?
- What does it mean for something to be "bad for the economy?"
- How do economists think about the well-being of a society?

Do we care about inequality?

The LeBron James parable (Robert Nozick, *Anarchy, State, and Utopia*, 1974):

- Suppose resources are equally distributed among everyone in the economy
- Now suppose that one of the people in our economy is LeBron James
- Lebron decides that he will only play basketball if everyone that comes to see him pays $1
- If 1 million people pay to see Lebron, then he has $1 million more than everyone else
- If people choose to watch LeBron, then is there any injustice? Is LeBron entitled to keep his extra money?

- These philosophical issues are largely beyond the scope of this course
- These issues are largely beyond the scope of economics!
- We will need to be careful whenever we use terms like "better" or "worse."

4. How do we reduce inequality?

- Minimum wage?
- Basic income?
- Cash assistance?
- Education?
- Taxation?

The Lorenz Curve

- A way to graphically represent an income distribution
- Plot the percentage of the population against their cumulative income share

How to calculate:

- Collect N incomes into a vector x, arranged from lowest to highest
- Calculate the cumulative income for each x_i ($i = 1, 2, ..., N$)
- Divide this by the total income (this give the cumulative income share)
- Plot against x_i's percentile