Visualization: Motivating a question

UCLA Soc 114

An argument that it does:

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1. unequal rewards motivate work and innovation

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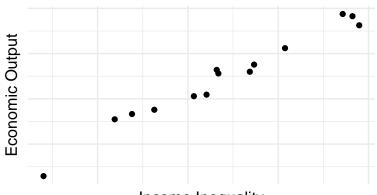
- 1. unequal rewards motivate work and innovation
- 2. work and innovation make everyone better off

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- 1. unequal rewards motivate work and innovation
- 2. work and innovation make everyone better off

What kind of data might support (or contradict) this argument?

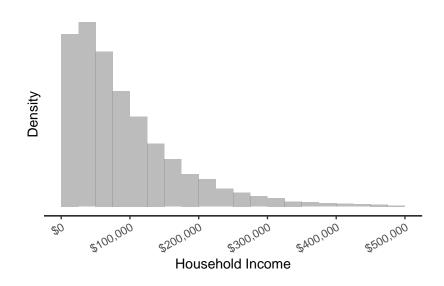
Each dot is a country (hypothetical data)



Income Inequality

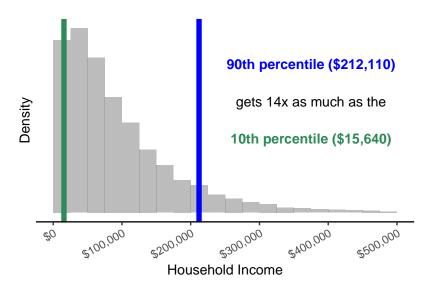
Defining concepts: Income inequality

2022 Annual Social and Economic Supplement to the Current Population Survey (U.S. households)



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$$90/10$$
 income ratio = $\frac{90 \text{th percentile}}{10 \text{th percentile}} = \frac{212,110}{15,640} = 13.6$

Defining concepts: Economic productivity

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Gross Domestic Product Per Capita

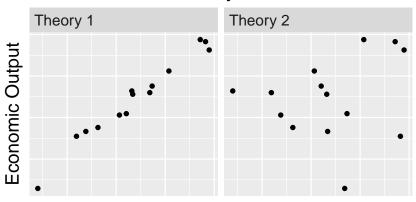
= (Total Economic Production) / (Number of People)

Two theories: Two possible graphs

Theory 1)
Countries with more inequality have more economic output
Theory 2)
Inequality and economic output are unrelated

Two theories: Two possible graphs

Each dot is a country



Income Inequality

Real data: Jencks 2002 Table 1

```
table1 <- read_csv(
   "https://soc114.github.io/data/jencks_table1.csv"
)</pre>
```

Real data: Jencks 2002 Table 1

| # A tibble: 14 | x 4 | | |
|----------------|-------------|-------------|-----------------|
| country | ratio | gdp | life_expectancy |
| <chr></chr> | <dbl></dbl> | <dbl></dbl> | <dbl></dbl> |
| 1 Sweden | 2.6 | 0.68 | 78.9 |
| 2 Finland | 2.7 | 0.68 | 76.6 |
| 3 Norway | 2.8 | 0.85 | 77.8 |
| 4 Denmark | 2.9 | 0.79 | 75.4 |
| 5 Netherlands | 3.2 | 0.75 | 77.5 |
| 6 Germany | 3.2 | 0.71 | 76.6 |
| 7 Belgium | 3.2 | 0.74 | 76.4 |
| 8 France | 3.5 | 0.66 | 78.4 |
| 9 Switzerland | 3.6 | 0.84 | 78.5 |
| 10 Italy | 4.8 | 0.67 | 77.6 |
| 11 Canada | 4 | 0.78 | 78.2 |
| 12 Australia | 4.3 | 0.75 | 78 |
| 13 UK | 4.6 | 0.67 | 77 |
| 14 US | 5.6 | 1 | 75.7 |