

# Measuring Unfair Inequality: Reconciling Equality of Opportunity and Freedom from Poverty

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September 2020

# Contributions

- Provide normative measure of inequality, we can safely call 'bad' (or unfair)
- Measure 'bad inequality' in US over time and across countries

# My discussion

- Measuring unfair inequality in a toy distribution
- Measuring unfair inequality in US data
- Is a single measure useful?

# Unfair Inequality

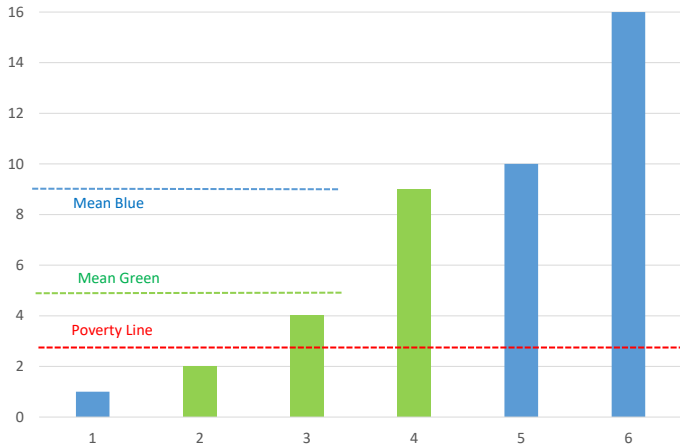
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- Need:
  - ▶ A notion of fair income distribution
  - ▶ A notion of distance

# Unfair Inequality

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Consider a toy distribution with 6 people and two colored groups determined at birth

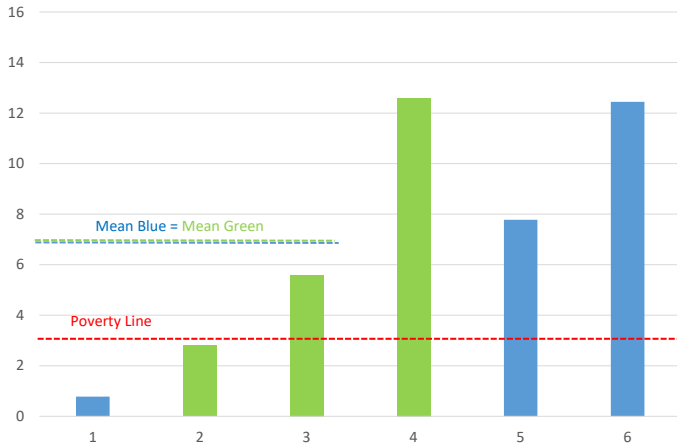
# What's fair?



Two dimension of unfairness:

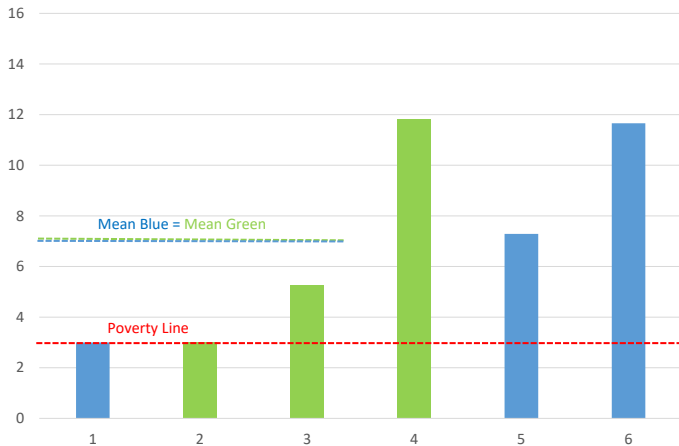
- Persons (1 and 2) below the poverty line (violates FfP)
- Inequality between green and blue groups (violates EOp)

# Restoring EoP



- Equalize income across (but not within) groups

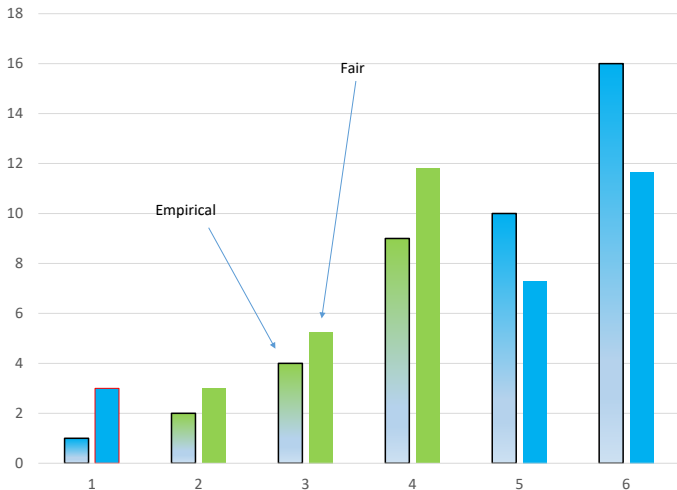
# Restoring FfP



- Bring up to the poverty line those below it

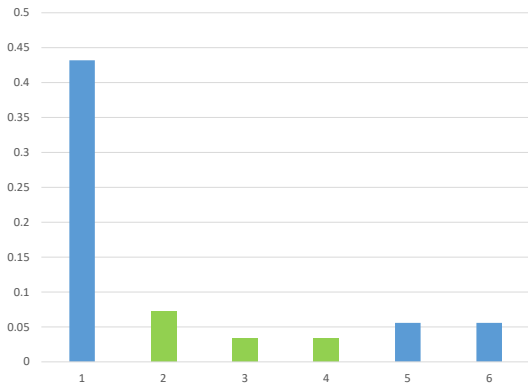


# Comparing Empirical and Fair



- Inequality in fair distribution lower than data, still far from 0

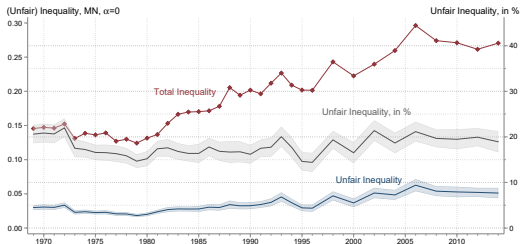
## Unfair: Distance between Empirical and Fair



- $$\frac{1}{N} \sum_i \log\left(\frac{y_i^{Fair}}{y_i^{Data}}\right) - \frac{y_i^{Fair} - y_i^{Data}}{y_i^{Fair}}$$

- Distance (unfairness) large when  $y_i^{Data}$  is low
- Unfair inequality affected by poverty

# Total and Unfair Inequality in US, 1969-2014



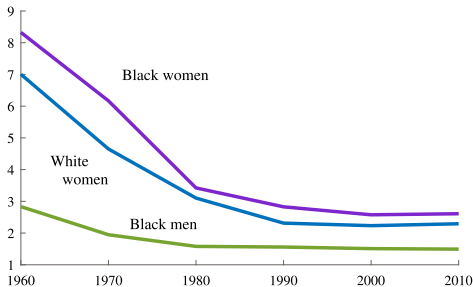
- Unfair inequality increases, but much less than total
- Most notable increase in unfair inequality due to increase in group income of people with educated and rich parents
- Hardest issue is to define what is pre-determined and what is not!
- Two changes in the analysis, might change the findings in opposite directions

## Why might unfair inequality be higher and growing faster?

- Part of increase in inequality (especially at the top) is driven by: higher pay for higher education, for executive positions (CEO, manager), and in some cities (SFO,NY)
- Possibly the ability of getting higher education, an executive position and living in a given city are in part pre-determined so these groups might be included in constructing unfair inequality
- Including those groups might yield **higher** and **faster growing** unfair inequality
- Worth exploring, as a sensitivity exercise

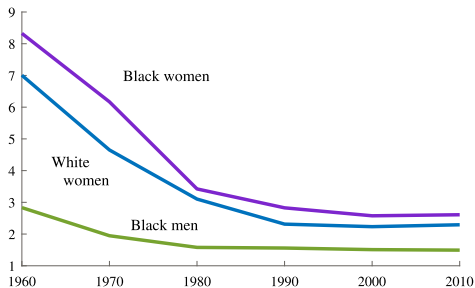
## Can unfair inequality be growing slower (or declining)?

- Evidence from Hsieh et al (2019) suggests for some groups large decline in entry barriers in high pay profession "In 1960, 94 percent of doctors and lawyers were white men. By 2010, the fraction was just 62 percent."



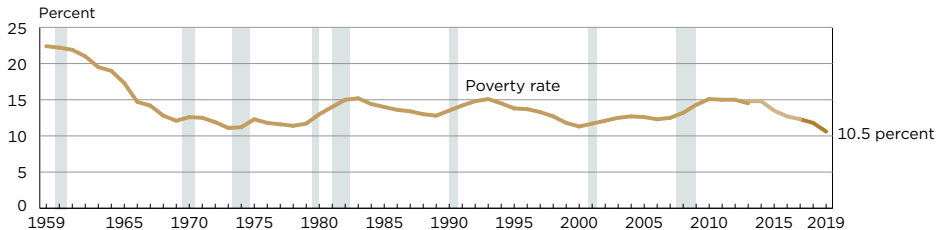
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- Surprisingly declining race barriers do not show up in declining unfair inequality due to race (fig 2)!
- Declining gender barriers do not show up either: maybe because use households (as opposed to individual) income. It might be worth to experiment with measures of inequality more individual based
- Missing the early 60s

# Poverty Rates in US



Source: Census 2020

- During the early 60s largest decline in poverty and entry barriers

## Concluding thoughts

- Very interesting paper
- Intriguing new/more normative measure of inequality and some really important findings (i.e. increasing importance of family of origin in shaping income distributions)
- A general issue (which I always stress when teaching) is that inequality is about distributions and it is hard to capture its dynamics with a single number
- Unfair inequality tries to capture all unfairness in a single number; still I find more valuable to analyze separately the source of unfairness!