Global Firm Dynamic, Productivity, (Mis)Allocations

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Using the IPUMS Census / ACS Data

Friday, August 27, 2021
Outline

• **Part I:** Some Results
  - The Allocation of Talent and U.S. Economic Growth
  - Race and Economic Well-Being in the United States

• **Part II:** Matlab and the IPUMS Census/ACS Files
  - Reading the data
  - Matlab code
The Allocation of Talent and U.S. Economic Growth

Econometrica 2019 with Hsieh, Hurst, and Klenow
Big changes in the occupational distribution

White Men in 1960:

94% of Doctors, 96% of Lawyers, and 86% of Managers

White Men in 2008:

63% of doctors, 61% of lawyers, and 57% of managers

Sandra Day O’Connor, Ruth Bader Ginsberg, David Blackwell (contraction mapping fame)
High-skill occupations are lawyers, doctors, engineers, scientists, architects, mathematicians and executives/managers.
Our question

Suppose distribution of talent for each occupation is identical for whites, blacks, men and women.

Then:

- Misallocation of talent in both 1960 and 2010.
- But less misallocation in 2010 than in 1960.

*How much of productivity growth between 1960 and 2010 was due to the better allocation of talent?*
Wage Gaps and Relative Propensities (Young Women in 1980)

64x more likely to be Secretary
4x less likely to be Lawyer
but same wage gap!
How much did growth benefit from declining barriers?

<table>
<thead>
<tr>
<th></th>
<th>Actual Growth</th>
<th>Growth with 1960 barriers</th>
<th>Difference</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per person</td>
<td>1.7%</td>
<td>1.0%</td>
<td>+0.7%</td>
<td>41%</td>
</tr>
<tr>
<td>GDP per worker</td>
<td>1.2%</td>
<td>0.9%</td>
<td>+0.3%</td>
<td>24%</td>
</tr>
<tr>
<td>LF Participation</td>
<td>0.4%</td>
<td>0.0%</td>
<td>+0.4%</td>
<td>90%</td>
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<tr>
<td>Earnings of WM</td>
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<td>-0.1%</td>
<td>-12%</td>
</tr>
<tr>
<td>Earnings of WW</td>
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<td>0.7%</td>
<td>+2.5%</td>
<td>77%</td>
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<tr>
<td>Earnings of BM</td>
<td>2.2%</td>
<td>1.6%</td>
<td>+0.6%</td>
<td>29%</td>
</tr>
<tr>
<td>Earnings of BW</td>
<td>4.3%</td>
<td>2.1%</td>
<td>+2.2%</td>
<td>51%</td>
</tr>
</tbody>
</table>
Female Wages Gaps Relative to White Men by Time and Cohort

Mostly cohort effects instead of time effects ⇒ human capital frictions?
Race and Economic Well-Being in the United States

(with Brouillette and Klenow)
Work in progress...

- Apply our “Beyond GDP” (*AER* 2016) methodology to different groups within the United States:
  - Consumption-equivalent welfare comparisons
  - Across groups and over time
  - Include consumption, life expectancy, leisure, and inequality

- Extensions
  - Splits by education (life expectancy harder to get)
  - Unemployment, incarceration rates
  - Health quality / morbidity
Life expectancy

Years

White

Black
Black relative to White consumption-equivalent welfare

Gaps remain large, but have gotten smaller

Using CEX

Census imputed

Gaps remain large, but have gotten smaller
Relative CE-Welfare Decomposition
Matlab and the IPUMS Census/ACS Files

(you will need the files in ChadMatlab.zip)

https://web.stanford.edu/~chadj/ChadMatlab.zip
Using the IPUMS Census Data

- [https://usa.ipums.org/usa/](https://usa.ipums.org/usa/)

- Log In, Get Data, Select Samples → 2018 ACS

- Select Harmonized HH and Person Variables
  - Geographic: StateFIP
  - Econ Characteristics: HHINCOME
  - Personal Income: FTOTINC

- View Cart, Select Data Extract

- Customize Sample Size to test: e.g. 0.01% (3mb)

- Can do this for multiple years if desired

- See `readcensus.m` for reading data