Global Firm Dynamics, Productivity, (Mis)Allocations

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Using the IPUMS Census / ACS Data

Monday, August 31, 2020
Outline

• **Part I:** Some Results
  - The Allocation of Talent and U.S. Economic Growth
  - Race and Economic Well-Being in the U.S. since 1970

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

Overall

40% of growth in GDP per person from declining barriers

(and 20% of growth in GDP per worker)
Mostly cohort effects instead of time effects ⇒ human capital frictions?
Race and Economic Well-Being in the U.S. since 1970

(in progress, with Brouillette and Klenow)
Very much a 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, and inequality

- Working on adding:
  - Splits by education (life expectancy harder to get)
  - Leisure, unemployment, QALYs, incarceration rates
  - Finer geographical splits? Urban/rural? By zip code?
Richer states have high L.E.
Poorer states have low L.E.
⇒ Welfare diffs > consumption diffs
Low life expectancy tends to depress welfare for blacks, even relative to low consumption.
Welfare Growth (All Races) is Plummeting!

True for each group as well...

GROWTH RATE

0%
1%
2%
3%

Welfare

Consumption

YEAR

1970s 1980s 1990s 2000s 2010s
Welfare of Blacks

• Levels (Whites=100):

<table>
<thead>
<tr>
<th></th>
<th>1970</th>
<th>2016</th>
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<tbody>
<tr>
<td>Blacks</td>
<td>45</td>
<td>60</td>
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• Growth rates

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Whites</td>
<td>1.5%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Blacks</td>
<td>2.2%</td>
<td>1.8%</td>
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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/

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

• Select Harmonized HH and Person Variables
  o Geographic: StateFIP
  o Econ Characteristics: HHINCOME
  o 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