Reviving the American Dream
New Lessons from Big Data

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Photo Credit: Florida Atlantic University
The American Dream?

- Odds that a child born to parents in the bottom fifth of the income distribution reaches the top fifth:
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- **USA**: 7.5% (Chetty, Hendren, Kline, Saez 2014)
- **UK**: 9.0% (Blanden and Machin 2008)
- **Denmark**: 11.7% (Boserup, Kopczuk, and Kreiner 2013)
- **Canada**: 13.5% (Corak and Heisz 1999)
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→ Chances of achieving the “American Dream” are almost two times higher in Canada than in the U.S.
Differences in Opportunity Within the U.S.

- Differences across countries have been the focus of policy discussion

- But upward mobility varies even more within the U.S.

- We calculate upward mobility for every metro and rural area in the U.S.
  - Use anonymous earnings records on 10 million children born between 1980-1982

Source: Chetty, Hendren, Kline, Saez 2014: The Equality of Opportunity Project
The Geography of Upward Mobility in the United States
Odds of Reaching the Top Fifth Starting from the Bottom Fifth by Metro Area

San Jose 12.9%
Salt Lake City 10.8%
Atlanta 4.5%

Note: Lighter Color = More Upward Mobility
Download Statistics for Your Area at www.equality-of-opportunity.org
The Geography of Upward Mobility in the Bay Area
Chances of Reaching the Top Fifth Starting from the Bottom Fifth by County

San Francisco: 18.5%
San Mateo: 17.4%
Santa Clara: 17.7%
Alameda (Oakland): 11.4%

Lighter Color = More Upward Mobility
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Why Does Upward Mobility Differ Across Areas? The Importance of Childhood Environments

- Most of the variation in upward mobility across areas is caused by differences in childhood environment.

- Demonstrate this by studying 5 million families that move between areas in the U.S.

Source: Chetty and Hendren 2015
Earnings Gain from Moving to a Better Neighborhood

Oakland ($30,000)
Earnings Gain from Moving to a Better Neighborhood

San Francisco ($40,000)

Oakland ($30,000)
Earnings Gain from Moving to a Better Neighborhood

San Francisco ($40,000)

Oakland ($30,000)

Move at age 9 → 54% of gain from growing up in San Francisco since birth
Earnings Gain from Moving to a Better Neighborhood

Gain from Moving to a Better Area

San Francisco ($40,000)

Oakland ($30,000)

Age of Child when Parents Move

0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

10
15
20
25
30

0%
What are the Characteristics of High-Mobility Areas? Five Strongest Correlates of Upward Mobility

1. Segregation
Racial Segregation in Atlanta
Whites (blue), Blacks (green), Asians (red), Hispanics (orange)

Source: Cable (2013) based on Census 2010 data
Racial Segregation in Sacramento
Whites (blue), Blacks (green), Asians (red), Hispanics (orange)

Source: Cable (2013) based on Census 2010 data
What are the Characteristics of High-Mobility Areas? Five Strongest Correlates of Upward Mobility

1. Segregation
2. Income Inequality
3. Family Structure
4. Social Capital
5. School Quality
Equality of Opportunity and Economic Growth

- Traditional argument for greater social mobility is based on principles of justice

- But improving opportunities for upward mobility can also increase size of the economic pie

- To illustrate, focus on innovation
  - Study the lives of 750,000 patent holders in the U.S.

Source: Bell, Chetty, Jaravel, Petkova, van Reenen 2015
Patent rate for children with parents in top 1%: 22.5 per 10,000

Patent rate for children with parents below median: 2.2 per 10,000
Patent Rates vs. 3rd Grade Test Scores

Inventors per Ten Thousand

3rd Grade Math Test Score (Standard Deviations Relative to Mean)

85th Percentile
Patent Rates vs. 3rd Grade Test Scores for Children with Low vs. High Income Parents

Inventors per Ten Thousand

3rd Grade Math Test Score (Standard Deviations Relative to Mean)

- Parent Income Below Median
- Parent Income Above Median
Patent Rates vs. 3rd Grade Test Scores for Children with Low vs. High Income Parents

High-ability children much more likely to become inventors if they are from high-income families.
The Origins of Inventors in America
Patent Rates by Area where Child Grew Up
The Place Where the Poor Once Thrived

San Jose, in the heart of Silicon Valley, used to be the best place in the country for kids to experience a Horatio Alger, rags-to-riches life. Is it still?