EDUCATION AND MOBILITY: GATSBY IN THE AMERICAS
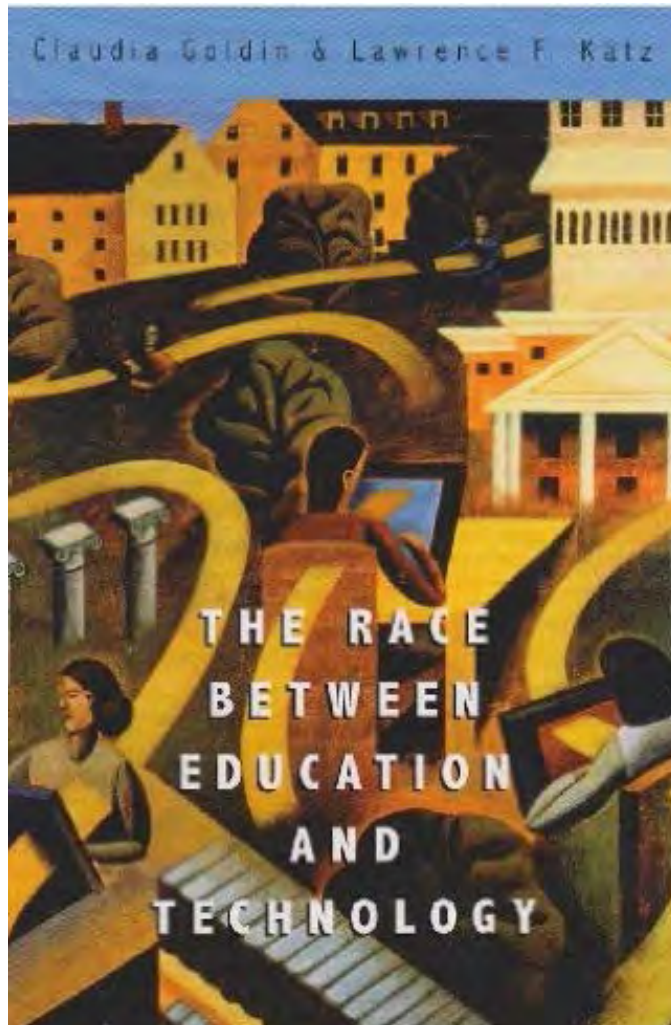
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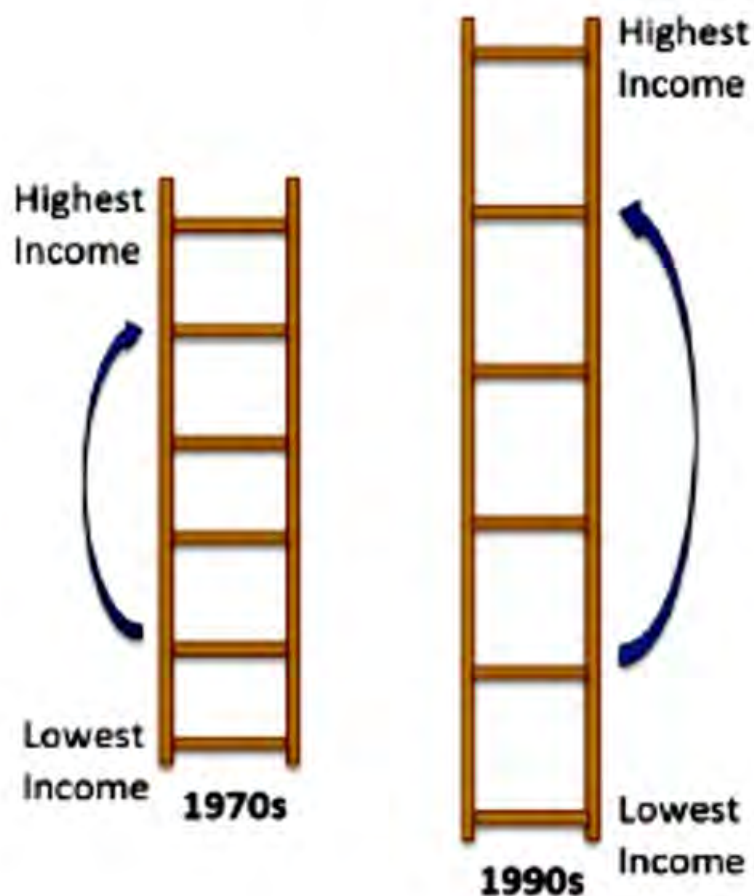

Presentation at CCNY
Latin American and Latino Studies
Monday

The U.S. and Latin America in a great race between technology and education

Globalization and new technologies means more education needed to climb to top…

Changes in the Income Ladder in the United States

Highest
Income

Highest
Income

Lowest
Income **1970s**

Lowest
Income

1990s

The rungs of the income ladder have grown further apart (income inequality has increased)

…but children's chances of climbing from lower to higher rungs have not changed.

Immigration, growth and inequality short term long term

- **Immigration increases inequality in ST** Chetty cities data shows as FB share 4.7% to 13%+ from 1970 to 2010 can explain rise in Gini from 40 to 44 (have the distance to 48)

- **Inequality increases ST** as immigrants compete: Hispanic but not native wages fall with immigration & integration.

- **Immigration increases mobility** vs. LatAm and within the U.S. children of immigrants consistently outperform natives in school this increases Hispanic wages over longer term (CBO, 2013).

- **Financial inclusion & immigration** reform raises growth and asset accumulation by Hispanics, reducing share of inherited wealth, see Piketty, 2014, p. 83-84.

**U.S. Congressional budget Office (2013) The Economic Impact of S. 744, the Border Security, Economic Opportunity, and Immigration Modernization Act

Inequality is falling in Latin America, but not in the U.S…can this be fixed by redistribution of education

- *In the USA, growth slowed and access to education reproduced inequality… top 1% courted by best schools (not the most meritorious)*

- *Inequality and expensive selective schools reduced mobility and reinforced inequality…*

- *In Latin America, expansion of education through social transfer programs and faster growth 2000 to 2015 led to falling inequality and rising mobility*

Education raises social mobility if children more educated than their parents: 3 related Mobility measures

1. *Intergenerational Education Mobility: Gatsby curve for Chile & Latin America*

2. *Absolute Mobility: how far NYC residence rise up on average?*

3. *College mobility: access vs. success for 30 million students: Chetty et al 2017 available in NY Times*

Measure 1: Intergenerational Education Mobility

- *Intergenerational Educational mobility takes place within families…across generations.*

- *If your education matches that of your parent's: if everyone ends up same as their parents, no social mobility…family and SES determine your future.*

- *Mobility is a break with the past, your generation is better educated than you parents… the more correlated with your schooling is with your parents the less social mobility there is… you need connections to get into a good shool*
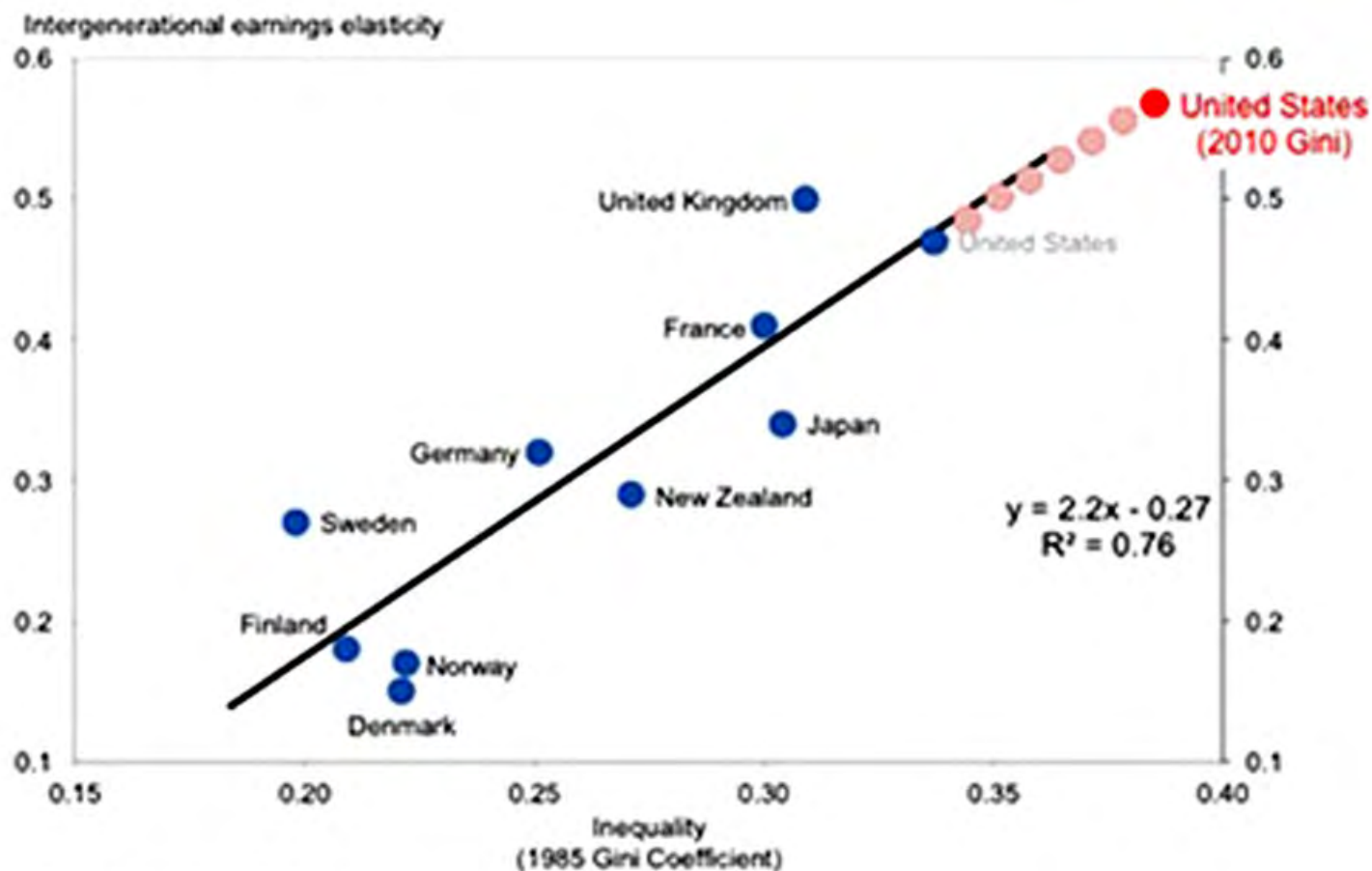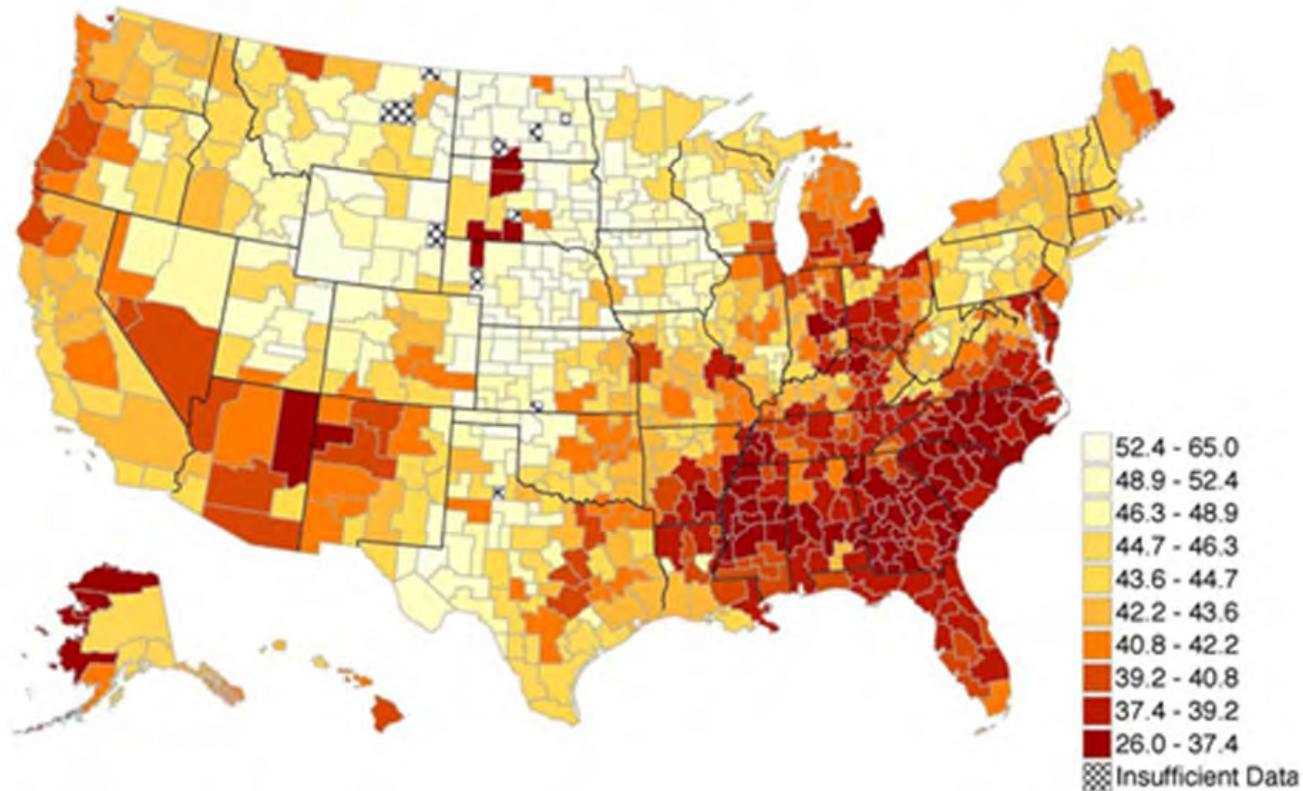
Measure 2: Absolute Mobility across major Cities-urban labor markets

- *Absolute Mobility: Where you end up in the income distribution compared to your parents:*

- *Example from Chetty et al. 2014: New Yorkers whose families start at the 25ᵗʰ percentile end up at the 44 percentile on average*

- *New York has top 20 mobility but the highest inequality in the world… it turns out a lot of immigrant rich cities have this characteristic.*

- *Chetty et. al 2014 matches millions of tax returns, 1980 more or less to about 2010… big data from the IRS…*

Mobility across U.S. cities and regions Chetty et al. find lots of variation with lower mobility in the South

Geography

Mobility Varies Substantially Across Places…

	52.4 - 65.0
	48.9 - 52.4
	46.3 - 48.9
	44.7 - 46.3
	43.6 - 44.7
	42.2 - 43.6
	40.8 - 42.2
	39.2 - 40.8
	37.4 - 39.2
	26.0 - 37.4
	Insufficient Data

http://www.equality-of-opportunity.org/

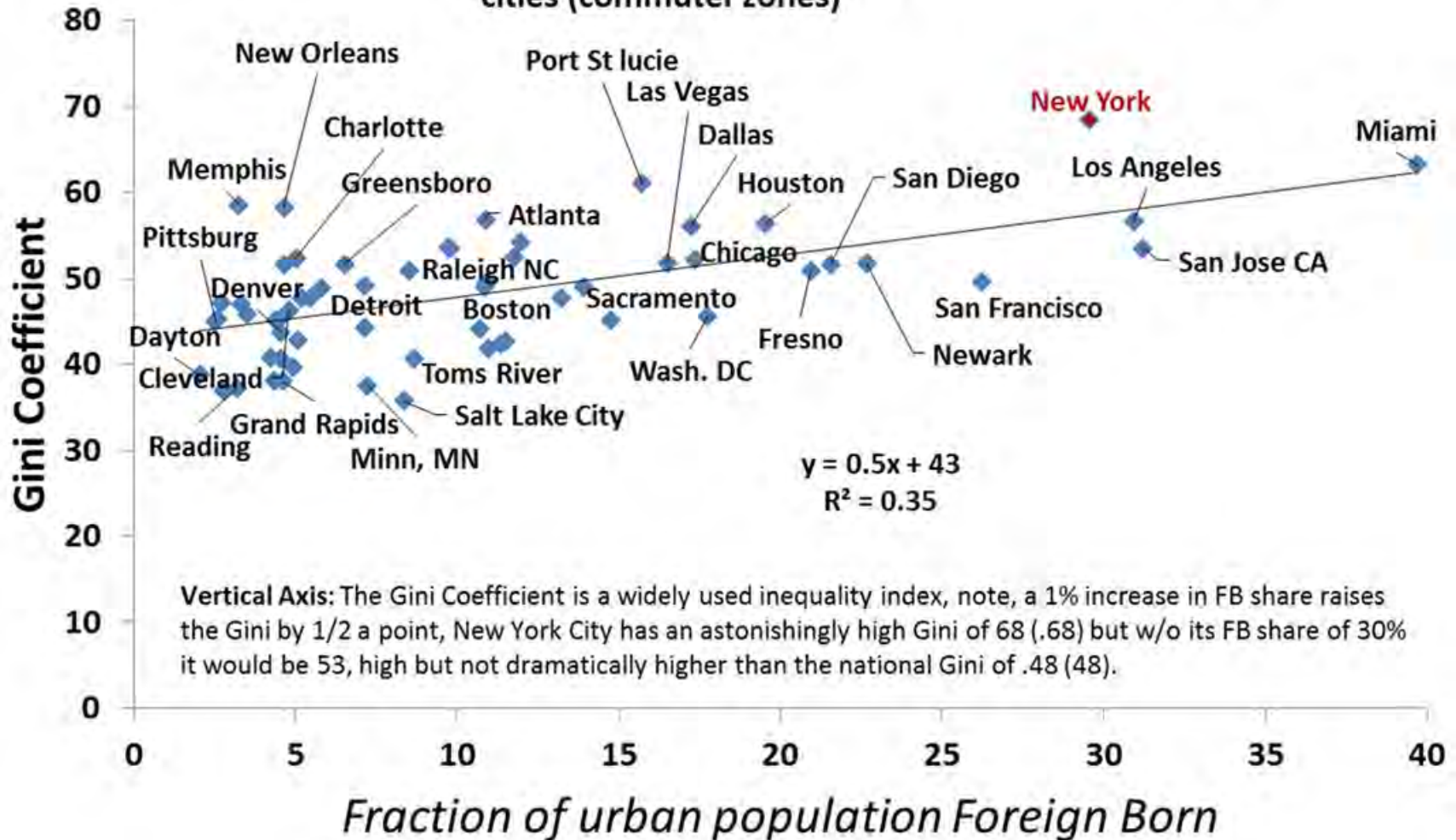# Gatsby curve NYC has highest inequality, but mobility in top 1/4 of U.S. cities: 1980-82 kids in 25th get to 44th in 2010-12

Figure 2: Great Gatsby Curve for 60 largest U.S. urban areas

Children of parents in the 25th percentile in 1980-82 climbed on average to the percentile shown on the Y axis by 2010-12

Absolute Intergenerational Mobility, 1980-82 Cohort (see Chetty et al. 2014, Table 8).
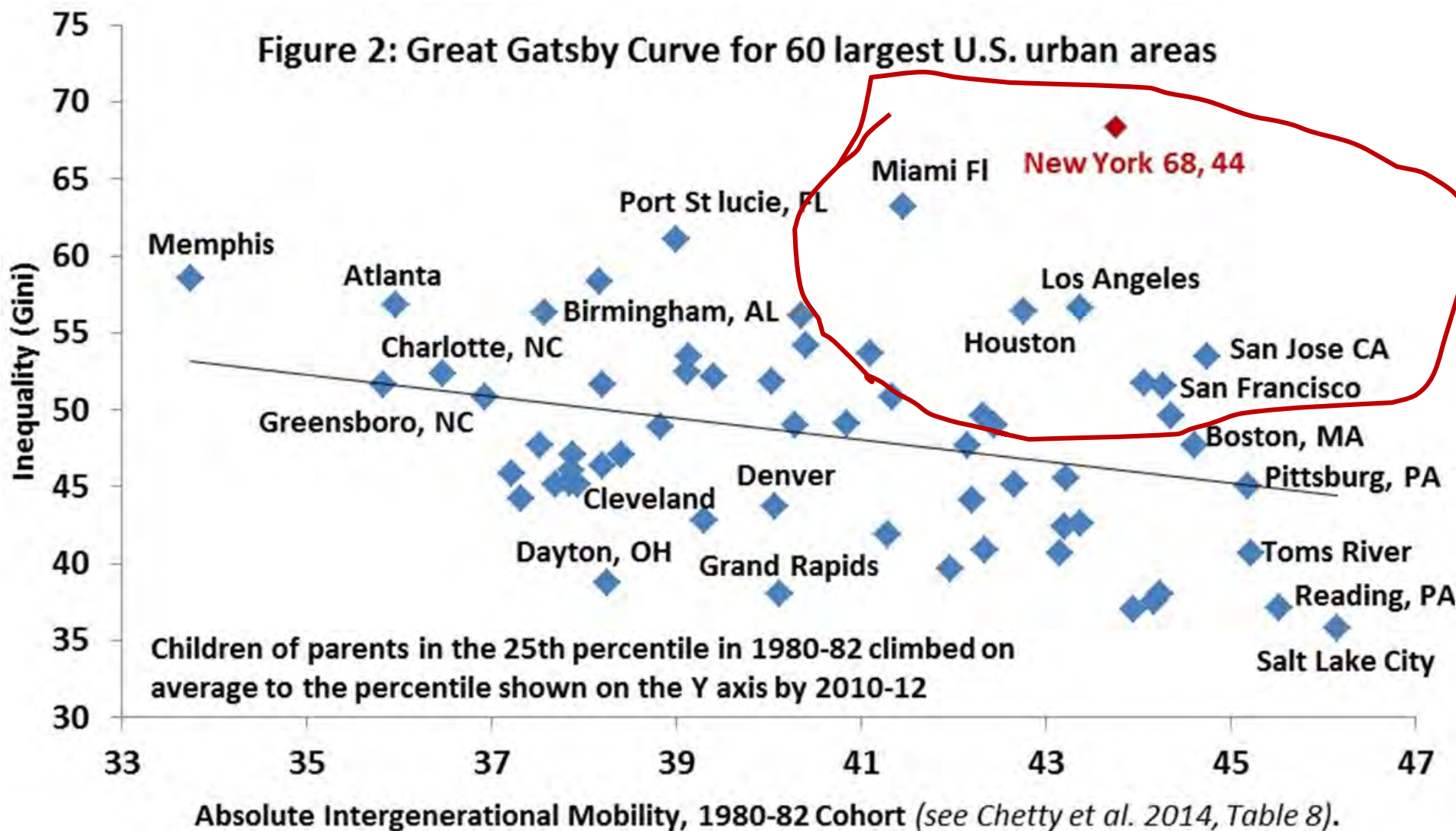
Immigration associated w/ higher inequality

Figure 6B: Fraction of Foreign Born & Inequality in the 60 largest U.S. cities (commuter zones)

$y = 0.5x + 43$
$R^2 = 0.35$

Vertical Axis: The Gini Coefficient is a widely used inequality index, note, a 1% increase in FB share raises the Gini by 1/2 a point, New York City has an astonishingly high Gini of 68 (.68) but w/o its FB share of 30% it would be 53, high but not dramatically higher than the national Gini of .48 (48).

Fraction of urban population Foreign Born

(see Chetty et al. 2014, Table 8, online at http://www.equality-of-opportunity.org).

Gatsby curve for major cities in U.S.

NYC an exception: Highest inequality, but mobility in top 1/4 of U.S. cities: 1980-82 kids in 25th get to 44th in 2010-12

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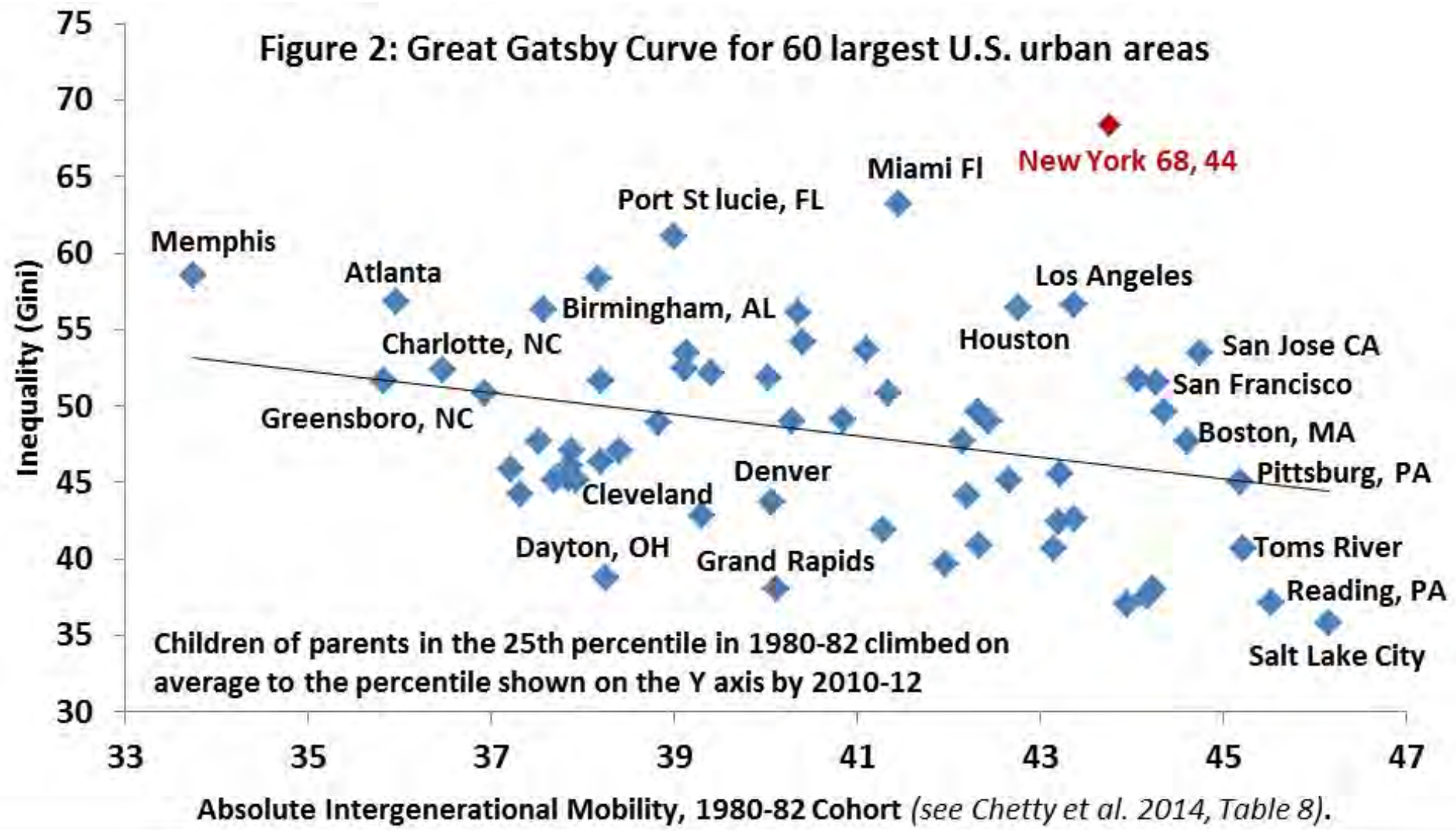
Figure 6B: Fraction of Foreign Born & Absolute Mobility from the 25th percentile, 1980 to 2010, for the 60 largest Commuter Zones
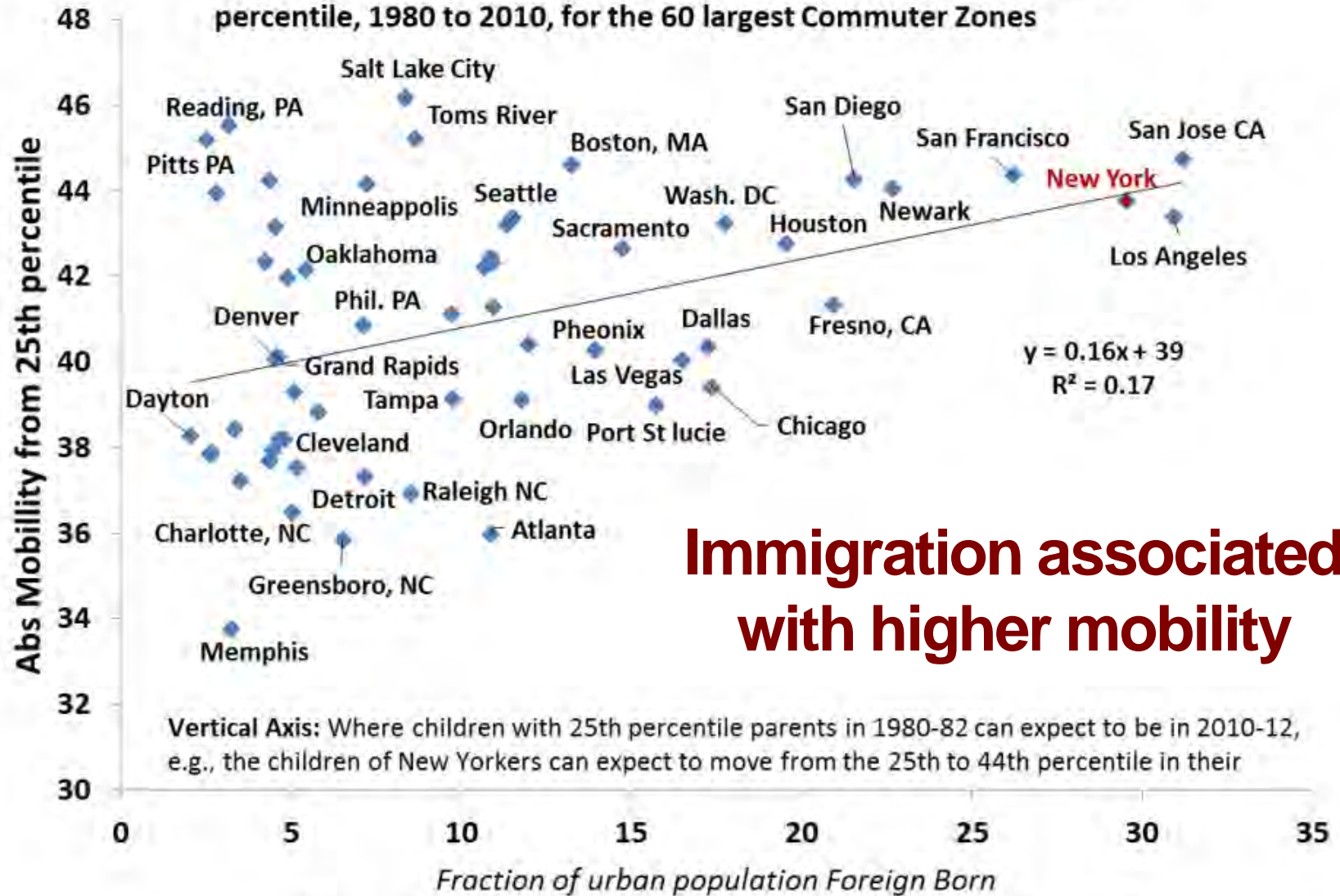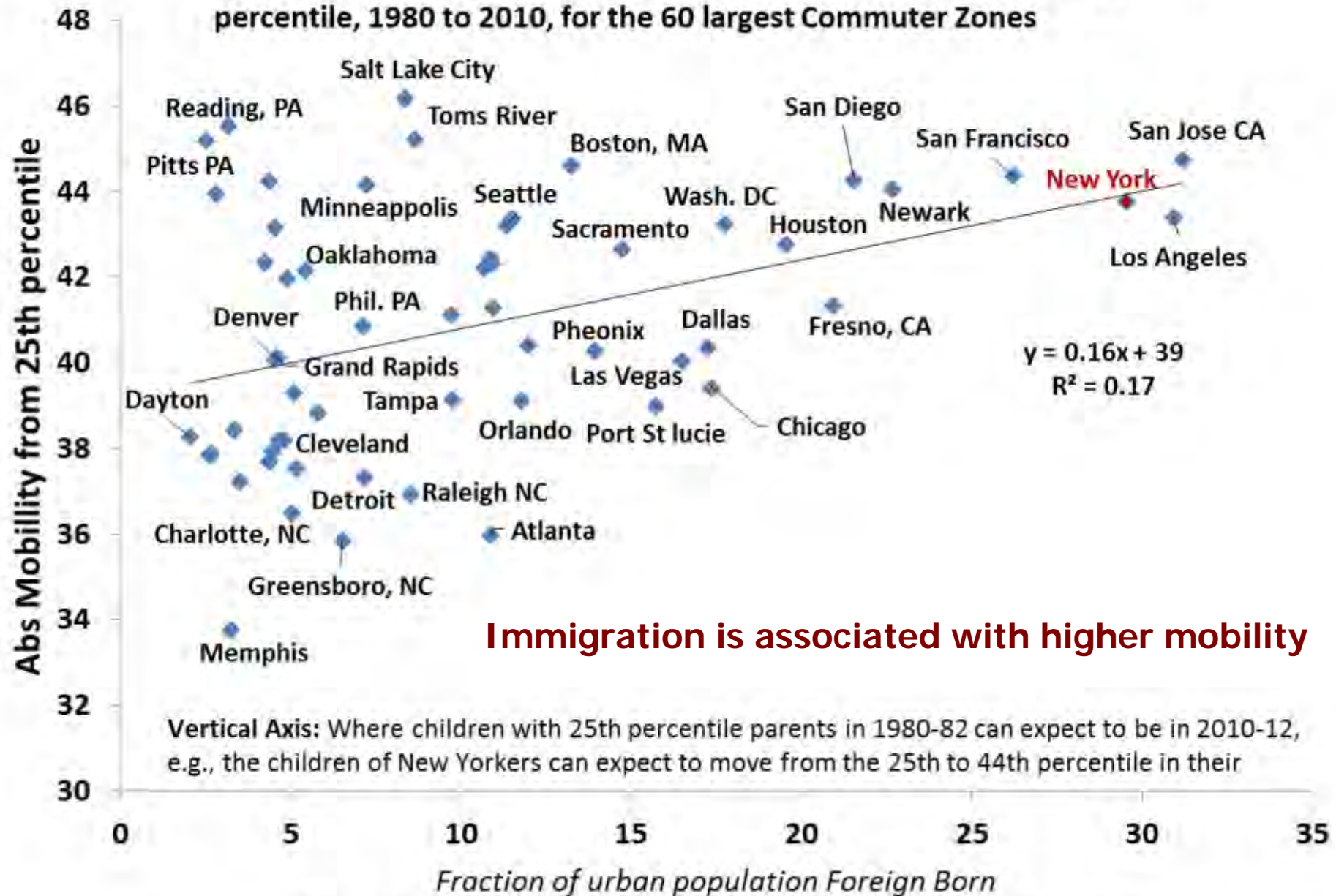
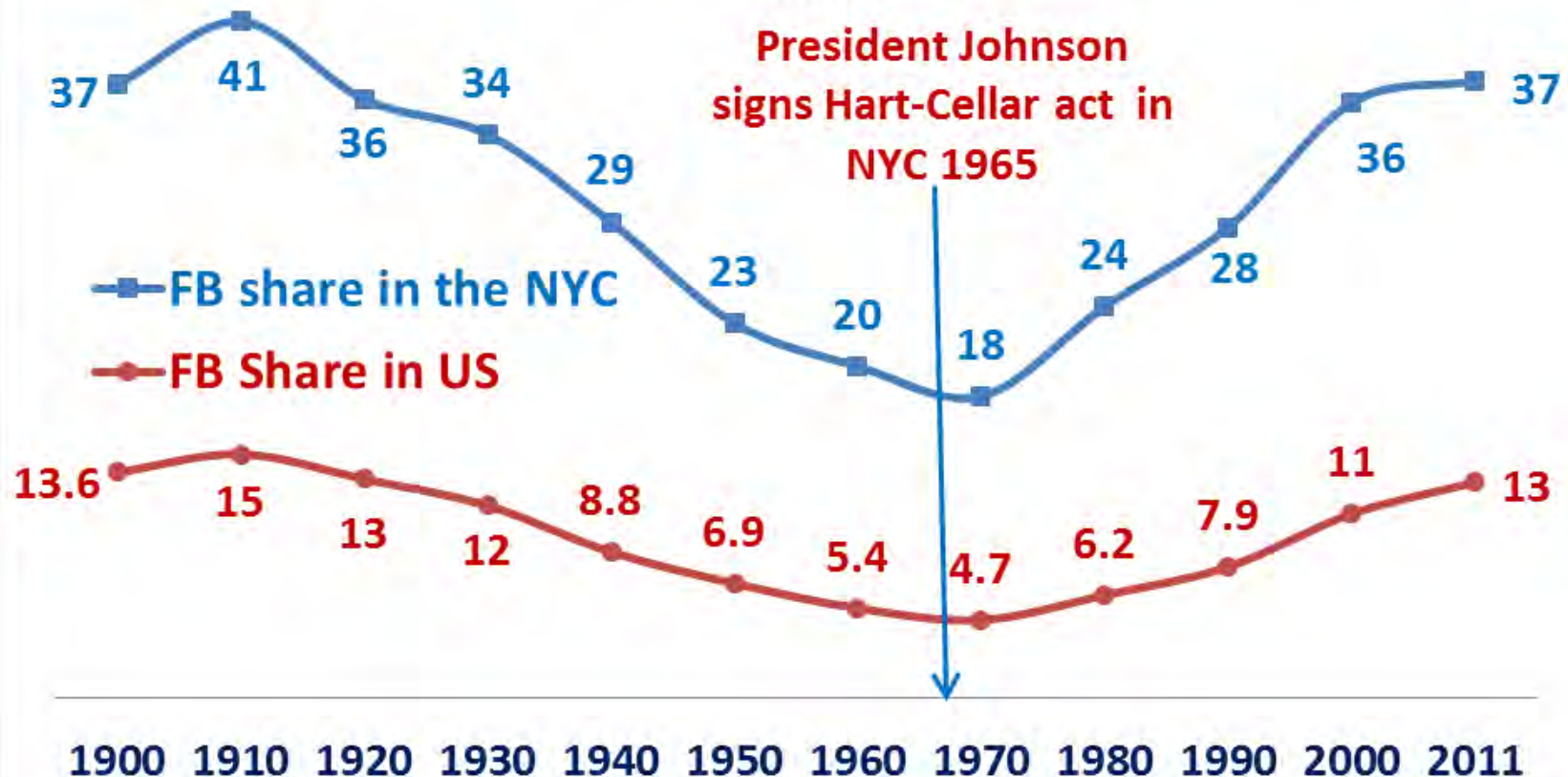**Immigration associated with higher mobility**

Figure 6B: Fraction of Foreign Born & Absolute Mobility from the 25th percentile, 1980 to 2010, for the 60 largest Commuter Zones

Immigration is associated with higher mobility

U.S. FB share rose from 4.7 in 1970 to 13 in 2012, a rise of over about 8 percentage points

Figure FB-1 US and NYC Foreign born back to 1900 share

President Johnson signs Hart-Cellar act in NYC 1965

FB share in the NYC

FB Share in US

NYC values: 37, 41, 36, 34, 29, 23, 20, 18, 24, 28, 36, 37

US values: 13.6, 15, 13, 12, 8.8, 6.9, 5.4, 4.7, 6.2, 7.9, 11, 13

1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2011

Source: page 10 Table 2.2 New York Dept of City Planning (2013) *The Newest New Yorkers, 2013 Edition*, NYC DCP-13-10, December NY. http://www.nyc.gov/html/dcp/pdf/census/nny2013/nny_2013.pdf
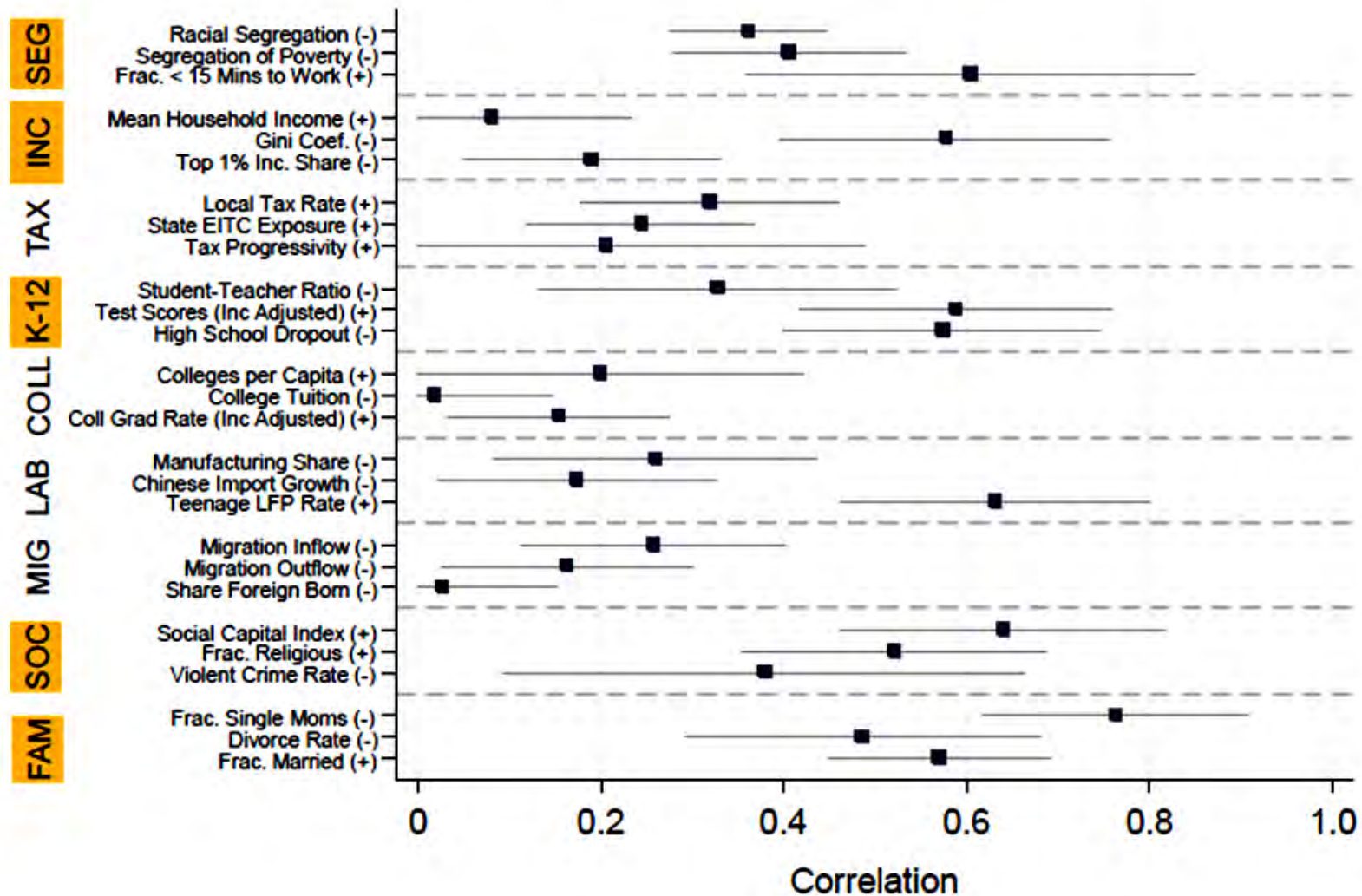
Immigration and inequality short not long term depends on education and innovation…
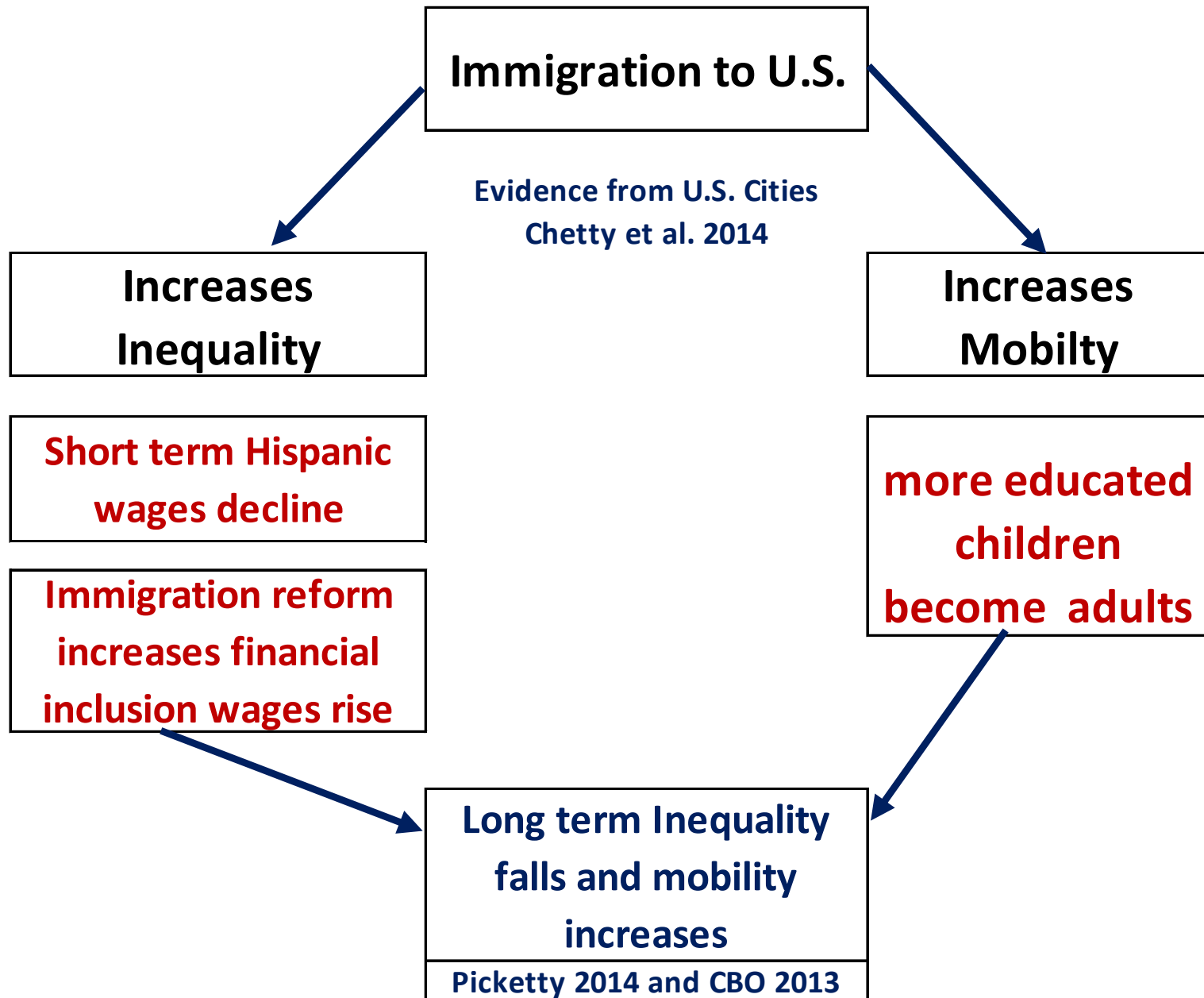
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- **Inequality increases ST** as immigrants compete: Hispanic but not native wages fall with immigration & integration.

- **Immigration increases mobility** in the Americas as children stimulate growth and invest in schooling wages rise for immigrants and natives over the over longer term (CBO, 2013).

- **Financial inclusion & immigration** reform raises growth and asset accumulation by Hispanics, reducing share of inherited wealth, see Piketty, 2014, p. 83-84.

**U.S. Congressional budget Office (2013) The Economic Impact of S. 744, the Border Security, Economic Opportunity, and Immigration Modernization Act

Mobility varies across the US

FIGURE X: Correlates of Spatial Variation in Upward Mobility

Source: Chetty et al. 2014 http://www.equality-of-opportunity.org/

Immigration to U.S.

Evidence from U.S. Cities
Chetty et al. 2014

Increases Inequality

Increases Mobilty

Short term Hispanic wages decline

Immigration reform increases financial inclusion wages rise

more educated children become adults

Long term Inequality falls and mobility increases
**Picketty 2014 and CBO 2013**

Measures college mobility as defined by Chetty et al. 2017…

- They match 30 million IRS returns to children's education
- A college education *raises social mobility irrespective of* parents education (immigrants?)
- A college education also reduces inequality if the share of well educated increases into to a larger middle class…
- Colleges level the playing field wherever you start
- But… current admissions and fees exacerbate rather than attenuate inequality, except in a few schools
- Free college in New York?

Measure 3: college mobility leads higher and more equal incomes for low income entrants

Poor students who attend top colleges do about as well as their rich classmates
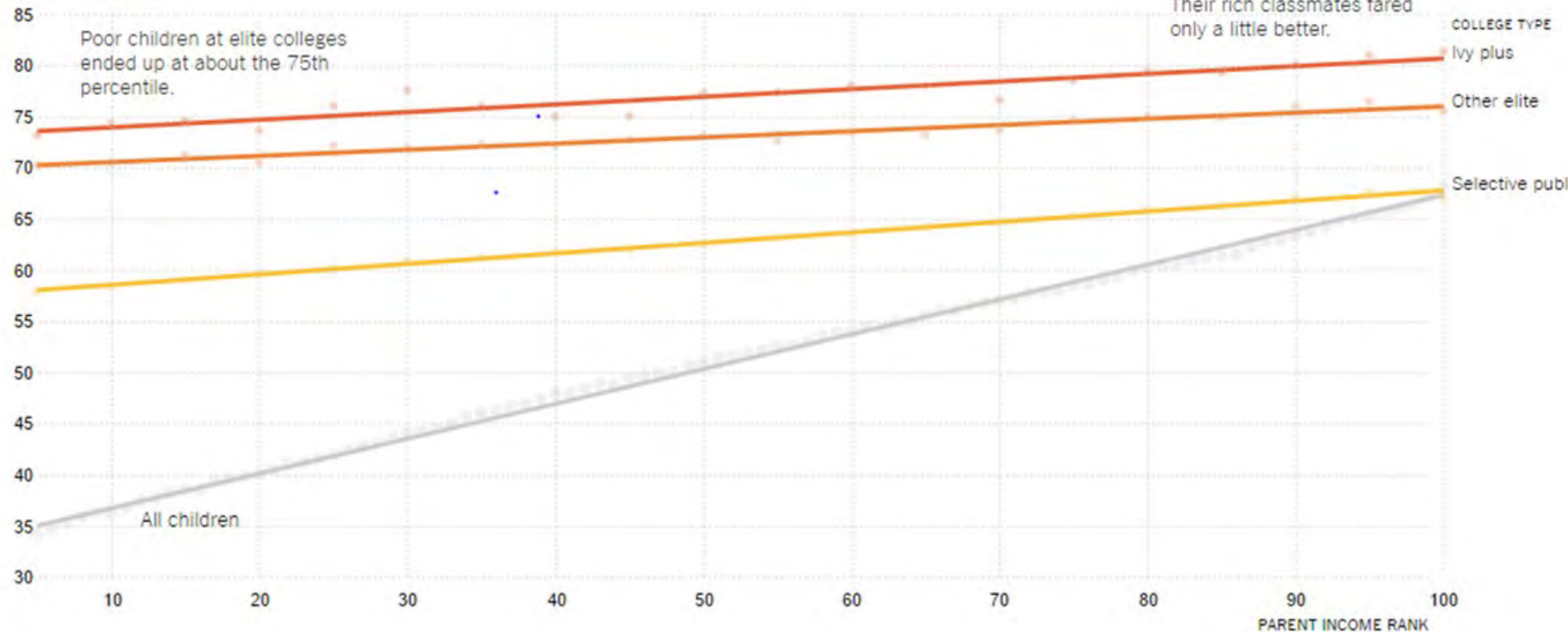
Data here comes from the 1980-82 cohort, roughly the college classes of 2002-4. By this stage in life, income ranks are relatively stable.

Measure 3: *college mobility leads higher and more equal incomes for low income entrants*

- Define a college's *mobility rate* (MR) as the fraction of its students who come from bottom quintile and end up in top quintile

Mobility Rate   =   Success Rate   x   Access

P(Child in Q5 & Parent in Q1)   P(Child in Q5| Parent in Q1)   P(Parent in Q1)

- E.g., SUNY-Stony Brook: 8.4%   =   51.2%   x   16.4%

- The mobility rate should be interpreted as an accounting measure rather than a causal effect

Mobility is share from low group (access) times the share that make it (61% x 63% = 38%

Colleges with the highest mobility rate, from the bottom 40 percent to the top 40 percent

COLLEGE	PCT. FROM BOTTOM 40%	SUCCESS RATE	"MOBILITY"
1. Vaughn College of Aeronautics and Technology	66.0%	66.4%	43.9%
2. City College of New York	60.5	62.9	38.1
3. Texas A&M International University	60.7	62.4	37.9
4. Lehman College	64.6	57.0	36.8
5. Bernard M. Baruch College	52.3	69.2	36.2
6. California State University, Los Angeles	59.6	60.0	35.7
7. Crimson Technical College	55.4	64.1	35.5
8. University of Texas-Pan American	64.0	53.5	34.2
9. New York City College of Technology	66.2	50.9	33.7
10. John Jay College of Criminal Justice	54.4	61.1	33.2
844. Fordham University	17.0	67.9	11.6

Success rate measures the percent of lower-income students who ended up in the top 40 percent. Data here comes from the 1980-82 cohort, roughly the college classes of 2002-4. By this stage in life, income ranks are relatively stable.

Chetty et al. 2017 publish several mobility measures… and the NY Times has more

Top 10 Colleges by Mobility Rate (Bottom to Top 20%)

Rank	Name	Mobility Rate	=	Access	x	Success Rate
1	Cal State University – LA	9.9%		33.1%		29.9%
2	Pace University – New York	8.4%		15.2%		55.6%
3	SUNY – Stony Brook	8.4%		16.4%		51.2%
4	Technical Career Institutes	8.0%		40.3%		19.8%
5	University of Texas – Pan American	7.6%		38.7%		19.8%
6	CUNY System	7.2%		28.7%		25.2%
7	Glendale Community College	7.1%		32.4%		21.9%
8	South Texas College	6.9%		52.4%		13.2%
9	Cal State Polytechnic – Pomona	6.8%		14.9%		45.8%
10	University of Texas – El Paso	6.8%		28.0%		24.4%

Chetty et al. 2017 publishes some college measures… and the NY Times has more

https://www.nytimes.com/interactive/projects/college-mobility/city-college-of-new-york

Overall mobility index

This measure reflects both access and outcomes, representing the likelihood that a student at City College of New York moved up two or more income quintiles.
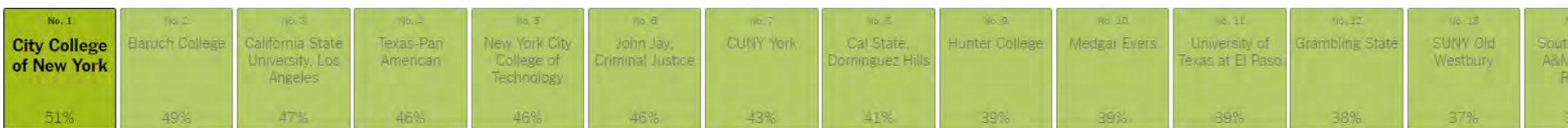
[1st] out of 369 Selective public colleges

No. 1 City College of New York	No. 2 Baruch College	No. 3 California State University, Los Angeles	No. 4 Texas-Pan American	No. 5 New York City College of Technology	No. 6 John Jay, Criminal Justice	No. 7 CUNY York	No. 8 Cal State, Dominguez Hills	No. 9 Hunter College	No. 1 Medgar
51%	49%	47%	46%	46%	46%	43%	41%	39%	39%

HIGHEST City College of New York 51%

Overall mobility index

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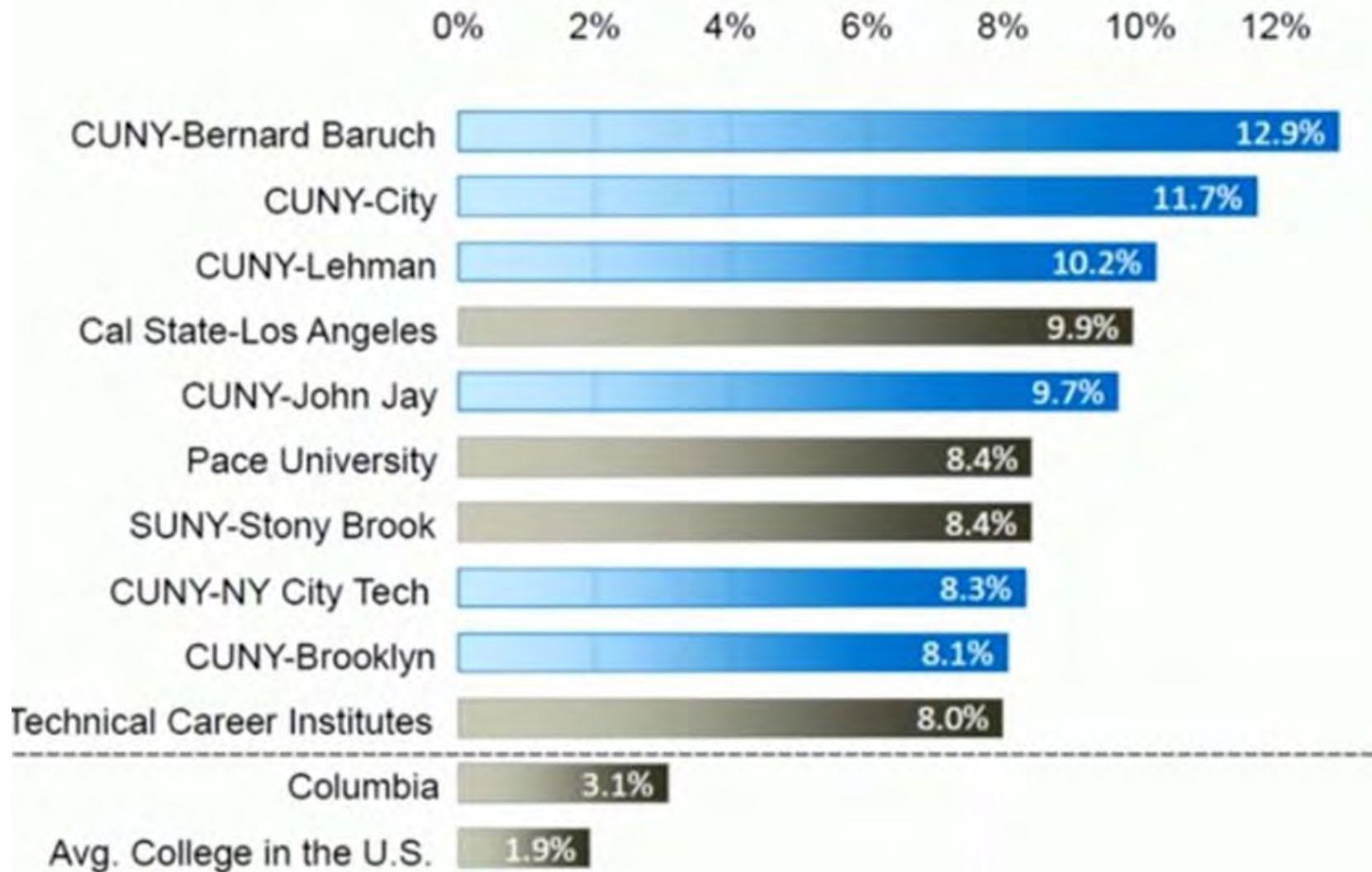COMPARE TO: New York colleges   **Selective public colleges**
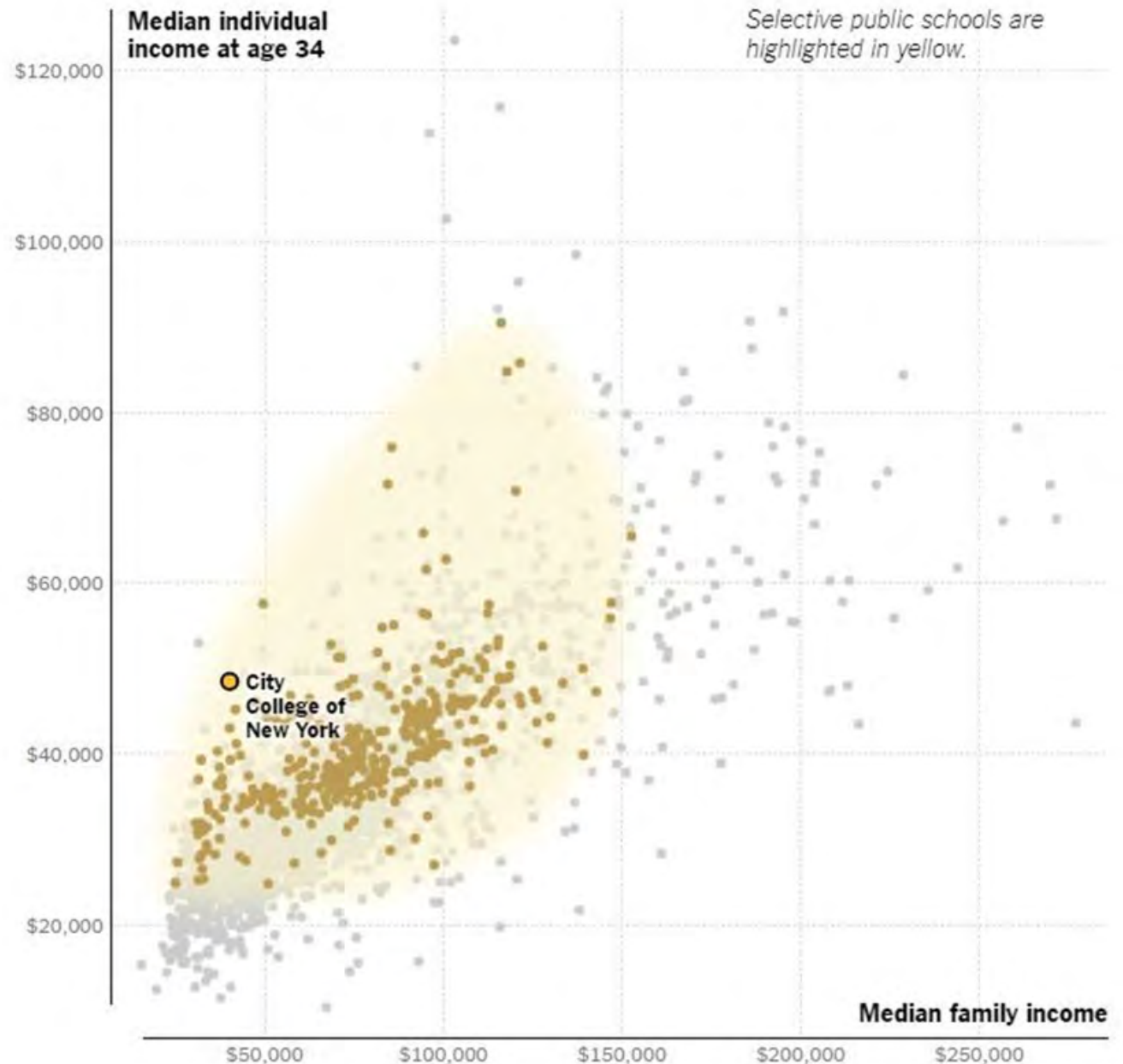
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51%	49%	47%	46%	46%	46%	43%	41%	39%	39%	39%	38%	37%	

HIGHEST City College of New York 51%   LOWEST (NO. 369) University of Mary

Top 10 Colleges in America By Mobility Rate

College	Mobility Rate
CUNY-Bernard Baruch	12.9%
CUNY-City	11.7%
CUNY-Lehman	10.2%
Cal State-Los Angeles	9.9%
CUNY-John Jay	9.7%
Pace University	8.4%
SUNY-Stony Brook	8.4%
CUNY-NY City Tech	8.3%
CUNY-Brooklyn	8.1%
Technical Career Institutes	8.0%
Columbia	3.1%
Avg. College in the U.S.	1.9%

This is a [NY Times](#) interactive graphic "selective public schools' light up…

Mobility Rates: Colleges in the New York City Metro Area
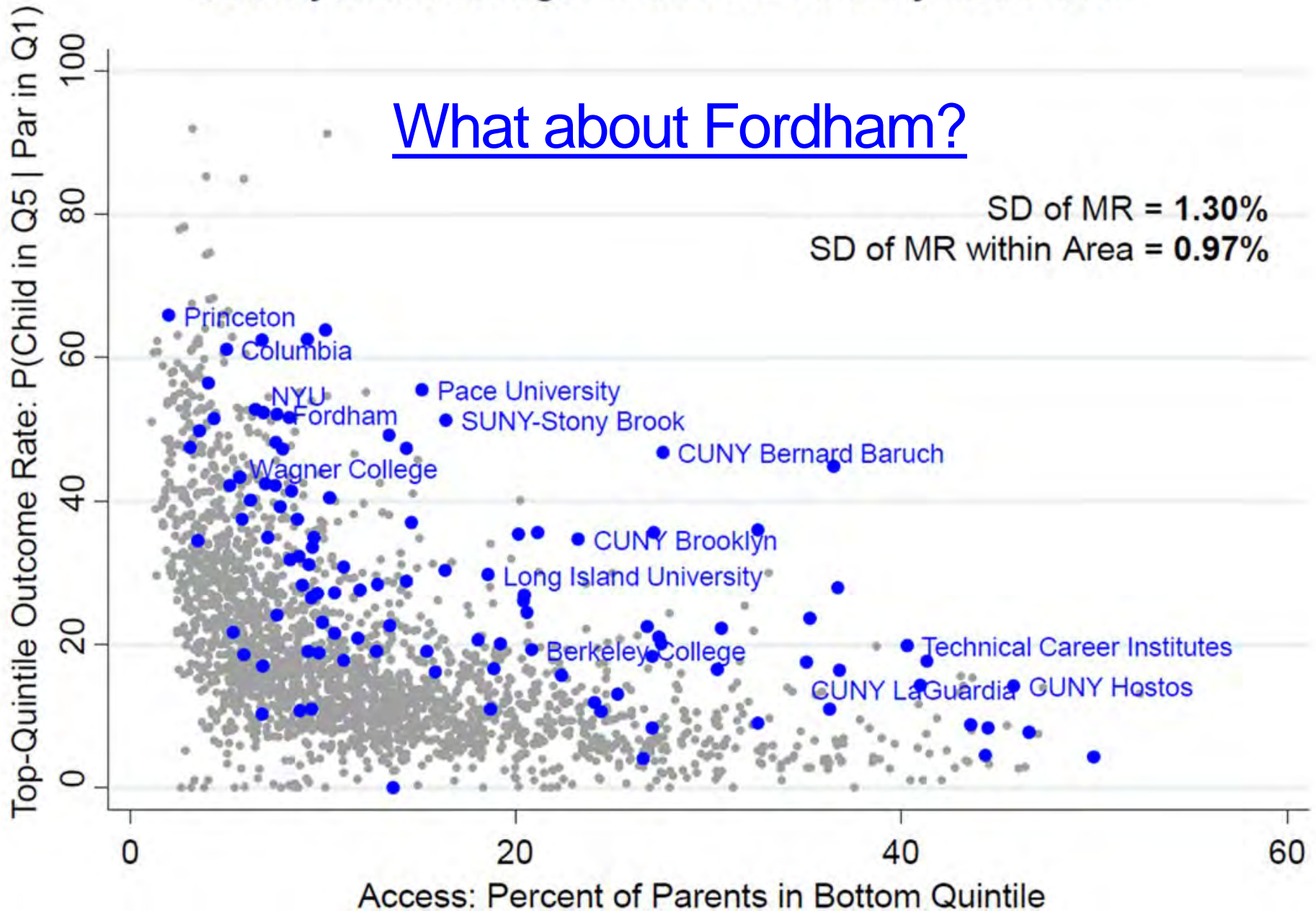
What about Fordham?

What about Fordham?

Variation in Access Conditional on Success Rate

- Much of the variation in mobility rates is driven by differences in access at a given success rate

  - Not just driven by "vertical selection" across colleges that have very different students and outcomes

  - Ex: SUNY-Stony Brook and CUNY have similar success rates to Fordham, NYU, and Wagner, but very different levels of access

Lessons on Mobility Rates

- **Fact #3**: Certain mid-tier public institutions (e.g., CUNY, Cal-State) have the highest bottom-to-top quintile mobility rates

- But highly selective institutions (e.g., Berkeley, Harvard) channel more low-income students to the top 1%

Mobility report cards online at NY Times

http://www.equality-of-opportunity.org/documents/
https://www.nytimes.com/interactive/projects/colleg
e-mobility/city-college-of-new-york
http://www.equality-of-opportunity.org/documents/
https://www.nytimes.com/interactive/projects/colleg
e-mobility/city-college-of-new-york

The New York Times

The New York Times
Descubre el mundo con nosotros

:TheUpshot

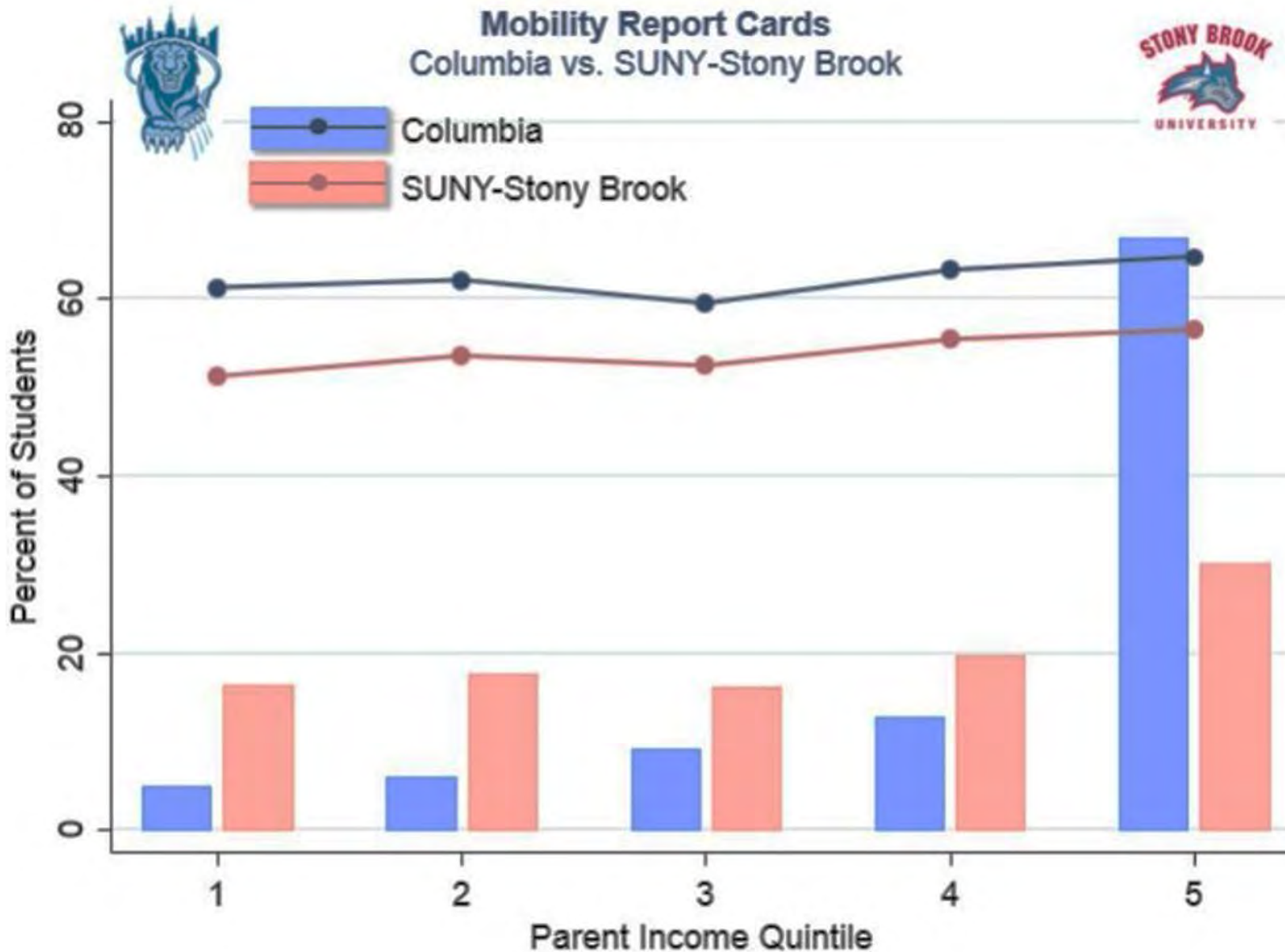Economic diversity and student outcomes at

City College of New York

New York, New York

The median family income of a student from City College of New York is **$40,200**, and **15%** come from the top 20 percent. About **12%** of students at City College of New York came from a poor family but became a rich adult.

A new study, based on millions of anonymous tax records, shows that some colleges are even more economically segregated than previously understood, while others are associated with income mobility.

Below, estimates of how City College of New York compares with its peer schools in economic diversity and student outcomes.

Mobility Report Cards:
The Role of Colleges in Intergenerational Mobility

Raj Chetty, Stanford
John N. Friedman, Brown
Emmanuel Saez, UC-Berkeley
Nicholas Turner, U.S. Treasury
Danny Yagan, UC-Berkeley

February 2017

The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors and do not necessarily represent the views of the U.S. Department of Treasury.

This is a NY Times interactive graphic

Introduction

- What role do colleges play in intergenerational income mobility?

    - Large returns to college attendance suggest that higher education can be an important pathway to upward mobility

    - But inequality in access between high- and low-income families may limit (or even reverse) this effect

- Evaluating colleges' role in mobility requires analysis of two factors:

    - [Outcomes] Which colleges are most effective in helping children climb the income ladder?

    - [Access] How can we increase access to such colleges for students from low-income families?

Lessons on Outcomes

- **Fact #2**: At any given college, students from low- and high- income families have very similar earnings outcomes

  - Colleges effectively "level the playing field" across students with different socioeconomic backgrounds whom they admit

- No indication of "mismatch" of low-SES students who are admitted to selective colleges under current policies

  - Low-SES students at less-selective colleges are unlikely to do better than high-SES students at more-selective colleges

  - Within-college earnings gradient therefore places a tight upper bound on the degree of mismatch

- Any current affirmative action policies for low-income students have little cost to universities in terms of students' outcomes

This is a NY Times interactive graphic

Lessons on Mobility Rates

- **Fact #3**: Certain mid-tier public institutions (e.g., CUNY, Cal-State) have the highest bottom-to-top quintile mobility rates

- But highly selective institutions (e.g., Berkeley, Harvard) channel more low-income students to the top 1%

Discussion: Broad Lessons for Policy

1. Low-income students admitted to selective colleges do not appear over-placed, based on their earnings outcomes

   - Provides support for policies that seek to bring more such students to selective colleges

2. Efforts to expand low-income access often focus on elite colleges

   - But the high-mobility-rate colleges identified here may provide a more scalable model for upward mobility

   - Instructional costs at high-mobility-rate colleges are far lower...
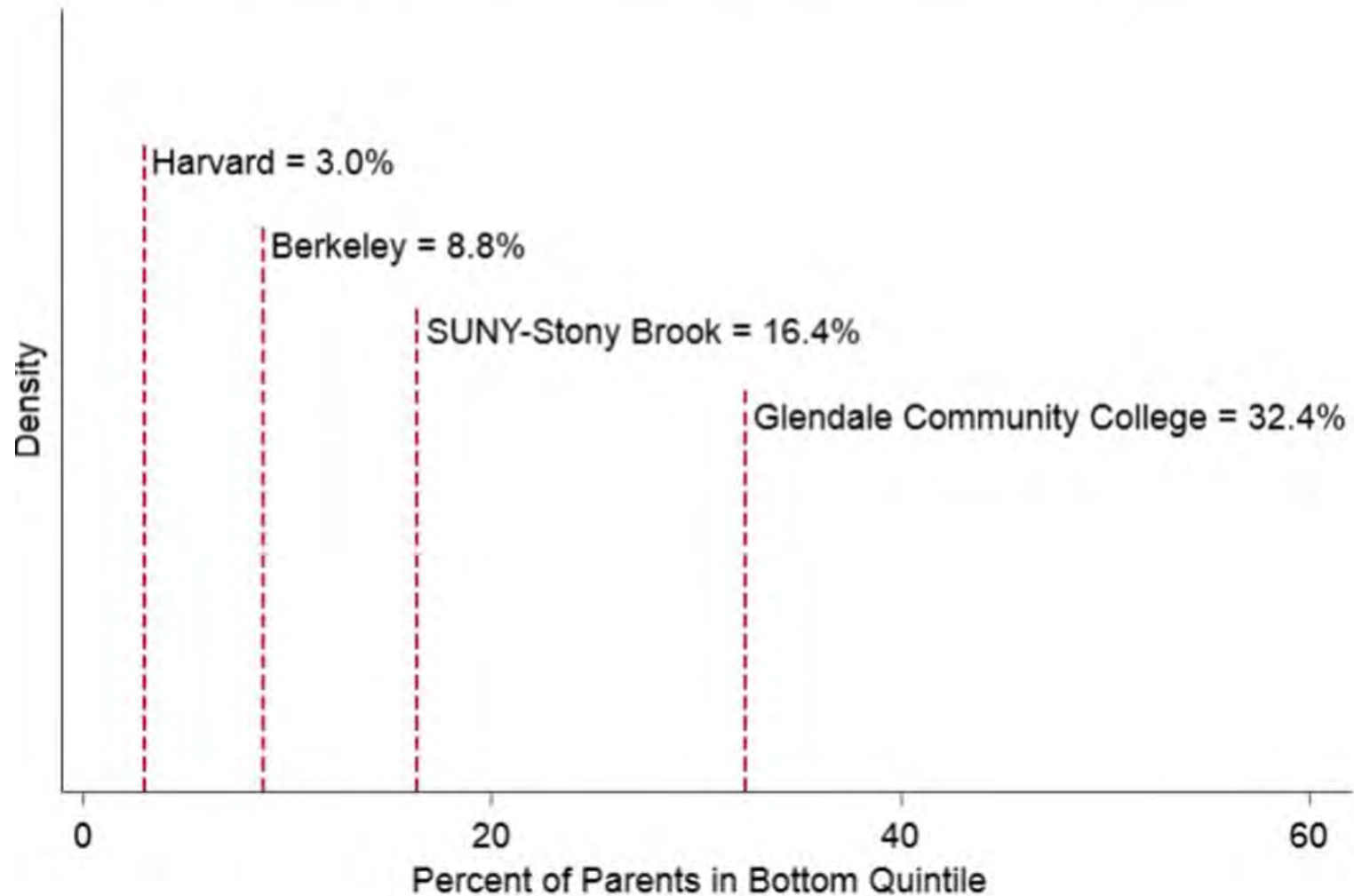
Correlates of Top 20% Mobility Rate

Trends in Low-Income Access from 2000-2011 by CUNY Campus
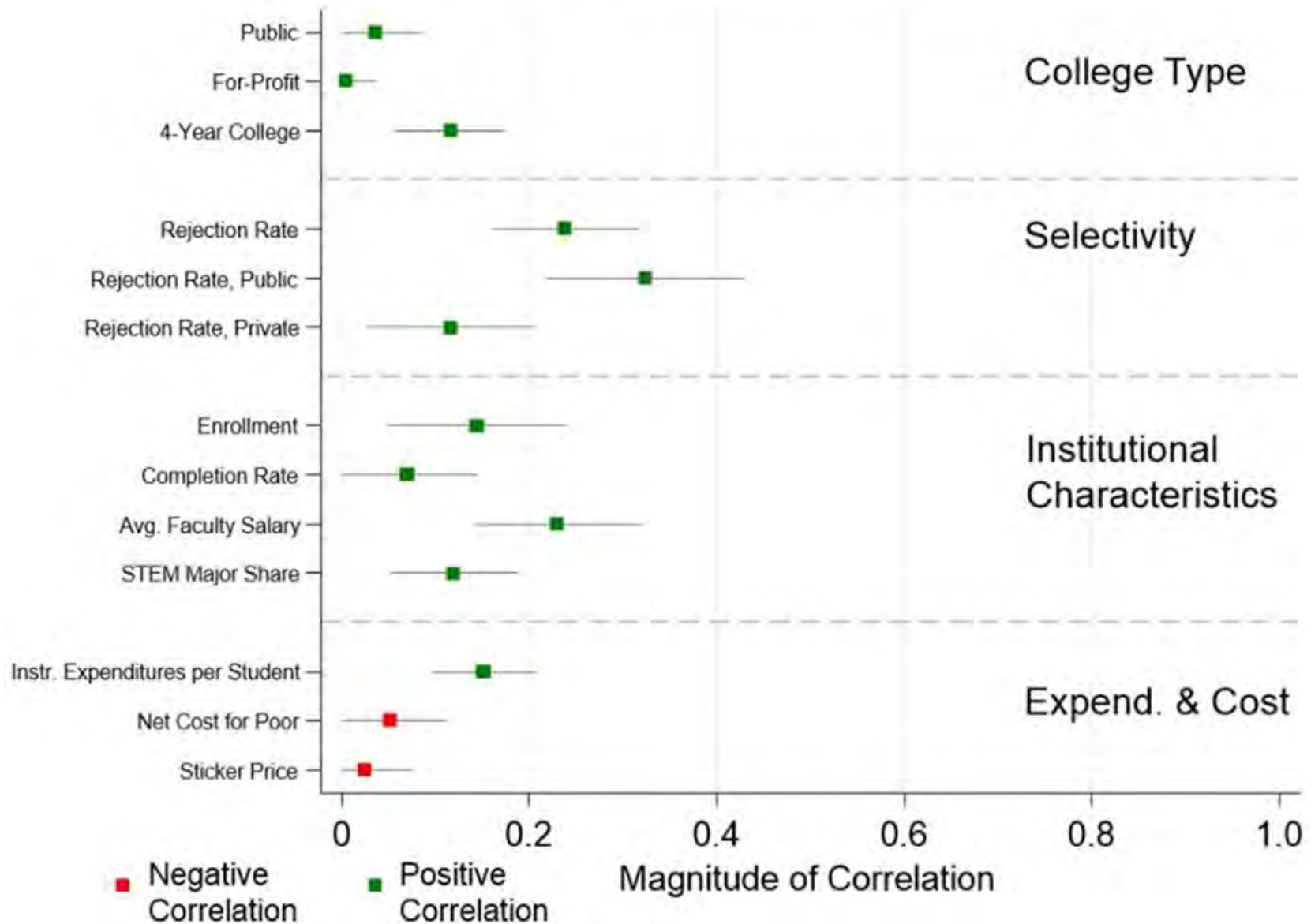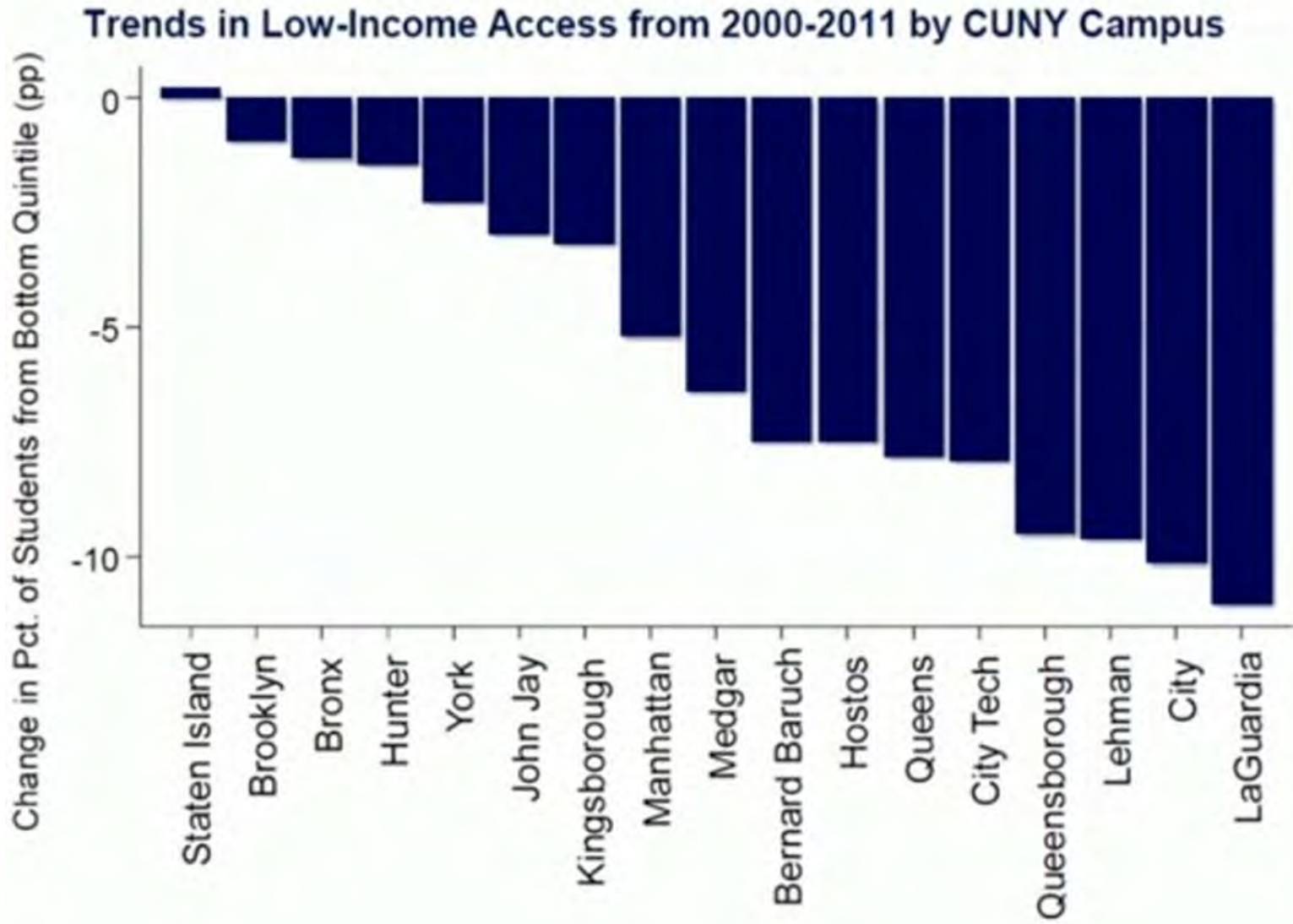
Education increases inequality if …

Distribution of Access Across Colleges (Enrollment-Weighted)

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