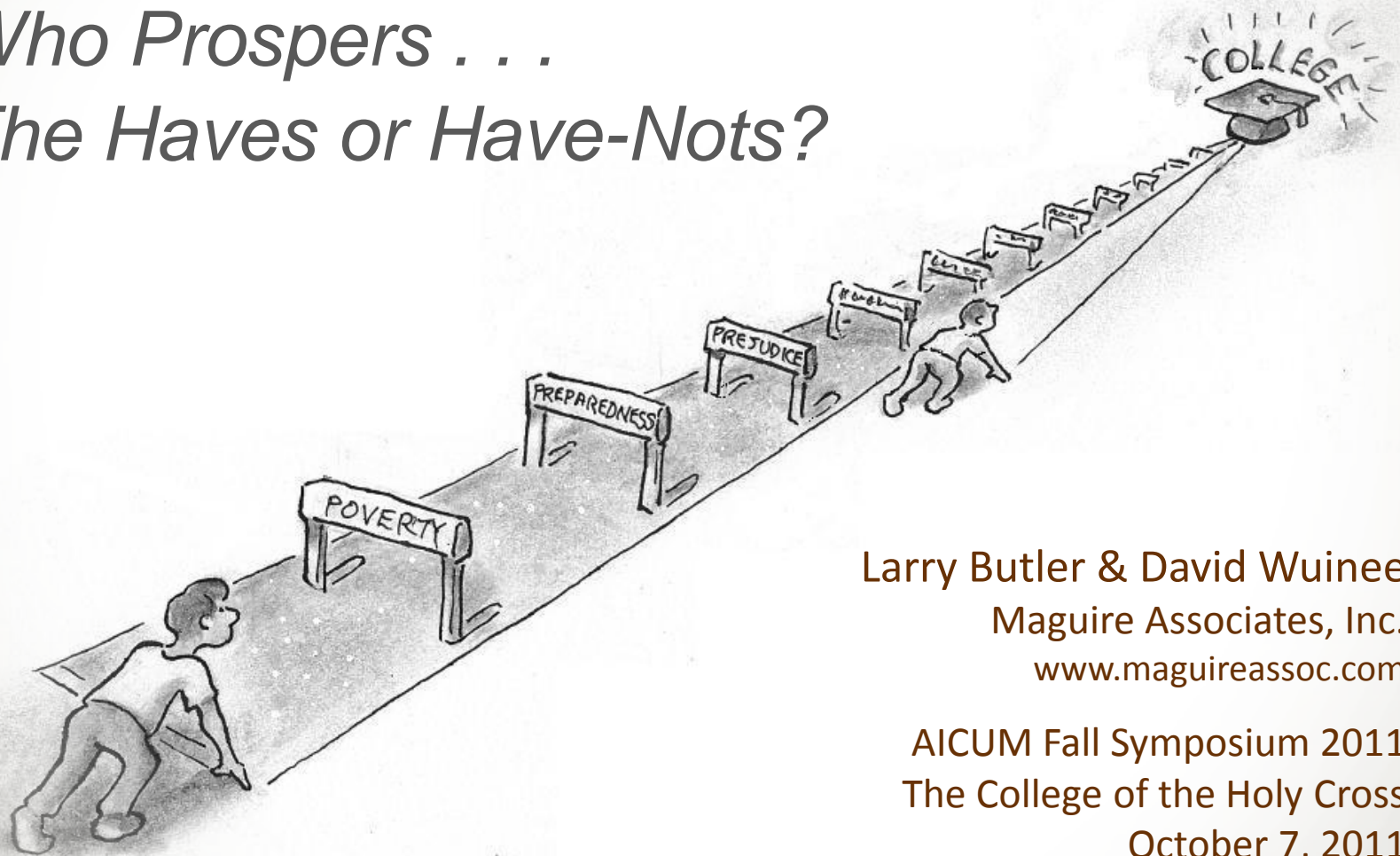


Financial Aid Leveraging

Who Prospers . . .

The Haves or Have-Nots?



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AICUM Fall Symposium 2011
The College of the Holy Cross
October 7, 2011

Does this sound familiar?

- So-called “merit aid” is just another way for colleges to improve their rankings.
- Non-need based financial aid only benefits students with the financial means to pay at the expense of students with real financial need.
- Discounting tuition on any basis other than financial need is immoral!



The Case for Financial Aid Leveraging

1. At the SOCIETAL Level . . .

There is powerful evidence that the dramatic growth in income disparity within the U.S. population is contributing to an alarming array of miseries that affect the quality of life in our society.



The Case for Financial Aid Leveraging

2. At the Higher Education SYSTEM Level . . .

The heightened income stratification of Haves vs. Have-Not families has increased the disparity between Have and Have-Not institutions of higher education – to the detriment of those colleges and universities below the top-tier of heavily endowed schools.



The Case for Financial Aid Leveraging

3. At the INSTITUTIONAL Level . . .

Less well-endowed, highly tuition-dependent schools disproportionately serve this nation's Have-Not students, even as they are increasingly challenged financially to do so.



The Case for Financial Aid Leveraging

4. At the STUDENT Level . . .

One of the few ways Have-Not schools are able to compete for the better qualified students – whatever their level of financial need – is by leveraging their limited financial aid dollars through strategically discounting price.

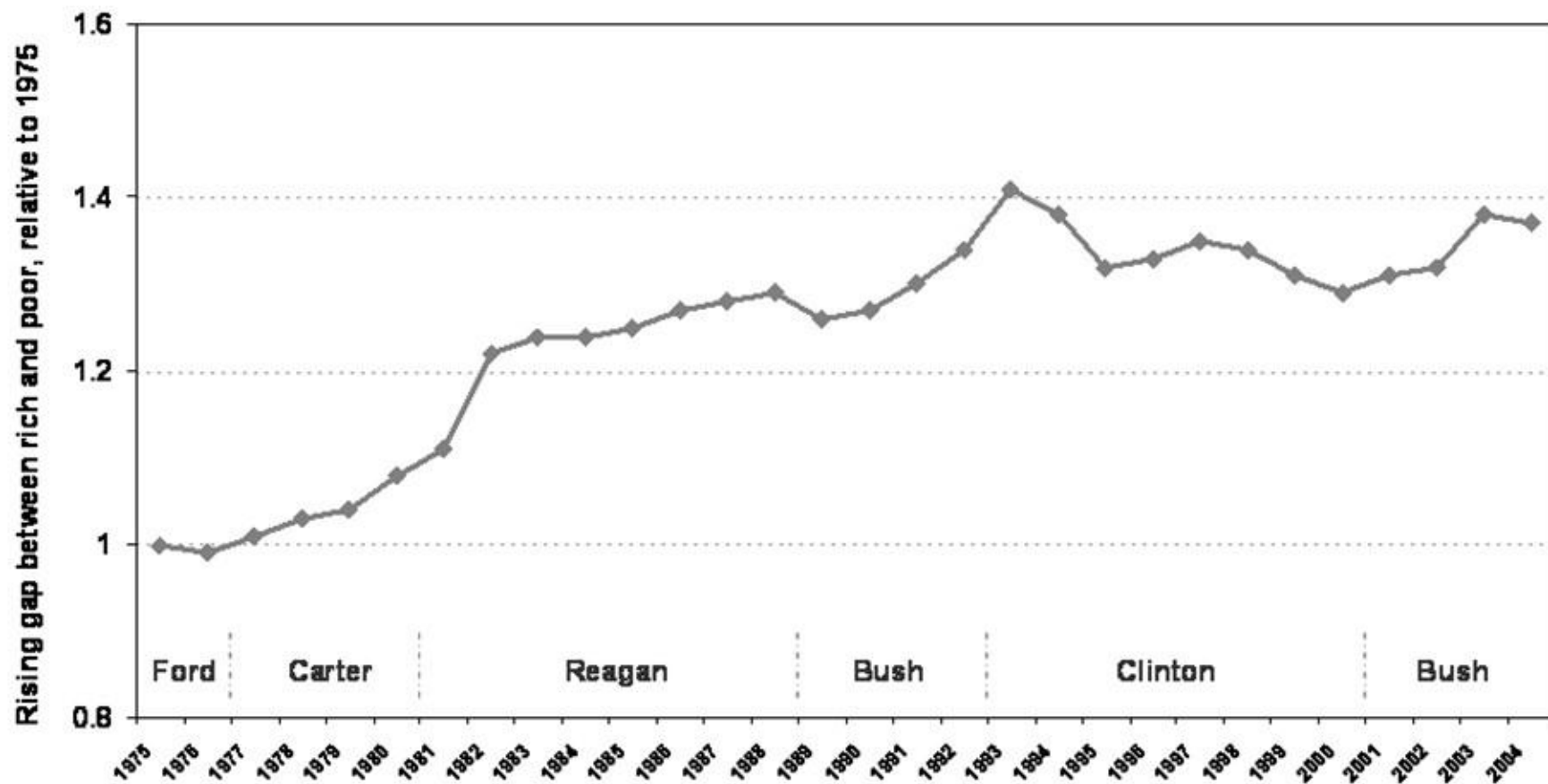


At the SOCIETAL Level

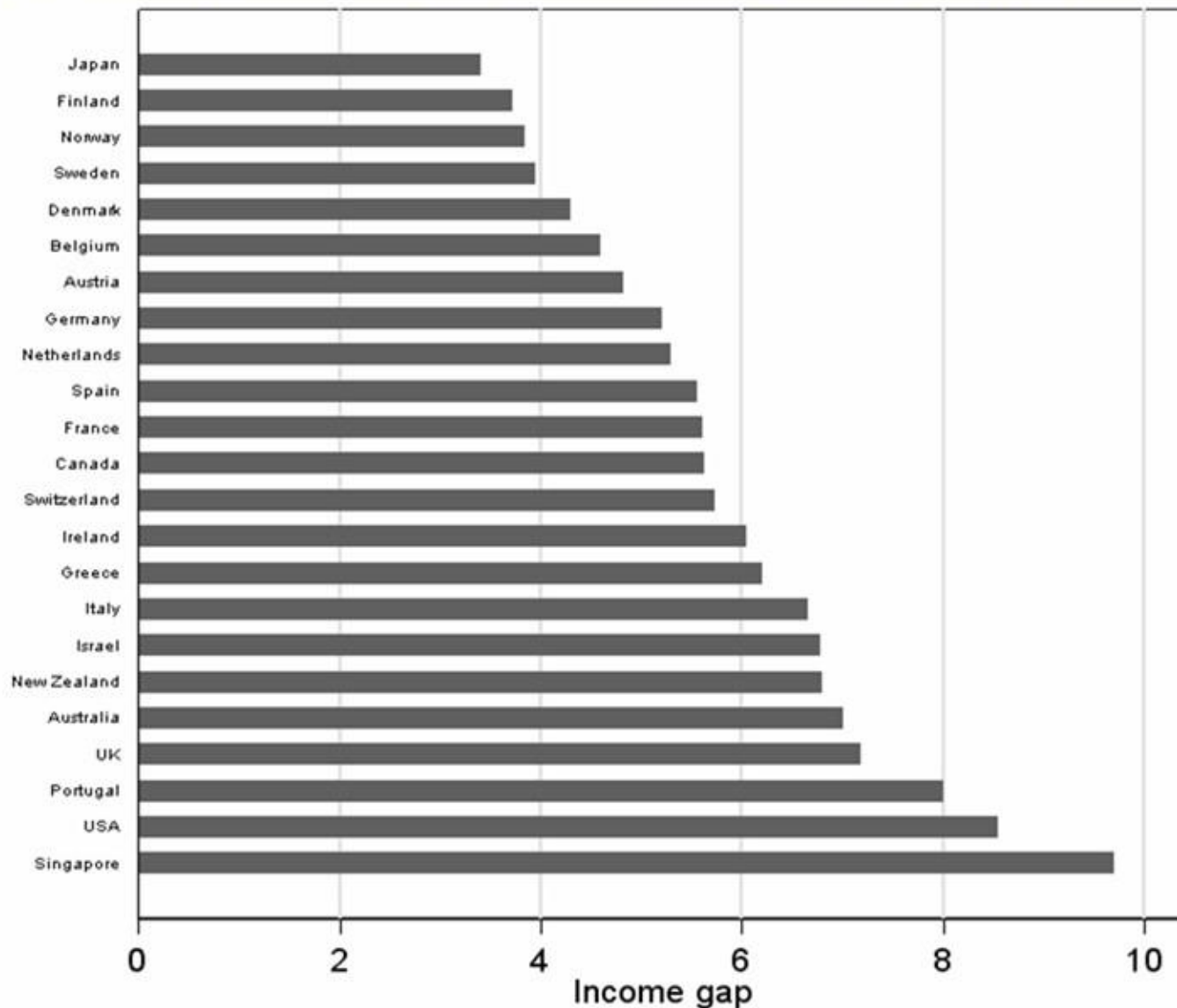
- A wealth of compelling data have been compiled, notably by British epidemiologists Richard Wilkinson and Kate Pickett, co-authors of ***The Spirit Level: Why Greater Equality Makes Societies Stronger*** that clearly demonstrate the deleterious effects of income inequality in nations and societies around the world.
- These effects in life expectancy, disease morbidity, high school dropout rates, violent crime, drug abuse, etc. are not related to measures of poverty *per se* but to the **gap between levels of income** within the society itself – whether at the national, state or county level.
- **Income inequality has grown dramatically in the U.S.** where the gap between Haves and Have-Nots is now one of the largest of any developed nation.
- The U.S. also displays some of the most **negative societal effects**.



Trends in US income inequality 1975-2005

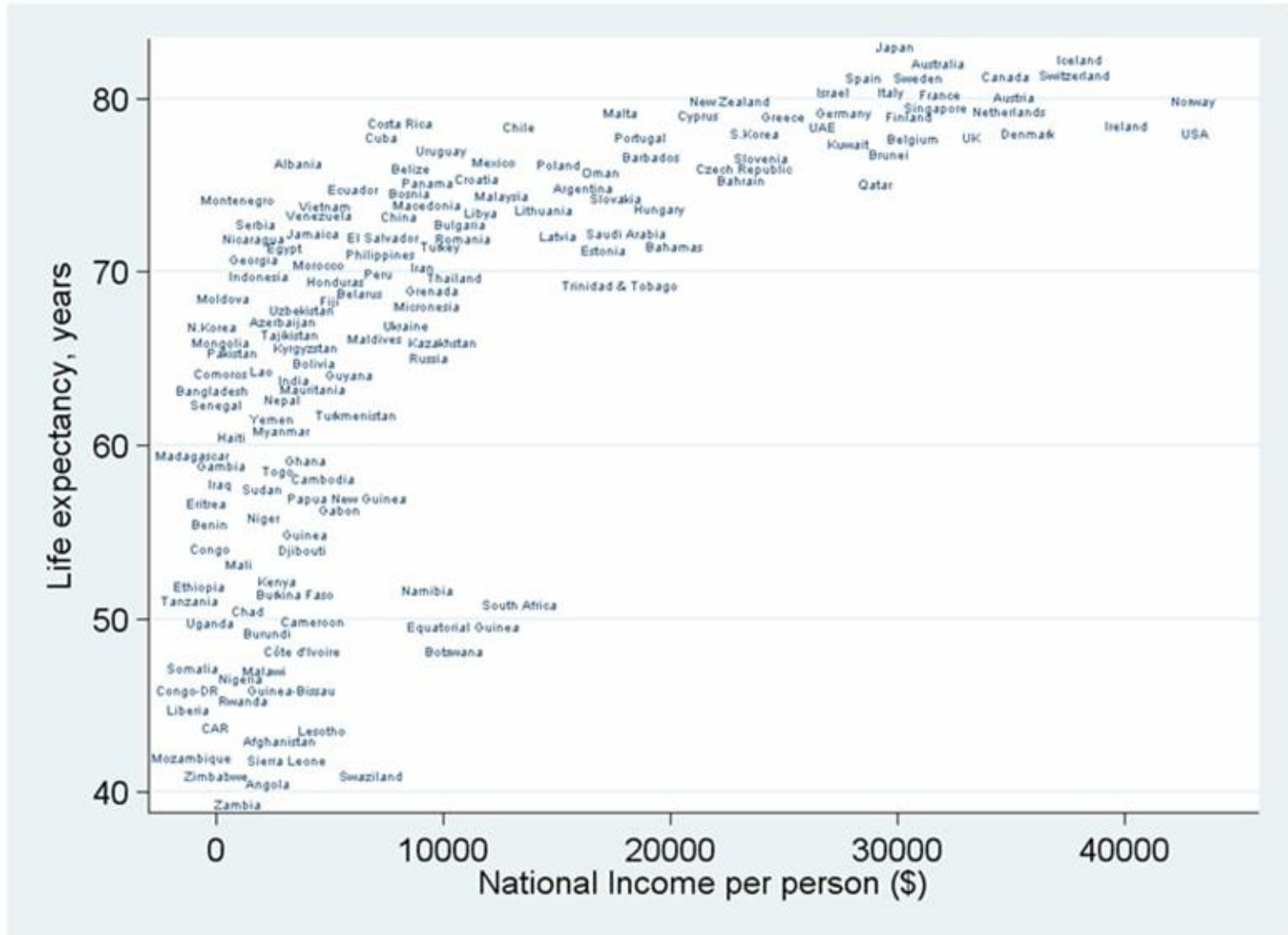


How much richer are the richest 20% than the poorest 20%?



Source: United Nations Development Program

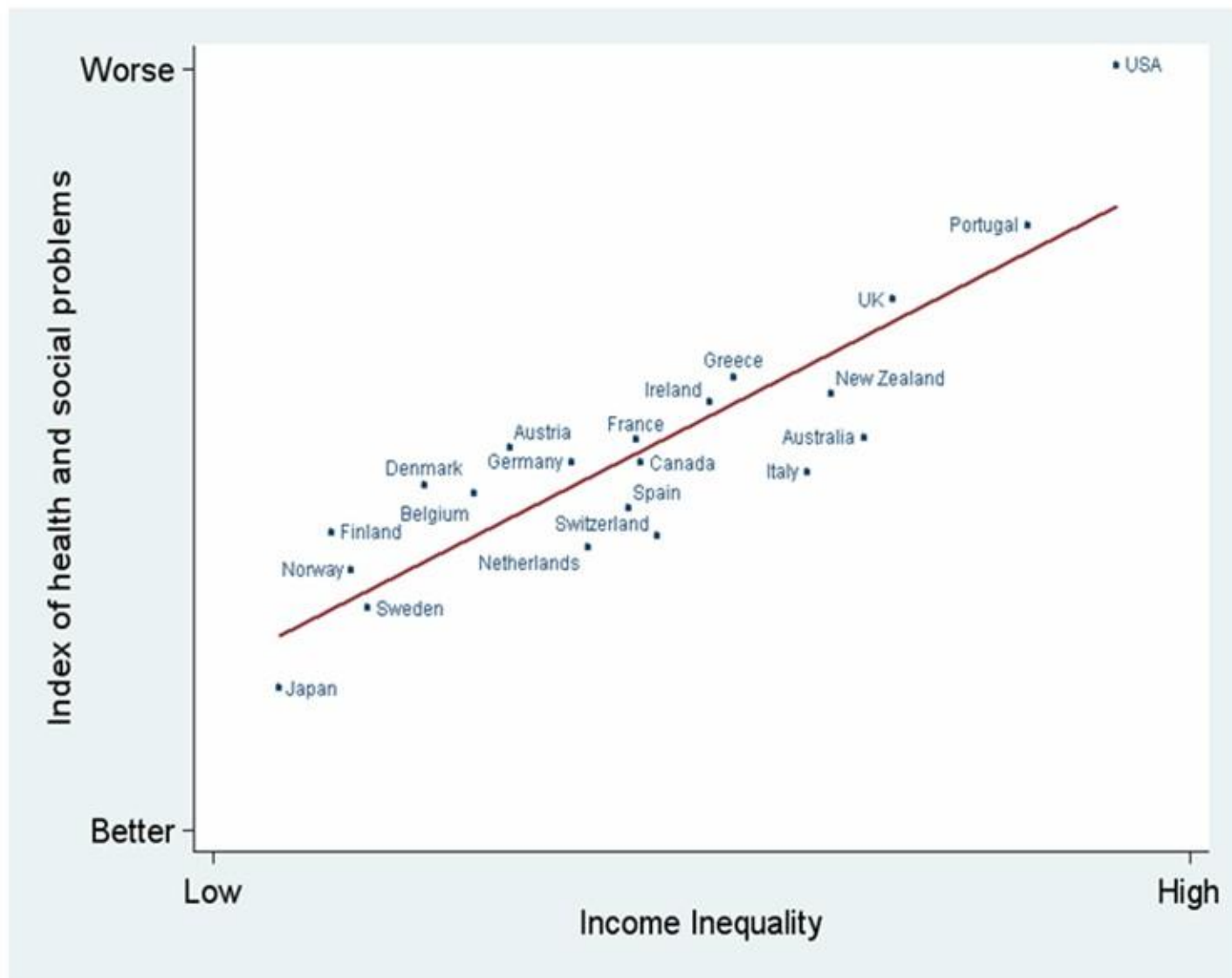
Income per head and life-expectancy: rich & poor countries



Health and Social Problems are Worse in More Unequal Countries

Index of:

- Life expectancy
- Math & Literacy
- Infant mortality
- Homicides
- Imprisonment
- Teenage births
- Trust
- Obesity
- Mental illness – incl. drug & alcohol addiction
- Social mobility



At the SYSTEM Level

- The top 20 private universities with the largest endowments account for **60% of the total endowment value** of all private institutions of higher education in the U.S.
($\$146$ billion out of $\$243$ billion in 2010 –NACUBO)
- These same 20 institutions represent **6.3% of total private post-secondary enrollment** and only **1.7% of total post-secondary enrollment**.
(355,478 students out of 5.7 million private and 20.6 million – NCES)
- These same best-endowed institutions are **virtually identical to the 20 top-ranked national universities** according to *US News*.



At the SYSTEM Level

- These “Have” institutions disproportionately serve the “Have” students and families.
 - “Just under **15 percent** of the undergraduates at the country's 50 wealthiest colleges received Pell Grants in 2008-9 . . .
 - That percentage hasn't changed much from 2004-5 . . .
 - Pell Grant students are still significantly less represented at the wealthiest colleges than they are at public and nonprofit four-year colleges nationwide, where grant recipients accounted for roughly **26 percent** of students in 2008-9.”

(Chronicle of Higher Education, March 27, 2011)



At the SYSTEM Level

- A self-perpetuating cycle in which wealthy alumni of elite universities “bring sand to the beach” in **donations that further expand their endowments**.
- Endowments that give these schools an unfair programmatic and reputational advantage in attracting wealthy families and the financial aid resources to **out-compete for the most capable students** – even those who are economically disadvantaged.
- Endowments that actually confer a major, **hidden discount** in the form of a sticker price far below the actual cost of educating students – even before any discounts in the form of institutional aid.



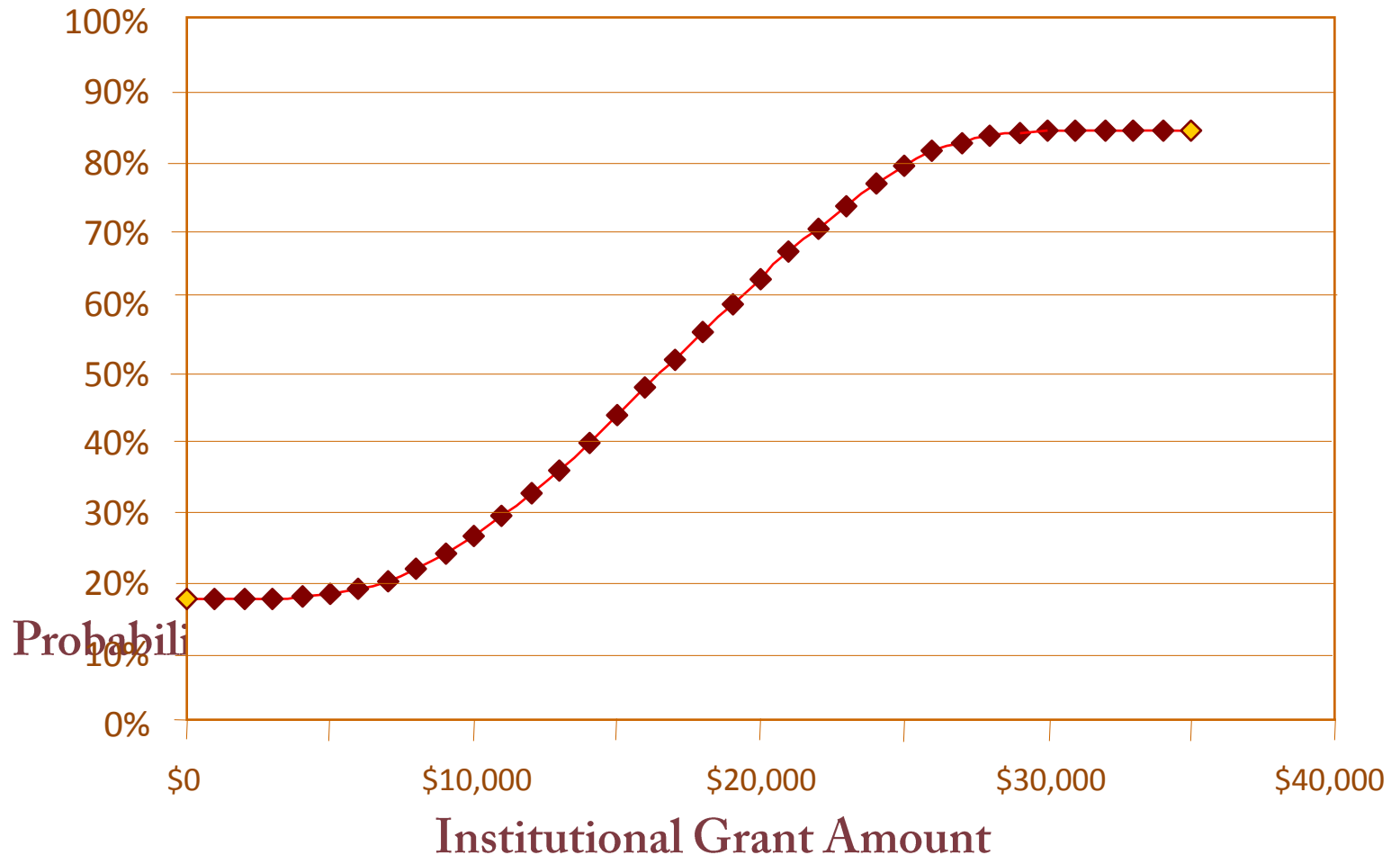
At the INSTITUTIONAL and STUDENT Levels

- Increasing the average discount rate can **increase Net Tuition Revenue**.
- There is an **optimal average grant** below which an institution “yields” fewer students than it could; and above which it foregoes more tuition revenue than it needs to.
- Increasing Net Tuition Revenue permits not only program enrichment but **expanded need-based financial aid**.
- Predictive modeling enables institutions to leverage its financial aid dollars not only to maximize Net Tuition Revenue but also to **shape the incoming class** in terms of characteristics it deems important – from SAT scores to gender balance to geographic and ethnic diversity.



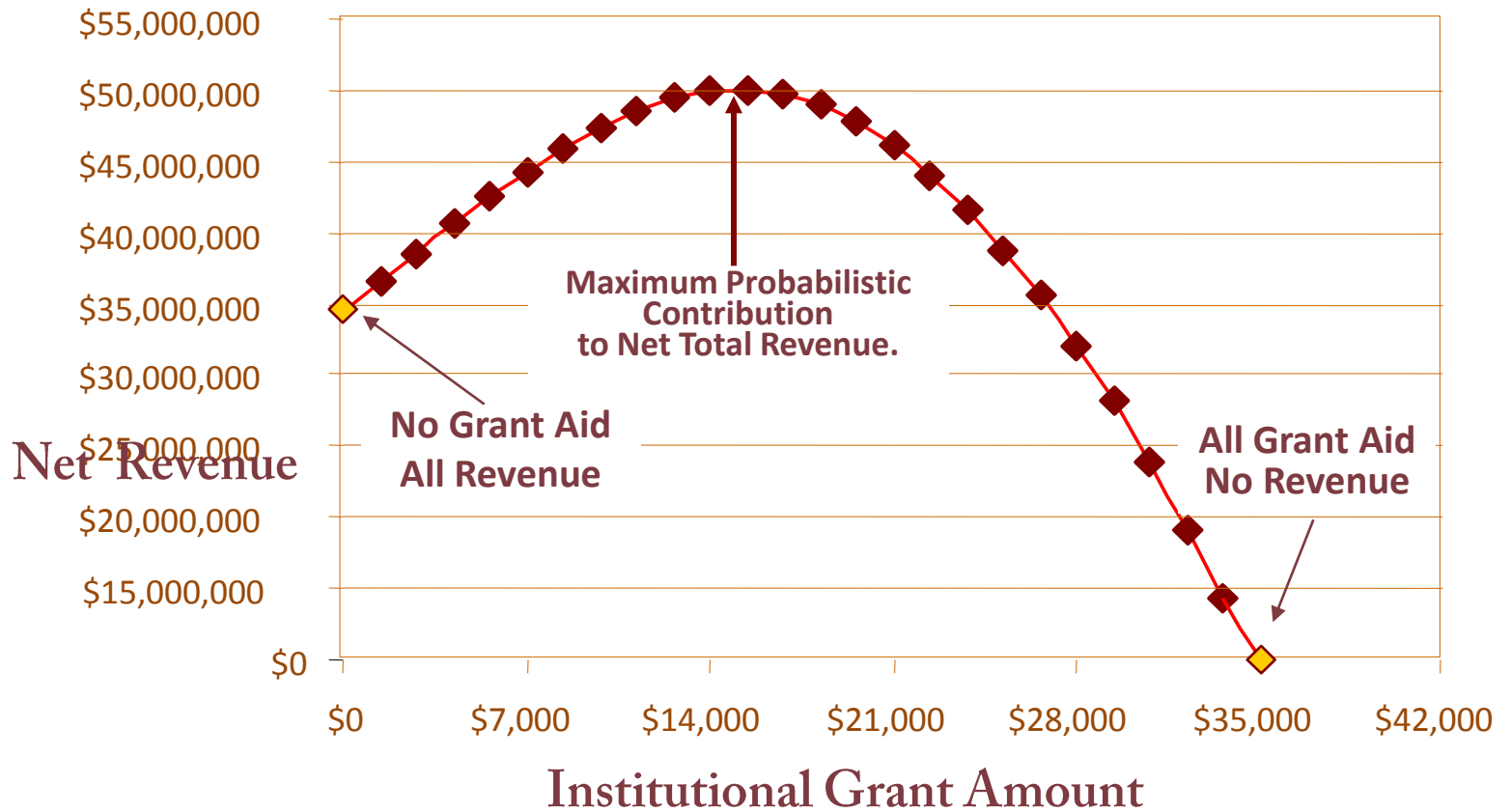
Probability of Enrollment as a Function of Average Institutional Grant

Assuming a \$ 35,000 COA

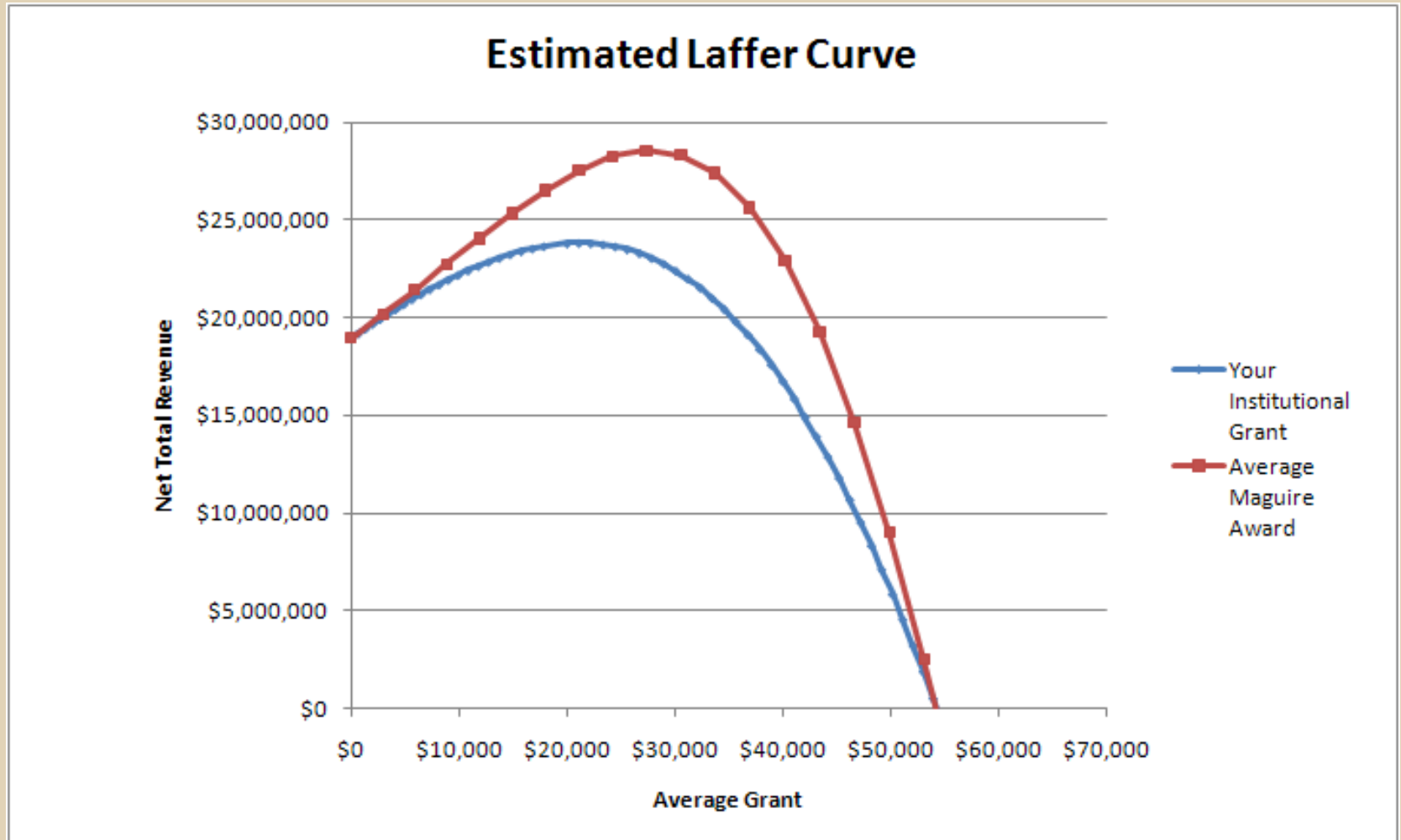


Net Revenue as a Function of Institutional Grants

Assuming a \$ 35,000 COA



Point of Optimization



Determine Influences on Enrollment Decision

**Enrollment
Predictors
by:**

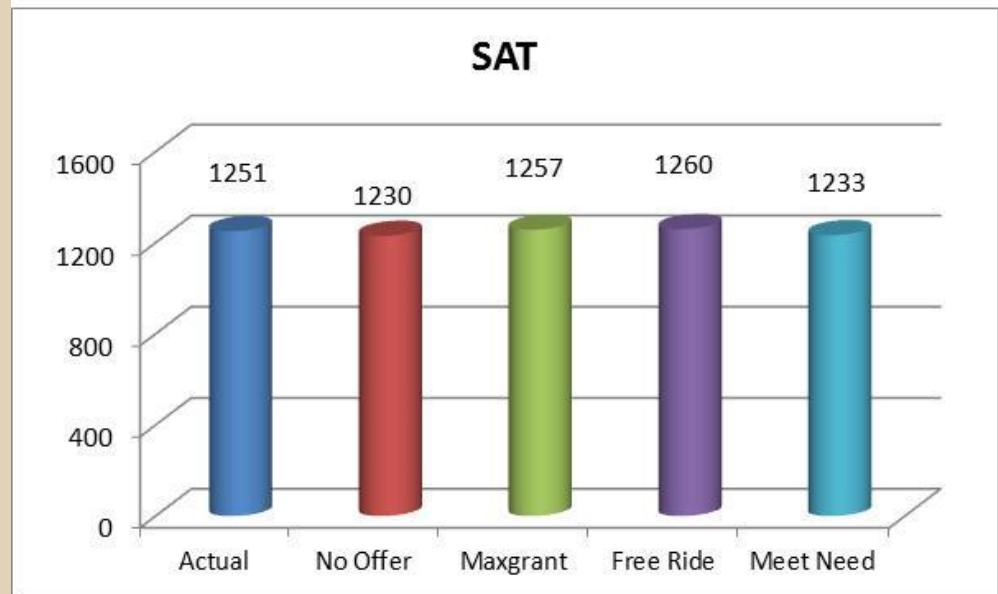
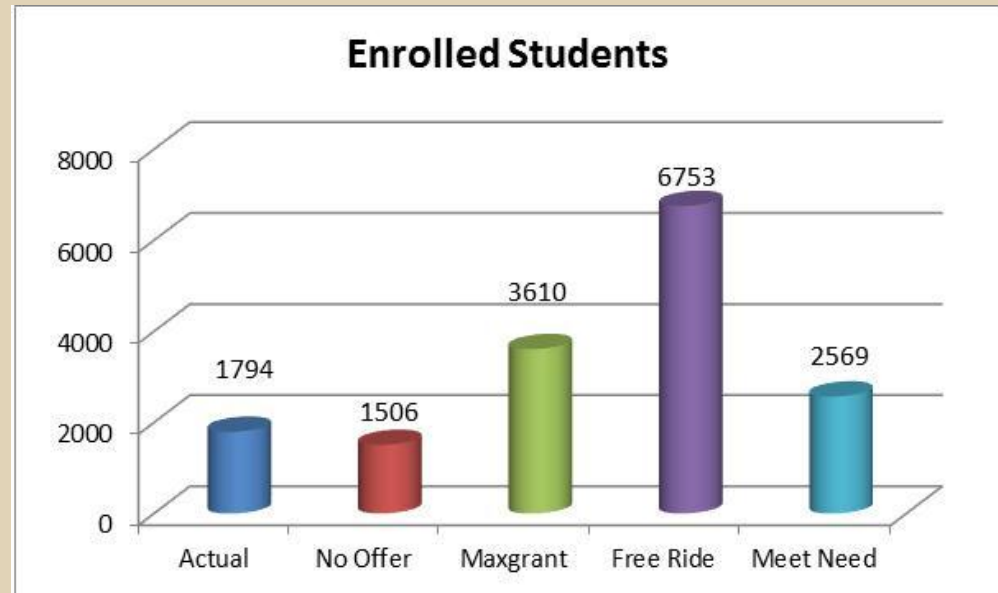
Variables	Coefficients
Scholarship Amount	.00010
Minority (excluding Asian)	-.80629
Arts and Sciences	-.28496
First Contact-Sent Scores	.24774
First Contact-Application	.17130
E-Common Application	-.30106
Legacy	.26312
Campus Tour	1.30359
Admitted Student Decision Day Program	1.93381
SAT	-.00526
Recalculated High School GPA	-.89520
Listed as FAFSA First Choice	1.80647
Listed as FAFSA Second Choice	.41153
Demonstrated Financial Need	-.00001
Admitted to Honors Program	.20411
Contiguous State #1	.27709
Contiguous State #2	.35001



Calculate Price Sensitivity

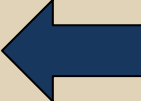
A test of your students' price sensitivity, by:

- Academic program
- Residents
- Commuters
- In-State
- Out-of-State
- Other targets of interest



Price Sensitivity

- **Low** – Financial aid does not have much of an effect on students' enrollment decisions.
- **High** – Net cost is a dominant factor in students' enrollment decision and their decision-making is very sensitive to financial aid offers.
- **Medium** - Students admitted to these schools tend to respond to less expensive financial incentives and therefore bring in more net revenue.



Greatest opportunity to use financial aid strategically to shape incoming classes.



In Short . . .

The strategic deployment of non-need based financial aid is the inevitable byproduct of a system that is inherently skewed (not only in higher education but in virtually every sphere of American life) toward rewarding the Have institutions at the expense of the Have-Not institutions.

Far from being immoral, Strategic Pricing can be the most ethical response in an unfair system.



Resources

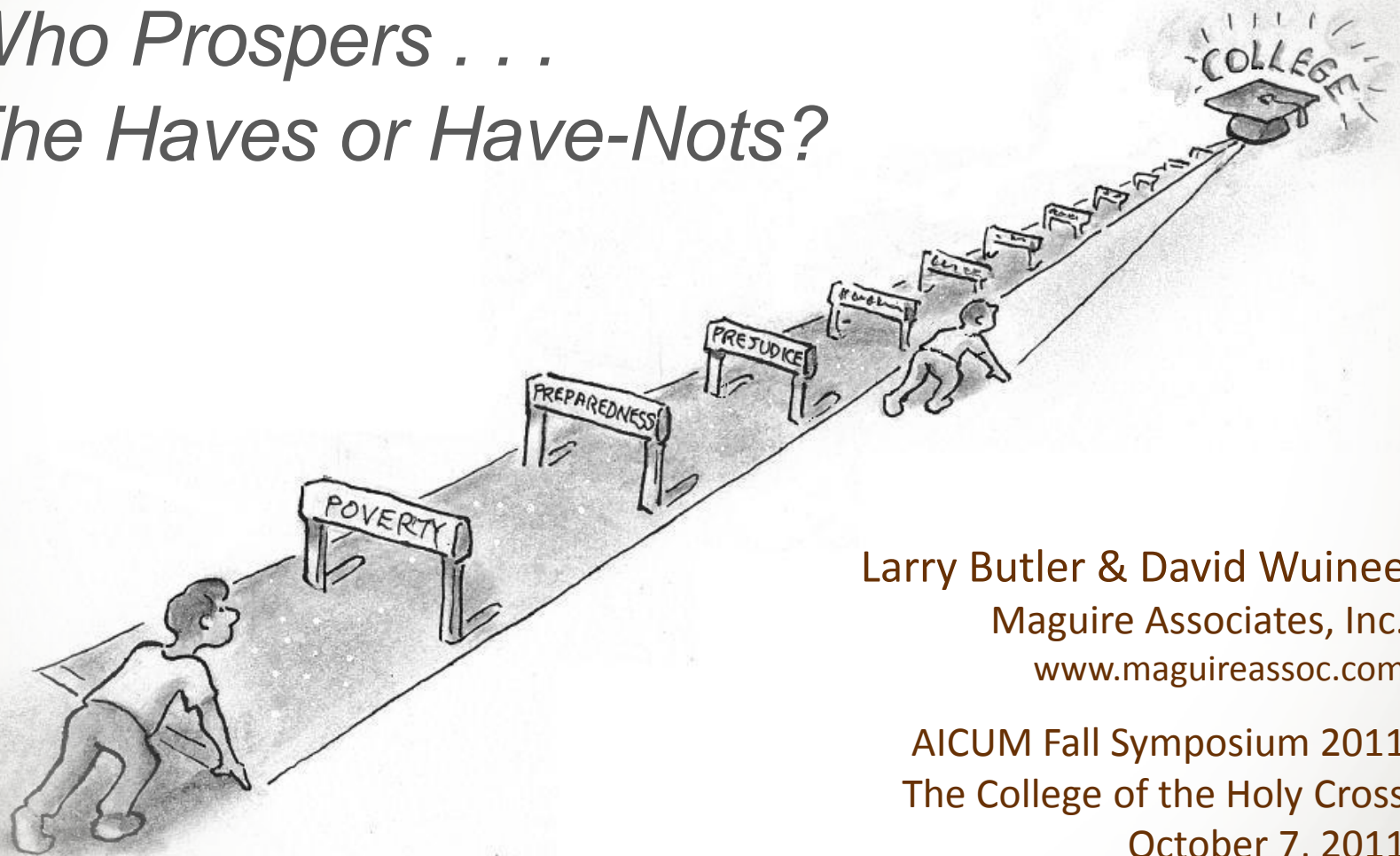
- Epstein, J., “Merit Aid...‘I Wish You’d Never Been Born’: Turning Bedford Falls into Pottersville” *College and University*, Volume 84, No. 2, 2008.
(http://www.maguireassoc.com/resource/documents/College_and_University-meritaid_article-J._Epstein_11-08.pdf)
- Kristof, N., “Equality, a True Soul Food,” *The New York Times*, January 1, 2011.
- Maguire, J. and Butler, L. “Have-Not Colleges Need New Ways to Compete with Rich Ones,” *The Chronicle of Higher Education*, January 18, 2008.
- Maguire, J. and Butler, L., *EM=C²: A New Formula for Enrollment Management*, Trafford Publishing, 2008.
- Marx, A., “The Economic Divide on Campuses is a National Tragedy,” *The Chronicle of Higher Education*, September 11, 2011.
- Supiano, B. and Fuller, A., “Elite Colleges Fail to Gain More Students on Pell Grants,” *The Chronicle of Higher Education*, March 27, 2011.
- Wilkinson, R. and Pickett, K., *The Spirit Level: Why Greater Equality Makes Societies Stronger*, Bloomsbury Press, 2009.



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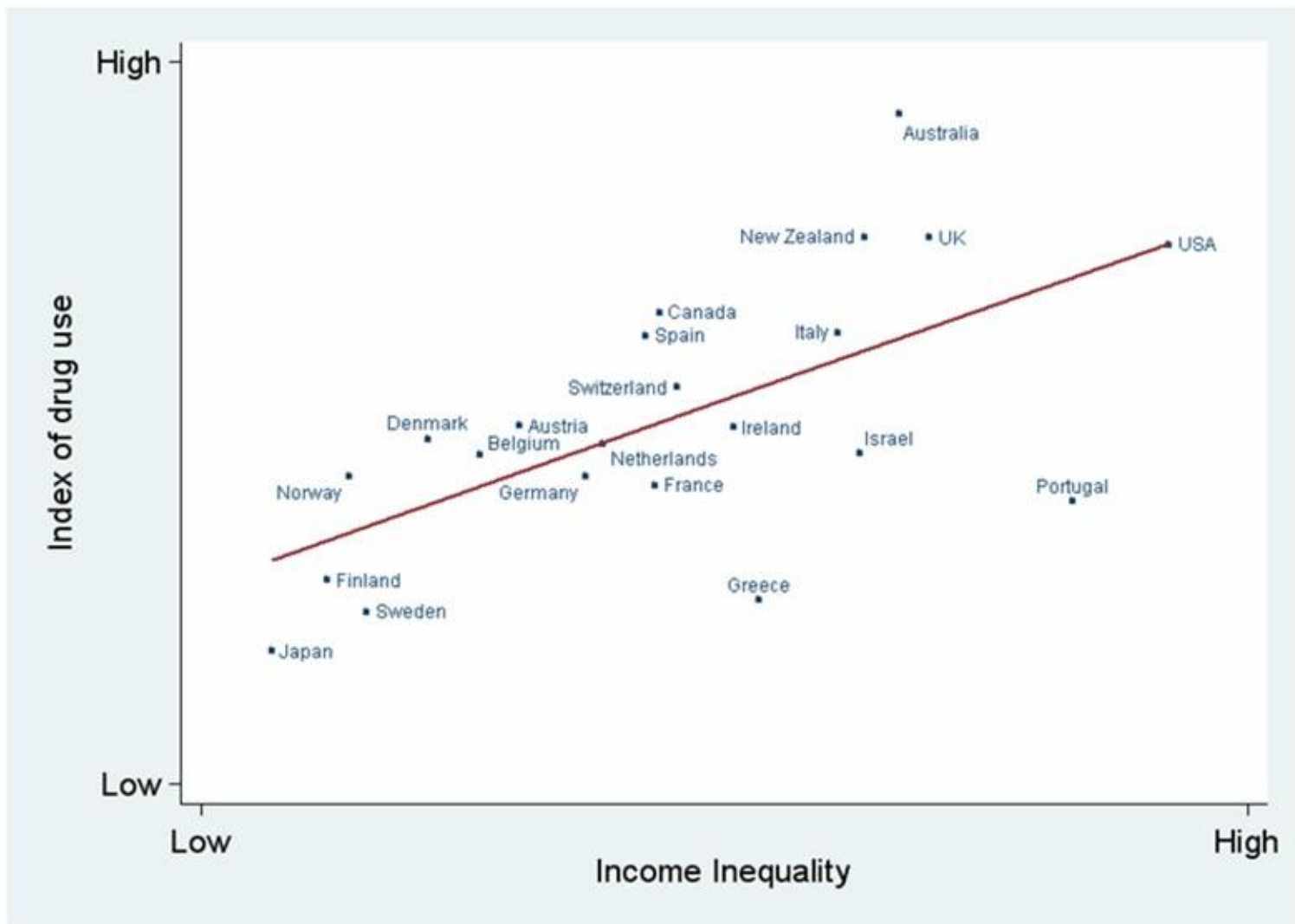
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Value of Top 20 Private University Endowments AY 2009-10

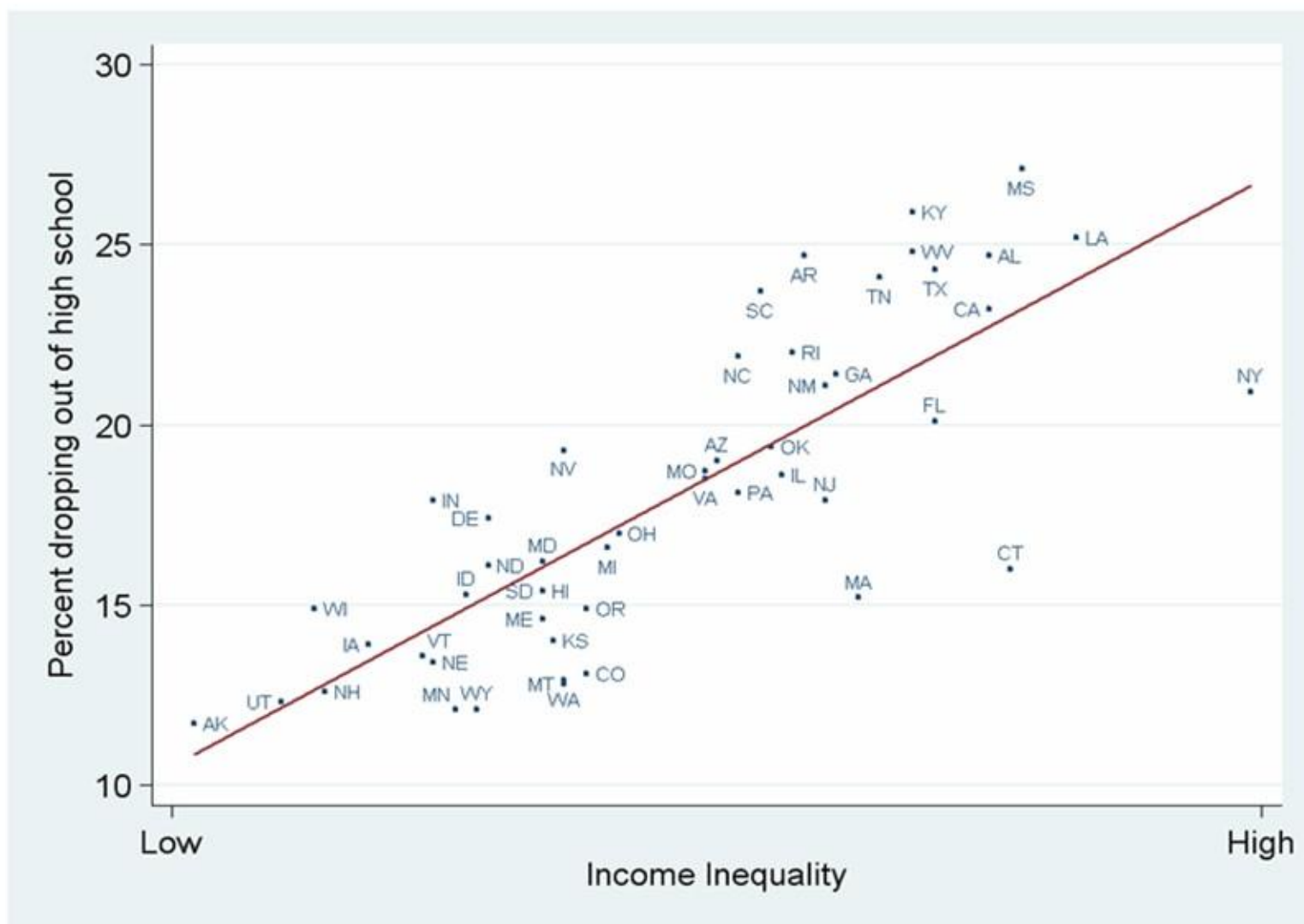
	Endowment Value	Total Fall Enrollment
1 Harvard University (Cambridge, MA)	\$27,557,404,000	27,651
2 Yale University (New Haven, CT)	\$16,652,000,000	11,593
3 Princeton University (Princeton, NJ)	\$14,391,450,000	7,592
4 Stanford University (Stanford, CA)	\$13,851,115,000	18,498
5 Massachusetts Institute of Technology (Cambridge, MA)	\$8,317,321,000	10,384
6 Columbia University in The City of New York (New York, NY)	\$6,516,512,000	24,230
7 Northwestern University (Evanston, IL)	\$5,945,277,000	19,853
8 University of Pennsylvania (Philadelphia, PA)	\$5,668,936,618	24,599
9 University of Chicago (Chicago, IL)	\$5,638,039,676	15,094
10 University of Notre Dame (Notre Dame, IN)	\$5,234,841,000	11,816
11 Duke University (Durham, NC)	\$4,823,572,000	14,350
12 Emory University (Atlanta, GA)	\$4,694,260,367	12,930
13 Washington University in St Louis (St Louis, MO)	\$4,473,179,679	13,575
14 Cornell University-Endowed Colleges (Ithaca, NY)	\$4,378,587,000	20,633
15 Rice University (Houston, TX)	\$3,786,548,407	5,576
16 Vanderbilt University (Nashville, TN)	\$3,044,000,000	12,506
17 Dartmouth College (Hanover, NH)	\$2,998,302,000	5,987
18 University of Southern California (Los Angeles, CA)	\$2,947,978,000	34,824
19 New York University (New York, NY)	\$2,370,000,000	43,404
20 Johns Hopkins University (Baltimore, MD)	\$2,219,925,000	20,383
SUBTOTAL	\$145,509,248,747	355,478

Drug Use is More Common in More Unequal Countries

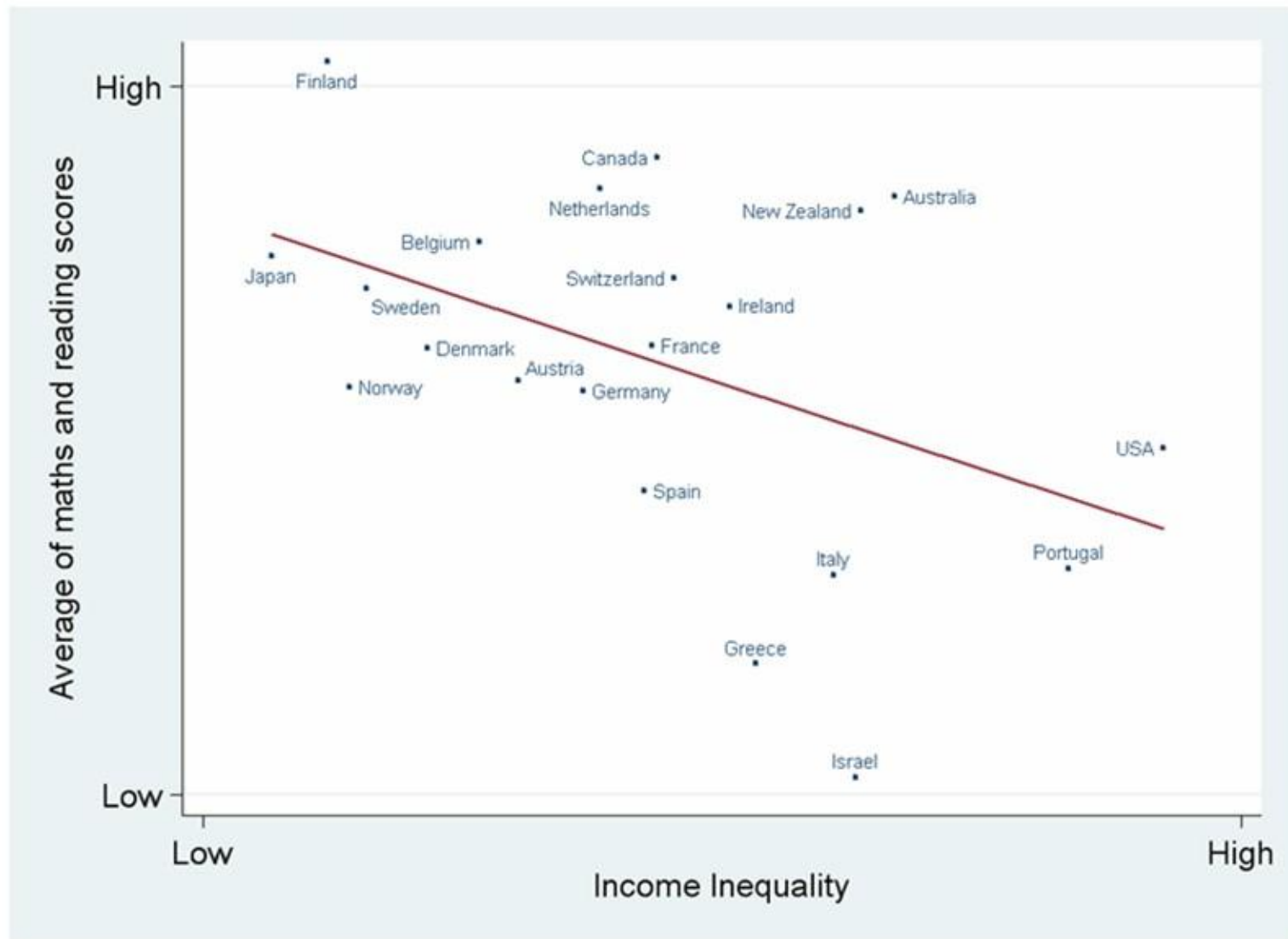


Index of use of: opiates, cocaine, cannabis, ecstasy, amphetamines

More Children Drop Out of High School in More Unequal US States

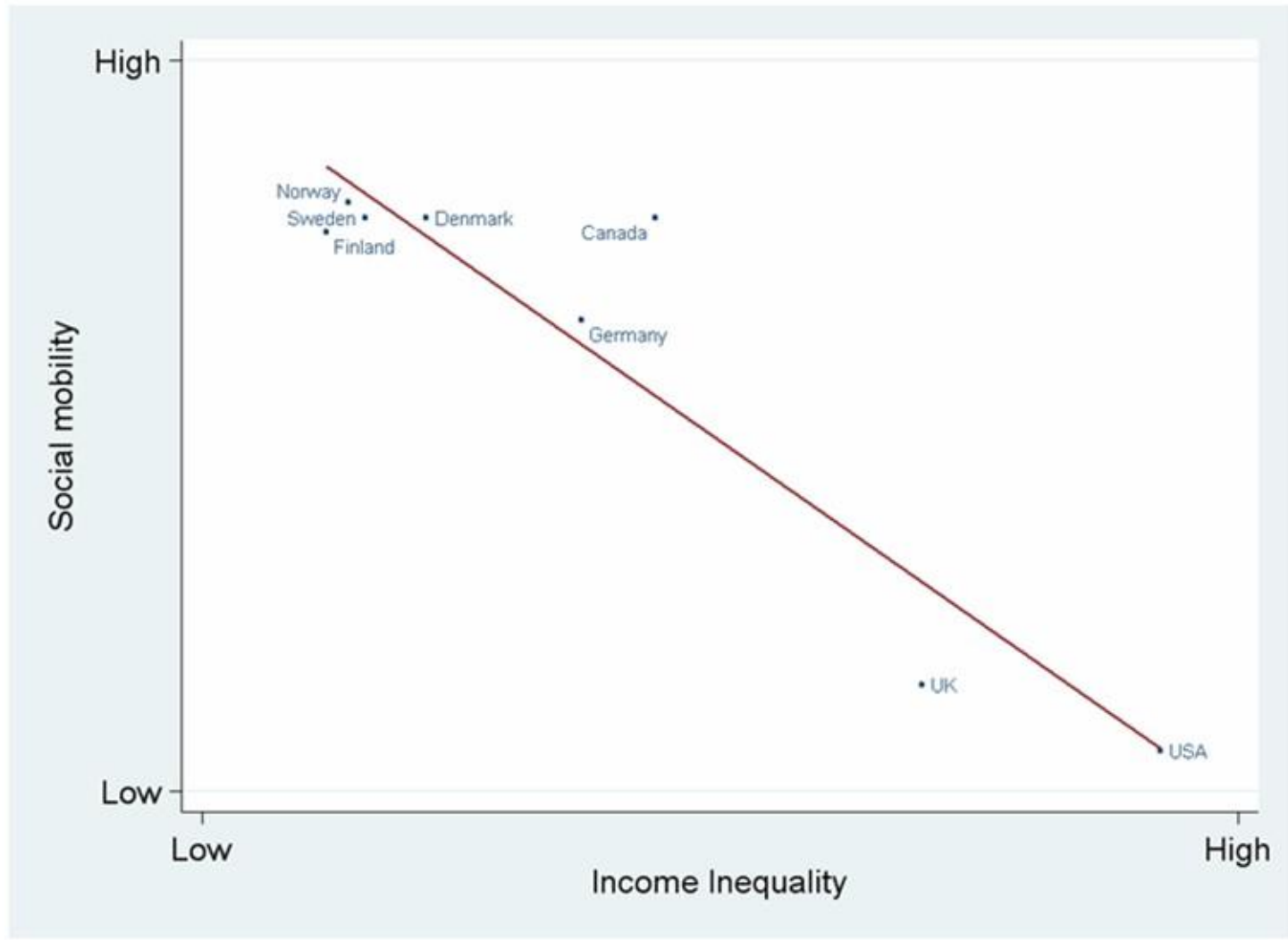


Educational Scores are Higher in More Equal Rich Countries



Source: Wilkinson & Pickett, *The Spirit Level* (2009)

Social Mobility is Higher in More Equal Rich Countries

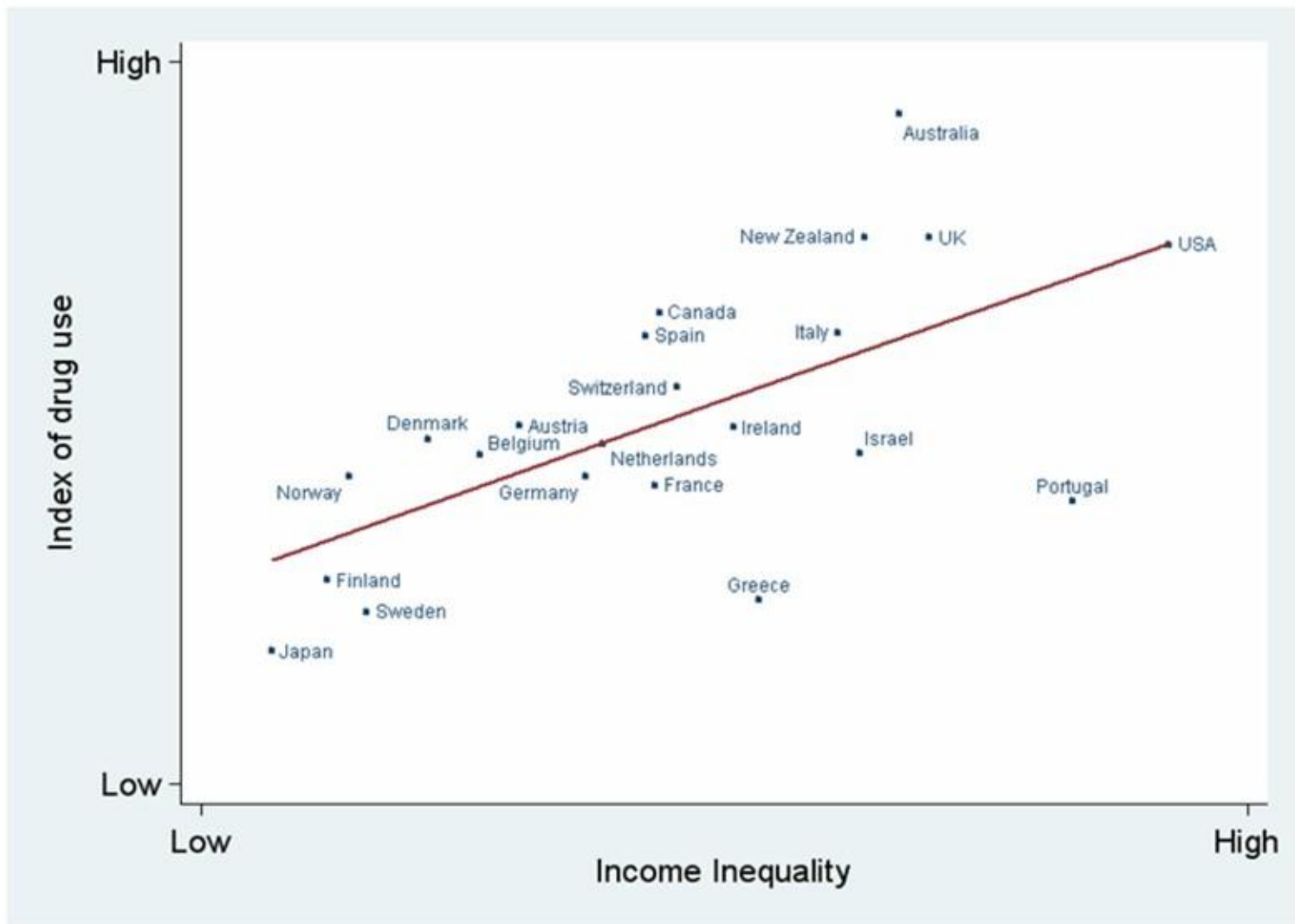


Source: Wilkinson & Pickett, *The Spirit Level* (2009)

Infant Mortality Rates are Higher in More Unequal Countries

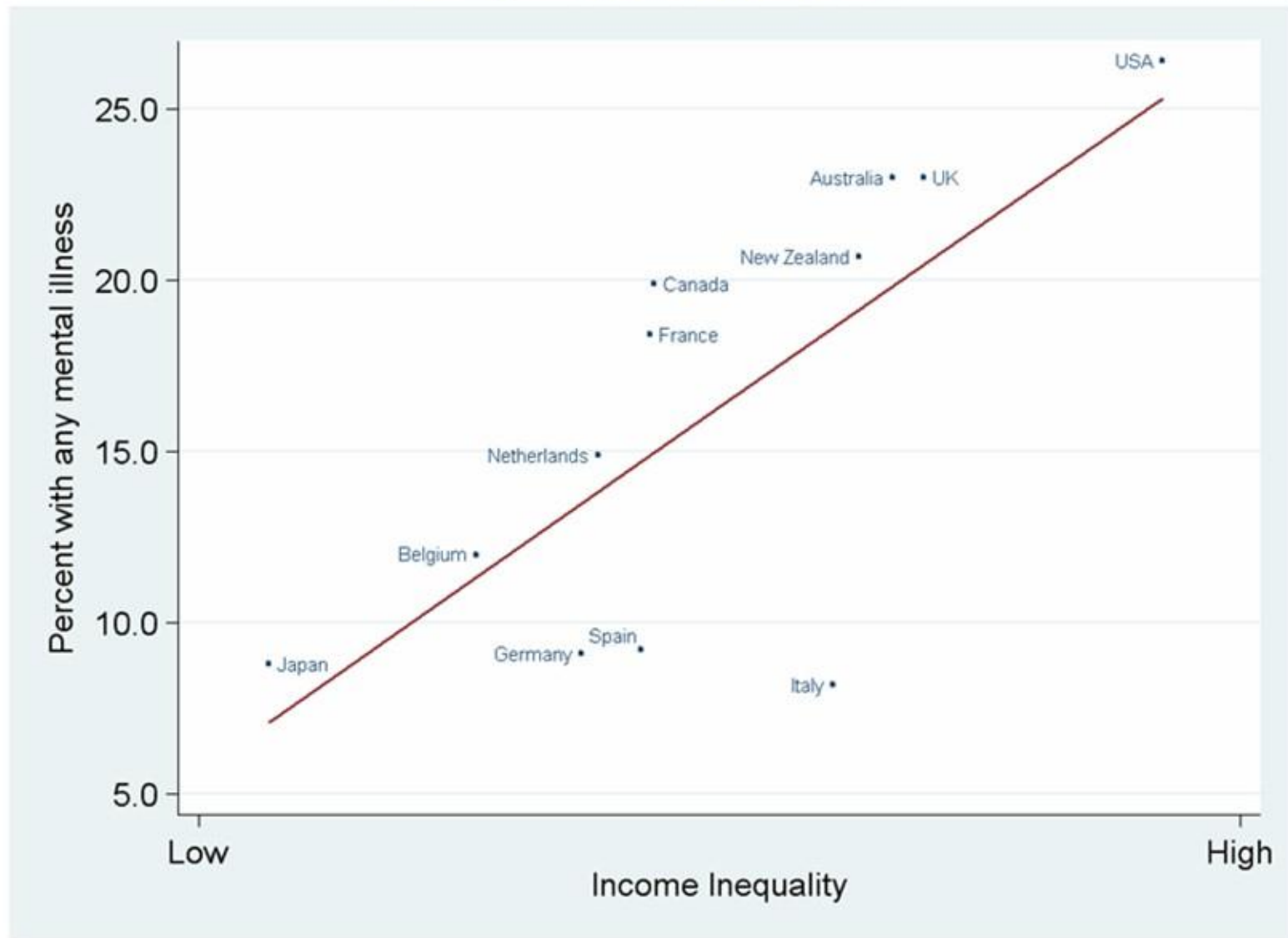


Drug Use is More Common in More Unequal Countries



Index of use of: opiates, cocaine, cannabis, ecstasy, amphetamines

The Prevalence of Mental Illness is Higher in More Unequal Rich Countries

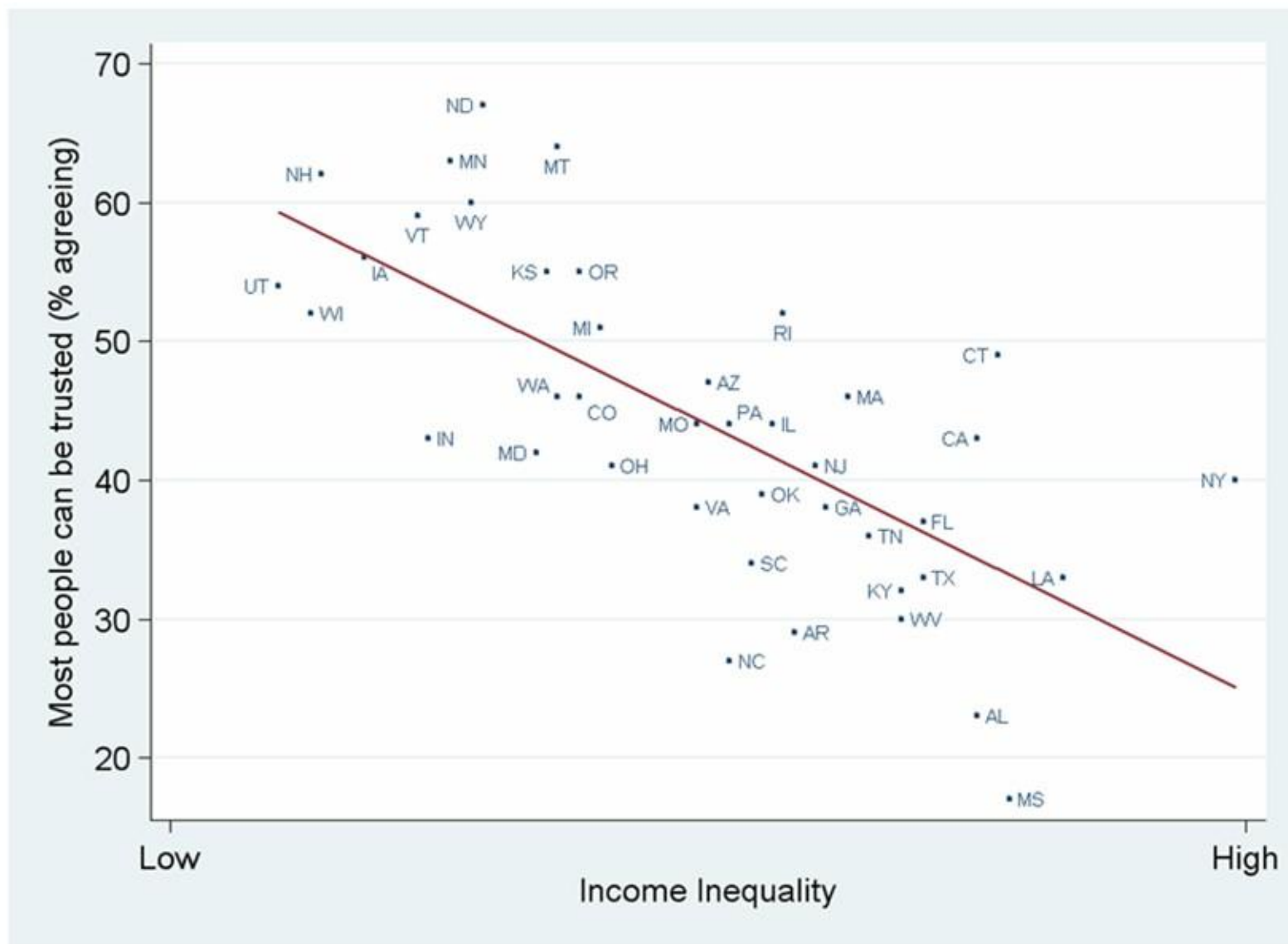


More Adults are Obese in More Unequal Rich Countries

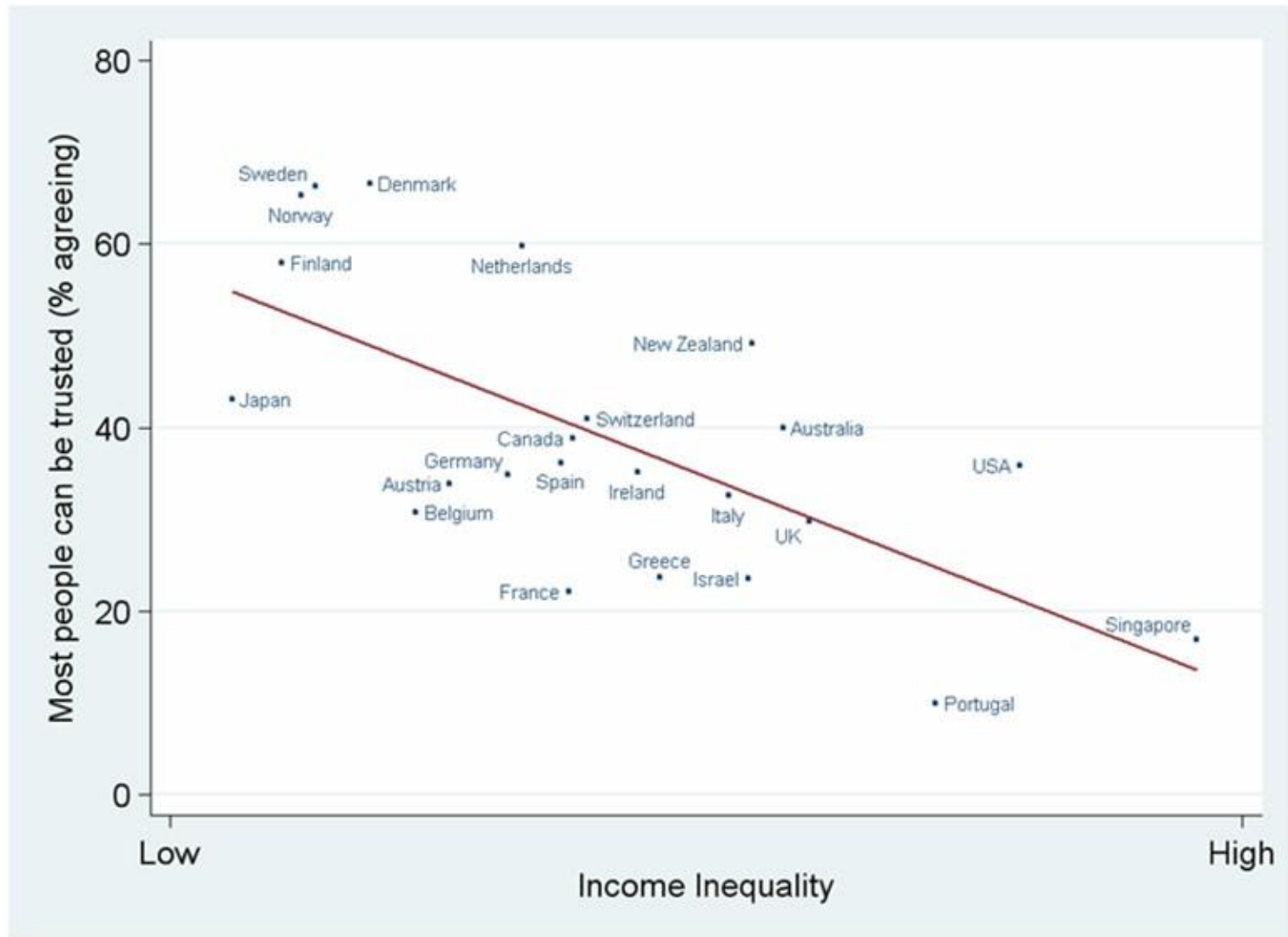


Source: Wilkinson & Pickett, *The Spirit Level* (2009)

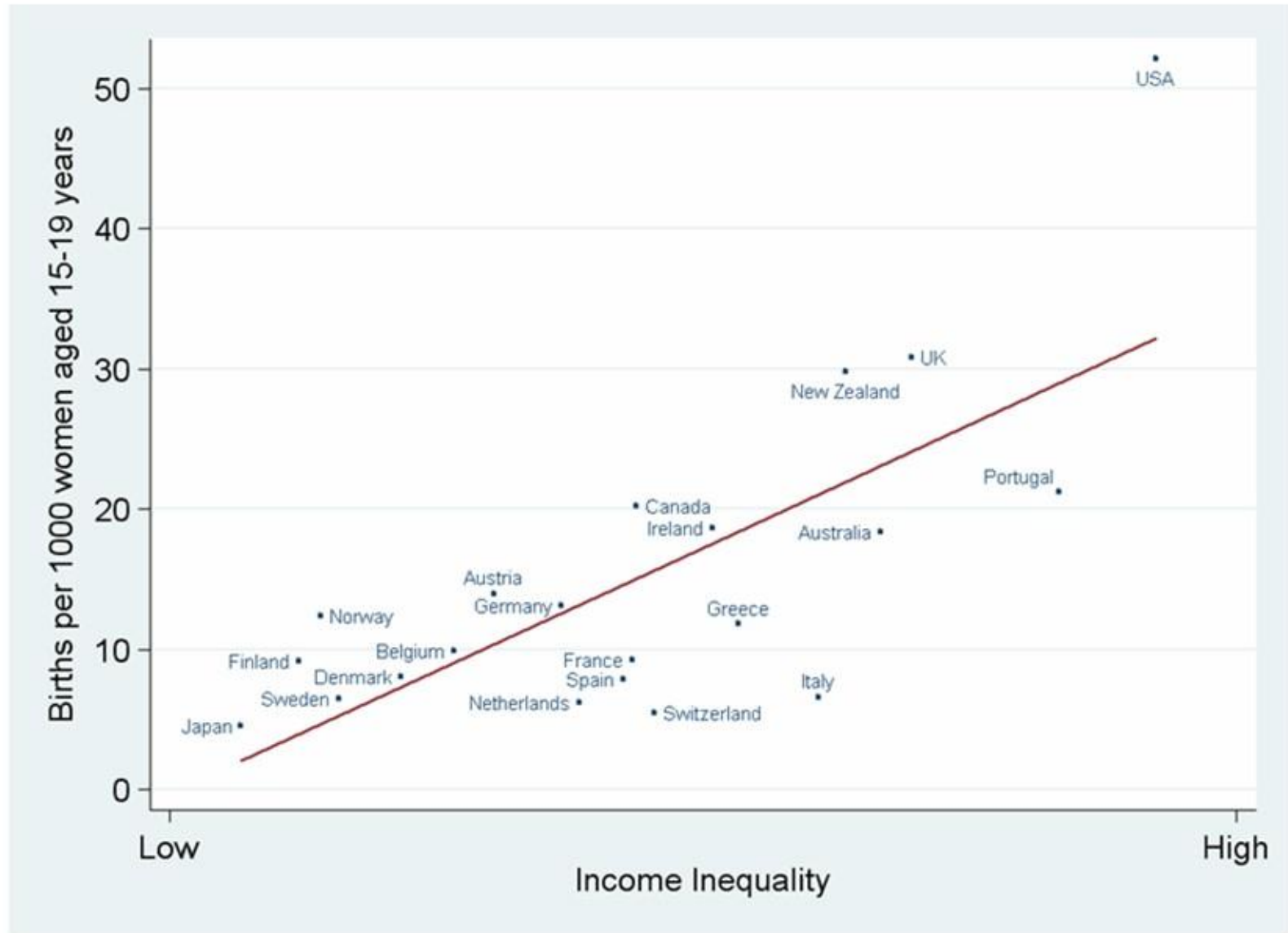
Levels of Trust are Higher in More Equal US States



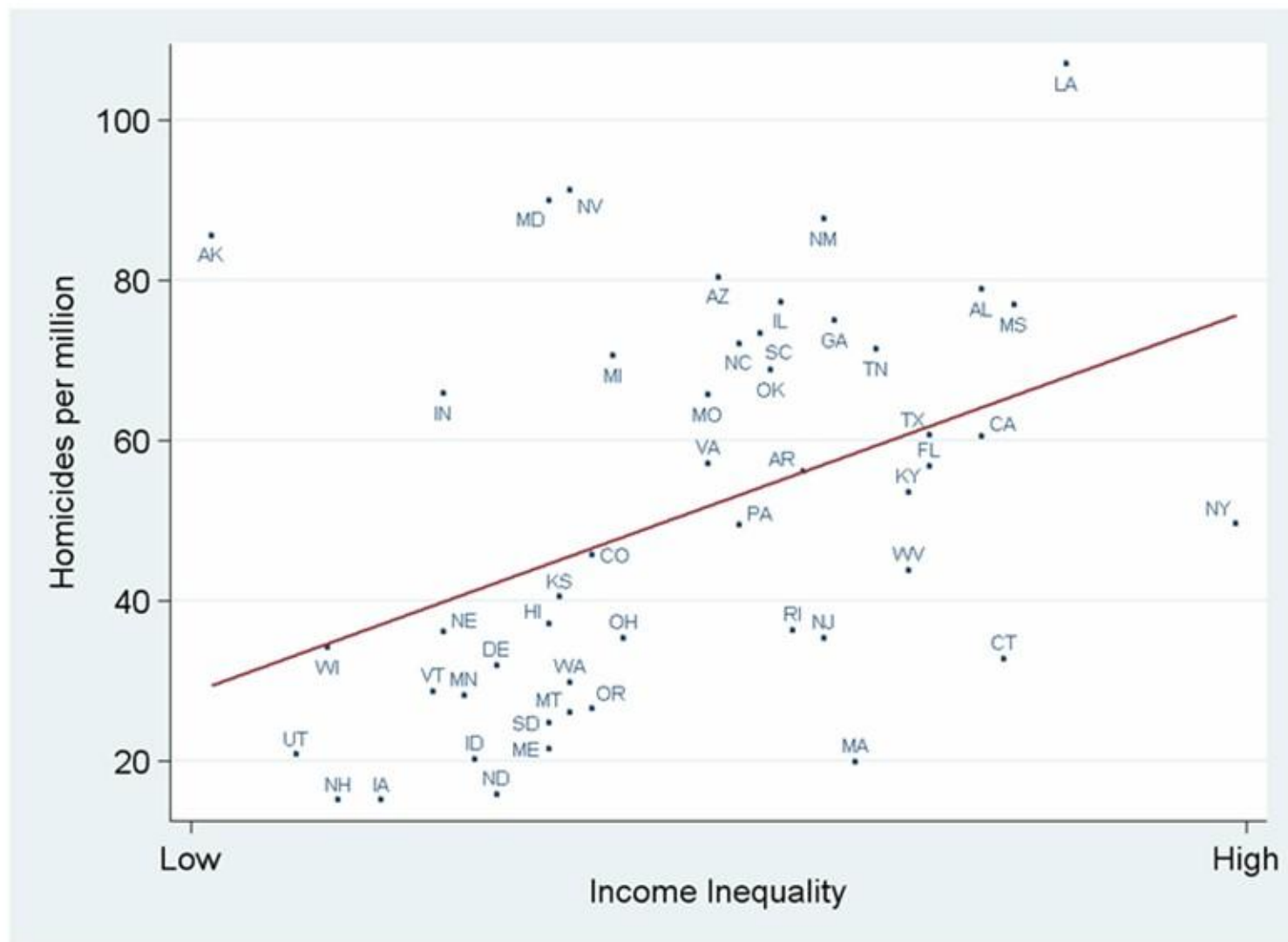
Levels of Trust are Higher in More Equal Rich Countries



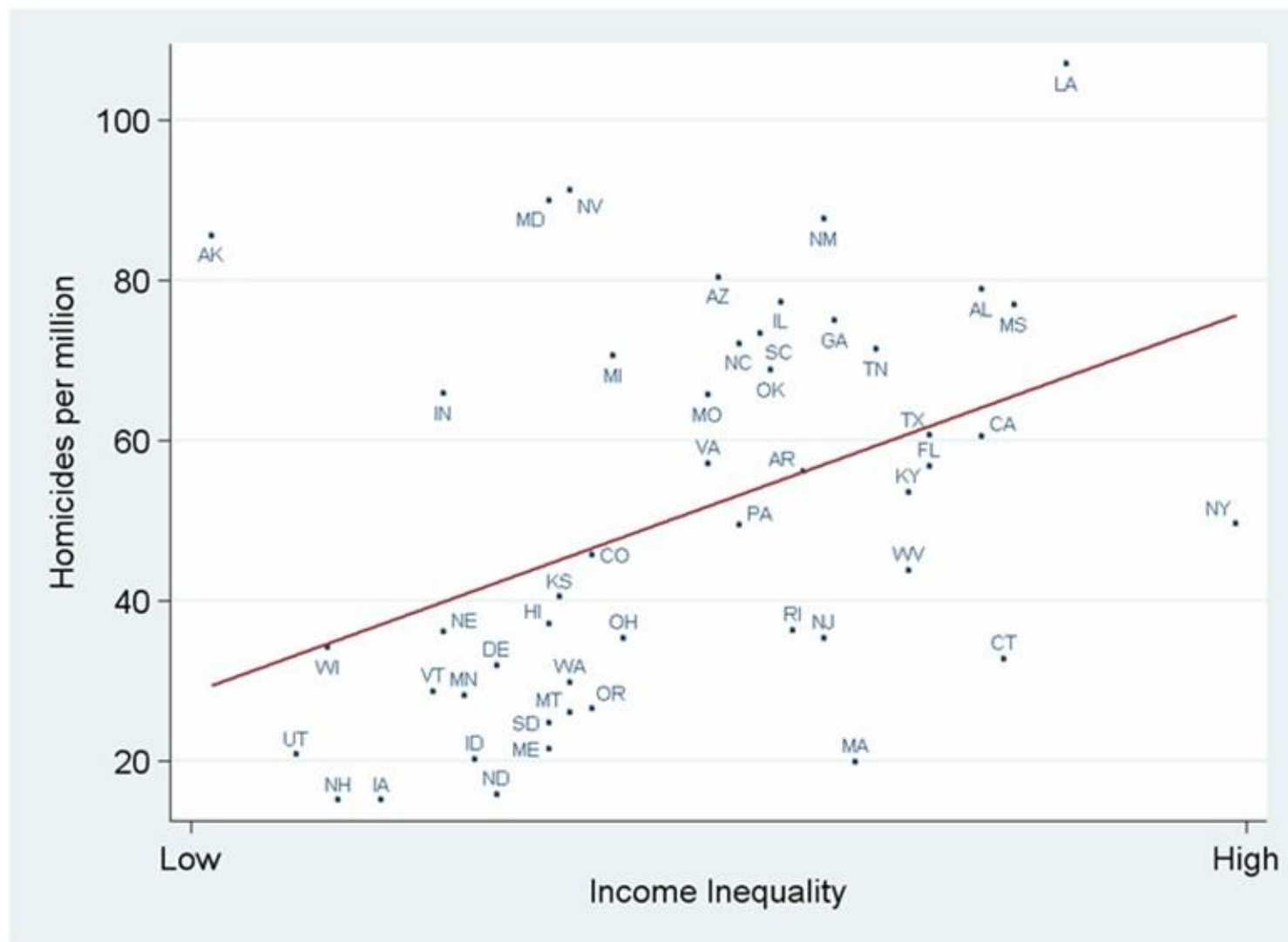
Teenage Birth Rates are Higher in More Unequal Rich Countries



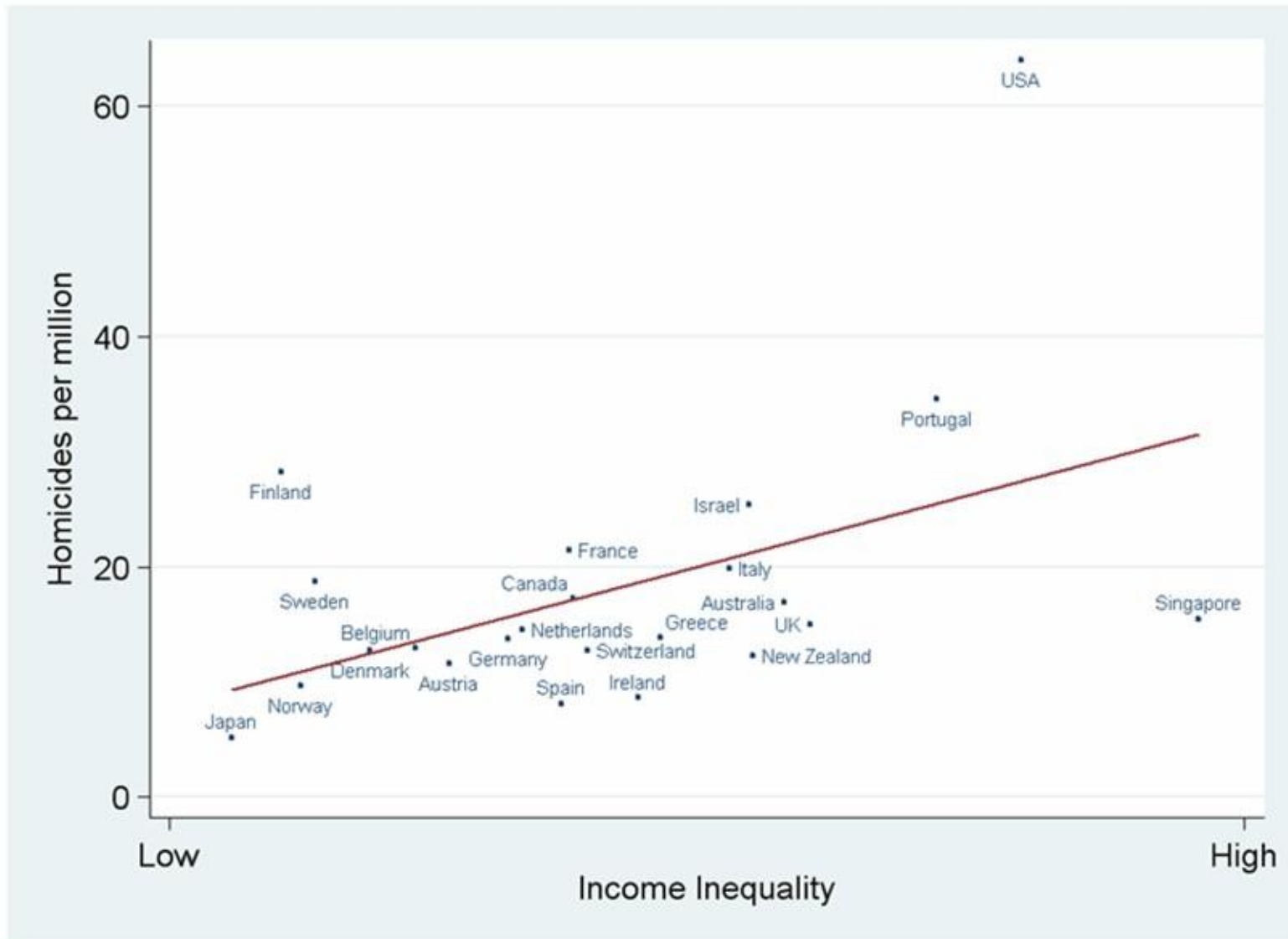
Homicide Rates are Higher in More Unequal US States



Homicide Rates are Higher in More Unequal US States



Homicide Rates are Higher in More Unequal Rich Countries



Life Expectancy is Longer in More Equal Rich Countries

