

ADDRESSING THE FORCES DRIVING INEQUALITY
IN THE UNITED STATES

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Presentation of multiple dimensions of current inequality in the United States, with some discussion of some causes and some policy issues. (JEL D3)

I normally shy away from use of the word *inequality*, but it's become such a hot topic that it becomes harder and harder to do that. One reason I shy away is that there are lots of different measures and issues relative to inequality, and particularly, to changing inequality. Without a modifier, the term does not distinguish among topics.

The second reason I shy away is that, as an economist, I am basically interested in what connects to policy. While inequality is part of the thinking about a variety of policy issues, it is only part. For example, take Jim's model of the optimal income tax (Mirrlees 1971), where the inequality in the distribution of earnings abilities is a key factor in the design of an optimal income tax. If something makes earnings abilities become differently distributed, then the optimal tax is going to change. From a policy point of view, looking at the earnings changes is a way of flagging whether or not you need to change taxes in order to continue having good policy.

And, it won't shock you to hear that I think—and I'm focusing just on the United States—that not all policy issues have been well addressed. So issues of changing inequality may help to bring attention to existing policy issues, and open up opportunities to do better.

I. INEQUALITIES

I want to run quickly through some pictures about inequality, and then touch on the causes, and on what the causes tell us might be roots for policy improvements; policy improvements viewed from the normal economist's consequential analysis of equilibrium, not out of a focus on what it does to the Gini coefficient.

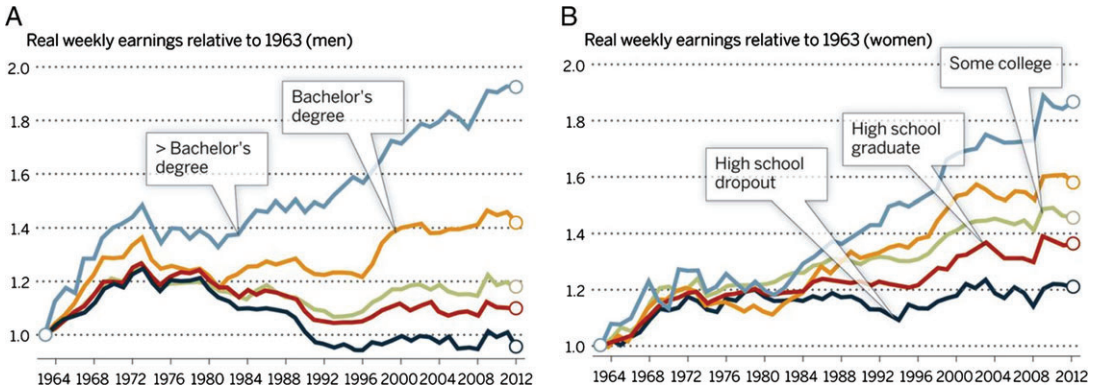
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So let me show you a few pictures; I'll run through them quickly. Figure 1 is real wage levels of U.S. workers, separated out by sex and education. And, as you see, we have a long-run problem in the United States of people with low education having very stagnant earnings on average. That is widely recognized to be a problem, and it is becoming worse as it goes on.

A consequence of that picture with different growth rates top and bottom is commonly referred to as the hollowing out of the middle class. To look at what is happening to the middle class, I turn to incomes, rather than earnings. Pew Research Center (2015) defined the middle income group as those with an income between two-thirds and twice the U.S. median household income, after incomes have been adjusted for household size (and scaled for a family of three). The upper and lower income groups are further divided with the lower-middle income households having incomes from half to two-thirds and upper-middle income households between two and three times the median. Figure 2A shows the percentage of adults in each of five tiers of incomes. Figure 2B shows the median incomes in the three tiers, while Figure 2C shows the median net worth in each tier (a measure that does not include either Social Security or defined benefit pensions).

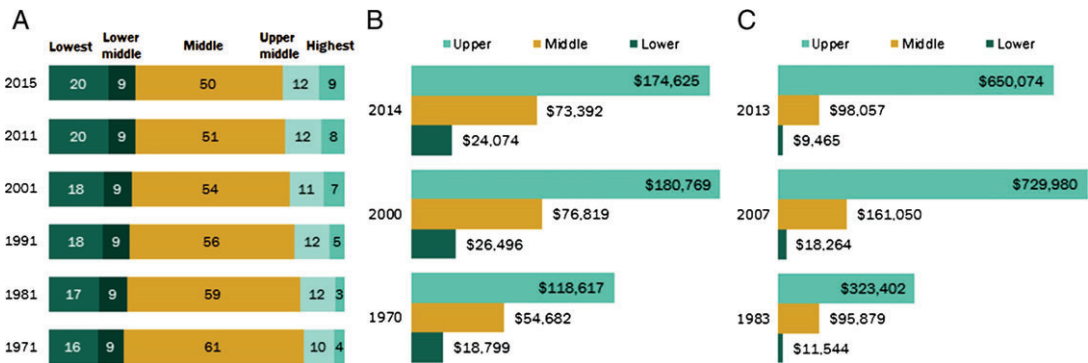
Thus, the relative size of the middle income group has been shrinking, with the increases occurring in the lowest and highest groups. In the years shown, the median income of the lower group went up by 41% and then fell by 9%. For the middle income group, a rise of the median of 40% was followed by a fall of 4%. And for the upper group a rise of 52% was followed by a decline of 3%. The median wealth swings (based on different years), show a much larger percentage difference between the upper-income group and the rest.

FIGURE 1
Change in Real Wage Levels of Full-time Workers by Education, 1963–2012



Source: Reprinted from “Skills, Education, and the Rise of Earnings Inequality among the ‘Other 99 Percent,’” by D. Autor, 2014, *Science*, 344(6186), 843–851. Copyright 2014 by the American Association for the Advancement of Science. Reprinted with permission.

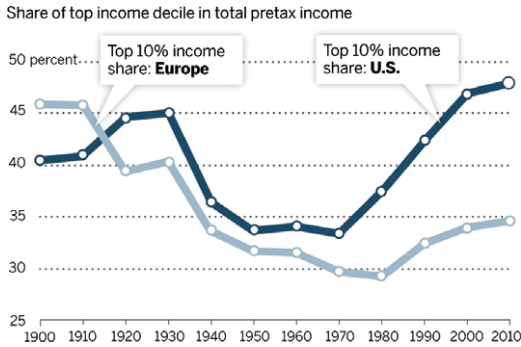
FIGURE 2
(A) Percentage of Adults in Each Income Tier; (B) Median Income in 2014 Dollars and Scaled to Reflect a Three-person Household; (C) Median Net Worth of Families, in 2014 Dollars



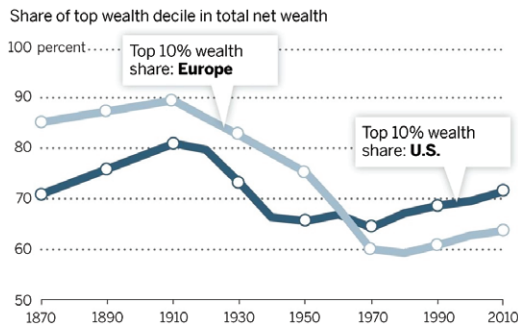
Notes: (A) Adults are assigned to income tiers based on their size-adjusted household income in the calendar year prior to the survey year. Figures may not add to 100% due to rounding. Source: Pew Research Center analysis of the Current Population Survey, Annual Social and Economic Supplements. (B) Households are assigned to income tiers based on their size-adjusted income in the calendar year prior to the survey year. Source: Pew Research Center analysis of the Current Population Survey, Annual Social and Economic Supplements, 1971, 2001, and 2015. (C) Net worth is the difference between the value of assets owned by a family and the liabilities it holds (but does not include either Social Security or defined benefit pensions). Families are assigned to income tiers based on their size-adjusted income. Net worth is not adjusted for family size. Source: Pew Research Center analysis of Survey of Consumer Finances public-use data. Source of Figure: “The American Middle Class Is Losing Ground.” Pew Research Center, Washington, D.C. (December 9, 2015), <http://www.pewsocialtrends.org/2015/12/09/the-american-middle-class-is-losing-ground/>.

Focusing next on the top decile’s share, we’ve seen significant sustained rises in income inequality, in both the United States and Europe, but at different rates (Figure 3). Wealth inequality, also as reflected in the top decile share, is not quite as sharp a picture, but again, we see a clear trend there (Figure 4).

Notice, I’ve picked out three different aspects of the distributions in these examples, all of which could be viewed as key factors in inequality: the top, the middle, and the bottom. They all matter when thinking about economic policy and the implications for politics; they lead to thinking about different policy issues. As to the very top,

FIGURE 3**Income Inequality in Europe and the United States, 1900–2010**

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FIGURE 4**Wealth Inequality in Europe and the United States, 1870–2010**

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the 0.1%, in Figure 5, there are huge changes in the picture. So we want to keep that in mind as well, as we think of addressing direct policy questions. And looking at the bottom, Table 1 shows child poverty in a selection of cities.

There are two messages from this picture. One is that the United States has an appallingly high level of poverty among children. That goes back to the opportunity part of inequality. And those rates are very different in different cities.

And we can ask: if your father was in a particular decile in the income distribution, at a comparable age, where were you? I do not know

TABLE 1**Children Living Below 100% of Federal Poverty Line in 50 Largest Cities, 2013**

Highest		Lowest	
Detroit	59%	San Francisco	12%
Cleveland	54%	Virginia Beach	13%
Fresno	48%	Colorado Springs	14%
Memphis	46%	San Jose	17%
Miami	44%	Seattle	17%

Source: “Thirty-five Largest U.S. Cities Saw Increase in Child Poverty Rate Between 2005 and 2013,” The Annie E. Casey Foundation, posted 9/22/2014, <http://www.aecf.org/blog/thirty-five-largest-us-cities-saw-increase-in-child-poverty-rate-between/>.

what age this calculation is done for. The first picture shows, of course, that with a father in the top decile, the answers are scattered all over the place. This is not a simple representative high decile person ending up in one particular place. The distribution of answers is spread all over, but obviously, there is a strong correlation; a higher relative earnings level for your father, a higher relative earnings level for yourself. And, in Figure 6, we see a stark difference in the distributions between the United States and Canada.

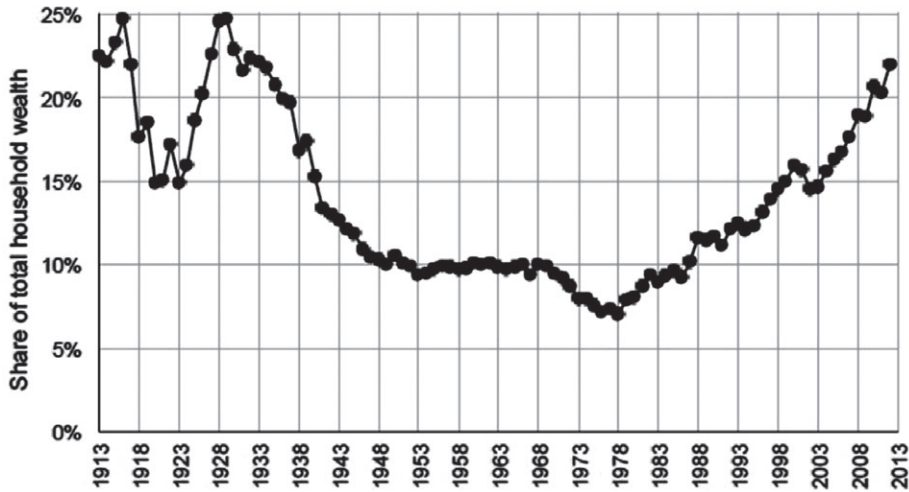
What happens if you’re starting in the bottom decile, Figure 7? Well, again, you get spread out everywhere. And again, there’s a high correlation, and a tendency to pile up in nearby places, and again, the picture is much happier in Canada than in the United States. As described by Corak (2013, 83): “In the United States, sons raised by top and bottom decile fathers are more likely to occupy the same position as their fathers than they are in Canada. More than half of sons raised by top decile American fathers fall no further than the 8th decile, and about half of those raised by bottom decile fathers rise no further than the third decile. In Canada there is less stickiness at the top, and a much higher proportion of bottom decile sons also rise to the top half of the earnings distribution.”

II. CAUSES

Jim made mention of Tony Atkinson and his book, *Inequality*, which has attracted quite a bit of attention. I’m going to pull a couple of things from it. Atkinson (2015, 82) points out a number of contributing factors, indicating, I think, a need to change policies:

- globalization
- technological change

FIGURE 5
Top 0.1% Wealth Share in the United States, 1913–2012



Source: “Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data,” E. Saez and G. Zucman, 2015, accessed at <http://eml.berkeley.edu/~saez/> on 24 January 2016, formerly NBER Working Paper No. 20625, October 2014, forthcoming in *Quarterly Journal of Economics*. Reprinted with permission.

- growth of financial services
- reduced role of trade unions
- changing pay norms
- scaling back of the redistributive tax and transfer policy

Globalization is impacting earnings of different people in a larger and more rapid way, I think, than we’ve seen before. Technological change does the same. The growth of financial services has come with huge amounts of income for people in those professions and there is a huge attraction of people to those occupations. The reduced role of trade unions, which is just enormous in the United States, has unquestionably impacted the relationship between the return to labor and the return to capital. Pay norms themselves have a tendency to influence things. And what we’ve seen in the United States, starting around 1980, is a steady cut back in progressive tax and transfer policy.

We have also seen a steady cut back in public investment (relative to GDP), which is not narrowly a U.S. phenomenon. It shows up, and is mostly talked about, in terms of infrastructure, but the share of GDP spent on basic R&D has also declined over the period since 1980. A variety of other investment elements appear to me to be important as well, including education at all ages.

I want to give one stark example around norms. Curt Flood was a famous baseball player.

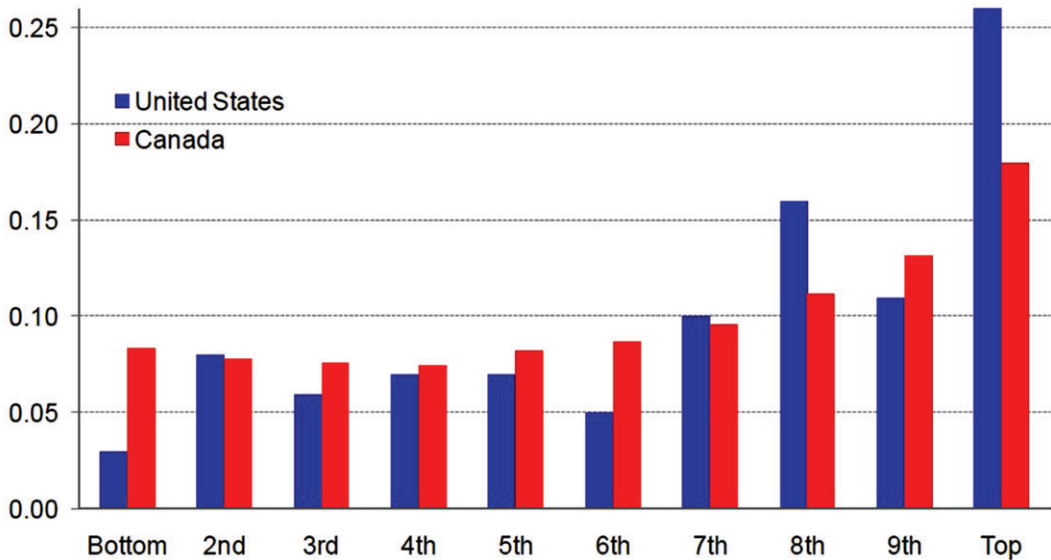
He was very good, but that’s not why he is particularly famous. He sued Major League Baseball over the way it was organized, where players signed a contract that had a reserve clause, which forced them to sign a contract with the same team again. He took it to the Supreme Court but lost.¹ The attention to this helped change bargaining in baseball, which contributed to the large change in compensation for professional athletes. As I was reading about this suit online, I turned up this amazing quote from Curt Flood: “I was told by the general manager that a white player had

1. *Flood v. Kuhn* (407 U.S. 258) was a 1972 United States Supreme Court decision upholding, by a 5–3 margin, the antitrust exemption first granted to Major League Baseball (MLB) in *Federal Baseball Club v. National League*. It arose from a challenge by St. Louis Cardinals’ outfielder Curt Flood when he refused to be traded to the Philadelphia Phillies after the 1969 season. He sought injunctive relief from the reserve clause, which prevented him from negotiating with another team for a year after his contract expired. Named as initial respondents were baseball commissioner Bowie Kuhn, MLB and all of its then-24 member clubs.

Although the Court ruled in baseball’s favor 5-3, it admitted the original grounds for the antitrust exemption were tenuous at best, that baseball was indeed interstate commerce for purposes of the act and the exemption was an “anomaly” it had explicitly refused to extend to other professional sports or entertainment. That admission set in motion events which ultimately led to an arbitrator’s ruling nullifying the reserve clause and opening the door for free agency in baseball and other sports (Wikipedia).

I am grateful to Mike Leeds for correcting me on who won.

FIGURE 6
Earnings Deciles of Sons Born to Top Decile Fathers: United States and Canada



Source: Corak and Heisz (1999, table 6) and Mazumder (2005, table 2.2). Source of Figure: Reprinted from "Income Inequality, Equality of Opportunity, and Intergenerational Mobility," by M. Corak, 2013, *Journal of Economic Perspectives*, 27(3), 79–102. Copyright 2013 by American Economic Association. Reprinted with permission.

received a higher raise than me. Because white people required more money to live than black people. That is why I wasn't going to get a raise." There's a lot of attention now to pay norms in multiple dimensions.

Particularly in the spotlight is the question of whether CEOs are being paid a lot more primarily because it's become acceptable to pay them a lot more. Alternatively, some argue that we have seen a big boost in their marginal products, so that, naturally, there's greater competition to attract the best ones, and that's why they're paid more. I am skeptical of the latter by itself. Pay norm issues are quite widespread, and there's a whole literature on perceptions of fairness of wages and efficiency.

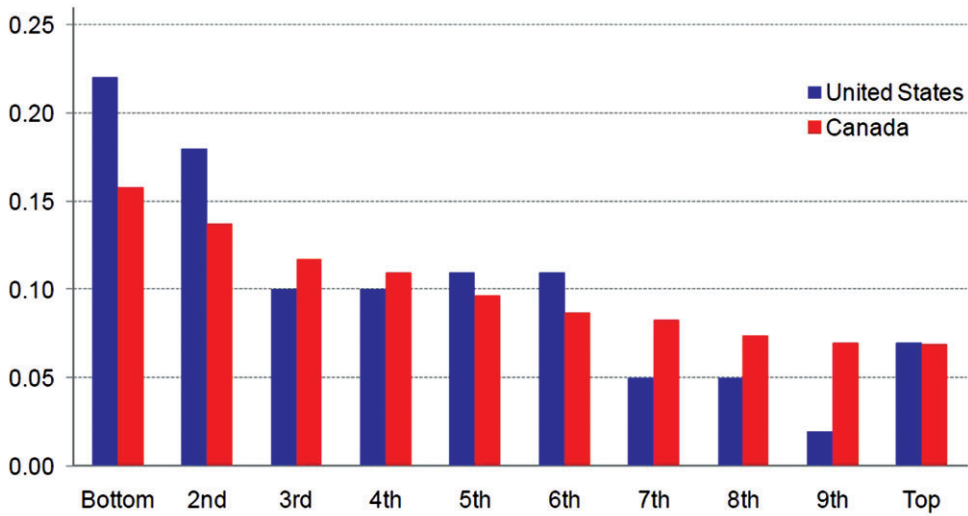
The economy is very complicated. And so looking for places where it doesn't work so well and there is a possibility of getting it to work better, let me go back to the list of contributing factors from Atkinson. Globalization and technological change have been with us for a long time. They have a critical role in job creation, and a critical role in job destruction. So there's a role for government in dealing with the reaction to these impacts. The United States has Trade Adjustment Assistance, separate from and above unemployment insurance, to help workers who

are impacted in this way, providing additional aid where you can identify that it's a trade-generated destruction of jobs. What is wanted as policy is to speed up the process of getting displaced workers to other jobs (Diamond 1982). The analysis here is clear; this is a place where the market isn't going to do a good job of delivering these services, and the government can play a significant role. Not just with money, but with training, with advice, with services, to help the response. This will, then, impact on measures of inequality, but that's not what I want to focus on. I want to say if we can do this better, we will have better outcomes.

The growth of financial services is one element where I feel quite strongly, but I recognize that it's not based on well-grounded underlying economic analysis. If what's going on with all the financial engineering we've seen, is a great improvement in the cost of risk bearing in the economy, and a great improvement in the allocation of capital to more productive uses, then efficiency may call for the people who are good at that to be paid vastly more than previously. If, on the other hand, what is going on is a radical change in the risk allocation associated with more gambling, to put a blunt word on it, with more trade based on differences in subjective

FIGURE 7

Earnings Deciles of Sons Born to Bottom Decile Fathers: United States and Canada



Source: Corak and Heisz (1999, table 6) and Mazumder (2005, table 2.2). Source of Figure: Reprinted from “Income Inequality, Equality of Opportunity, and Intergenerational Mobility,” by M. Corak, 2013, *Journal of Economic Perspectives*, 27(3), 79–102. Copyright 2013 by American Economic Association. Reprinted with permission.

probabilities, more focus on getting out products that people don’t understand, then that is a quite different story. The book by Akerlof and Shiller (2015), *Phishing for Phools*, and search theory generally, explain that the incentives for firms, not just financial firms, but firms generally, depend on the decision processes of their demanders. And this is a place where the government has long had a role in trying to get better reporting about investment and consumption opportunities. The Consumer Financial Protection Bureau is a valuable recent addition to trying to get markets to function better. We can think about whether, given the huge changes that have been happening through financial engineering and the growth of financial firms, what we’re seeing is large inefficiencies connected to the pay issue. And if we focus on the inefficiencies, and if that is right, and I have not seen anything succeeding in fully sorting this out, then we’ll have policy implications.

Let me turn back to Tony Atkinson’s book (pp. 303–04). He argues for a capital endowment, a minimum amount given to each person on reaching adulthood.² And he also argues for an annual child benefit, which the United States doesn’t have, but many European economies do,

to help support the finances it takes to help children have better opportunities.³ It appears to me that these are two very interesting ideas.

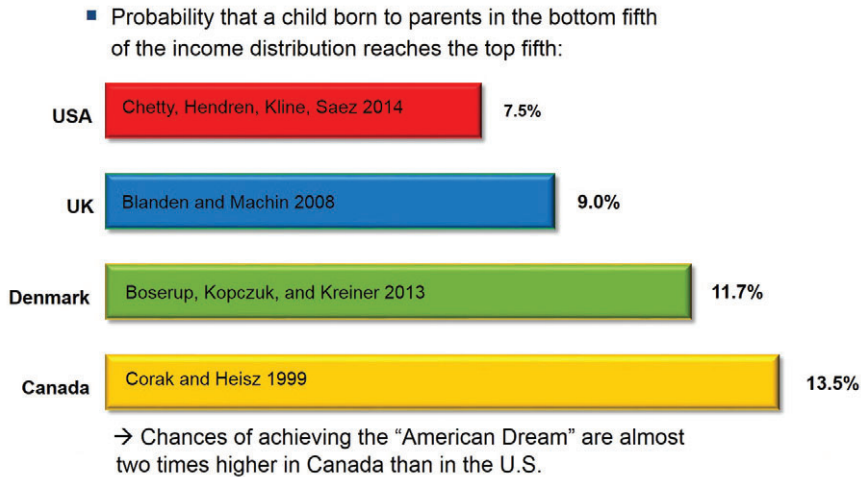
If we were to think about benefits for everybody, a topic that has been getting a lot of attention lately, how much of that do we want to do as an annual cash flow? And how much do we want to do in a more capitalized way, to help people launch further education and/or new businesses? Should we do things to place less reliance on the standard lending institutions, which have a variety of shortcomings?

My favorite tax, by the way, is the estate tax, if done right. I think, in terms of deadweight burdens, it really comes in as the lowest one around (apart from Pigouvian taxes to correct externalities). And it’s a time when we have a lot of good measurement of wealth, and we can really target the places where we think this is well taxed. The idea of using the estate tax to finance a grant to those turning 21 to help launch their careers is not new. Indeed, it is more than 200 years old, Thomas Paine having proposed it in 1797. Paine (1797) also wanted to use part of the revenue to provide benefits for elderly persons and disabled workers. Non-contributory

2. Proposal 6: There should be a capital endowment (minimum inheritance) paid to all at adulthood.

3. Proposal 12: Child Benefit should be paid for all children at a substantial rate and should be taxed as income.

FIGURE 8
The American Dream?



Source: Compiled by Raj Chetty from Chetty et al. (2014), Blanden and Machin (2008), Boserup et al. (2014), and Corak and Heisz (1999). Reprinted with permission.

pensions, like that, have become widespread in rich countries and poor countries and are being debated currently in several countries.

I want to say a little bit about equality of opportunity, drawing on a variety of work of Raj Chetty and co-authors (Chetty and Hendren 2015; Chetty et al. 2014, 2015). Figures 8–10 that follow were provided by Raj. Figure 8 reports the probability that a child born to parents in the bottom quintile of the income distribution reaches the top quintile, contrasting the United States with several countries that do much better. Figure 9 reports the same probability by geographic area.

As we saw was the case with child poverty, mobility is widely different in different places. Chetty et al. report strong correlations of mobility with a variety of factors, and Raj is very careful to say correlations. They haven’t nailed causation, but lower mobility and higher inequality are, indeed, correlated.⁴

4. The abstract reports: We use administrative records on the incomes of more than 40 million children and their parents to describe three features of intergenerational mobility in the United States. First, we characterize the joint distribution of parent and child income at the national level. The conditional expectation of child income given parent income is linear in percentile ranks. On average, a 10 percentile increase in parent income is associated with a 3.4 percentile increase in a child’s income. Second, intergenerational mobility varies substantially across areas within the United States. For example, the probability that a child reaches the top quintile of the national income distribution starting from a family in the

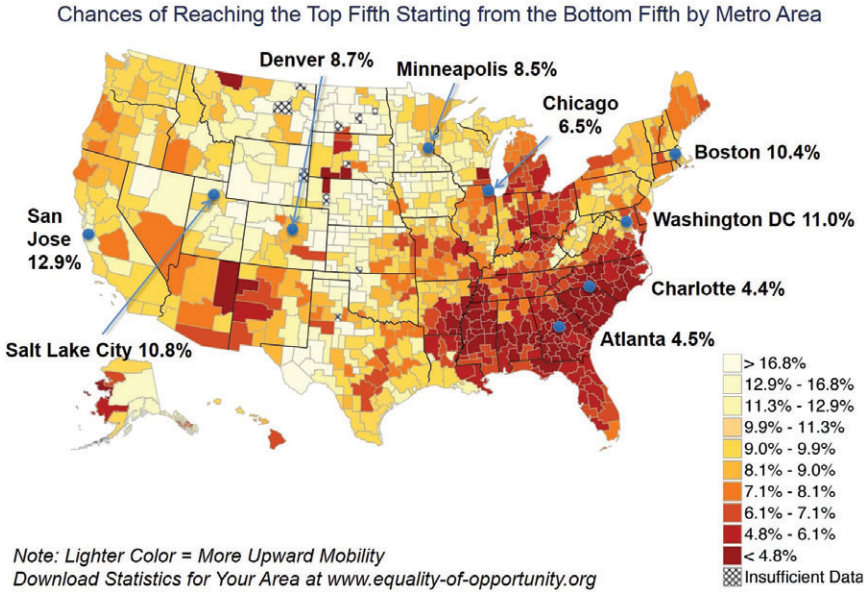
As Raj says, the geographic heterogeneity may come from differences among people living in different places, or it may come from neighborhood effects, because the circumstances in a place have a causal effect on upward mobility. Of course, you don’t have to choose one or the other; there plausibly are both.

Raj has also been analyzing what happens to children when their families move from one place to another. Chicago and Boston had rather different average income levels at the time that was measured. On average, children who move go about half way between the two average income levels. A key finding here is that the size of the change is very sensitive to the age at the time of the move (Figure 10).

Raj raises two lessons that we could try to draw from this. First, there are all sorts of costs and difficulties getting to the places with better opportunities. We can think of policies to expand housing, for example, to ease moves. And secondly, we can try to figure out what makes the high opportunity places function

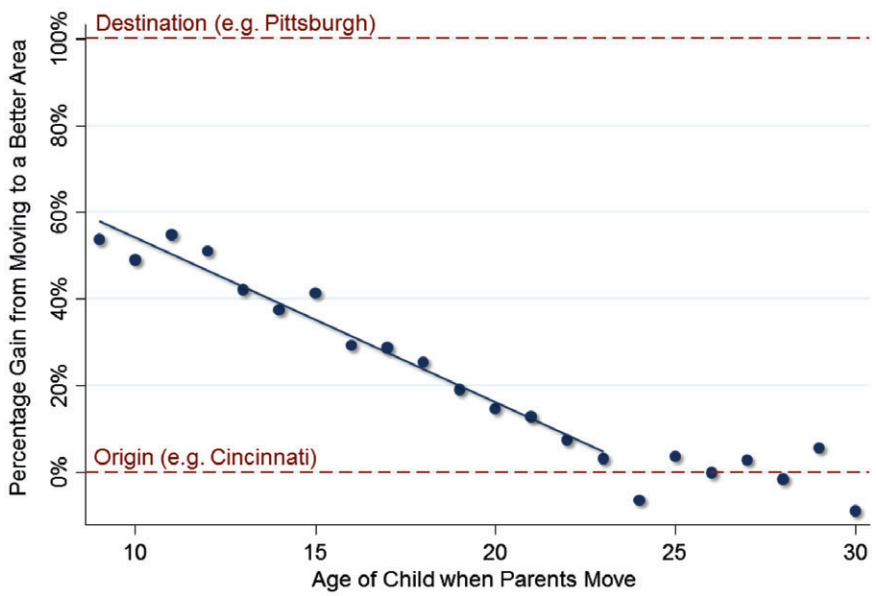
bottom quintile is 4.4% in Charlotte but 12.9% in San Jose. Third, we explore the factors correlated with upward mobility. High mobility areas have (1) less residential segregation, (2) less income inequality, (3) better primary schools, (4) greater social capital, and (5) greater family stability. While our descriptive analysis does not identify the causal mechanisms that determine upward mobility, the publicly available statistics on intergenerational mobility developed here can facilitate research on such mechanisms.

FIGURE 9
The Geography of Upward Mobility in the United States



Source: Visual representation compiled by Raj Chetty from table III data in Chetty et al. (2014). Reprinted with permission.

FIGURE 10
Effects of Moving to a Different Neighborhood on a Child’s Income in Adulthood



Source: Reprinted from “The Impacts of Neighborhoods on Intergenerational Mobility: Childhood Exposure Effects and County-Level Estimates,” by R. Chetty and N. Hendren, 2015, Working Paper, http://equality-of-opportunity.org/images/nbhds_exec_summary.pdf. Reprinted with permission.

better, and see whether some of those have implications for things we can do to invest in the low opportunity places.

In 1787, the United States had a constitutional convention. Most of the constitution that we still have emerged from it. What followed during ratification by the states was a fascinating debate over several issues. One was how much power to give the central government. Remember, this was a society that revolted against a very powerful central government when they were colonies in the distant periphery. And the existing central government had very limited powers. The argument was about the powers of the central government relative to the powers of the states and local governments. But there were also other aspects of the debate that are still very familiar, such as quite different attitudes toward aspects of the constitution between urban and rural areas, and between coastal and inland regions. Obviously, there were quite different attitudes between slave-holding states and non-slave-holding states. So it took four years of lively debate before all 13 former colonies signed on.

My view is that the United States has an appallingly low level of tax collection, particularly for investments, and this appears to have been ingrained in the country since the beginning. “We [the American colonists fighting in the War of Independence] have shed our blood in the glorious cause in which we are engaged; we are ready to shed the last drop in its defense. Nothing is above our courage, except only (with shame I speak it) the courage to TAX ourselves” (Madison 1782).

We need to be spending lots more on infrastructure, on R&D, on education, on health for poor people, and you need money to do that. And then you need to ask about the principles for different ways of raising the tax revenue needed to increase investment sufficiently. I view the active discussion about inequality as a vehicle for enhancing the possibility of good reforms about issues that I think we have had for a significant time.

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