



Middle-Out Mobility:

Regions with Larger Middle Classes Have More Economic Mobility

By Ben Olinsky and Sasha Post September 4, 2013

Areas with large middle classes enjoy far more economic mobility than areas with small middle classes. Consequently, low-income children who grow up in regions with large middle classes are likely to become more financially successful than those who do not. This finding provides powerful new evidence that a strong middle class and economic opportunity go hand in hand.

Despite our plentiful political disagreements, Americans share a common commitment to equality of opportunity. Indeed, a remarkable 97 percent of Americans believe that every person should have an equal opportunity to get ahead in life.¹

Yet over the past few decades, a child's chance of succeeding in life has become increasingly dependent on the circumstances into which he or she is born. Children of low-income parents tend to grow up to earn lower incomes themselves, while children of affluent parents tend to remain affluent. More than 4 in 10 children who start at the bottom stay at the bottom, and close to 4 in 10 children who start at the top stay at the top.² If we aspire to give every child the chance to achieve the American Dream, we must do better. We must clearly understand the determinants of economic opportunity and craft solutions that will help to reignite it.

Last month, four economists from Harvard University and the University of California, Berkeley—Raj Chetty, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez—made an important contribution to this effort by releasing a comprehensive study of intergenerational income mobility across the United States.³ Their study revealed not only that mobility varies substantially across metropolitan areas and other geographic regions, but that these variations are associated with a number of regional characteristics, such as school quality, civic and religious engagement, the share of single-parent families, and geographic sprawl. In other words, the variation in economic mobility is not random. Some characteristics likely improve mobility, while others dampen it.

By using the same data and methodology employed by Chetty and his colleagues, we can see that one of the most important characteristics is the size of the region's middle class.⁴ Put simply, the data show that when a region has a larger middle class, its low-income children are likely to be more upwardly mobile. Indeed, the size of a region's middle class is a stronger predictor of economic mobility than all but 2 of the 28 regional characteristics that the study's authors tested.

This finding—that the middle class and mobility are strongly related—is very much in line with recent research that shows a negative correlation between intergenerational mobility and economic inequality. International studies have shown that countries with more inequality have less economic mobility, a relationship termed the “Great Gatsby Curve” by Alan Krueger, the former chairman of President Barack Obama’s Council of Economic Advisers.⁵ Now we know, based on the study from Chetty and his co-authors, that this relationship is true right here within the United States, not only across countries.

For too long, a strong middle class was believed to be merely the consequence of strong economic growth, not the other way around. Furthermore, income inequality was often dismissed as a natural and harmless side effect of a purportedly equal-opportunity economy. But increasingly, those understandings have been upended. A growing body of scholarship suggests that a strong middle class can drive prosperity while high inequality can hamper it.⁶

The latest data from Chetty and his colleagues add to this work by revealing that the middle class and inequality are clearly linked with mobility: Regions with larger middle classes and lower income inequality have higher mobility. By contrast, their findings undercut the key premise of “supply-side” economic theory by showing that places where state income taxes are lower and less progressive actually have lower mobility. These findings should have a dramatic impact on the debate over whether and how to address ever-widening income disparities and an ever-weakening middle class.

Declining opportunity

Americans have long believed that their children would be better off than they were⁷; today, only half of all Americans hold this belief.⁸ This growing pessimism is based on tectonic shifts in the American economy. In the decades following World War II, the benefits of robust economic growth were broadly shared. As a result, from the late 1940s to the early 1970s, families from across the income spectrum saw their incomes grow at nearly the same rate, roughly doubling over this period.⁹ But since the early 1970s, productivity growth has decoupled from median wage growth. Consequently, nearly all of the income gains from the last 40 years of growth have gone to the richest 10 percent.¹⁰ And in the past decade, median family income actually declined.¹¹ In 1963, President John F. Kennedy famously declared that “a rising tide lifts all boats.” Today, however, this no longer holds true.

As economic advancement has stalled for most families, the circumstances into which Americans are born increasingly dictate their futures. A number of studies suggest that the United States enjoyed substantial intergenerational mobility from the 1940s to around 1980.¹² But this postwar period of economic opportunity began to stall for the generation of Americans who joined the workforce during the 1980s.¹³ In the following three decades, mobility has stagnated, and the prognosis for today's children is particularly worrisome—Stanford University Professor Sean Reardon found that the educational achievement gap between rich and poor students grew 40 percent over the past 30 years. This is a troubling indicator that could signal further declines in mobility.¹⁴

As the Pew Economic Mobility Project noted, “the view that America is ‘the land of opportunity’ doesn’t entirely square with the facts.”¹⁵ Indeed, data show that the United States has less relative mobility than almost any country in Europe. In particular, Pew found that the top and bottom are “sticky”—42 percent of children born to parents in the poorest income quintile remain in the bottom quintile, while 39 percent born to parents in the top fifth remain there.”

When Pew looked at the mobility prospects for poor black children, they found that they were worse than those for poor white children. They also found that a majority of black children whose parents were middle class in the late 1960s grew up to have less family income than their parents did. Indeed, almost half of black children whose parents were in the middle income quintile have fallen to the bottom quintile, compared to only 16 percent of white children.

America considers itself to be a country in which success is determined by talent and hard work, not the size of your parents’ bank account. Declining mobility directly contradicts this principle and also threatens our future prosperity. Economic growth depends on ensuring that we can make full use of a precious national resource: the American workforce. That means we must cultivate individuals’ talents and make sure that every person can realize their full potential.¹⁶ This is not merely a moral matter, it is an economic imperative: When one person is held back, all Americans are held back.

Regions with larger middle classes have more economic mobility

With economic mobility on the decline, it is critical to understand what factors might slow or reverse this trend. That is why the report from Chetty and his colleagues is so important and has garnered so much attention. Their findings show that variations in mobility are not random, but rather are systematically associated with certain regional characteristics.

Much of the coverage of that study has highlighted factors such as school quality, civic and religious engagement, the share of single-parent families, and geographic sprawl. But Chetty and his colleagues have yet to publish any analysis testing the relationship between mobility and the middle class. As a result, one of the single strongest predictors of regional mobility has barely been discussed.

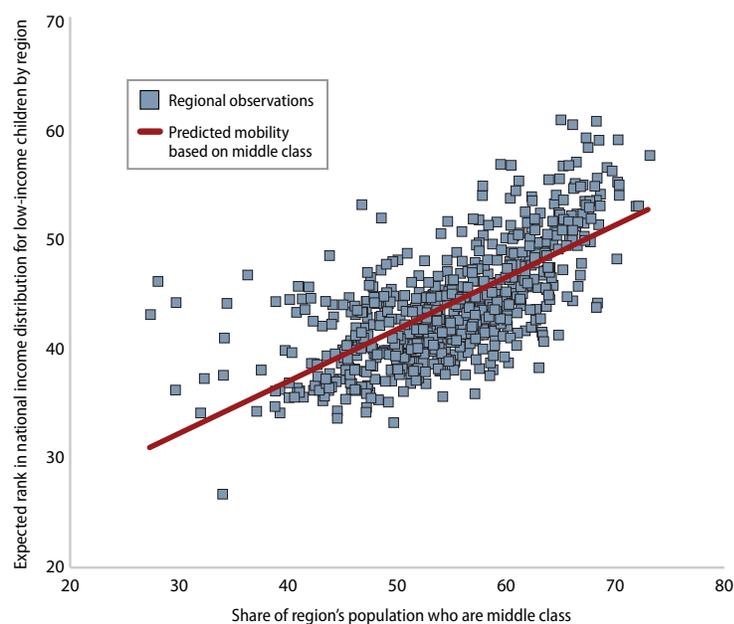
Using the same data and methodology as Chetty and his colleagues reveals that the size of the middle class is strongly linked to mobility. The relationship is striking and statistically significant. Specifically, the correlation coefficient between the size of a region's middle class and its economic mobility is nearly 0.69. Moreover, nearly half of the regional variance in mobility is explained by the size of the middle class.

To put this relationship in perspective, consider that Chetty and his colleagues examined 28 different characteristics that might or might not be associated with economic mobility. These characteristics range from student test scores to geographic sprawl. The size of the middle class is more strongly associated with mobility than 26 out of 28 characteristics, and is only barely exceeded by the concentration of single mothers and a region's divorce rate.

This association means that as a region's middle class expands, so too does mobility. Specifically, the data suggest that for every percentage-point increase in the share of a region's population who fall between the 25th percentile and the 75th percentile of the national household income distribution, children who begin at the 25th percentile of the income distribution will climb up nearly half a percentile. So if one city's middle class is 10 percentage points larger than another's, we would expect that its low-income children will grow up to earn incomes that put them 5 percentiles higher in the national distribution.

For example, imagine a city in which 40 percent of the population is in the middle class. According to the data, a child who begins in the 25th income percentile could expect to reach the 37th percentile when he or she turns 30. But if the city's middle class were larger, say, 50 percent instead of 40 percent, then a low-income child could expect to end up in the 42nd percentile, making around \$26,000 a year instead of \$22,000 a year. That's almost \$4,000 in additional income—a 17 percent increase.

FIGURE 1
Size of middle class strongly predicts mobility



Source: Authors' calculations based on data from Raj Chetty and others, "The Economic Impacts of Tax Expenditures: Evidence from Spatial Variation Across the U.S." (Harvard University and the University of California, Berkeley, 2013).

What is correlation?

One way to understand the relationship between the size of a region's middle class and its level of mobility is to look at the extent to which they are "correlated." The correlation between two variables tells you how accurately you can predict one variable just from knowing the other one. For example, there is a high correlation between the average number of runs that a baseball team scores in each game and the number of games that it wins in the season. Knowing the number of runs doesn't tell you precisely how many games the team won, but we know that teams that score more runs tend to win more games.

The strength of a correlation is called its "coefficient," which is measured on a scale from -1 to 1. A coefficient of 0 means that the two variables have

no relationship and change entirely independently of each other. As the coefficient approaches 1, the two variables are more "positively" correlated because they increasingly move up or down in tandem. By contrast, as the coefficient approaches -1, the variables are more "negatively" correlated, meaning that changes in one variable are accompanied by opposite but proportional changes in the other. Using the same example, wins are positively correlated with runs, but negatively correlated with fielding errors.

When we look at the relationship between the size of a region's middle class and its mobility, we find a large positive coefficient of 0.69. That means that just by knowing the size of a region's middle class, we can guess its level of mobility with a fairly high degree of accuracy.

One objection to the association between middle-class size and mobility might be that looking at the "size of the middle class" is just another way of looking at poverty concentration. Since the middle class is defined here as the percentage of a region's population falling between the 25th percentile and the 75th percentile of the national income distribution, you could reasonably assume that regions with smaller middle classes also have higher amounts of poverty. Indeed, the size of a region's middle class and its poverty level are correlated, with a correlation coefficient of -0.539. Perhaps, then, the size of the middle class is irrelevant and what truly affects mobility is the amount of poverty in a region. But even after accounting for a region's poverty concentration, the size of the middle class still retains substantial independent explanatory power—far more than the poverty level.¹⁷

A second objection might be that although the data clearly demonstrate that there is a strong link between the size of the middle class and economic mobility, it does not establish a causal relationship. For instance, it is possible that greater economic mobility is producing a larger middle class, not the other way around. But existing social-science research suggests several mechanisms by which the size of a community's middle class may causally contribute to upward mobility.

For example, consider the relationship between the middle class, education, and mobility. Previous research by David Madland and Nick Bunker at the Center for American Progress found that states with larger middle classes invest more in education and have stronger student performance.¹⁸ In addition, Chetty and his colleagues found a strong correlation between student test scores and economic mobility for lower-income students.¹⁹ This finding is in line with economic research showing that educational attainment and human-capital development are critical contributors to an individual's earning potential.²⁰ One could thus imagine a causal pathway by which a larger middle class leads to better schools, which in turn offers greater mobility for low-income students.

Finally, one troubling finding is that few regions of the country with large African American populations have high mobility. In light of this observation and the fact that African Americans have much less economic mobility than other groups,²¹ we checked to see whether race might limit the relationship between the middle class and mobility. The results are concerning: In regions with large African American populations, increases in the middle class's size are linked to smaller increases in mobility than in other regions. This suggests that the middle class's influence on mobility may be dampened by racial inequities, both social and economic.²² The size of the middle class is a powerful predictor of mobility, yet its reach is limited by our nation's troubling legacy of racial inequity.

Regions with greater inequality have less economic mobility

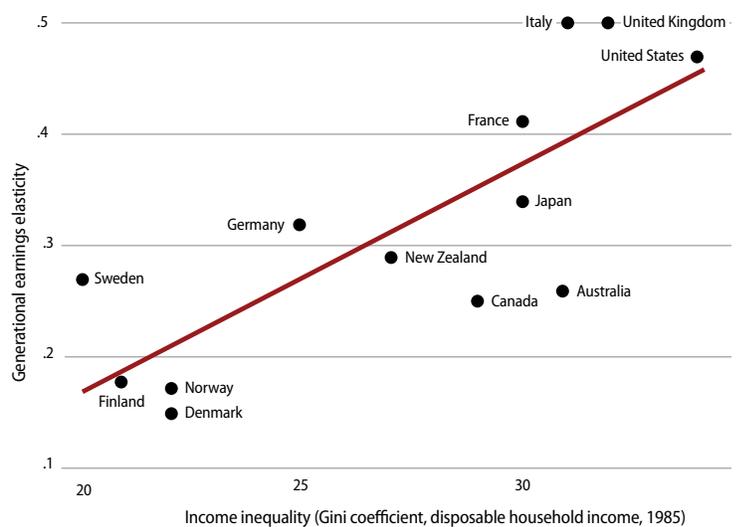
The finding that mobility is closely linked to the size of the middle class adds to a growing body of research suggesting that high-income inequality is a major drag on U.S. mobility. For example, Daniel Aaronson and Bhash Mazumder have found that inequality and mobility in the United States have moved in tandem over the past 70 years.²³

Moreover, Canadian economist Miles Corak has used Organisation for Economic Co-operation and Development, or OECD, data to show that countries with more income inequality have less intergenerational mobility, the relationship that Alan Krueger has called the Great Gatsby Curve.²⁴ Dan Andrews and Andrew Leigh also found a statistically significant relationship between a country's inequality and earnings persistence between fathers and sons; according to their study, economic inequality explains 71 percent of the variance in intergenerational mobility across countries.²⁵

The strong inverse relationship between inequality and mobility is further demonstrated by the Chetty study, which shows that the Great Gatsby Curve holds not only across countries but across regions within the United States. They define inequality as the dollar difference between incomes at the 25th percentile and the 75th percentile in a region's household income distribution. They also find a significant negative correlation (-0.475) between inequality and intergenerational income mobility, demonstrating that regions with greater inequality have less mobility.

FIGURE 2
The Great Gatsby Curve

More inequality is associated with less mobility across the generations



Source: Miles Corak, "Inequality from Generation to Generation: The United States in Comparison." In Robert Rycroft, ed. *The Economics of Inequality, Poverty, and Discrimination in the 21st Century* (Santa Barbara, California: ABC-CLIO, 2013).

The new findings are inconsistent with supply-side economic theory

These findings give strong support to the notion that economic policymakers should focus on strengthening the middle class. But there is a different theory about how the economy works that has enjoyed enormous influence in recent decades. That theory, known as “supply-side” or “trickle-down,” maintains that the rich are job creators and that giving tax cuts and other benefits to those few at the top of the income ladder will generate economic prosperity and opportunity for everyone else. Recent scholarship and economic experience have revealed significant flaws with this theory, showing that giving tax cuts to the rich does not increase economic output.²⁶ Rather than boosting growth and mobility, supply-side policies, such as the Bush tax cuts of 2001 and 2003, have exacerbated income inequality and failed to create new jobs.

The data from Chetty and his colleagues’ study further undercuts supply-side’s central premise—that higher taxes are anathema to prosperity. If supply-side theory were right, then we should expect regions with higher taxes to have lower economic mobility. But there is simply no evidence of any such relationship; to the contrary, there is a small positive correlation. In regions with higher state income tax levels, low-income children were slightly more mobile than in regions with lower state tax levels. Moreover, supply-side theory predicts that asking the rich to pay more taxes would diminish mobility; instead, Chetty and his colleagues found that states with more progressive income taxes had greater mobility. These two findings are in direct opposition to the supply-side theory that taxing the rich will reduce prosperity for all.

Conclusion

All Americans—conservatives and liberals alike—have long imagined our nation to be a land of equal opportunity, where anyone can succeed by dint of talent and hard work. Yet the reality is that economic mobility is a scarce commodity, and a child’s life chances are too often dictated by his or her parent’s pocketbook.

We now know that regions of the United States that have larger middle classes and less inequality have more economic mobility. As a consequence, a low-income child who grows up in an area with a large middle class is likely to earn more money and make a better life for himself or herself. Giving tax breaks and other benefits to the wealthy will only perpetuate the current era of diminished mobility; to reignite opportunity, policymakers must grow and strengthen a vibrant middle class.

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Endnotes

- 1 Ruy Teixeira, "Why Progressives Need To Talk About Economic Mobility If They Want To Fix Inequality," ThinkProgress, March 20, 2013, available at <http://thinkprogress.org/economy/2013/03/20/1731361/why-progressives-need-to-talk-about-economic-mobility-if-they-want-to-fix-inequality/>.
- 2 Ron Haskins, Julia B. Isaacs, and Isabel V. Sawhill, "Getting Ahead or Losing Ground: Economic Mobility in America" (Washington: Brookings Institution and the Pew Charitable Trusts Economic Mobility Project, 2008), available at http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Economic_Mobility/Economic_Mobility_in_America_Full.pdf.
- 3 Raj Chetty and others, "The Economic Impacts of Tax Expenditures: Evidence from Spatial Variation Across the U.S." (Harvard University and the University of California, Berkeley, 2013), available at http://obs.rc.fas.harvard.edu/chetty/tax_expenditure_soi_whitepaper.pdf. For more information on the study, see "The Equality of Opportunity Project," available at <http://www.equality-of-opportunity.org/> (last accessed August 2013).
- 4 Chetty and his colleagues publicly post their data online at <http://www.equality-of-opportunity.org/index.php/datadivide> and describe their methodology in their white paper at http://obs.rc.fas.harvard.edu/chetty/tax_expenditure_soi_whitepaper.pdf.
- 5 Alan B. Krueger, "The Rise and Consequences of Inequality in the United States," speech delivered at the Center for American Progress, January 12, 2012, available at http://www.whitehouse.gov/sites/default/files/krueger_cap_speech_final_remarks.pdf.
- 6 Heather Boushey and Adam Hersh, "The American Middle Class, Income Inequality, and the Strength of Our Economy" (Washington: Center for American Progress, 2012), available at http://www.americanprogressaction.org/wp-content/uploads/issues/2012/05/pdf/middleclass_growth.pdf; Annie Lowrey, "Income Inequality May Take Toll on Growth," *The New York Times*, October 16, 2012, available at <http://www.nytimes.com/2012/10/17/business/economy/income-inequality-may-take-toll-on-growth.html?pagewanted=all>; Jared Bernstein, "Growth from the Middle Out, and How It Works," *The New York Times Economix* blog, July 26, 2013, available at <http://economix.blogs.nytimes.com/2013/07/26/growth-from-the-middle-out-and-how-it-works/>.
- 7 Catherine Rampell, "Dimming Optimism for Today's Youth," *The New York Times Economix* blog, May 2, 2011, available at <http://economix.blogs.nytimes.com/2011/05/02/dimming-optimism-for-todays-youth/>.
- 8 Lydia Saad, "Americans Divided on Outlook for Next Generation," Gallup, January 8, 2013, available at <http://www.gallup.com/poll/159737/americans-divided-outlook-next-generation.aspx>.
- 9 Chad Stone, Arloc Sherman, and Danilo Trisi, "A Guide to Statistics on Historical Trends in Income Inequality" (Washington: Center on Budget and Policy Priorities, 2012), available at <http://www.cbpp.org/files/11-28-11pov.pdf>.
- 10 David Cay Johnston, "Income Inequality: 1 Inch to 5 Miles," *Tax Analysts*, February 25, 2013, available at <http://www.taxanalysts.com/www/features.nsf/Articles/C52956572546624F85257B1D004DE3FC?OpenDocument>.
- 11 Heidi Shierholz and Elise Gould, "Already more than a lost decade," Economic Policy Institute, September 12, 2012, available at <http://www.epi.org/publication/lost-decade-poverty-income-trends-continue-2/>.
- 12 Bhashkar Mazumder, "Is intergenerational economic mobility lower now than in the past?," *Chicago Fed Letter* 297 (2012), available at http://www.chicagofed.org/digital_assets/publications/chicago_fed_letter/2012/cflapril2012_297.pdf.
- 13 Ibid.
- 14 Sean F. Reardon, "No Rich Child Left Behind," *The New York Times Opinionator* blog, April 27, 2013, available at <http://opinionator.blogs.nytimes.com/2013/04/27/no-rich-child-left-behind/>.
- 15 Haskins, Isaacs, and Sawhill, "Getting Ahead or Losing Ground: Economic Mobility in America."
- 16 Lawrence Summers, "Inequity Threatens Our Future Growth." In Vanessa Cardenas and Sarah Treuhaf, eds., *All-In Nation: An America that Works for All*, p. 134–137 (Center for American Progress and PolicyLink, 2013), available at <http://allinaction.org/pdf/Essay-Summers.pdf>.
- 17 Our analysis reveals that there is no degree of multicollinearity that is of concern (the variance inflation factor is 1.41, well below standard cut-off points). We also ran a number of other multiple regressions to account for factors related to school quality, share of population that is Hispanic, mean travel time to work, divorce rate, share of kids with single moms, and regional population. We find that the size of the middle class continues to have strong independent explanatory power.
- 18 David Madland and Nick Bunker, "Middle-Class Societies Invest More in Public Education" (Washington: Center for American Progress, 2011), available at <http://www.americanprogressaction.org/issues/economy/report/2011/11/08/10645/middle-class-societies-invest-more-in-public-education/>; David Madland and Nick Bunker, "The Middle Class Is Key to a Better-Educated Nation" (Washington: Center for American Progress, 2011), available at <http://www.americanprogressaction.org/issues/economy/report/2011/11/08/10647/the-middle-class-is-key-to-a-better-educated-nation/>.
- 19 See Table 5 in Chetty and others, "The Economic Impacts of Tax Expenditures: Evidence from Spatial Variation Across the U.S."
- 20 Anthony P. Carnevale, Stephen J. Rose, and Ban Cheah, "The College Payoff: Education, Occupations, Lifetime Earnings" (Washington: Georgetown University Center on Education and the Workforce, 2011), available at <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/collegepayoff-complete.pdf>.
- 21 Haskins, Isaacs, and Sawhill, "Getting Ahead or Losing Ground: Economic Mobility in America."
- 22 In contrast, the relationship between middle-class size and mobility does not seem to be significantly attenuated in regions with large Hispanic populations.
- 23 Daniel Aaronson and Bhash Mazumder, "Intergenerational Economic Mobility in the U.S., 1940 to 2000." Working Paper 2005-12 (Federal Reserve Bank of Chicago, 2007), available at http://www.chicagofed.org/digital_assets/publications/working_papers/2005/wp2005_12.pdf.
- 24 Miles Corak, "How to Slide Down the 'Great Gatsby Curve'" (Washington: Center for American Progress, 2012), available at <http://www.americanprogressaction.org/wp-content/uploads/2012/12/CorakMiddleClass.pdf>.
- 25 Dan Andrews and Andrew Leigh, "More Inequality, Less Social Mobility," *Applied Economics Letters* 16 (2009): 1489–1492, available at <http://andrewleigh.org/pdf/InequalityMobility.pdf>.
- 26 Neera Tanden, "Burying Supply-Side Once and for All," *Democracy* 29 (2013), available at <http://www.democracyjournal.org/29/burying-supply-side-once-and-for-all.php?page=all>.