

Center for American Progress



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How to Slide Down the 'Great Gatsby Curve'

Inequality, Life Chances, and Public Policy in the United States

Miles Corak December 2012

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Introduction and summary

While it is now more than a year since the Occupy Wall Street movement began to draw attention to the wide and growing gulf in America between the 1 percent and the 99 percent of income earners, many have been quick to dismiss its staying power. After all, from the very beginning critics said that Occupy really did not have much to offer in terms of concrete policy proposals or solutions. Asked by the *Wall Street Journal* in October 2011 about his views on the Occupy movement, Martin Feldstein, the prominent Harvard University economist, could only say, “I can’t figure out what that’s all about—I haven’t seen what they’re asking for.”¹

But the vagueness of its policy proposals is hardly a basis for dismissing the movement’s significance. It gave voice to, and made more broadly known, some basic facts about labor markets. While growing income inequality—and in particular the sharp and growing division between the 1 percent and the 99 percent—is something that has been documented by labor economists for more than a decade, it is now headline news and the subject of serious policy discussion in a way that it was not before the movement began on September 17, 2011. In important ways, the social conversation has begun to move toward a clearer understanding of the underlying causes of inequality, why it is something we should care about, and what concretely can be done about it.

There have been many healthy contributions to this debate. Among the most thorough and detailed is the report, “Divided We Stand: Why Inequality Keeps Rising,” published by the Paris-based think tank, the Organisation for Economic Co-operation and Development. The report offers a careful and solid reading of the facts; reviews and evaluates the underlying explanations that have been offered; and highlights not only why inequality should be a concern but also the trade-offs involved in implementing—and not implementing—policies to address it.²

“Rising income inequality creates economic, social and political challenges,” says the Organisation for Economic Co-operation and Development report. It “can stifle upward social mobility, making it harder for talented and hard-working

people to get the rewards they deserve. Intergenerational earnings mobility is low in countries with high inequality such as Italy, the United Kingdom, and the United States, and much higher in the Nordic countries, where income is distributed more evenly.” The study goes on to imply that this should be a concern for us all, saying that, “The resulting inequality of opportunity will inevitably impact economic performance as a whole, even if the relationship is not straightforward.”

This paper focuses on one claim that has particular resonance in the United States: the suggestion that inequality erodes opportunity. Indeed, there is a growing body of research that examines whether inequality harms growth, discussed and reviewed in part by Columbia economist Joseph Stiglitz and University of Chicago economist Raghuram Rajan.³ If one of the consequences of higher inequality is less economic mobility, then this may have real consequences for economic growth, as many talented individuals will be excluded from reaching their potential.

In order to understand whether the economy as a whole can be affected by economic mobility, however, we need to first describe the relationship between inequality and mobility and the likely causes of this relationship.

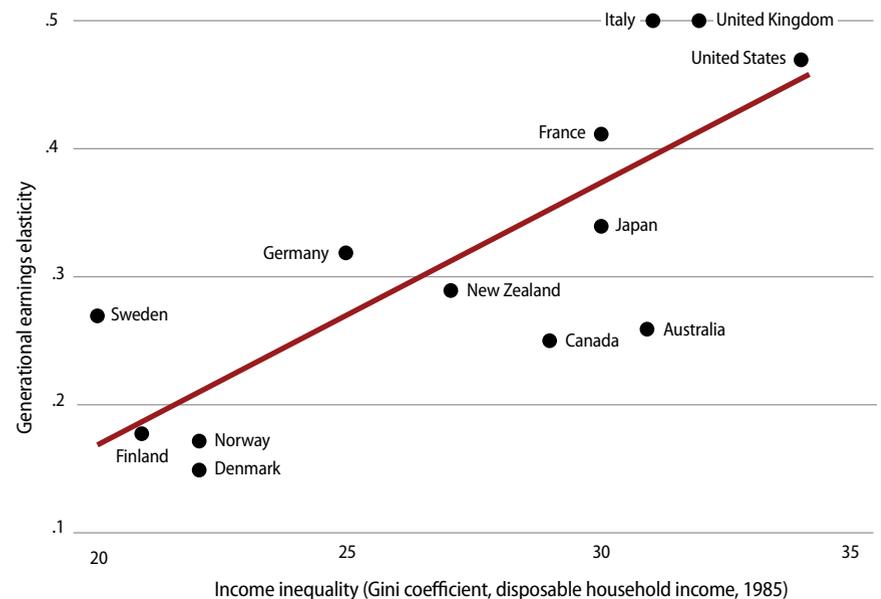
The ‘Great Gatsby Curve’

In fact, it is very much the case that the more-unequal countries are also the countries in which a greater fraction of economic advantage and disadvantage is passed on from parents to their children. It is now common to represent this relationship with what Alan Krueger, the current chairman of the Council of Economic Advisors—the in-house economic think tank of the U.S. president—referred to as the “Great Gatsby Curve.”⁴

FIGURE 1

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).

This curve ranks countries along two dimensions. Moving horizontally from left to right represents a movement from low inequality to high inequality: Finland, Sweden, Norway, and Denmark being the most equal countries, and the United Kingdom and the United States being the least. Moving vertically from bottom to top represents a movement from more mobility in economic status across generations to less economic mobility. In countries such as Finland, Norway, and Denmark, the correlation between parental economic status and the adult outcomes of children is the weakest: Less than one-fifth of any economic advantage or disadvantage that a father may have had is passed on to a son in adulthood. In contrast, in Italy, the United Kingdom, and the United States, roughly 50 percent of any advantage or disadvantage is inherited by the next generation. If a father were earning twice the average income in Denmark, for example, he would expect his son to end up earning only about 15 percent above average; in the United States, this would be almost 50 percent. (see Figure 1)

In short, more inequality at any point in time is associated with a greater transfer of economic status across the generations. In more unequal societies, the poor are more likely to see their children grow up to be the next generation of poor, and the rich are more likely to see their children remain at the top rungs of the economic ladder.

The United States occupies a position at the very top of the curve relative to many of the other rich countries to which it is often compared. High levels of inequality experienced about a generation ago are associated with a strong tie between family background and adult earnings for the cohort of people who approximately were born in the early 1960s, attended school from the late 1960s through the 1980s, and got their first foothold in the labor market in the late 1980s and 1990s.

This picture—and the portrait it paints of America relative to other countries—raises at least three questions:

- What do the underlying statistics mean, and, in particular, is something with the rather cumbersome name “generational earnings elasticity” appropriate for understanding equality of opportunity?
- What are the underlying causes of economic opportunity?
- What will happen to the opportunities of the current and coming generations of young people, given that inequality has risen further over the past couple of decades?

These are important questions because they help us to appreciate the implications of economic inequality and mobility for public policy: How should we think about sliding down the Great Gatsby Curve? Is that desirable? How is it possible? Others can discern how sliding down the Great Gatsby curve may affect the greater economy, but if the reasons include lack of access to opportunity, then the effects on growth could be important.

The Great Gatsby Curve and the American Dream

The American Dream is a phrase that captures many citizens' aspirations for a good and successful life. It has many meanings and associations but at its core is the idea that Americans have the freedom to do and become all that they wish with hard work, energy, and talent—regardless of whether they were born rich or poor. No one statistic can capture these aspirations, but the strength of the tie between a child's adult earnings and the earnings of his or her parents is an important signal. It measures the degree to which inequalities are passed down across the generations and as such is appropriately paired with the level of inequality in a country at any point in time.

This pairing, as depicted in the Great Gatsby Curve, suggests that the United States is not only among the most unequal societies in the rich world but also among the least mobile. But comparison is not causation. The cross-country comparisons offered by the Great Gatsby Curve invite us to explore the underlying institutional and policy differences between the countries to better appreciate the causes and to raise the possibility of making changes.

The Great Gatsby Curve is the outcome of a whole series of gradients between socioeconomic circumstances and the outcomes of children as they make the transition from infancy to school readiness and ultimately from school to the job market.

The life chances of children are, at the broadest level, determined by the care, nurturing, and direction they receive from their families, the structure and nature of inequalities in the labor market with which they must engage, and the degree to which public policy can level the playing field with human capital investments that are relatively more advantageous to the relatively disadvantaged. The stronger and more enriching the family environment, the more equal the life chances of children. The more equal the labor market, the more equal the life chances of children. And the more progressive public policies in place, the more equal the life chances of children.

In America all three of these forces are aligned in a way that reinforces rather than weakens the tie between socioeconomic status and adult outcomes. American families are more diverse in their capacity to invest in and promote the human capital of their children. Labor markets are more unequal, skewing resources and incentives in a way that benefits the relatively rich. And in spite of these greater challenges, public policy does less to level the playing field. Indeed, in some important ways, policies do just the opposite, tilting the playing field to help the more advantaged.

This implies that in an era of growing labor market inequality, it is unlikely that the United States will slide down the Great Gatsby Curve in the coming years unless Americans enact effective changes and realignments in public policy that more strongly promote the human capital of the least advantaged. This paper explores the dimensions of that slide.

Measuring mobility across the generations

In many ways America is clearly a land of opportunity. The simple fact that so many people from so many different countries wish to emigrate to the United States is a clear indication of that fact. Another is the feeling that many children can reasonably expect to see their material standard of living rise higher than that of the previous generation.

Both notions, however, refer to the capacity to move beyond some absolute standard, first across space and second across time. So many people from all over the world wish and try to emigrate to the United States, which certainly tells us something about the opportunities and wealth in America. But it also tells us something about the opportunities and wealth in other countries: America is the land of opportunity for many others because, in part, the average standard of living in the United States is higher than it is elsewhere.

The desire to migrate is based on a comparison of these standards. While it is true that many wish to move to the United States, this does not make this country any more the land of opportunity than other rich countries—people also have strong desires to migrate to Europe. Over the past decades, many Latin Americans and Africans moved to Spain; many Turks and Croats moved to Germany; and many Europeans in former Communist-bloc countries moved westward.⁵

We might think of making similar comparisons between the economic status of the current generation of young adults and the economic well-being of the previous generation. America, on average, is a much richer country now than it was three or more decades ago. Certainly some individuals have suffered because of the changes associated with economic growth, particularly increased international trade and changes in technology. As a result, it may well be difficult for some children to reasonably attain the same standard of living their parents' generation enjoyed. But even so, the majority of people have higher family incomes and wealth than their parents had decades ago.⁶

Important as these perspectives are, neither speaks to what we commonly understand equality of opportunity to mean: the idea that children can become all that they want to be regardless of their family and socioeconomic background. This requires a statistic that in some sense captures the so-called stickiness between the economic status of a young adult and the economic status of his or her parents: Do “rich” parents have children who grow up to be “rich”? Are the “poor” more likely to see their children be the “poor” of the next generation?

The intergenerational elasticity of earnings standard

The statistic giving the Great Gatsby Curve its vertical direction is what economists refer to as the intergenerational elasticity of earnings, which simply means the percentage change in a child’s adult earnings that is associated with a 1 percentage point change in parental earnings. (see Figure 2) It is an overall measure of mobility, where “rich” or “poor” is in reference to the average in each generation. If a father has earnings well above the average in his generation, then what fraction of that advantage is passed on to his son? To what degree will the son also have above-average earnings, where average is now referring to his own cohort of Americans? The intergenerational elasticity provides answers to these types of questions.

In measuring everything as deviations from the average, this statistic removes the influence of changes in productivity levels, international trade, technology, and labor market institutions. All the factors that influence average incomes are netted out. The intergenerational elasticity indicates the degree to which earnings are “sticky” across generations within the same family. The lower the value, the more mobility—meaning that a parent’s place in the earnings distribution will tell us little about where we can expect a child’s place to be—while the higher the value, the more stickiness, so that a parent’s relative earnings are a good predictor of the child’s rung on the earnings ladder of the next generation.⁷ This relationship more closely corresponds to the idea that in a mobile society, children have the capacities to become all that they can be.

In this sense, the intergenerational earnings elasticity is referred to as a measure of relative mobility. If our concern is with inequality and the fraction of inequality that is passed on across the generations, then this statistic measures exactly that.⁸ Figure 2 presents the best estimates of the intergenerational elasticity for as many rich countries as possible. They are derived from published studies and adjusted according to the methodology described in the appendix to a previously published paper.⁹

As such, they are not necessarily the best estimates for any particular country but rather should be thought of as the best estimates for comparison purposes.¹⁰

This is done for two reasons. First, not all studies are of acceptable quality, perhaps being completed before the methodological advances described by economists Gary Solon and David Zimmerman in 1992.¹¹ These researchers—both graduates of Princeton University and now teaching at Michigan State University and Williams College, respectively—stressed the importance of correctly measuring the earnings capacity of parents. Second, some studies are not able to calculate an accurate estimate because the available data were, in some sense, not rich enough to make comparisons across generations within the same family.

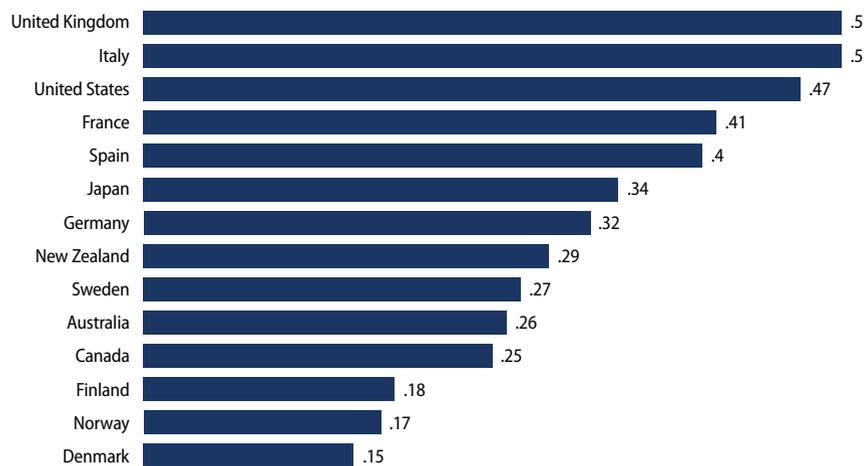
When the economics literature on this topic was originally read, for example, there were 28 different estimates of the intergenerational earnings elasticity for the United States, ranging in value from less than 0.1 to just more than 0.6—a range so broad as to make international comparisons meaningless.¹² This report therefore only uses estimates derived from data that are nationally representative of the population and in which the author corrects for the type of measurement error highlighted by economic research, also accounting for the way in which those corrections were made.¹³

The intergenerational elasticity is an overall indicator of the average degree of mobility in a country. If just one number is needed to summarize the degree to which inequality is transmitted across the generations, then this is an appropriate statistic to use. Does it capture all aspects of intergenerational mobility? No, obviously not. It does not give an indication of the directional change; it does not tell us if the degree of mobility is different at different points in the distribution; it does not refer to absolute differences. As a summary measure, it is an overall indi-

FIGURE 2

Inheriting economic status

The tie between father and son earnings varies across the rich countries



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).

cator that is available for more countries than any other statistic, and it is appropriately paired with a measure of inequality at a point in time.¹⁴

But does it measure equality of opportunity—or even something more elusive such as the American Dream? The Economic Mobility Project of the Pew Charitable Trusts conducted a nationally representative poll and asked Americans what they understood this phrase—the American Dream—to mean.¹⁵ It is clearly a concept that no single statistic can measure. But many of those polled responded by saying, “Being free to say or do what you want,” “Being free to accomplish almost anything you want with hard work,” and “Being able to succeed regardless of the economic circumstances in which you were born.”¹⁶

John E. Roemer of Yale University advances this discussion by examining the conceptual relationship between statistics such as the intergenerational elasticity and equality of opportunity. He argues that equality of opportunity implies that inequities of outcome are indefensible when they are due to “differential circumstances.”¹⁷

Family background does not translate straightforwardly into a “circumstance” since parents can influence their children in a variety of ways, and societies may differ on the degree to which they feel these different playing fields should be leveled. In particular, Roemer thinks of these influences—to slightly paraphrase his work—as a threefold hierarchy. First, parents may give their children an advantage through social connections that facilitate access to jobs or admission to particular schools or colleges. Second, their influence may be seen through a family culture and other monetary and nonmonetary investments that can shape skills, aptitudes, beliefs, and motivation. Finally, parents may influence their children’s life chances through the genetic transmission of characteristics such as innate ability, physical appearance, and health, all of which are of value in the labor market.

According to Roemer, these are the successively broader playing fields—each corresponding to a successively broader definition of equality of opportunity—that policymakers could potentially seek to level. Equating equality of opportunity with complete generational mobility—with an earnings elasticity of zero—implies that not only should the influence of nepotism, social connections, and family culture/investments be eliminated but so too should the genetic transmission of ability and the influence that families have on the preferences and attitudes of their children. He suggests that this is “a view that only a fraction of those who consider the issue would, upon reflection endorse.”¹⁸

This is an important caution. The fraction of parental income advantage passed on to children consistent with equality of opportunity is not self-apparent. It requires a definition of the circumstances considered unacceptable as sources of labor market success, and this is a value judgment that different societies may make differently.¹⁹

These values will interact with the perceived costs associated with less-than-perfect equality of opportunity, which are also associated with the consequences for economic growth. Clearly if individuals access jobs based on nepotism—not on skills or aptitude—then this may be an affront to our sense of fairness but will also hamper productivity growth. A tie between family culture and other nonmonetary parental influences on child outcomes, however, will also influence economic growth. Research increasingly and more clearly shows that a child’s development during the early years and even in utero can influence skill acquisition and educational attainment.²⁰ But Roemer’s point is that citizens may disagree in the degree to which this is a matter for public policy. To inform this discussion would also require an understanding of not only the consequences for economic growth but also the effectiveness of government intervention.

Not even the most generationally mobile country listed in Figure 2—Denmark—has completely eliminated the stickiness between parent and child earnings. Furthermore, it is important not to interpret comparisons such as those offered in Figures 1 and 2 as recipes for change or as illustrating the possibility of moving down the Great Gatsby Curve. In his study, “What is the Justification of Studying Intergenerational Mobility of Socioeconomic Status?,” Roemer stresses that the demographic diversity between these countries and their underlying values both imply that it may well be impossible to change the degree of mobility in countries such as the United Kingdom or the United States into the rates observed in Denmark.²¹ Rather, the cross-country comparison of generational mobility invites us to reflect on what makes one country different from another in the hope of clarifying the underlying drivers and determining whether these are forces that can—or that we want to—change.

In this sense, it may also sometimes be appropriate to focus the comparisons on countries that share a good deal in common yet continue to have different outcomes. Canada and Australia, for example, both boast moderate levels of inequality and mobility and thus may be more appropriate countries to use in wondering why the United States and the United Kingdom have, in comparison, such low levels of mobility. These four countries are more demographically diverse than many of the others, and they all—broadly speaking—share a common history,

with relatively open and flexible labor markets. The Great Gatsby Curve and its associated intergenerational earnings elasticity invite these comparisons as a first step in understanding the underlying causal forces. It focuses our attention solely on earnings mobility, without pronouncing what exactly equality of opportunity means or exactly what point of the Great Gatsby Curve is the most desirable.

The causes of economic mobility across generations

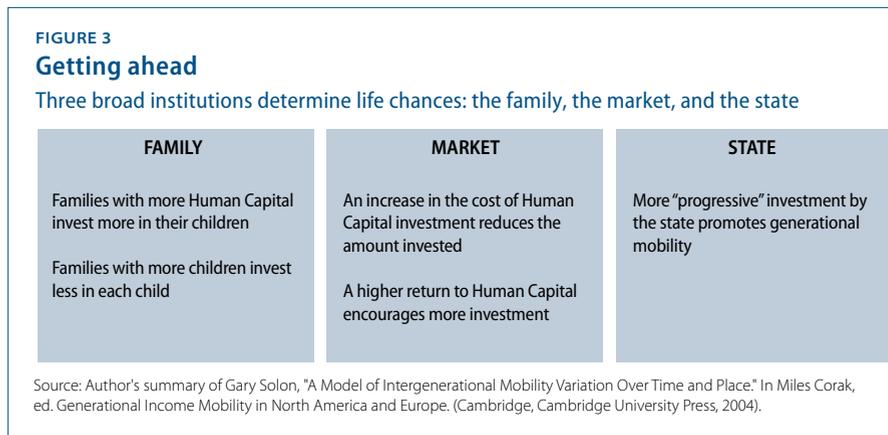
The Great Gatsby Curve is not a causal relationship. If it were, public policy solutions for addressing inequality and life chances would be more straightforward. If the level of inequality is deemed too high, then simply use taxes and transfers to lower it. In this way, a policymaker could hit two targets with one instrument—reduce current inequality and reduce the degree to which it is transmitted across future generations.

While redistributive policies certainly have a role in determining a country's position on the Great Gatsby Curve, its slope does not accurately depict their impact on equality of opportunity. There is no silver bullet. The Great Gatsby Curve reflects a whole series of gradients between the outcomes of children at specific points in their lives and the prevailing socioeconomic inequalities to which they are exposed.

Socioeconomic status influences a child's health and aptitudes in the early years—indeed even *in utero*—which in turn influences early cognitive and social development, as well as readiness to learn. These outcomes and the family circumstances of children, along with the quality of neighborhoods and schools, influence success in primary school, which feeds into success in high school and college. Family resources and connections partly determine access to good schools and jobs, and the degree of inequality in labor markets determines both the resources that parents have and ultimately their children's return to investments of time and money in education.

This whole process determines earnings in adulthood. The series of relationships between socioeconomic status and outcomes feed successively into life chances. The Great Gatsby Curve is a summary of all of these underlying gradients, reflecting the outcome of a whole host of ways inequality impacts children.

At the broadest level, the degree to which adult outcomes are tied to family background is determined by the interaction of three fundamental social institutions and the extent to which they level the playing field: the family, the labor market, and government programs. This interaction is what Figure 3 below illustrates schematically. Ron Haskins and Isabel Sawhill of the Brookings Institution offer a particularly careful and detailed analysis of how these forces determine economic opportunity in the United States.²² Their analysis merits a careful reading, but this can be supplemented by appreciating how the configuration of these three broad forces differs across countries, what determines a country's position on the Great Gatsby Curve, and what challenges they face in changing that position. America's position as a high inequality-low mobility country is due to all three sets of causal factors limiting advantage and opportunity for the relatively disadvantaged yet promoting it for the relatively advantaged.²³ (see Figure 3)

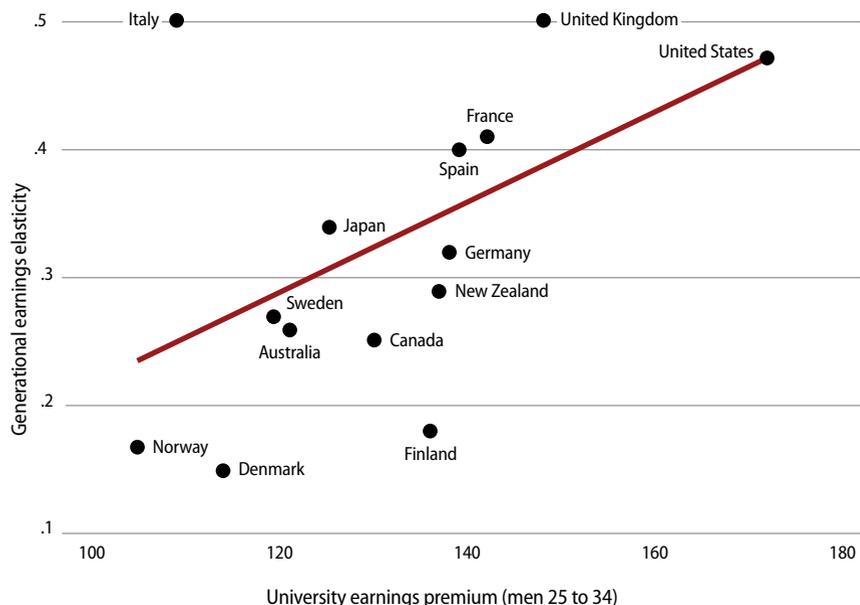


More labor market inequality implies less mobility

One of the most revealing aspects of how these three forces are configured in the United States compared to other countries is the structure of the labor market—particularly the return to education. In fact, the rate of return to education is the starting point for the model that Gary Solon, Professor of Economics at the University of Michigan, put forward in 2004. It is well known that the rate of return to schooling has been increasing in the United States—that is, the gap in earnings between less-educated and more-educated individuals has grown—and that this contributed to higher inequality.²⁴ But the return to schooling is also associated with the intergenerational earnings elasticity.

Figure 4 relates the earnings elasticity to the earnings premium that a college graduate has over a high school graduate. The higher the return to college education, the lower the degree of generational mobility. The premium is higher in the United States than any other country for which these comparisons are possible. In the United States, a college graduate earns about 70 percent more than a high school graduate; in Australia and Canada, this difference is notably smaller, at about 20 percent to 30 percent.²⁵

FIGURE 4
Labor market inequality matters
 Lower generational mobility is associated with higher returns to education



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); OECD, *Education at a Glance*. (Paris, Organization for Economic Cooperation and Development, 2011), Table 8A.1.

Both the monetary and nonmonetary resources of families matter

Who has the capacity to make these investments? As suggested, families with more human capital can invest more in their children. A higher return to education encourages parents to invest more in their children and also gives those with more education a greater income to do so. It changes both incentives and opportunities, and therefore is central in determining the degree of mobility. Figure 5 illustrates the relationship between the intergenerational transmission of schooling—how many years of extra schooling a child can expect to obtain for each additional year of parental education—and the intergenerational transmission of earnings.

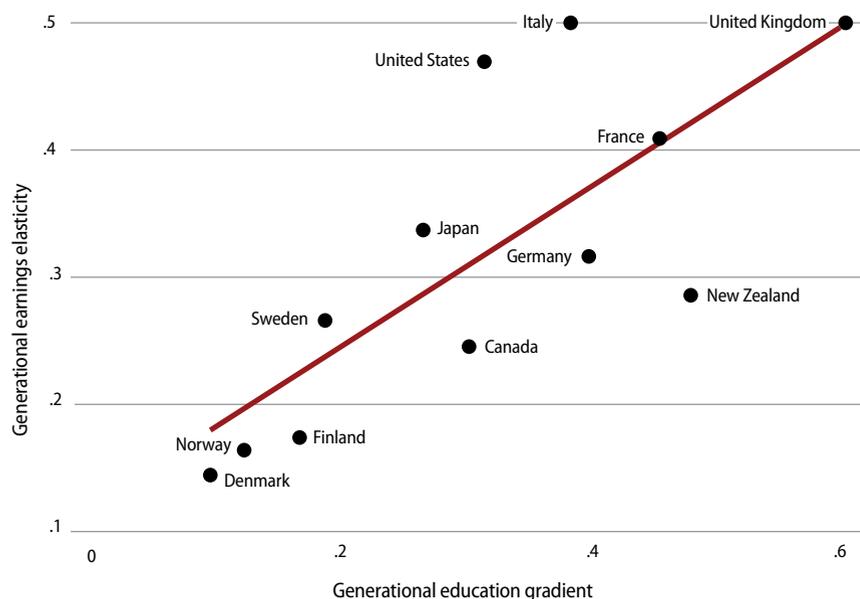
There is a clear positive relationship in the data: the greater the similarity between parent-child years of schooling, the greater the tie between their earnings. Parent-child education levels are most closely related in the United Kingdom, with the United States and Canada having middling degrees of stickiness in education across the generations.²⁶ When education is strongly transmitted between parents and children, so are earnings.

This not only reflects the nature and structure of the schooling system but also the investments families make in their children. As such, families are a fundamental influence on a child's life chances. The extent and way in which parents form the human capital of their children is at the very heart of their children's capacity to become all that they can be. These investments, as already suggested, are surely influenced by money—rich parents having more scope to develop their children's skills and attitudes and to enrich their daily experiences.

Parents also make nonmonetary investments in their children, reflecting the development of their values, motivation, and aspirations. The financial resources and education levels of parents, as well as the time they have to spend with their children, all determine the nature of these nonmonetary investments. Families with more human capital have the capacity to invest more in their children, while families with more children (in the sense of the number of children per parent) have a lower capacity to invest in each child.

There is no single indicator of these capacities and the health and vitality of families. The broadest indicator in academic literature involves examining the correlation in the earnings of brothers and comparing it to the correlation of all young men living in the same neighborhood. This research finds that the adult earnings of brothers are closely related for a wide number of countries, but that there is very little relationship between neighbors. This suggests that the qualities brothers have in common from being raised in the same family are the dominant influence on adult labor market outcomes.²⁷

FIGURE 5
Access to education matters
 Lower generational mobility is associated with stronger ties between parent and child education



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); Tom Hertz and others, "The Inheritance of Educational Inequality: International Comparisons and Fifty Year Trends," *The B.E. Journal of Economic Analysis and Policy* 7 (2) (2007): 1–46.

In fact, summarizing his research on this issue, Bhashkar Mazumder, an economist with the Federal Reserve Bank of Chicago, goes so far to state:

It may be especially surprising to note that even measures of physical attributes such as height and weight, which presumably have a strong genetic component, are not as highly associated between brothers as is the permanent component of wages. This strongly suggests that there are factors related to individual or family decision making that lead to a high degree of similarity in the economic fortunes of siblings rather than some simple mechanical relationship.²⁸

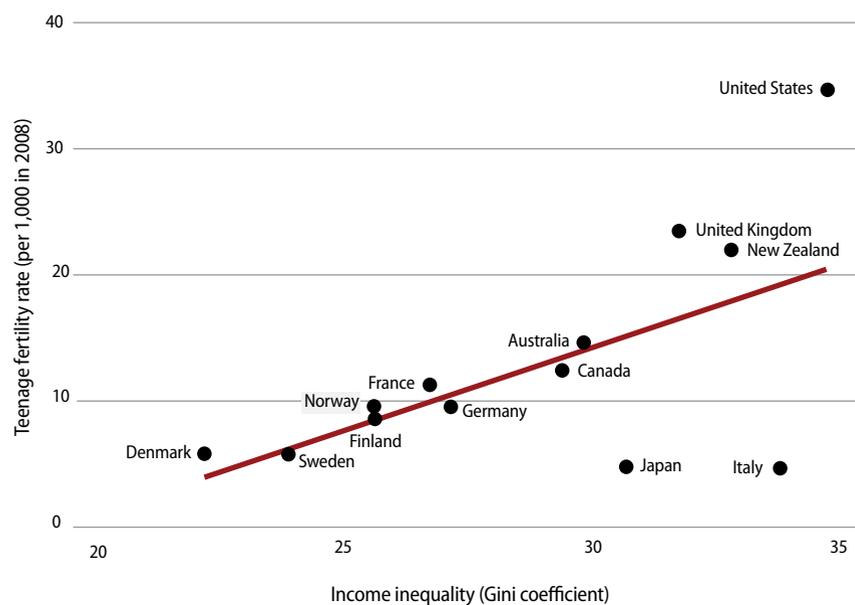
One specific yet important indicator signaling the status of the least advantaged—the rate of teen births, who in some sense (depending upon the other social supports available to them) might have the lowest status, lowest education, and lowest income—is depicted in Figure 6. Teenage women living in more unequal societies are more likely to have a child. Japan and Italy are interesting counterexamples, however, with teenage fertility rates considerably lower than what their high level of inequality would predict. But the most striking observation is the degree to which the United States is an outlier in the opposite sense, displaying a much higher teenage fertility rate given the level of inequality.

This is one indicator of the state of families, but other measures tell a similar tale. Research done by Miles Corak, Lori Curtis, and Shelley Phipps, of the University of Ottawa, the University of Waterloo and Dalhousie University, respectively, that was published by the Russell Sage Foundation focuses on a comparison between Canada and the United States, and finds that along a whole host of dimensions—the age of the mother, the

FIGURE 6

Parents matter

More inequality is associated with higher fertility rates among teenagers



Source: Organisation for Economic Co-operation and Development Family Database, "SF1.4: Chart SF2.4.D for teenage fertility rates"; Organisation for Economic Co-operation and Development for Gini co-efficients, various years between late 1990s and early 2000s.

education of the mother, and the incidence of living with both biological parents, as well as the incidence of living in a single parent household—Canadian children, particularly relatively disadvantaged children, tend to live in a more enriching family environment.²⁹

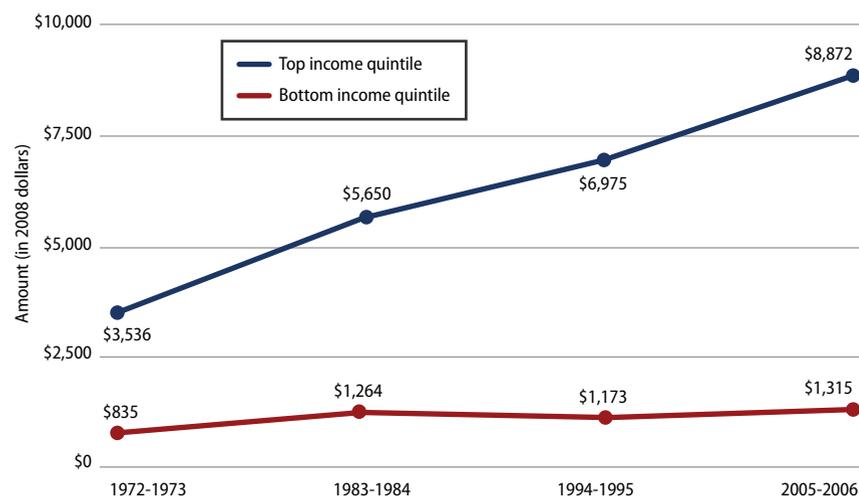
The opposite holds true at the other end of the socioeconomic hierarchy. Clearly money is not everything, but it matters. Families with more money can invest more in their children, and, among the relatively advantaged, the race to college can start even in the early years of a child’s life. Among the 10 jobs for new graduates that did not exist 10 years ago—as compiled by a reporter at Forbes³⁰—there are a few we could have all guessed: smartphone app developer, market research data miner, and social media manager, to name a few. But the magazine also listed a position called “educational or admissions consultants,” described in the following way:

When a certain set of affluent parents watch their toddler stack his or her first set of blocks, they’re not lost in a moment of cute, they’re strategizing their child’s likelihood of getting into the right pre-school. These moms and dads will stop at nothing to secure the best education for their kids—which for many includes hiring an educational or admissions consultant to help ease the process of interviewing and testing into schools from preschool to college. Admissions consultants can be paid thousands of dollars for their skills—which often include personal connections with school administrators.³¹

This is clearly anecdotal. While in some measure, this story may describe the situation of families at the very top of the income ladder, more representative analyses support the general suggestion. Families with more money invest more in their children than those with less money, and they

FIGURE 7
Money matters

Higher-income families in the United States have higher enrichment expenditures on their children



Note: “Enrichment expenditures” refers to the amount of money families spend on books, computers, high-quality child care, summer camps, private schooling, and other things that promote the capabilities of their children.

Source: Greg J. Duncan and Richard J. Murnane, “Introduction: The American Dream, Then and Now.” In Greg J. Duncan and Richard J. Murnane, eds. *Whither Opportunity? Rising Inequality, Schools, and Children’s Life Chances* (New York: Russell Sage Foundation, 2011), page 11.

enrich their children's lives outside of formal schooling in a way that promotes the children's human capital and future prospects. Figure 7, reproduced from a paper by economists Greg J. Duncan of the University of California, Irvine, and Richard J. Murnane of Harvard University, illustrates as much.

Figure 7 contrasts the evolution of so-called enrichment expenditures by families in the top 20 percent of the U.S. income distribution with those in the bottom 20 percent. These expenditures refer to money spent on books, computers, high-quality child care, summer camps, and private schooling, among other things that promote the capabilities of children. Annual expenditures rose significantly for families in the bottom 20 percent, from about \$835 in the early 1970s to more than \$1,300 in the mid 2000s. But this pales in comparison to the increase among households in the top 20 percent: The significant gap between the two groups already present in the early 1970s ballooned throughout these decades, as spending by those at the top went from \$3,500 to almost \$9,000 per year.

Progressive federal policies can help families interact with the labor market

Families matter, but families must also engage with the labor market. How they interact with labor markets determines their standard of living, their degree of security in the face of the unexpected, and the time they have to spend with their children. A more polarized and unequal labor market makes this more of a challenge for some than for others. Public policy can buffer families and support them in this interaction with the market, but it can also make families convenient for the labor market, reinforcing economic developments and allowing labor market inequalities to be shadowed in family resources, both financial and nonmonetary.

Solon describes the guiding principle in judging this role, which concerns the degree to which public policy—broadly defined to include all government programs, taxes, and transfers, as well as in-kind support and investments in child care, health care, and education—levels the playing field.³² The greater the degree to which it is progressive—that is, of relatively more advantage to the relatively disadvantaged—the greater will be the degree of income mobility across the generations. Broad-based, universal, and effective government support that is financed according to one's ability to pay will fill the gap in family resources, and buffer the relatively disadvantaged from inequalities and turbulence originating in the labor market.

There is nothing inevitable about this role for government—public policy can just as easily be designed to be regressive. The United States stands out in the degree to which government programs are relatively more advantageous for the advantaged in society. By being structured in this way, they generally exacerbate rather than blunt the degree to which labor market inequalities are passed on across generations. This is true of the U.S. tax code, both in terms of the level of progressivity in tax rates and also regarding a host of tax expenditures.

It is also true of total government spending. Research undertaken for the Pew Charitable Trusts by Gillian Reynolds and C. Eugene Steuerle of the Urban Institute, and Adam Carasso of the New America Foundation offers one attempt to estimate the global incidence of federal government programs.³³ The authors classify federal spending using various components, noting in particular those programs that promote mobility. According to their calculations, the U.S. government spends considerable amounts on such programs—up to 1.6 percent of GDP in 2006—but only about one-quarter of these expenditures actually benefits lower- and moderate-income individuals.

A full picture of the influence of public policy on mobility is beyond the scope of this paper, but a notable example is probably the most important government intervention determining equality of opportunity: the education system. At almost \$15,000 per student, America spends more on education than almost any other wealthy developed country.³⁴ What matters for mobility, however, is not just the amount of spending but also how the funds are allocated. The American education system does not promote mobility to the extent that it could because it exceedingly benefits relatively well-off Americans over the disadvantaged.

This outcome partly reflects the fact that a significant proportion of financing for primary and secondary schooling comes from local property taxes. This narrow funding base causes income inequalities among families to be echoed in inequalities in the nature and quality of schooling between the various school districts in America. It also implies large variations in school quality, with the best teachers and the best schools likely not servicing the least-advantaged children.

The Organisation for Economic Co-operation and Development makes these points in its 2012 Economic Survey of the United States.³⁵ It also points out that the higher levels of spending in the United States are driven by much higher spending on tertiary education. For every dollar spent on primary education, three dollars are spent on tertiary education, the highest rate of all rich coun-

tries. Further, tertiary spending is dominated by private sources of financing, which makes up more than 60 percent of all spending on this level of education.³⁶ America, in other words, is choosing to prioritize higher education, and, in a way, that is relatively more beneficial to the relatively wealthy, who can more easily afford to send their children to college and therefore have more access to this level of education than less-wealthy Americans.

The Organisation for Economic Co-operation and Development summarizes its research on this topic in the following way:

*Currently the United States is one of only three OECD countries that on average spend less on students from disadvantaged backgrounds than on other students. ... Moreover, the most able teachers rarely work in disadvantaged schools in the United States, the opposite of what occurs in countries with high-performing education systems.*³⁷

In other words, in spite of the high level of overall spending, the spending on and the quality of schooling at the primary level does a poor job preparing many young people from relatively less-wealthy families for the future. The demand for high-quality college education among the relatively well-off expresses itself in a demand for high-quality primary and secondary schooling that offers their children a gateway to a good college education.

While America spends more on primary education per pupil than many other countries, significant inequalities in parental resources express themselves in the structure of the system, leading to variations in the financing and quality of schools.³⁸ As a result, this spending does less than it could to promote opportunity for all Americans, despite their economic background.

Conclusion

This broad sketch of the forces that determine life chances highlights why parental earnings are a stronger correlate of adult outcomes in the United States than they are in many other rich countries. In America, families are much more diverse in their capacity to invest in and promote the human capital of their children; labor markets are much more unequal, skewing resources and incentives in a way that benefits the relatively rich; and, in spite of these greater challenges, U.S. public policy does less to level the playing field, and indeed, in some important ways, does just the opposite, tilting it to make it harder for the disadvantaged. This suggests that in an era of growing labor-market inequality, it is unlikely that the United States will slide down the Great Gatsby Curve and promote more economic equality and mobility unless it makes effective changes to its public policy.

It is important to appreciate the interaction between families, markets, and the state—in a more detailed way than is discussed here—to understand the challenges faced by the current generation of families and policymakers. The academic literature does not yet offer strong guidance on this dynamic.³⁹ If America has fallen into a vicious circle, then there clearly are different perspectives on how it has done so, what the principle drivers are, and how to break out of it. Charles Murray of the American Enterprise Institute, for instance, stresses the role of family and values associated with the raising of children as the main cause of this cycle. His policy recommendations—to the extent he is comfortable putting any forward—deal with the nature and structure of families, particularly the role of marriage and a stable family environment.⁴⁰

In thinking about these issues, it is helpful to anchor the discussion on changes that have their origin outside of the system. Perhaps this is the case for family structure, though it is unclear how to rationalize an exogenous change in such values. Labor economists are more inclined to think about the labor market as being the starting point. It is clear that employment in most rich countries has been influenced by important changes in information and communication technology, as well as globalization. In the United States, and in other countries, this

has led to a significant increase in wage inequality since at least around the early 1980s.⁴¹ Inequality is significantly higher now than it was during the formative years of the generation upon which our estimates of the intergenerational earnings elasticity are based.

This change has attracted a good deal of discussion in the academic literature.⁴² Increased trade and technical changes interact to influence employment and earnings prospects in different ways depending upon the nature of employee skills. Workers in jobs that are based on routine tasks—be they manual tasks such as those traditionally associated with assembly-line work or nonmanual tasks such as those associated with being a clerk or a lower-middle manager—have fared the worst. Roughly speaking, it is those who were in the middle or lower-middle range of the earnings distribution a generation ago who are most negatively affected in this sense today.

Workers at the very bottom of the distribution in low-paying service jobs performing nonroutine manual tasks have been impacted more so in the sense that possibilities for upward mobility have diminished. At the same time, the prospects of those performing nonroutine cognitive tasks have improved, as the demand for their skills has increased. This has contributed to increased inequality and a polarization in earnings because the supply of highly skilled workers did not keep up with demand.

The structure of the education system, as well as limited public support to families in need, limited the development of early years skills among children and was not broad-based enough in its ability to produce graduates. This did not happen to the same degree in other countries, as the information in Figure 4 makes clear. It is also likely to have contributed to changing family dynamics—on the one hand, leading to more stress and challenges for some, while on the other hand, strengthening the overall earnings capacity of two-parent households in which both partners have relatively high levels of education.

It is also likely that growing inequality has influenced the political process in the United States more than in other countries. In different ways, Jacob Hacker and Paul Pierson in their book *Winner Take All Politics* and Daron Acemoglu and John Robinson in *Why Nations Fail* stress how inequality can skew social choices in a way that benefits the relatively advantaged, limiting the capacity of public policy to level the playing field.⁴³ A reading of Hacker and Pierson suggests that this may have more relevance in the United States than elsewhere because of the structure

of the nation's political institutions, along with the very significant and higher concentration of earnings and income among the top 1 percent of earners.

Labor-market inequality is at the heart of the dynamic determining intergenerational mobility. Technology and trade will continue to influence labor markets, and the top 1 percent will continue to maintain an important influence. Some families are already stressed and limited in their capacity to respond, yet others are advantaged and incentivized. Public policy, however, is framed in a way that does not address the challenges of the least advantaged, which if changed would lead to greater economic mobility in the future.

For all these reasons, it is unlikely that the current generation of young Americans will experience more mobility than their parents. Persistent and growing inequalities will limit future opportunities, and over the course of the coming decades America will not slide down the Great Gatsby Curve without effective and progressive changes in public policy. This is a prospect that many citizens may well feel cuts very much against what it means to believe in the American Dream.

About the author

Miles Corak is a professor of economics with the Graduate School of Public and International Affairs at the University of Ottawa in Canada. He has published numerous articles on topics dealing with child poverty, access to university education, intergenerational earnings and education mobility, and unemployment. He has also edited three books, the most recent of which—*Generational Income Mobility in North America and Europe*—was published by Cambridge University Press.

Corak is a fellow with the Institute for the Study of Labor (in Bonn, Germany), the Stanford Center on Poverty and Inequality, the Institute for Research on Public Policy, The C.D. Howe Institute, and, until 2007, was the director of the Family and Labour Studies Division at Statistics Canada, the country’s national statistical agency. He was also a visiting researcher at the UNICEF Innocenti Research Centre in Florence, Italy; a visiting researcher with the Centre for Longitudinal Studies at the University of London, United Kingdom; and a visiting researcher with the Office of Population Research at Princeton University in New Jersey.

His co-authored research paper “Economic Mobility, Family Background, and the Well-Being of Children in Canada and the United States” received the Association for Public Policy Analysis and Management’s “Best Comparative Paper Award” in 2009. Corak’s research has also been cited by many of the major print and electronic media, including *The Wall Street Journal*, *The New York Times*, *The Economist*, *The Sunday Times*, *The Guardian*, and *The Globe and Mail*, among others.

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Endnotes

- 1 Kelly Evans, "Feldstein: 'About as Bad an Expansion as I've Ever Seen,'" Real Time Economics blog, October 10, 2011, available at <http://blogs.wsj.com/economics/2011/10/10/feldstein-about-as-bad-an-expansion-as-ive-ever-seen/>.
- 2 Organisation for Economic Cooperation and Development, "Divided We Stand: Why Inequality Keeps Rising" (2011).
- 3 Raghuram Rajan, *Fault Lines: How Hidden Fractures Still Threaten the World Economy* (Princeton: Princeton University Press, 2010); Joseph Stiglitz, *The Price of Inequality: How Today's Divided Society Endangers Our Future* (New York: W.W. Norton, 2012), 2010
- 4 He used this label for the first time in a speech—"The Rise and Consequences of Inequality"—to the Center for American Progress. Alan Krueger, "The Rise and Consequences of Inequality," remarks as prepared for delivery at the Center for American Progress, Washington, January 12, 2012, available at <http://www.americanprogress.org/events/2012/01/12/17181/the-rise-and-consequences-of-inequality/>. The underlying economic theory for this curve is due to Gary S. Becker and Nigel Tomes, "An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility," *Journal of Political Economy* 87 (6) (1979): 1153–1189; Gary S. Becker and Nigel Tomes, "Human Capital and the Rise and Fall of Families," *Journal of Labor Economics* 4 (3) (2) (1986): 51–539; and in particular to Gary Solon, "A Model of Intergenerational Mobility Variation over Time and Place." In Miles Corak, ed., *Generational Income Mobility in North America and Europe* (Cambridge: Cambridge University Press, 2004).

The curve has been drawn in different varieties by, to the best of my knowledge, Dan Andrews and Andrew Leigh, "More Inequality, Less Social Mobility," *Applied Economics Letters* 16 (15) (2009): 1489–1492; Anders Bjorklund and Markus Jantti, "Intergenerational Income Mobility and the Role of Family Background." In Wiemer Salverda, Brian Nolan, and Timothy M. Smeeding, eds., *The Oxford Handbook of Economic Inequality* (Oxford: Oxford University Press, 2009); Jo Blanden, "CEE Discussion Paper 111: How Much Can We Learn From International Comparisons of Intergenerational Mobility?" (London: Centre for the Economics of Education at the London School of Economics, 2009); Miles Corak, "Do Poor Children Become Poor Adults? Lessons for Public Policy from a Cross Country Comparison of Generational Earnings Mobility." In John Bishop, ed., *Research on Economic Inequality* 13 (2006), which is available in an unabridged form as IZA Discussion Paper 1993, <http://ftp.iza.org/dp1993.pdf>; 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*, available at <http://milesorak.com>; John Ermisch and others, "Advantage in Comparative Perspective." In John Ermisch, Markus Jantti, and Timothy M. Smeeding, eds., *From Parents to Children: The Intergenerational Transmission of Advantage* (New York: Russell Sage Foundation 2012); in addition to appearing in Mr. Krueger's speech and The Economic Report of the President for 2012.

The economic theory and methods to derive the data are in Corak, "Do Poor Children become Poor Adults?" and subsequently in Miles Corak, "The Economics of the Great Gatsby Curve," Economics for Public Policy blog, January 18, 2012, available at <http://milesorak.com/2012/01/17/the-economics-of-the-great-gatsby-curve/>.

- 5 Organisation for Economic Cooperation and Development, "Trends in International Migration: Annual Report 2004 Edition" (2005).
- 6 The Pew Charitable Trust reports that more than 80 percent of Americans had a higher family income than their parents, and 50 percent had greater wealth. Economic Mobility Project, "Pursuing the American Dream: Economic Mobility Across Generations" (Washington: Pew Charitable Trusts, 2012).
- 7 See Casey B. Mulligan, *Parental Priorities and Economic Inequality* (Chicago: University of Chicago Press, 1997) for a more detailed description of how the statistic is calculated and how it should be interpreted.
- 8 But there are certainly alternative ways of viewing intergenerational mobility that draw our attention to other aspects of the process. One alternative puts the emphasis on "absolute" mobility: the extent to which a child as an adult has earnings that are higher or lower (in inflation-adjusted dollars) than his or her parents when they were roughly the same age. This is a much narrower interpretation of "equality of opportunity" than the phrase is traditionally given and assumes that well-being in a sense is captured by comparing one's position to a standard that prevailed in the previous generation. It does not directly refer to the stickiness in economic status. An example is Economic Mobility Project, "Pursuing the American Dream: Economic Mobility Across the Generations," which finds that while "a majority of Americans exceed their parents' family income and wealth, the extent of their absolute mobility gains are not always enough to move them to a different rung of the economic ladder." There are not many studies of absolute mobility for other countries.

Some research focuses on the direction of movement and whether children move beyond or fall below the point in the earnings distribution occupied by their parents. See, for example, Bhashkar Mazumder, "Upward Intergenerational Economic Mobility in the United States" (Washington: Pew Charitable Trusts, 2008), who focuses on the United States, and Miles Corak, Matthew Lindquist, and Bhashkar Mazumder, "A Comparison of Upward and Downward Intergenerational Mobility in Canada, Sweden, and the United States," unpublished paper presented to the Annual Meetings of the Society of Labor Economics, Vancouver, Canada, 2011, who offer a comparison of Canada, Sweden, and the United States.

The academic literature also recognizes the value of using the correlation in earnings across the generations, rather than the elasticity. The correlation coefficient can be interpreted as standardizing the earnings distributions in each generation. It recognizes the fact that earnings distributions are much wider in some countries than in others so that a given absolute gain would imply a very different percentage-point gain. For example, since the earnings distribution is much more equal in Denmark, it may not require as much money to move from one point to another than it would in the United States, where the earnings distribution is much more unequal. The correlation coefficient in effect recognizes that Americans face an income ladder with rungs that are much wider apart than in other countries and can be thought of as compensating for this by adjusting the length of their stride. It measures

- intergenerational mobility as the fraction of a standard deviation that a child receives for a one standard deviation change in parental earnings. These statistics are also not reported in as wide a number of countries as the intergenerational elasticity.
- 9 Corak, "Do Poor Children Become Poor Adults?" The figure uses the estimates in this paper updated with a more recent literature review reported in Corak, "Inequality from Generation to Generation: The United States in Comparison," who also offers elasticity estimates for a total of 22 countries. An appendix listing the sources used is available at "Here is the source for the 'Great Gatsby Curve' in the Alan Krueger speech at the Center for American Progress on January 12," available at <http://milesorak.com/2012/01/12/here-is-the-source-for-the-great-gatsby-curve-in-the-alan-krueger-speech-at-the-center-for-american-progress/> (last accessed November 2012).
 - 10 For example, the most accurate estimate of the intergenerational elasticity currently available for the United States is likely that calculated by Bhashkar Mazumder, who suggests it is higher than 0.5 and possibly as high as 0.6. Bhashkar Mazumder, "Fortunate Sons: New Estimates of Intergenerational Mobility in the United States Using Social Security Earnings Data," *Review of Economics and Statistics* 87 (2) (2005): 235–255.
 - 11 Gary Solon, "Intergenerational Income Mobility in the United States," *American Economic Review* 82 (3) (1992): 393–408; David J. Zimmerman, "Regression Toward Mediocrity in Economic Stature," *American Economic Review* 82 (3) (1992): 409–429.
 - 12 Corak, "Do Poor Children Become Poor Adults?"
 - 13 A.B. Atkinson, A.K. Maynard, and C.G. Trinder, *Parents and Children: Incomes in Two Generations* (London: Heinemann Educational Books, 1983); Solon, "Intergenerational Income Mobility in the United States," Zimmerman, "Regression Toward Mediocrity in Economic Stature." To be specific, this refers to the derivation of permanent earnings from the annual measures available in the data by either averaging the annual data over several years or by using instrumental variables. As discussed by Solon, these two methods will bound the true value of the estimated elasticity; averaging offering a lower bound, instrumental variables an upper. The estimates I derived from the latter method are down-sized to make them comparable to those using the former method. As such, these estimates will tend to be conservative, possibly understating the true value in some cases.
 - 14 It should also be noted that as I have collected the information, it refers solely to the relationship between father and son earnings. The dynamics for women, as well as that for other measures of income—such as total market income or family income—are examined in the academic literature, but the father-son elasticity is the most common and thereby permits a comparison of the largest number of countries.
 - 15 Economic Mobility Project, "Opinion Poll on Economic Mobility and the American Dream" (Washington: Pew Charitable Trusts, 2009).
 - 16 Economic Mobility Project, "Poll Results: Economic Mobility and the American Dream" (Washington: Pew Charitable Trusts, 2009).
 - 17 John E. Roemer, "Equal Opportunity and Intergenerational Mobility: Going Beyond Intergenerational Income Transition Matrices." In Miles Corak, ed., *Generational Income Mobility in North America and Europe* (Cambridge: Cambridge University Press, 2004). This and the following two paragraphs are taken directly from my summary of Roemer's 2004 article presented in Corak, "Do Poor Children become Poor Adults?"
 - 18 Ibid, 49.
 - 19 There is a literature that has sought to estimate indices of equality of opportunity that more closely relate to Roemer's theoretical contributions by netting out the influence of factors over which individuals have no control: for example, race, mother and father's schooling, region of birth, and father's occupation. See Francisco H. G. Ferreira and Jeremie Gignoux, "The Measurement of Inequality of Opportunity: Theory and an Application to Latin America," *Review of Income and Wealth* 57 (4) (2011): 622–657; Arnaud Lefranc, Nicolas Pistoiesi, and Alain Trannoy, "Inequality of Opportunities vs. Inequality of Outcomes: Are Western Societies All Alike?" *Review of Income and Wealth* 54 (4) (2008); Ricardo Paes de Barros and others, "Measuring Inequality of Opportunities in Latin America and the Caribbean" (Washington: The World Bank, 2009).
 - 20 There is a broad literature on this theme that crosses disciplines. As an example, see Eric I. Knudsen and others, "Economic, Neurobiological, and Behavioral Perspectives on Building America's Future Workforce," *Proceedings of the National Academy of Sciences* 103 (27) (2006): 10155–10162.
 - 21 John Roemer, "What is the Justification of Studying Intergenerational Mobility of Socioeconomic Status?" In John Ermisch, Markus Jantti, and Timothy M. Smeeding, eds., *From Parents to Children: The Intergenerational Transmission of Advantage* (New York: Russell Sage Foundation, 2012).
 - 22 Ron Haskins and Isabel Sawhill, "Creating an Opportunity Society" (Washington: Brookings Institution, 2009).
 - 23 The following discussion, and its representation in Figure 3, is meant to intuitively present the economic theory developed by Becker and Tomes, "An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility," and Becker and Tomes, "Human Capital and the Rise and Fall of Families," and particularly its extension by Solon, "A Model of Intergenerational Mobility Variation over Time and Place."
 - 24 Claudia Goldin and Lawrence F. Katz, "The Race between Education and Technology" (Cambridge: Harvard University Press, 2010).
 - 25 Daniel Aaronson and Bhashkar Mazumder, "Intergenerational Economic Mobility in the United States, 1940 to 2000," *Journal of Human Resources* 43 (1) (2008): 139–172. The authors illustrate this relationship by comparing their estimates of the intergenerational earnings elasticity in the United States over time with the evolution of the return to education documented by Goldin and Katz, "The Race between Education and Technology." The elasticity moves over the decades in tandem with the return to education.
 - 26 Information on the intergenerational gradient in education is not available for Australia, and it therefore is omitted from this figure.
 - 27 Anders Bjorklund and others, "Brother Correlation in Earnings in Denmark, Finland, Norway and Sweden Compared to the United States," *Journal of Population Economics* 15 (4) (2002): 757–772.
 - 28 Bhashkar Mazumder, "Sibling Similarities and Economic Inequality in the US," *Journal of Population Economics* 21 (3) (2008): 685–701.
 - 29 Miles Corak, Lori Curtis, and Shelley Phipps, "Economic Mobility, Family Background, and the Well-being of

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