



WHEN MOVING MATTERS

Residential and Economic
Mobility Trends in
America, 1880–2010

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EXECUTIVE SUMMARY

In recent years, observers across America’s political spectrum have expressed concern over declining residential mobility and its implications for economic mobility in the United States. There is a widespread belief that Americans’ economic mobility has declined and that Americans are also less likely to “move to opportunity” than in the past. These two assertions have been linked to argue that falling residential mobility is an important factor behind diminished economic opportunity in America.

The reality is more complicated. The bulk of research on economic mobility—focused on earnings, income, occupation, and education—suggests very little change since at least the mid-twentieth century. While the share of Americans having moved in the previous year has fallen since the 1970s, this paper finds that other types of residential mobility are now as high as they have been in 100 years or more.

The author’s extensive analysis of different data sources—12 decennial censuses, extending back to the nineteenth century; the Census Bureau’s American Community Survey; and two panels from the Labor Department’s National Longitudinal Surveys—confirms a long-standing connection between residential mobility and economic outcomes; but this connection is much stronger when focusing on the kinds of residential mobility that have not declined—moves between birth and adulthood (and most likely between adolescence and adulthood) and moves across state boundaries.

While the trajectories of U.S. residential and economic mobility are thus less alarming than widely believed, there is still good reason to be concerned: though not lower than in the past, U.S. upward economic mobility remains low; and certain disadvantaged groups, including the less educated and African-Americans, are less willing, or able, to move to economic opportunity.

If the association between residential and economic mobility reflects a causal relationship—as recent research suggests—opportunity in America could be expanded through policies to promote greater residential mobility among groups with low upward economic mobility. Various policies to reform the country’s safety net, reduce housing-cost inflation, and deregulate housing and labor markets might effectively encourage migration to higher-opportunity areas.

Cover photo: a migrant family from Idabel, Oklahoma travels to California during the Great Depression.
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ACKNOWLEDGMENT

The author thanks the Manhattan Institute's Preston Cooper for his research assistance.

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INTRODUCTION

Upward economic mobility has traditionally been among America's core ideals. But in recent years, policymakers and analysts on both the left and on the right have grown concerned about the health of the American dream. Children in the United States who start in the bottom of the income distribution are unlikely to achieve a solidly middle-class adulthood. Just 13 percent of today's adults who were raised in the poorest fifth of families as children made it to the top two-fifths.¹ Fully 43 percent remained in the bottom fifth as adults, and 70 percent were in the bottom two-fifths. While the poverty rate in America has declined significantly over the past half-century, public policy has failed to move the needle on upward economic mobility.²

One factor that may be related to economic mobility is residential mobility. Economic growth and job options vary with geography. Thus, people who are willing and able to relocate may be more likely to earn more money. Moving to better opportunities has been a prominent feature of American history. Westward expansion, for example, was one of the most important developments of the nineteenth century. During the first half of the twentieth century, millions of African-Americans moved from the South to seek better lives in northern cities. During the 1930s, hundreds of thousands of farmers left the Dust Bowl.

Another form of geographic mobility that has been historically important for expanding opportunity involves moves within metropolitan areas, especially from city to suburb. Postwar housing and transportation policy, combined with explosive growth in automobile ownership and pent-up demand for more living space, caused a dramatic decentralization of people and jobs within metro areas. Those who were unable or unwilling to move from the city found themselves facing an eroding tax base, a rising share of lower-skilled and disadvantaged residents, higher crime, and slower job growth.

Even within cities, the willingness and ability to move has been thought to be of consequence for economic mobility. Concentrated poverty, particularly severe among African-Americans, has long been considered disadvantageous, and federal housing subsidies have shifted in recent decades away from dense high-rise projects within poor neighborhoods to rental vouchers and dispersed low-rise and mixed-income projects. The evidence for so-called neighborhood effects on child and adult outcomes has been mixed, but recent papers by Harvard economist Raj Chetty and his colleagues have compellingly reinforced that place really does matter.

This paper explores a number of questions, historical and contemporary, related to how residential mobility may affect economic mobility. How important has moving to opportunity been historically? Has residential mobility declined? If so, among whom? How have these trends—in the importance of residential mobility and in its prevalence—interacted to affect economic mobility? What does the evidence suggest for public policies to encourage people to move in search of better economic opportunities?

The paper begins by assessing whether residential mobility promotes economic mobility. The evidence suggests that being willing and able to move—particularly to a new state and between childhood and adulthood—is associated with a range of better economic outcomes. The paper then explores how

residential mobility has changed over time and how it varies across different demographic groups. Contrary to conventional wisdom, the types of mobility that appear to matter for adult outcomes are not especially low today; but residential mobility is lower among more disadvantaged groups. The paper closes with a discussion of policy implications.

I. DOES RESIDENTIAL MOBILITY PROMOTE ECONOMIC MOBILITY? THEORY AND EVIDENCE

When Americans move, they often do so for better opportunities. Young adults leave home to join the armed services, attend college, or set down roots in higher-growth areas. Professionals and managers pull up stakes to move up the corporate or academic ladder. Blue-collar workers leave behind declining factory towns for other parts of the country that are booming. Coders flock to technology hubs. Parents leave the city so that their kids can attend better schools in the suburbs. Working-class families break leases to grab apartments closer to public transportation.

Residential mobility can also affect the social, environmental, and institutional conditions to which children are exposed. A rich sociological literature has theorized ways in which concentrated disadvantage might affect child educational outcomes, social and cultural capital, values, and aspirations through detrimental norms and weakened local institutions.³ A nascent public-health literature is focused on how exposure to lead paint and other toxins, cockroaches and vermin, microbes, and violence affects the physical and emotional health and cognitive development of children in low-income neighborhoods.⁴

It makes sense, then, that greater residential mobility should correspond with greater economic mobility. Parental moves to opportunity might help child outcomes, and migration by grown children can be reasonably expected to improve their own outcomes. Of course, it is also possible that too much movement can hurt outcomes. Residential stability may promote

good psychological health while frequent moves could be disruptive to children's education and social development. More generally, if moves often occur between one disadvantaged locale and another, we would not expect to see improvement in child outcomes.

Some researchers have suggested that rising economic inequality and differences in the cost of living have reduced the extent to which residential mobility *can* improve economic mobility. A higher cost of living would be expected to lead to higher incomes for poor and middle-class families that move. However, researchers have hypothesized that rising inequality in many cities has driven a wedge between the cost of living—especially the cost of housing—and median incomes, partly because of restrictions on the supply of housing and partly because of inefficiencies in labor markets.⁵ If, for instance, zoning regulations prevent the supply of housing from keeping up with rising demand in areas with labor shortages, then low- to moderate-income migrants to booming areas like Silicon Valley may face unaffordable housing costs.⁶ To the extent that such dynamics operate, residential mobility may be less obviously related to upward economic mobility than we might think.

Assembling compelling evidence on this question is a formidable challenge. The basic problem is easily grasped. People who move might do better or worse than those who do not move because moving tends to be helpful or harmful. But they might simply have strengths or weaknesses that would lead them to do better or worse than non-movers whether or not they move. A second problem is that the impact of residential mobility surely varies depending on a host of particulars, not the least of which is where someone is moving from and moving to.

This paper will not surmount these methodological problems and should be considered as a primarily descriptive document. Finding or not finding that residential mobility goes hand in hand with better economic outcomes is suggestive of causality or its absence—but only suggestive. However, it is difficult

to make progress answering questions of cause and effect without first understanding the underlying facts.

II. EARLIER RESEARCH

Some research has provided strong evidence from randomized controlled trials that where a child grows up matters. The vast majority of research is focused on neighborhoods.⁷ The literature assessing lotteries for school assignment (often involving charter schools) consistently shows sizable long-term effects on academic performance and adult educational attainment from attending higher-performing schools.⁸

Because school attendance is generally determined by residential proximity rather than lotteries, it follows that living in a neighborhood with lower-performing schools has a negative impact on educational outcomes, and therefore residential mobility between neighborhoods (or larger geographies) would improve those metrics. At least two studies outside the U.S. have established that refugees assigned (without their input) to neighborhoods with better schools or better-educated residents had better educational outcomes than those assigned to less advantageous neighborhoods.⁹

Other research is based on policy experiments—usually not fully randomized—that move low-income families to more advantaged neighborhoods.¹⁰ For instance, evidence from the “Gautreaux program”—a court-ordered effort in Chicago to place segregated public-housing residents in predominantly nonblack neighborhoods—suggests that living in neighborhoods with more nonpoor or nonblack residents improved mothers’ employment and earnings and lessened their reliance on welfare. Living in a suburban neighborhood instead of one in the city reduced drug arrests among sons and appears to have improved educational and employment outcomes and earnings in young adulthood.¹¹ Having more educated neighbors and more employed as professionals reduced early male mortality.¹²

The most important and ambitious of these policy experiments, the fully randomized Moving to Opportunity (MTO) project, considered whether requiring public-housing residents to rent an apartment in a somewhat less poor neighborhood affected adult and child outcomes. Contrary to much of the (mostly nonexperimental) evidence that had preceded it, MTO found limited benefits from moving—particularly in regard to economic and educational outcomes.¹³ MTO’s findings suggested instead that much of the apparent “effect” of concentrated poverty simply reflects the disadvantageous characteristics of the individuals and families living in those neighborhoods. Move them out of poor neighborhoods, and the disadvantages remain; the neighborhood itself may be relatively unimportant.

This disappointing conclusion has been turned on its head by a new study from Raj Chetty, Nathaniel Hendren, and Lawrence Katz, who linked the children in MTO families to their tax records as adults.¹⁴ Despite the absence of improved educational outcomes in adolescence that previous MTO studies found—even for children who moved to better neighborhoods when young—the Chetty paper found that children whose families had used their voucher to move to a higher-income neighborhood before they turned 13 did significantly better in their mid-twenties than children randomly assigned not to receive a voucher. Their incomes were higher by nearly one-third, and their college attendance rates rose while their rates of single parenthood fell. They also attended better colleges. At the same time, children who were older when their families moved, if anything, did worse than the control group.

Chetty and his colleagues have also provided invaluable research on the benefits of moving between localities. Using tax-return data, his team initially documented large differences in economic mobility across labor markets throughout the United States.¹⁵ Some areas, such as Salt Lake City, featured economic mobility that would make a Dane proud.

Others, like Atlanta, appear to offer far fewer opportunities to children raised there.

Do these different places cause better or worse economic outcomes? The Chetty team showed that a number of economic and social features of labor markets are correlated with economic mobility, but it appropriately urged caution in making causal connections. There could be underlying differences in the populations of different labor markets behind the measurable factors that Chetty and his colleagues examined. Even more problematically, people might simply sort into neighborhoods based on their own attributes and preferences, with some moving (and to certain places) while others stay put.

The most recent paper from Chetty addresses this last concern by showing that children whose families move to counties with better child outcomes do better themselves.¹⁶ This was true for adult income, college attendance, marriage, and teen birth-rates. The more time that children spent in these counties, the more their outcomes improved, up to a certain age. Even siblings experiencing different amounts of time in high- or low-economic-mobility counties did better or worse than one another. In short, these results suggest that moving per se does affect economic mobility. The Chetty team also determined which specific counties were the most and least beneficial for children.

III. HAS MOVING BECOME MORE IMPORTANT FOR INTERGENERATIONAL ECONOMIC MOBILITY?

This paper seeks to add to our knowledge regarding residential mobility, past and present, by providing new historical evidence about the relationship between moving and economic outcomes. It distinguishes between different types of residential mobility and assesses outcomes for various demographic groups.

Few data sets exist that allow the same individuals to be tracked from their childhood homes to their

adult residences. Nevertheless, many sources of data include information on adult outcomes at a point in time and also ask where participants have lived in the past or where their parents are from.

To look at whether residential mobility affects economic outcomes, this paper assembles several types of evidence. The first involves the use of decennial census data and the American Community Survey—point-in-time data sets that will be collectively referred to as the “Census Bureau data.”¹⁷ These analyses compare the economic outcomes of adults with the income levels typical of their birth state when they were children. They consider whether the relationship to conditions in one’s birthplace is weaker among adults who change residences than it is among those who do not.

The paper also turns to two surveys from the Bureau of Labor Statistics National Longitudinal Study, each of which allows individual children to be tracked into adulthood. These two surveys allow true economic mobility estimates to be computed for recent cohorts of men and women in their late twenties and to see whether movers have more economic mobility than non-movers.

Finally, the paper presents long-run trends in a number of adult economic outcomes and how they have varied depending on adults’ moving histories. These outcomes do not constitute economic mobility measures per se because they are not conditioned on childhood circumstances, but they allow for a look back to the nineteenth century.

IV. TRANSCENDING ONE’S BIRTHPLACE: HOW ECONOMIC MOBILITY VARIES WITH RESIDENTIAL MOBILITY FROM BIRTH TO ADULTHOOD AND OVER THE PRECEDING FIVE YEARS

The limitations of the Census Bureau data sets preclude true intergenerational mobility analyses because adults cannot be linked to their childhood

households from previous census years and are not asked about parental circumstances.¹⁸ One clever way around this problem was developed by Daniel Aaronson and Bhashkar Mazumder in a widely cited paper looking at trends in economic mobility.¹⁹

Aaronson and Mazumder use various censuses to impute family incomes to adult men, taking advantage of the fact that birth states and birth years are supplied in each data set. From earlier censuses, they estimate the average income of families that had a son born in a given five-year window in a given state and who continued to live in the state. They attach that average family income to adults in subsequent censuses born in the same state and during the same five-year window. Finally, they estimate intergenerational economic mobility measures, relating “family income” to the adult earnings of men.²⁰

Importantly, the Aaronson-Mazumder approach differs from the conventional economic mobility metric tied to real parental incomes. The vast majority of interfamily income inequality occurs within birth states and cohorts. For that reason, this paper will characterize the indicator of child circumstances as “birthplace income” rather than “parental income.” The measure reflects the importance of the economic conditions in one’s birth state when one was a child (or of other factors correlated with these conditions), and only minimally does it reflect circumstances specific to one’s family.

Trends in “economic mobility” using the Aaronson-Mazumder measure need not reflect trends conventionally measured that relate adult incomes to actual parental incomes. Birthplace conditions can become more important without family conditions increasing in salience because family conditions vary greatly within birth states and birth cohorts.²¹

The Rank-Rank Slope

Even with real information about parental income, the metric used by Aaronson and Mazumder suffers from several problems as a measure of

economic mobility.²² A solution to most of these problems is to estimate another statistic called the “rank-rank slope.”²³

Essentially, birthplace incomes and adult incomes are both converted into percentile ranks, indicating the percentage of people who fall above or below a given income level, before their relationship is assessed. The rank-rank slope indicates how adult income percentiles increase or fall as birthplace income percentiles change. Using a statistical model, the slope is estimated simultaneously with the expected adult income of a child in the poorest birthplace, and together they can be used to compute the expected adult income of a child starting out at any birthplace income percentile.²⁴

In the analyses below, the decennial censuses from 1940 through 1980 are first used, and family incomes in each year are converted to percentiles across all families with children up to age 14.²⁵ (Stopping at that age ensures a sizable group of children while reducing the number whose state of residence when they show up in the data differs from their birth state and while ensuring that very few are living independently.) That is, in 1940, percentiles are computed for children born between 1926 and 1940, 1950 percentiles are computed for children born in the years 1936 to 1950, and so forth. Within each year (or, equivalently, birth cohort), the average income percentile is computed within each birth state.²⁶

The next step is to switch to the 1970 through 2000 censuses and the 2010 American Community Survey. Within each year, the samples are restricted to adults aged 30–44, so that those in 1970 were born between 1926 and 1940, those in 1980 were born from 1936 to 1950, and so on. That creates five groups of adults, aged 30–44, born in the same set of years as the five groups of children from the 1940 to 1980 censuses but observed 30 years later. Earnings and family incomes are converted to percentiles within each year (birth cohort).²⁷

Adults are then given the average family income percentile among children born in their birth state from their 15-year birth cohort 30 years earlier. In other words, all men aged 30–44 in 2000 and born in Virginia are given the average income percentile across children in 1970 who were aged 14 or younger and born in Virginia.

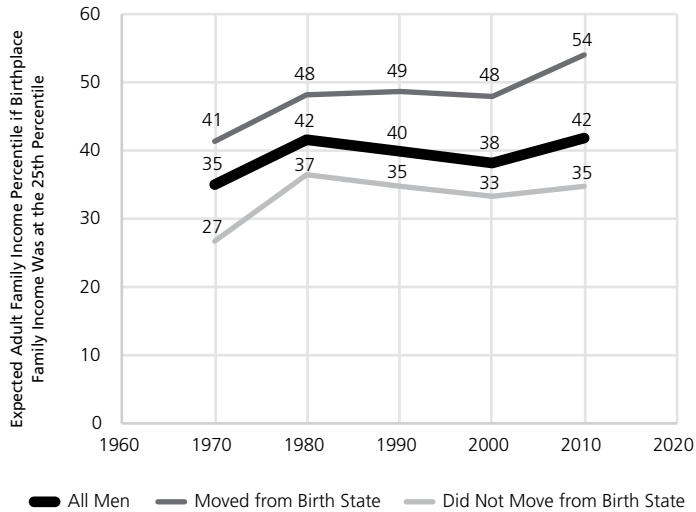
A simple linear regression model is estimated that relates adults’ earnings to the average income in their birth state around the time they were children, to the year (birth cohort) and to the interaction between the two.²⁸ From the model estimates, the expected income percentile is computed for each year for an adult whose birthplace income was at the 25th percentile. Being at the 25th percentile means having birthplace income that is higher than just 25 percent of adults and lower than 75 percent of them. The richest birthplaces are above the 99th percentile, and the poorest are below the 1st. The birthplace in the middle of the distribution is at the 50th percentile, and an adult from that birthplace has the median income. Economic mobility is estimated separately for movers and non-movers to assess the importance of moving.

These analyses build on the Aaronson and Mazumder paper by looking at how the relationship between adult income and birthplace income differs between movers and non-movers. The appendix to this paper (www.manhattan-institute.org/pdf/e21_r2_appendix.pdf) includes supplementary analyses examining other outcomes.

Adult Earnings, 1970–2010

Figure 1 displays the first set of results, which relate birthplace average family income to men’s earnings.²⁹ Among men generally, the value of 35 in 1970 indicates that an adult who was born into a state with average family income at the 25th percentile 30 years earlier typically had adult earnings that put him at the 35th percentile. That value rose to 42 in 1980, fell through 2000, and ended in 2010 at 42. In other words, economic mobility measured in this way rose during the 1970s but was then basically flat.³⁰

Figure 1. Expected Earnings Percentile for Man with Low Birthplace Income, by Residential Mobility Since Birth, 1970–2010

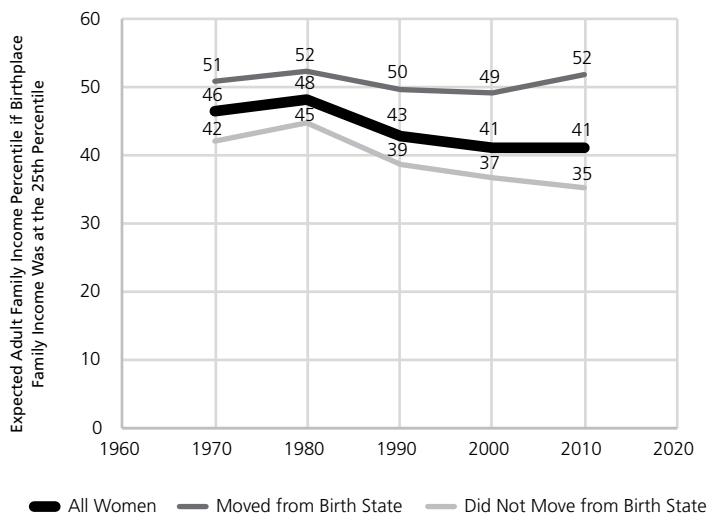


Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

The primary questions of interest are whether economic mobility rates are higher for adults who move from their birth state and whether the importance of residential mobility has grown over time. Figure 1 shows that economic mobility was significantly higher among men who lived outside their birth state than it was for those still living there. In 1970, a man still living in his birth state who had been at the 25th percentile of birthplace income was typically at the 27th percentile of male earnings. But if he lived in a different state, he was typically at the 41st percentile.

The economic mobility trends for movers and non-movers were similar from 1970 to 2000, though the advantage of movers widened, especially after 2000. By 2010, the movers were at the 54th percentile of adult earnings, compared with the 35th percentile for those who stayed put. Economic mobility among non-movers was lower in 2010 than it had been in 1980.

Figure 2. Expected Earnings Percentile for Woman with Low Birthplace Income, by Residential Mobility Since Birth, 1970–2010



Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

In **Figure 2**, which analyzes women's earnings, the striking feature is the steady decline in economic mobility from 1980 to 2000. In 1980, a woman raised at the 25th percentile of birthplace income was typically at the 48th percentile of female earnings. By 2000, such a woman was at the 41st percentile. Upward economic mobility remained at that level in 2010, the first time that it was lower than for men.³¹ Figure 1 and Figure 2 show similar patterns in that movers do much better than non-movers, and the gap between them widens over time.

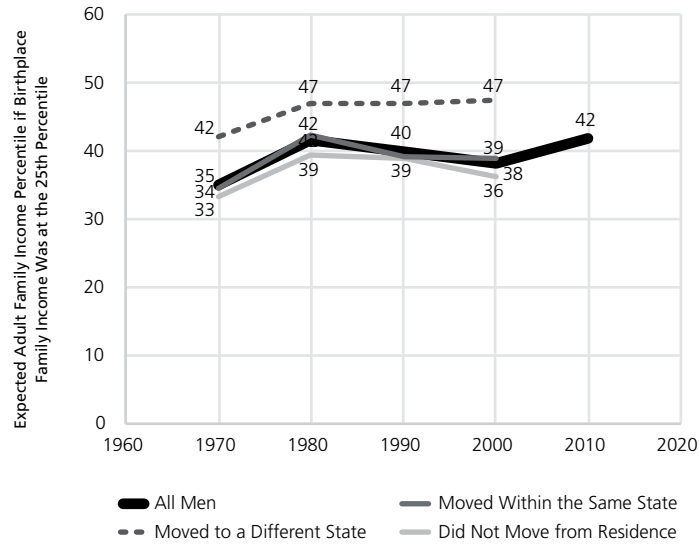
Figure 3 compares men's earnings to family income in their birth state, but this time, it considers different kinds of moves in the preceding five years rather than birth-to-adulthood moves.³² The gap between men who moved out of state in the preceding five years and other men was fairly constant over the 30 years, with the former seeing more upward economic mobility. Men who moved in the previous five years but stayed in-state generally fared only a little better than non-movers, and both groups saw declines in economic mobility after 1980. (While not shown, the economic mobility trends in Figure 1 are primarily driven by moves that preceded the past five years, rather than moves in the previous five years. This is also generally true of the analyses to follow.)

Interestingly, recent moves do not appear to confer any advantage to women, as shown in **Figure 4**. The three categories of women had practically identical rates of upward economic mobility. One possibility is that moves in or near middle age tend disproportionately to benefit husbands rather than wives. Perhaps some families continue to accommodate husbands' ambitions over wives', or it could be as simple as couples with higher-earning husbands doing what makes the most sense economically. At any rate, women generally have higher economic mobility rates than men, except for men with a recent out-of-state move in 1990 and 2000.

Adult Family Income, 1970–2010

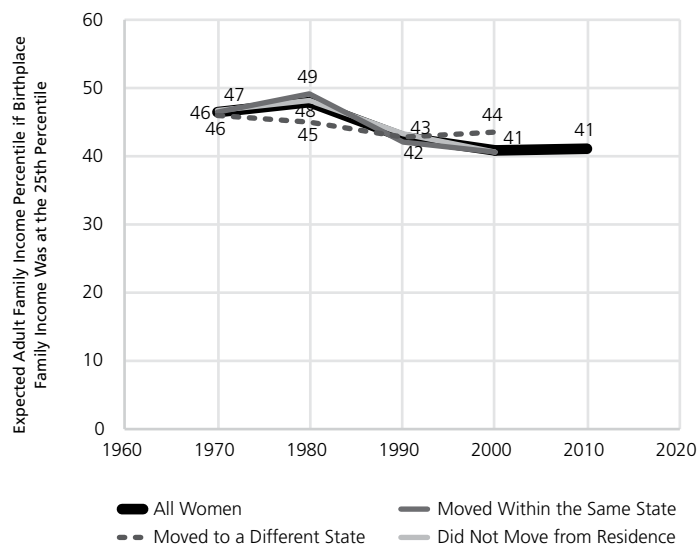
Figures 5 through 8 switch to comparing birthplace incomes with adult family incomes rather than earnings. In **Figure 5**, for men, economic mobility falls

Figure 3. Expected Earnings Percentile for Man with Low Birthplace Income, by Residential Mobility over the Previous Five Years, 1970–2010



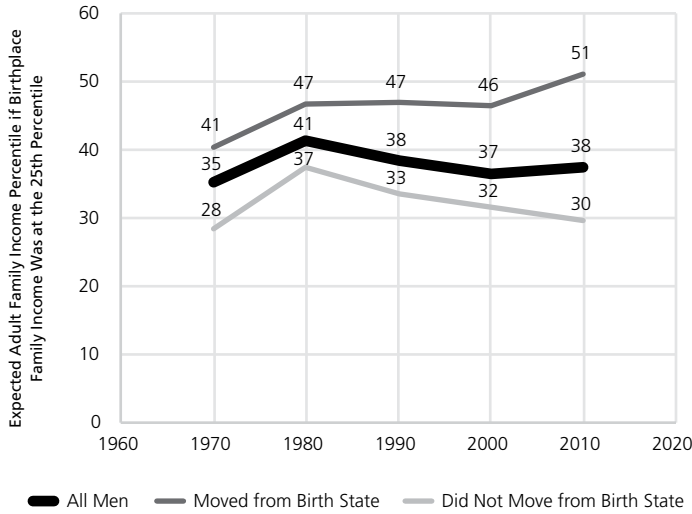
Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

Figure 4. Expected Earnings Percentile for Woman with Low Birthplace Income, by Residential Mobility over the Previous Five Years, 1970–2010



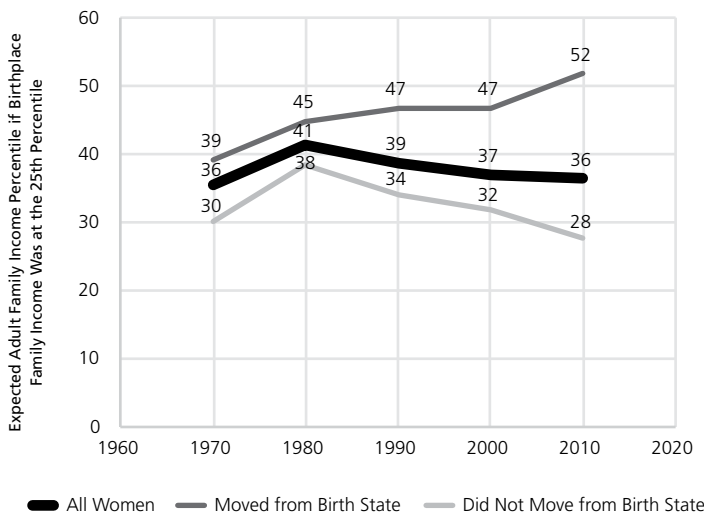
Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

Figure 5. Expected Earnings Percentile for Man with Low Birthplace Income, by Residential Mobility over the Previous Five Years, 1970–2010



Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

Figure 6. Expected Earnings Percentile for Woman with Low Birthplace Income, by Residential Mobility over the Previous Five Years, 1970–2010



Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

between 1980 and 2000 but remains higher in 2010 than in 1970. However, the fall is confined to men who remain in their state of birth. Movers saw little change after 1980 and had higher economic mobility in 2010 than ever, while non-movers' expected incomes fell steadily, even from 2000 to 2010. The gap between movers and non-movers doubled between 1980 and 2010. Strikingly, a man who was born to the 25th percentile of birthplace income typically ended up at just the 30th percentile of family income if he remained in his state, experiencing very little upward economic mobility.

Nowhere is the widening economic mobility gap between movers and non-movers more apparent than in **Figure 6**, which compares birthplace incomes with women's family incomes in adulthood. In 1970, a woman from the 25th percentile of birthplace income typically was at the 30th percentile of family income if she still lived in her birth state, compared with the 39th percentile if she had moved. By 2010, the expected incomes were at the 28th and 52nd percentiles. Non-movers experienced very little economic mobility at all by 2010; where an expected adult income percentile of 25 would indicate complete economic immobility, the 2010 estimate is 28.

The trends in short-run residential mobility in **Figure 7** resemble those for male earnings in **Figure 3**, except that the gaps between men who moved out of state in the past five years and other men are smaller this time. Upward economic mobility for men who remained in the same state as five years earlier was practically the same in 2000 as in 1970.

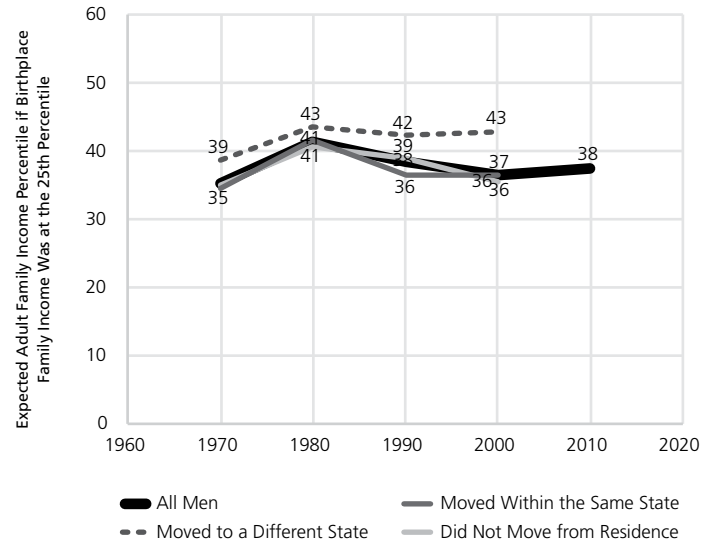
Figure 8 suggests that, like men, women see a bigger family income boost from short-term moves if they move out of state than if they move in-state. Economic mobility was flat for out-of-state movers after 1980 but fell for everyone else. Only among out-of-state movers was economic mobility significantly higher in 2010 than in 1970.

In sum, men and women who move have greater economic mobility than those who do not move, and the gap has widened considerably over the past 35 years. This is generally true for birth-to-adulthood residential mobility. It is also true for residential mobility over the previous five years, except when it comes to women's earnings—with the important caveat that moving within one's state confers little to no advantage.

From these analyses, it is not possible to say with confidence that residential mobility leads to better economic outcomes. It could be that those who move from poor birthplaces would do well compared with those who don't, whether or not they moved—or that those who don't move would fare no better even if they did move. Perhaps they would move to places that would be less beneficial—or perhaps those who move, and are successful, move because they already have opportunities lined up. But the consistency of the data—to say nothing of the magnitude of the gaps themselves—is striking.

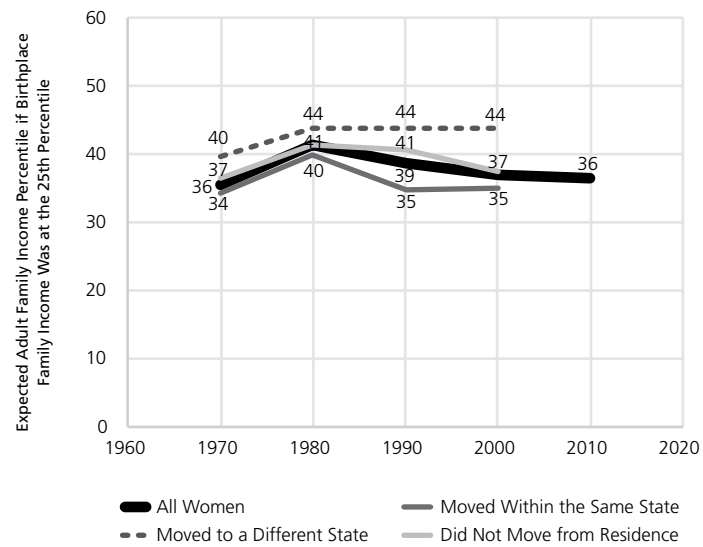
The appendix (www.manhattan-institute.org/pdf/e21_r2_appendix.pdf) presents additional analyses examining the educational requirements of jobs, educational attainment, and

Figure 7. Expected Earnings Percentile for Man with Low Birthplace Income, by Residential Mobility over the Previous Five Years, 1970–2010



Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

Figure 8. Expected Earnings Percentile for Woman with Low Birthplace Income, by Residential Mobility over the Previous Five Years, 1970–2010



Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

employment. To summarize the evidence relating birthplace income to adult outcomes—whether movers did better or worse than non-movers in 1970 on some indicator—trends were generally more favorable for those who lived outside their birth state than for those who remained in it. In 1970, movers already tended to have higher earnings and incomes than non-movers. There were only small differences—if any—between movers and non-movers in terms of the educational requirements of jobs, high school graduation and college graduation rates, and employment rates. Movers actually had higher unemployment rates than non-movers. By 2010, however, existing advantages among movers had grown, gaps had opened up where none existed, and higher unemployment among movers had disappeared.

Short-term residential mobility—moves over the preceding five years—tended to correlate with better outcomes in 1970, at least if adults moved out of state; in-state moves were generally not that beneficial. The gap between out-of-state movers and other adults remained relatively stable over time. Men who moved out of state in the preceding five years tended to have employment levels that were as low as or lower than those of other adults in 1970 and unemployment rates that were higher than those of other adults. By 2010, however, outcomes were more favorable among out-of-state movers than among other adults. An exception to all these trends is that in terms of earnings and family income, adult women who had moved or not moved recently did about equally well in every year.

V. TRANSCENDING ONE'S FAMILY ORIGINS: HOW ECONOMIC MOBILITY VARIES WITH RESIDENTIAL MOBILITY FROM BIRTH TO ADOLESCENCE AND FROM ADOLESCENCE TO ADULTHOOD

The Census Bureau data sets have two important strengths: they are very large, allowing for precise estimates to be computed; and they provide information back to the nineteenth century, as discussed below. However, they include only limited information for

within-state moves, and it is not possible to estimate true intergenerational economic mobility estimates from them. To surmount these shortcomings, this section presents results from the National Longitudinal Surveys of the Bureau of Labor Statistics (BLS).

BLS has fielded a number of surveys over the years following nationally representative groups of adolescents into adulthood and tracking their economic and social outcomes. This section relies on two of those surveys. The first, the National Longitudinal Survey of Youth 1979 (NLSY79), began in 1979 with a group of adolescents aged 14–21. An entirely separate survey, the National Longitudinal Survey of Youth 1997 (NLSY97), was initiated in 1997 with a group aged 12–17. In both surveys, adolescents who were initially aged 14–17 may be followed for 14 years, until they are aged 28–31 (in 1993 or 2011). In each survey wave, participants report their earnings and family income from the previous year, so the results compare parental income in 1978 or 1996 (at ages 13–16) with adults' own income in 1992 or 2010 (at ages 27–30).³³

Relative Intergenerational Economic Mobility, 1992 and 2010

A useful distinction in thinking about intergenerational economic mobility is between relative and absolute mobility. Relative mobility is about the extent to which children end up in the same economic position as their parents. Ignoring whether children are richer or poorer than their parents and by how much, relative mobility is concerned only with interpersonal *rankings*. If someone is raised by parents who are poorer than 80 percent of their peers, what are the chances that the child will end up richer than 80 percent of the child's peers? How many children start in the bottom quarter of family income and end up there themselves as adults? How many starting in the richest quarter end up in the bottom 75 percent?

In contrast, rankings are irrelevant for assessing absolute mobility. The son of parents at the 40th percentile might end up at the 40th percentile

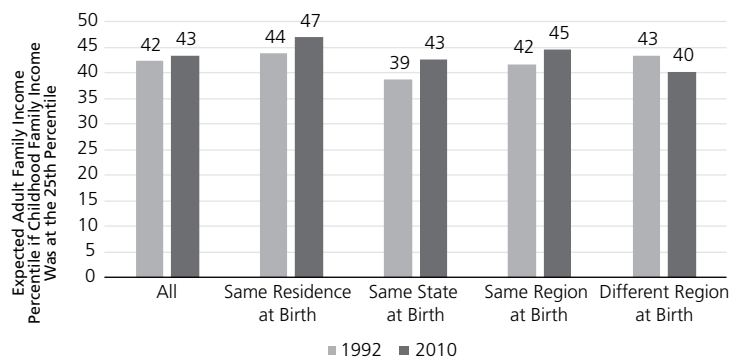
himself, but he might also be significantly better off in inflation-adjusted terms than his parents. He will have experienced absolute upward mobility despite seeing no relative mobility. This is possible because the nation can grow richer—or temporarily poorer—between generations. Both dimensions of economic mobility are important. Rising living standards are less satisfying if parents with the worst jobs have children filling the worst jobs years later; opportunity to make it to the top is less meaningful if everyone is getting poorer over time.

The BLS surveys provide information on where adolescents lived when they were born, as well as at the start of the surveys.³⁷ Figure 9 does not reveal a simple relationship between economic mobility and moves occurring between birth and adolescence. Living farther and farther from one's birthplace residence does not affect upward mobility in a clear way, except that, in both 1992 and 2010, adults who remained in the same residence as at their birth when they were adolescents went on to have higher upward mobility. In this case, it is residential *immobility* that appears beneficial.

Figure 9 provides the first set of BLS results on relative economic mobility. In order to increase the sample sizes in these analyses, none of the results are disaggregated by sex.³⁴ The measure here is the “expected,” or average, family income percentile of adults whose childhood income was at the 25th percentile.³⁵ Among all adults, upward economic mobility among those who had been poor increased slightly over time. Yet this increase is small enough, given the sample sizes, that upward mobility actually may have been unchanged during this period. In 2010, adults aged 27–30 who had been at the 25th percentile of childhood income were, on average, at the 43rd percentile of adult family income, while their counterparts in 1992 were, on average, at the 42nd percentile.

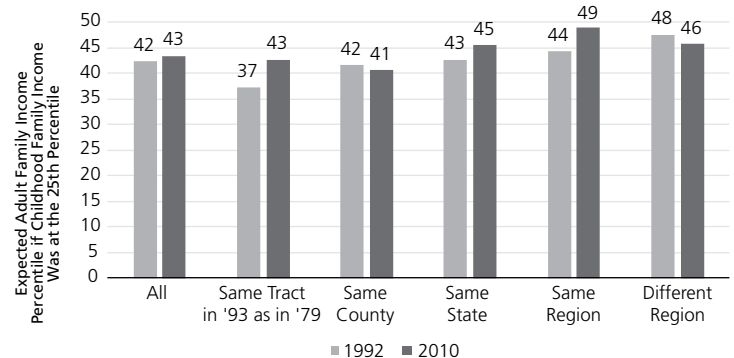
This finding of essentially no change in upward economic mobility is consistent with the Census Bureau data for the same period. In the BLS data, the expected adult income percentile was 43 for men in 1992 and 44 in 2010 (not shown). The Census Bureau data show 38 for both 1990 and 2010 (Figure 5). Among women, the expected adult income percentile in the BLS data rose from 42 to 43; in the Census Bureau, it fell from 39 to 36 (Figure 6).³⁶

Figure 9. Expected Family Income Percentile for Adult with Low Childhood Income, by Residential Mobility Between Birth and Adolescence, 1992 and 2010



Source: Author's calculations based on data from National Longitudinal Survey of Youth 1979 and National Longitudinal Survey of Youth 1997

Figure 10. Expected Family Income Percentile for Adults with Low Childhood Income, by Residential Mobility Since Adolescence, 1992 and 2010



Source: Author's calculations based on data from National Longitudinal Survey of Youth 1979 and National Longitudinal Survey of Youth 1997

In **Figure 10**, the BLS data are broken out by different types of residential mobility between adolescence and adulthood. This time, in both 1992 and 2010, upward economic mobility tends to rise with greater distance from one's adolescent origins. Adults who remained in the same census tract or county as in adolescence experienced the lowest upward mobility. (A census tract typically comprises a few thousand people.) Those who had moved to a different state

within or outside the region in which they lived as adolescents had the most upward mobility.³⁸

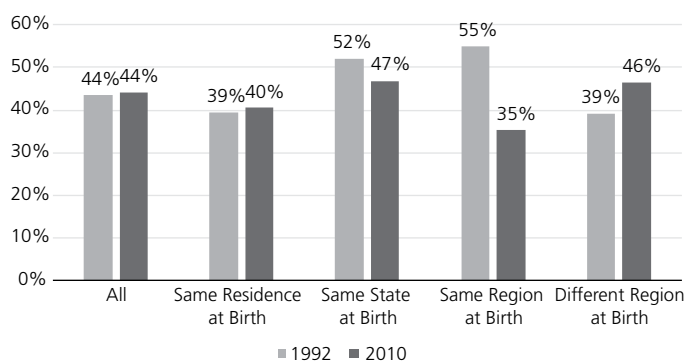
Another indicator of relative upward mobility is the percentage of adults who were raised in the poorest quarter of adolescents remaining in the bottom quarter of income in adulthood. **Figure 11** and **Figure 12** provide the results. Once again, there is little obvious relationship between birth-

to-adolescence residential mobility and upward mobility in **Figure 11**. Remaining in the same residence as at birth appears to correspond to higher upward mobility (fewer adults remaining in the poorest quarter). It appears that upward mobility improved strongly over time among adults who had moved to a different state in the same region between birth and adolescence, but the sample of such adults is small enough that the drop shown in **Figure 11** is consistent with a true decline that was much smaller (or even nonexistent).

As before, adolescence-to-adulthood residential mobility appears more strongly related to upward economic mobility (**Figure 12**). Among adults who lived in the same census tract as adults as they did in adolescence, 59 percent remained in the bottom quarter in 1992. Those who lived in an entirely different region of the country had only a 39 percent likelihood of remaining in the bottom quarter. None of the changes over time shown in **Figure 12** is statistically reliable, but the improvement in mobility among those remaining in their adolescent census tract is most likely to reflect what actually happened.

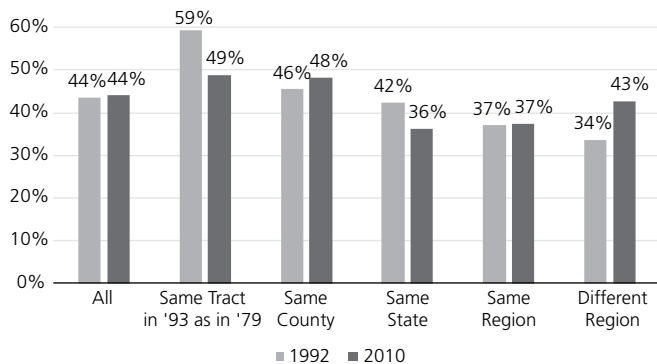
In addition to upward economic mobility, the BLS data provide information on downward mobility. For instance, one

Figure 11. Percentage of Adults Raised in the Bottom Quarter of Family Income Who Remain in the Bottom Quarter in Adulthood, by Residential Mobility Between Birth and Adolescence, 1992 and 2010



Source: Author's calculations based on data from National Longitudinal Survey of Youth 1979 and National Longitudinal Survey of Youth 1997

Figure 12. Percentage of Adults Raised in the Bottom Quarter of Family Income Who Remain in the Bottom Quarter in Adulthood, by Residential Mobility Since Adolescence, 1992 and 2010



Source: Author's calculations based on data from National Longitudinal Survey of Youth 1979 and National Longitudinal Survey of Youth 1997

can examine the share of adults who were raised in the second-poorest quarter of family income as adolescents dropping to the bottom quarter as adults. **Figure 13** provides little evidence that residential mobility between birth and adolescence is related to downward economic mobility in any straightforward way.

As with upward mobility, to the extent that any relationship can be discerned, it points toward residential immobility being beneficial. Adults who lived in a region of the country as adolescents that was different from the one into which they were born had the highest rates of downward economic mobility in both 1992 and 2010. The improvement in downward mobility for adults still living in their birth residence as adolescents is statistically likely to have really occurred, but none of the other changes is precisely estimated.

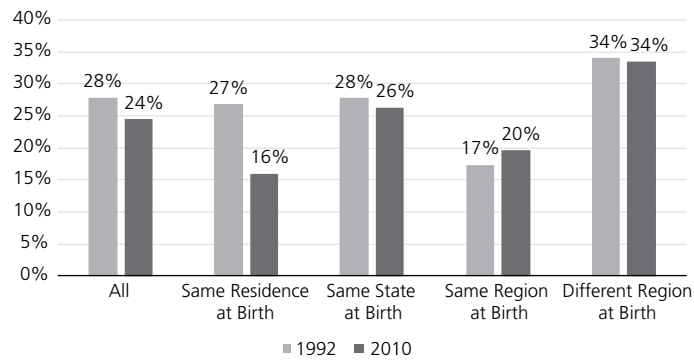
Figure 14 continues to indicate worse economic mobility outcomes for those with more limited residential mobility between adolescence and adulthood. Roughly, those who moved farther from their adolescent census tract had lower downward economic mobility. The large drop in downward mobility among those remaining in their adolescent census tract is statistically likely, though the actual decline may have been smaller.

Absolute Intergenerational Economic Mobility, 1992 and 2010

Absolute economic mobility may be measured in a variety of ways. This section examines the percentage of young adults whose family income exceeds their childhood income as adolescents (after accounting for the rise in the cost of living). Somewhat surprisingly, more young adults in 2010 (55 percent, not

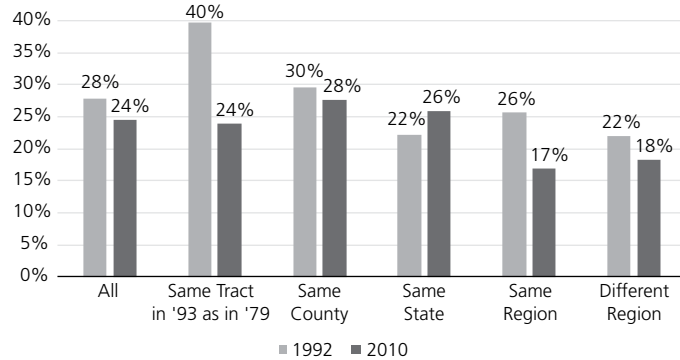
shown) had exceeded their childhood incomes than was true of young adults in 1992 (46 percent). Both 1992 and 2010 were close to low points for median family income in their business cycles.³⁹ Long-term unemployment was higher in 2010; but because most unemployment spells are relatively short, the share of the labor force experiencing *any* unemployment during the year was roughly the same (15.9 percent) as in 1992 (15.8 percent).⁴⁰

Figure 13. Percentage of Adults Raised in the Second Quarter of Family Income Who Fall to the Bottom Quarter in Adulthood, by Residential Mobility Between Birth and Adolescence, 1992 and 2010



Source: Author's calculations based on data from National Longitudinal Survey of Youth 1979 and National Longitudinal Survey of Youth 1997

Figure 14. Percentage of Adults Raised in the Second Quarter of Family Income Who Fall to the Bottom Quarter in Adulthood, by Residential Mobility Since Adolescence, 1992 and 2010



Source: Author's calculations based on data from National Longitudinal Survey of Youth 1979 and National Longitudinal Survey of Youth 1997

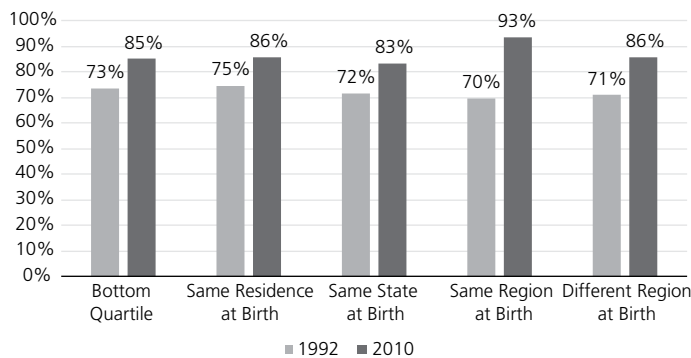
The explanation for the greater absolute upward mobility of adults in the second BLS data set—a result very likely, statistically, to reflect a true real-world increase—is the point at which childhood incomes are assessed. In the first panel, 1978 was one year from a cyclical peak for median family income. In contrast, in the NLSY97, parental income is assessed in 1996, which was closer to the trough year of 1993 than to the peak year of 2000.

In any given year, it is harder to exceed income from an earlier year, the closer the starting point is to a peak. Economic commentary often emphasizes the stagnation or decline of median income over the past 15 years, but even according to the official Census Bureau measures (which understate income growth for various reasons), median income was over \$2,000 higher in 2010 than in 1996, after accounting for inflation. (It was about \$6,500 higher in 2007 than in 1996.) The point is that the trend estimates in this section are likely to be sensitive to the particular years considered, which were chosen to maximize the comparability between the BLS data sets and to avoid observing adults at younger ages. What is important is less the trends and more the differences according to types of residential mobility.

It should be emphasized that the family incomes of adults were measured when they were between the ages of 27 and 30. Their parents tended to be older than this when childhood family income was assessed, so if it were possible to observe the adults in the NLSY97 at, say, age 40, the share exceeding their childhood income would be higher still. In the NLSY79, where adults have been followed longer and are older today than in the NLSY97, only 46 percent of adults had higher family incomes than their parents at ages 27–30; but 64 percent of these same adults exceeded their parents’ incomes in 2005, when they were 40–43 (not shown).

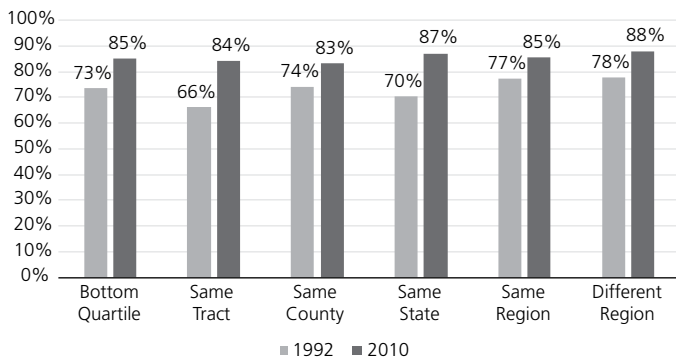
Determining how residential mobility is connected to absolute upward mobility requires accounting for parental family income because it is easier for adults who were poor as

Figure 15. Percentage of Adults Raised in the Bottom Quarter with a Higher Family Income than Their Parents, by Residential Mobility Between Birth and Adolescence, 1992 and 2010



Source: Author's calculations based on data from National Longitudinal Survey of Youth 1979 and National Longitudinal Survey of Youth 1997

Figure 16. Percentage of Adults Raised in the Bottom Quarter with a Higher Family Income Percentile than Their Parents, by Residential Mobility Since Adolescence, 1992 and 2010



Source: Author's calculations based on data from National Longitudinal Survey of Youth 1979 and National Longitudinal Survey of Youth 1997

children to move up than it is for adults who were in affluent families as children; for the poorest children, there is nowhere to go but up. In addition, residential mobility patterns may differ between rich and poor children.

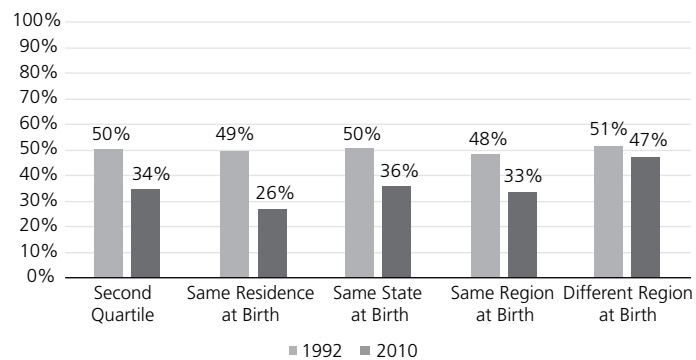
Figure 15 considers the share of adults raised in the bottom quarter of childhood income who exceed their childhood income in inflation-adjusted terms. Strong majorities do so because of their low starting point. No relationship between birth-to-adolescent residential mobility and absolute upward mobility is readily apparent; but in 1992, living farther from one's birthplace residence seems to correspond to somewhat lower upward mobility.

Residential mobility between adolescence and adulthood may be somewhat more important for absolute upward mobility, but consistent patterns are still elusive. In **Figure 16**, moves that are farther from one's adolescent home roughly correspond with a greater likelihood of absolute upward mobility from the bottom in 1992, though not obviously so in 2010.

Figure 17 shifts to absolute downward mobility from the second-poorest quarter of childhood income. This measure of mobility looks worse, the farther adolescents were from their birthplace residence, at least in 2010. In 1992, there is again little relationship to be discerned. **Figure 18** shows a clear relationship in 1992 between adolescence-to-adulthood residential mobility and downward mobility from the second-poorest quarter, and even a rough one in 2010. Adults who move farther away have lower downward economic mobility.

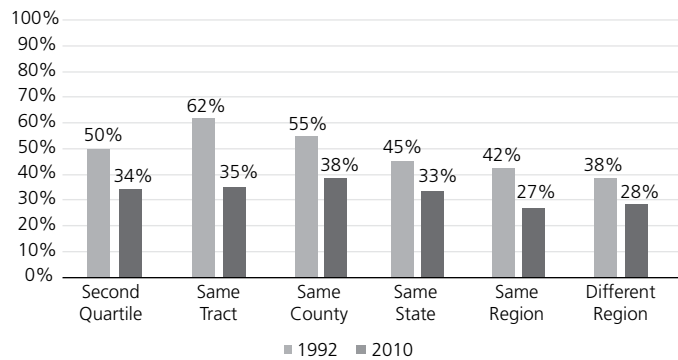
In sum, the BLS data are less clear than the Census Bureau data, in part because of far smaller samples. There is some evidence for both relative and absolute economic mobility that living in adolescence nearer to where one was born corresponds to better outcomes, meaning that residential mobility during early life stages may be harmful more often than not. The evidence is more consistent that residential mobility between adolescence and adulthood is

Figure 17. Percentage of Adults Raised in the Second-Poorest Quarter with a Lower Family Income than Their Parents, by Residential Mobility Between Birth and Adolescence, 1992 and 2010



Source: Author's calculations based on data from National Longitudinal Survey of Youth 1979 and National Longitudinal Survey of Youth 1997

Figure 18. Percentage of Adults Raised in the Second-Poorest Quarter with a Lower Family Income Percentile than Their Parents, by Residential Mobility Since Adolescence, 1992 and 2010



Source: Author's calculations based on data from National Longitudinal Survey of Youth 1979 and National Longitudinal Survey of Youth 1997

associated with better economic mobility outcomes and that outcomes are better for the adults who have moved the farthest away.

Combining the BLS results with those of the Census Bureau, to the extent that residential mobility between birth and adulthood has benefits, they seem to arise from the adult's own residential mobility between adolescence and adulthood rather than the parents' residential mobility during their childhood. The BLS data offer no suggestion that residential mobility has become more important over time.

VI. RESIDENTIAL MOBILITY AND ADULT OUTCOMES, 1880–2010

The analyses above were able to connect childhood circumstances and adult incomes, either by linking adults to their parents or birthplaces in childhood. Therefore, it was possible to make statements about “intergenerational economic mobility”—the extent to which movers and non-movers did better or worse, taking their origins into account.

Section VI extends the analyses to the nineteenth century, at the cost of not being able to observe childhood circumstances. Comparing adult outcomes between movers and non-movers is less informative if childhood conditions cannot be taken into account. The concern becomes greater that movers who do well were advantaged and would have done well anyway. Nevertheless, the evidence may be suggestive, particularly to the extent that it is consistent with the results from previous sections.

Analyses in Section VI use the Census Bureau data and are confined to native-born adults aged 30–39.⁴¹ Because the 1890 census records are unavailable, the trends in the charts below interpolate from 1880 to 1900. The appendix (www.manhattan-institute.org/pdf/e21_r2_appendix.pdf) includes estimates for men and women combined (Figures A45–A65), while the following discussion presents them separately.

Educational Requirements of Jobs, 1880–2010

The Census Bureau data include, for each year and for each worker with an occupation identified, the percentage of workers in that job who had completed at least one year of college. Ranking jobs by this metric indicates which jobs are most popular among those who are highly educated. Some jobs may not necessarily pay inordinately well but are desirable for other reasons.

The measure is somewhat less informative in the years before 1950 because the college enrollment estimates for each occupation are based on the 1950 educational attainment figures. Jobs that required a relatively high level of schooling in 1950 may not have required this in, say, 1880. Nevertheless, this metric is still likely to be among the best indicators of adult opportunity available before the mid-twentieth century.

One residential mobility indicator that is available in the earliest years of the census involves comparing the birth states of adults with their parents' birthplaces.⁴² A daughter might be born in a different state from her parents either because her parents moved to a new state as adults, before she was born, or because her grandparents moved when her parents were young. It is an intergenerational measure of residential mobility.

Early trends in the educational requirements of occupations and how they vary with residential mobility are dominated by women (**Figure 20**). In 1880, there were already small differences in these educational requirements, depending on where women and their parents were born. Thirtysomething women who were raised by one or two immigrant parents typically had jobs with higher educational requirements than their peers with native-born parents. From 1900 to 1910, the gap between women with one immigrant parent (but not two) and everyone else widened dramatically.

In 1910, the differences were still small between women born in the same state as both parents and women born in a different state from at least one native-born parent.

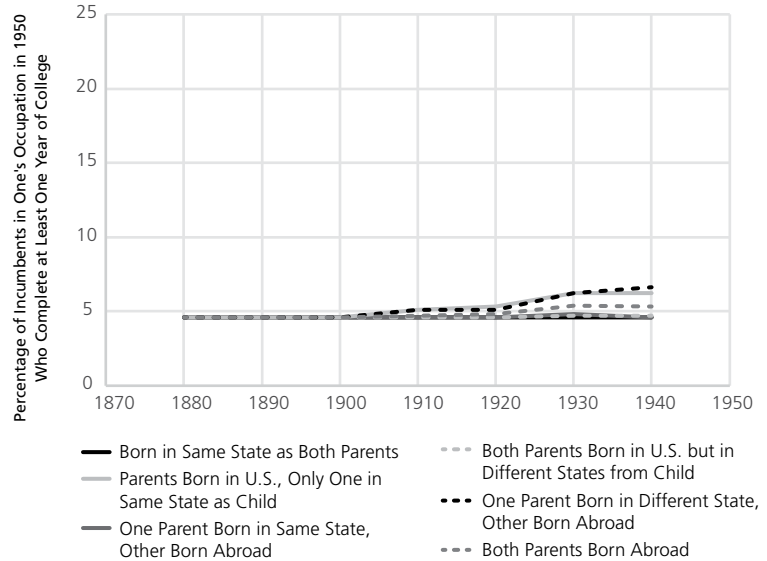
By 1920, a large gap had opened, and women born in a different state from both parents had more prestigious jobs than even those with just one parent from a different state. By 1930, that gap had closed.

Thirtysomething women born in the same state as both parents fared far worse in 1940 than their peers. In the jobs typically held in 1940 by women who had been born in a different state or country from one or both parents, 18 percent–21 percent of 1950 incumbents had completed at least one year of college. The corresponding figure for women born in the same state as their parents was 7 percent, not much above the 3 percent of 60 years earlier.

In contrast, the educational requirements of typical male jobs did not increase much at all, so the difference between residential mobility categories was small even in 1940 (Figure 19). Of note in these figures is the much higher educational requirements of the jobs held by women in 1930 and 1940, compared with those held by men (the exception being women born in the same state as both parents).

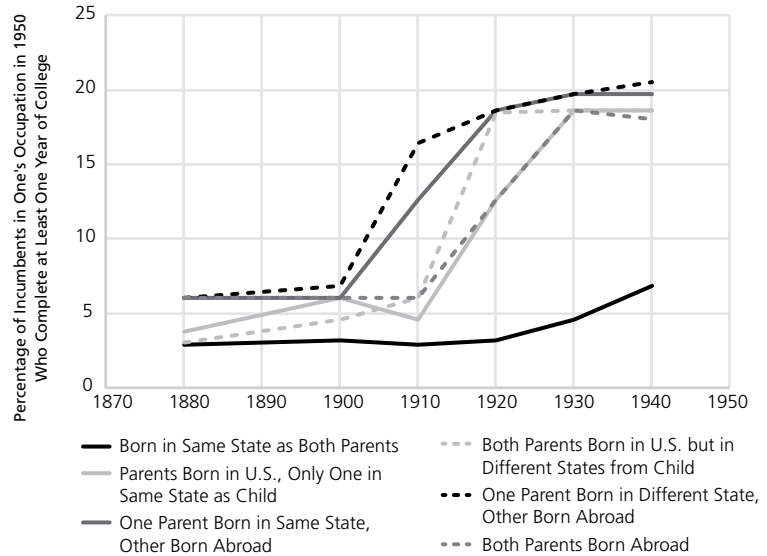
The Census Bureau data do not include information on parents' birth states after 1940, but the birth-to-adulthood measure of residential mobility is available in every year. The current state and birth state of adults might differ because they moved away from home; it might differ also because their parents moved sometime during childhood. The analyses in this section distinguish between adults living in the same state in which they were born, adults living in a different state within the same geographic region, and adults living in a different region.

Figure 19. Educational Requirements of Occupation, Thirtysomething Adults, by Intergenerational Residential Mobility, 1880–1940—Men



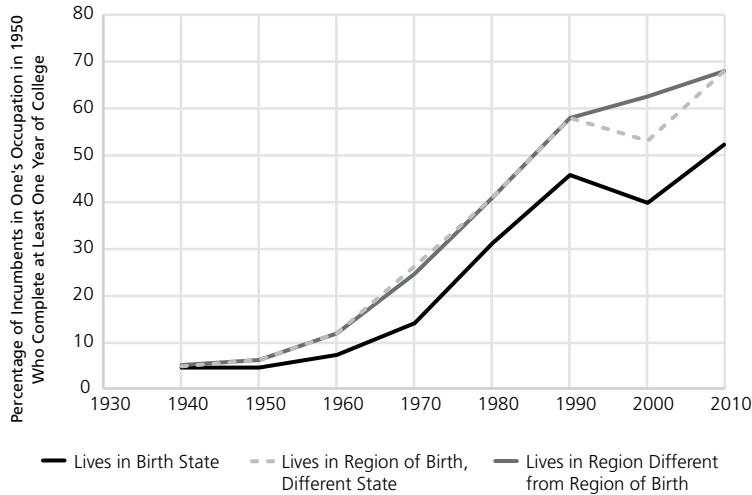
Source: Author's calculations based on data from decennial censuses, Integrated Public Use Microdata Series

Figure 20. Educational Requirements of Occupation, Thirtysomething Adults, by Intergenerational Residential Mobility, 1880–1940—Women



Source: Author's calculations based on data from decennial censuses, Integrated Public Use Microdata Series

Figure 21. Educational Requirements of Occupation, Thirtysomething Adults, by Childhood-to-Adulthood Residential Mobility, 1940–2010—Men



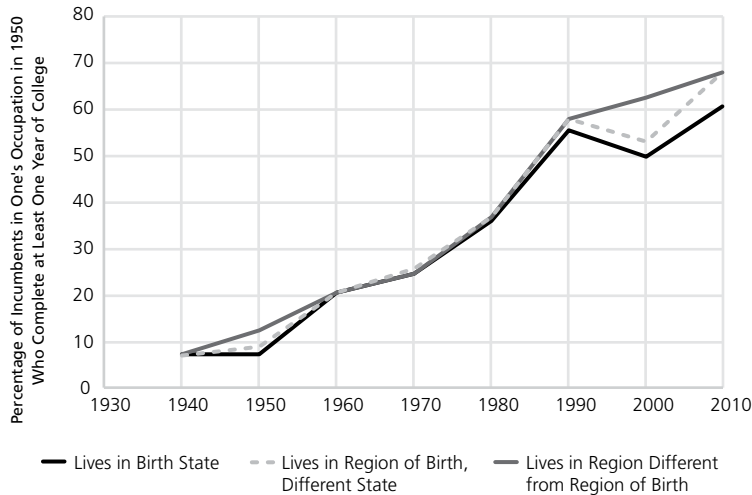
Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

Because the results in the earliest years are uninteresting, the figures begin with 1940.⁴³

According to **Figure 21**, from 1950 onward, non-moving men lagged further and further behind other men in terms of the number of people in their jobs who had attended a year of college. It is unclear what accounts for the dip in 2000; but apart from that year, men who move from their birth state have similar outcomes regardless of whether they stay in the region.

Before 1970, thirtysomething women had jobs with higher educational requirements than their male counterparts, and that remained true after 1970 among non-movers (**Figure 22**). Men and women who moved had essentially identical outcomes from 1970 forward, and women who continued to live in their birth state did just as well as movers until 1990. Between 1980 and 2010, female movers fell behind other women, though the gap was smaller than among men.

Figure 22. Educational Requirements of Occupation, Thirtysomething Adults, by Childhood-to-Adulthood Residential Mobility, 1940–2010—Women



Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

Residential mobility over the preceding five years may be assessed between 1940 and 2000. In the figures to follow, the trend is extrapolated from 1940 to 1970, as information for 1950 and 1960 is unavailable.⁴⁴ Among both men and women, those who had moved to a different region in the preceding five years consistently did better than their peers in terms of the share of people in their occupation who attended college for a year. The gap among men rose between 1940 and 1970 and remained large (**Figure 23**); it was much smaller among women until 2000 (**Figure 24**).

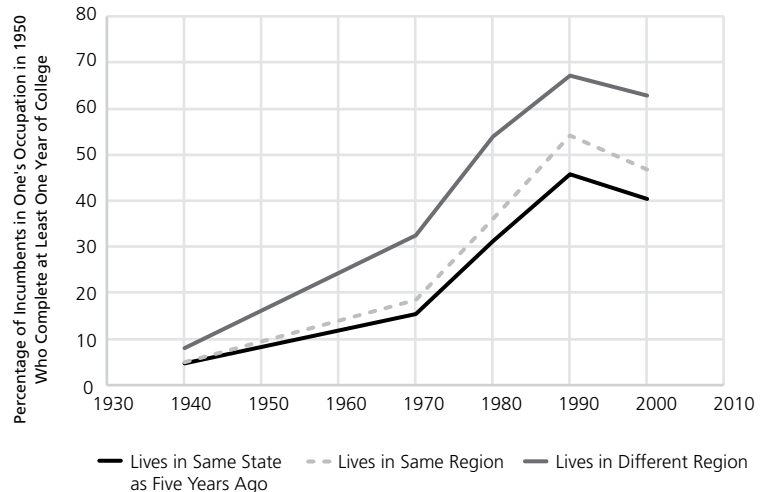
In contrast, moving to a new state within the region is associated with better occupations only among men, a gap that has grown over time but that remains much smaller than the gap between out-of-region movers and in-region movers. There is no non-mover/in-region-mover gap among women because non-moving women do better than non-moving men. Men who move out of region had better occupations than women who moved from 1970 to 1990, but the gender gap essentially closed in 2000.

Earnings, 1940–2010

The 1940 census was the first to ask about earnings and family income, recording information about the previous year. Starting with intergenerational residential mobility, among both men and women in their thirties who had any earnings, those born in the same state as both parents had lower earnings in 1940 than their peers (**Figure 25** and **Figure 26**; see Appendix Figure A46 for results combining men and women). Next were adults with native-born parents who both were born in a different state from where their children were born, followed by adults with one parent sharing their birth state while the other was born elsewhere in the United States. Thirtysomethings with one or both parents born abroad had the highest earnings. Since the census stopped asking about parental birthplace in 1940, this is the only year for which these estimates are available.

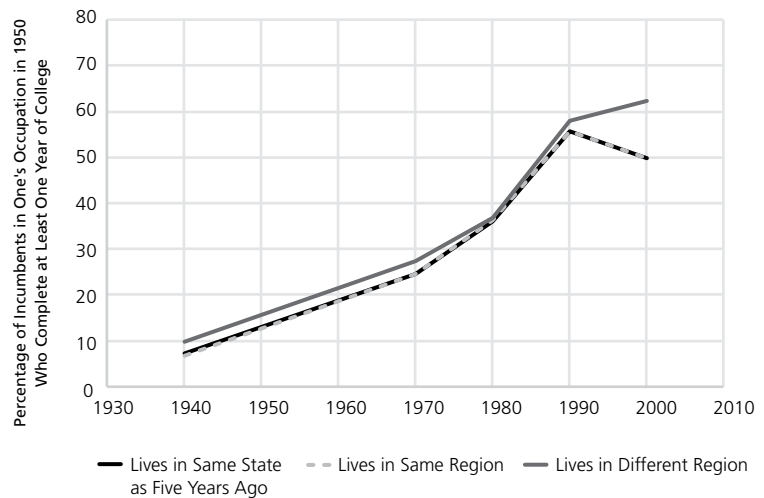
Turning to birth-to-adulthood residential mobility, thirtysomething men who worked and who still lived in their birth state made \$2,800 less (2014 dollars) in

Figure 23. Educational Requirements of Occupation, Thirtysomething Adults, by Last-Five-Years Residential Mobility, 1940–2000—Men



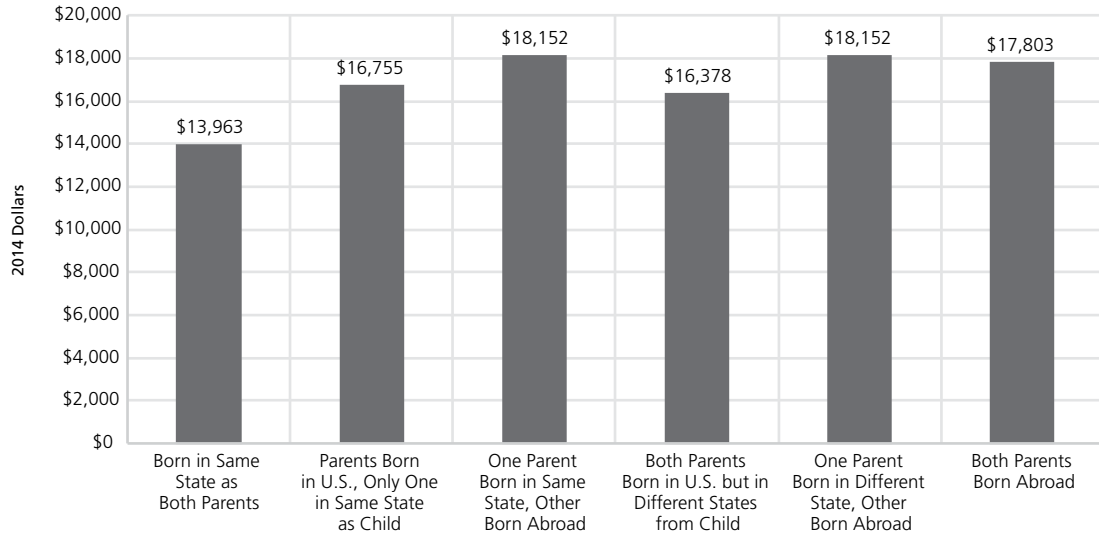
Source: Author's calculations based on data from decennial censuses, Integrated Public Use Microdata Series

Figure 24. Educational Requirements of Occupation, Thirtysomething Adults, by Last-Five-Years Residential Mobility, 1940–2000—Women



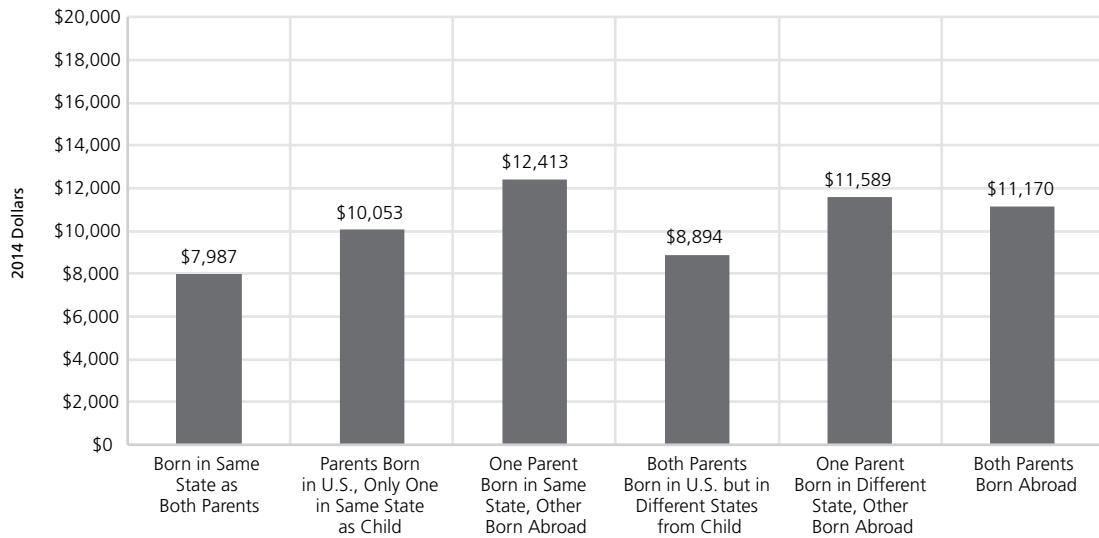
Source: Author's calculations based on data from decennial censuses, Integrated Public Use Microdata Series

Figure 25. Median Wage & Salary Income of Workers, Thirtysomething Adults, by Intergenerational Residential Mobility, 1940—Men



Source: Author's calculations based on data from 1940 census, Integrated Public Use Microdata Series

Figure 26. Median Wage & Salary Income of Workers, Thirtysomething Adults, by Intergenerational Residential Mobility, 1940—Women



Source: Author's calculations based on data from 1940 census, Integrated Public Use Microdata Series

1940 than men who no longer lived in their birth state (Figure 27).⁴⁵ That gap grew to nearly \$5,500 by 2010, though unevenly. Men who had moved out of state did no better if they remained in their region than if they left the region.

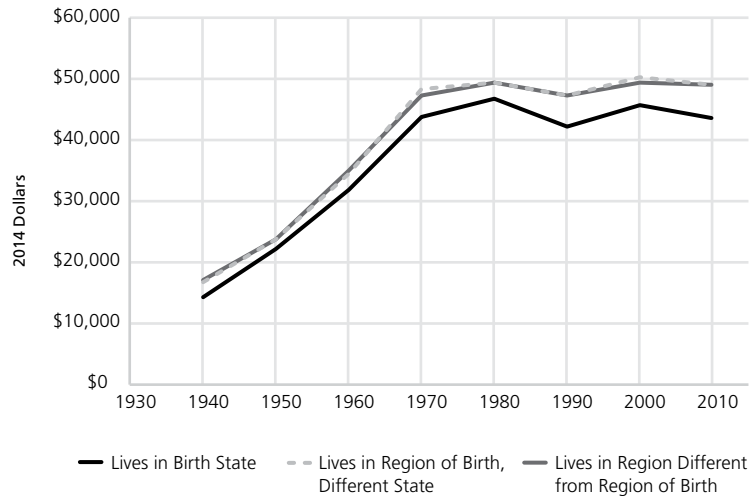
Across all three groups, Figure 27 clearly shows stagnation in earnings after the 1960s. By 2010, the earnings of thirtysomething men remaining in their birth state were at the same level as in 1970, and the median earnings of movers were the same as in 1980. Only among non-movers is there a clear downward trend in earnings, with the median lower in 2010 than in 1980 by over \$3,000.

Nonwage benefits, not included in this earnings measure, have become a rising share of pay over time. However, even under reasonable assumptions about how much they would add to the medians in Figure 27, the earnings of non-moving thirtysomething men grew only by about 5 percent during 1980–2010. In the 30 years preceding 1980, earnings doubled and then increased again by 30 percent.⁴⁶

In contrast, the median earnings of thirtysomething women rose by over 60 percent from 1980 to 2010—nearly as much as between 1950 and 1980 (71 percent to 80 percent) (Figure 28). Interestingly, working women saw flat earnings during the 1950s, a strong decade for male earnings growth.

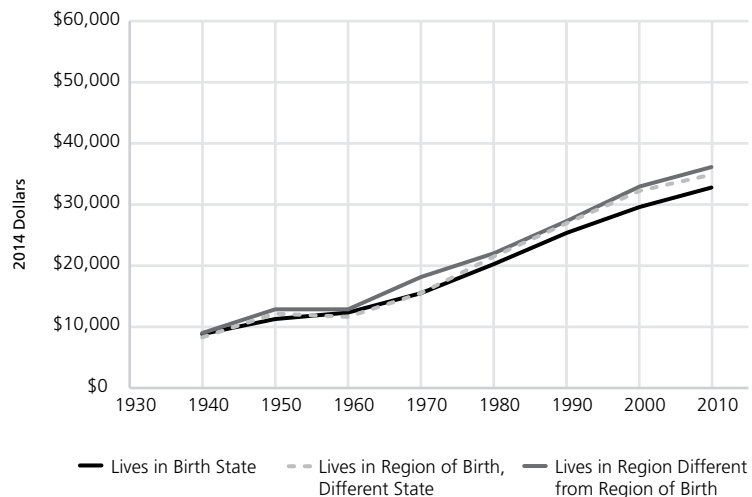
One explanation consistent with these trends is that men were beneficiaries of a wage premium during the 1940s, 1950s, and 1960s that was intended

Figure 27. Median Wage & Salary Income, Thirtysomething Adults, by Childhood-to-Adulthood Residential Mobility, 1940–2010—Men



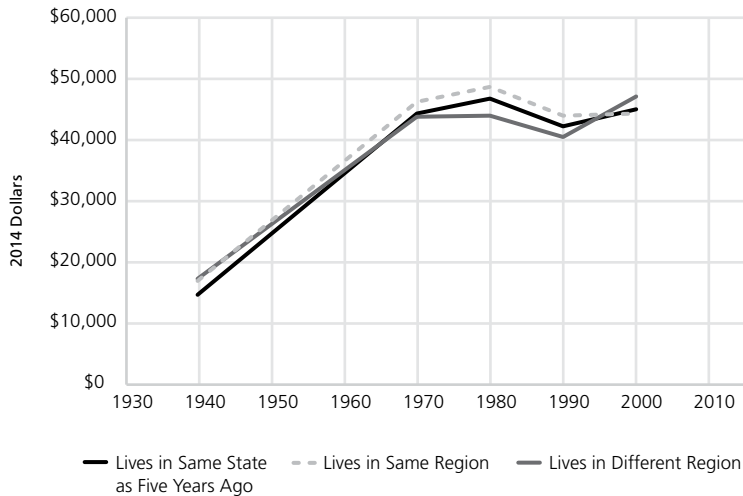
Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

Figure 28. Median Wage & Salary Income, Thirtysomething Adults, by Childhood-to-Adulthood Residential Mobility, 1940–2010—Women



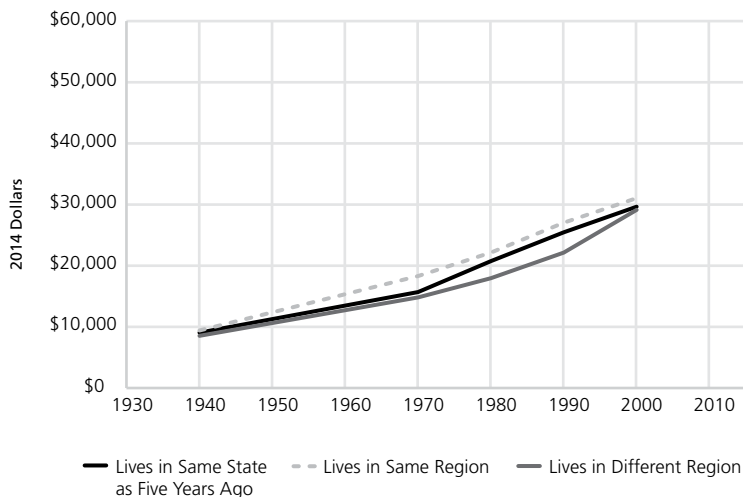
Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

Figure 29. Median Wage & Salary Income, Thirtysomething Adults, by Last-Five-Years Residential Mobility, 1940–2000—Men



Source: Author's calculations based on data from decennial censuses, Integrated Public Use Microdata Series

Figure 30. Median Wage & Salary Income, Thirtysomething Adults, by Last-Five-Years Residential Mobility, 1940–2000—Women



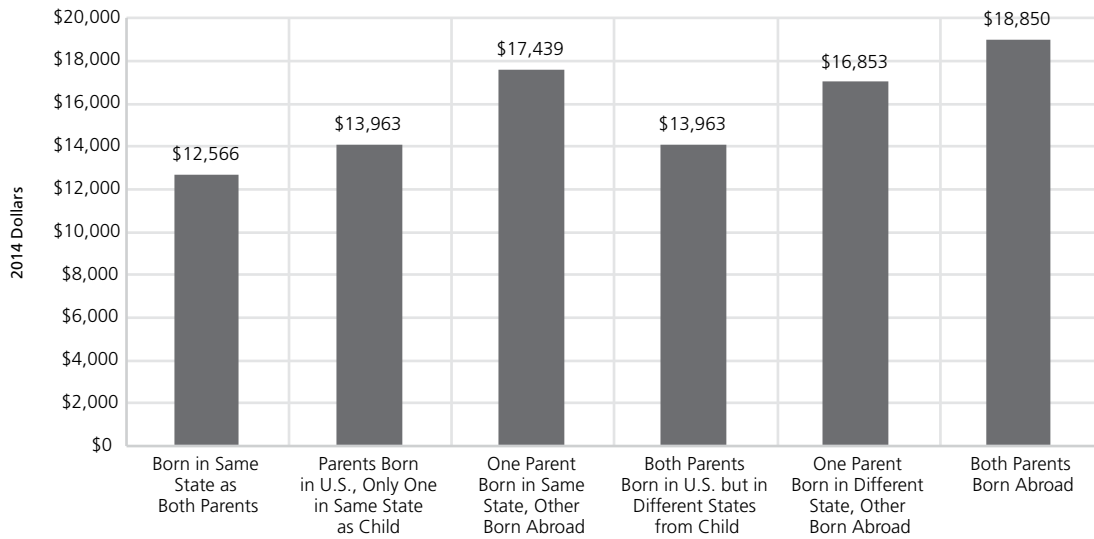
Source: Author's calculations based on data from decennial censuses, Integrated Public Use Microdata Series

to support the patriarchal male-breadwinner ideal, while women—particularly married women—faced labor-market discrimination. As more and more wives worked significant hours, the rationale for the male-breadwinner ideal broke down. Men, finding their pay at inflated levels that their productivity could not justify, saw decades of stagnation, while women enjoyed strong earnings growth as they became more skilled and experienced and as occupational barriers withered.

After 1970, non-moving women began to fall behind women who no longer lived in their birth state but still lived in the same region; by 2010, a gap of roughly \$3,000 had opened. Women who lived in an entirely different region from where they were born have generally done better than women who moved to a new state within the region; since 1980, however, the difference has been negligible.

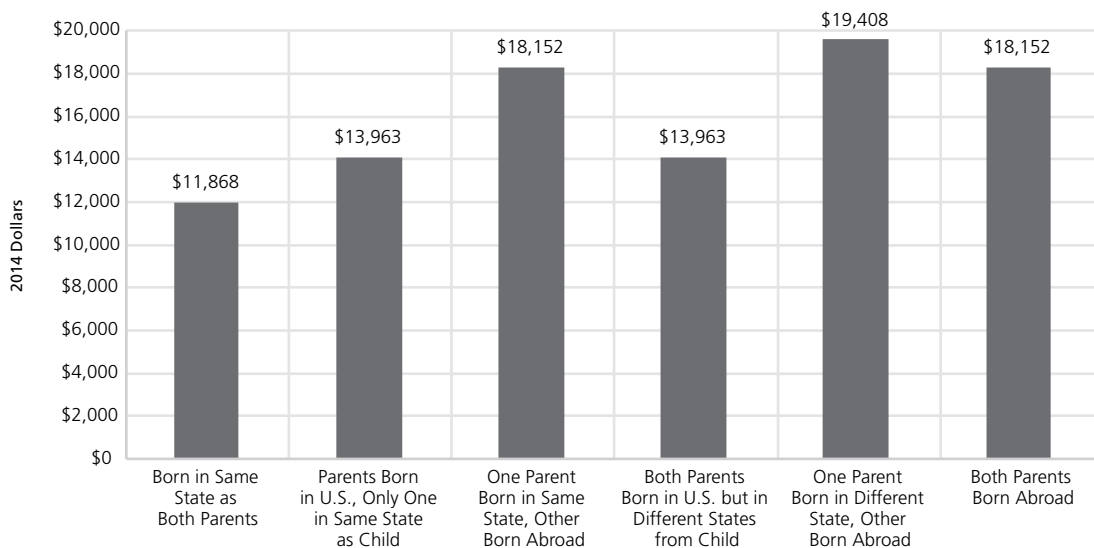
As for short-term residential mobility over the preceding five years: among women in their thirties, those who moved out of state but who stayed in the region consistently did a bit better than women who remained in the same state. The gap ranged from roughly \$1,300 to \$2,500. Women who moved to a new region did worse than other women, though the difference between them and non-movers was only sizable in 1980 and 1990 (**Figure 30**). These patterns also held among men between 1970 and 1990. By 2000, the ordering had reversed: men who moved out of their region had the highest earnings (**Figure 29**).

Figure 31. Median Family Wage & Salary Income, Thirtysomething Adults, by Intergenerational Residential Mobility, 1940—Men



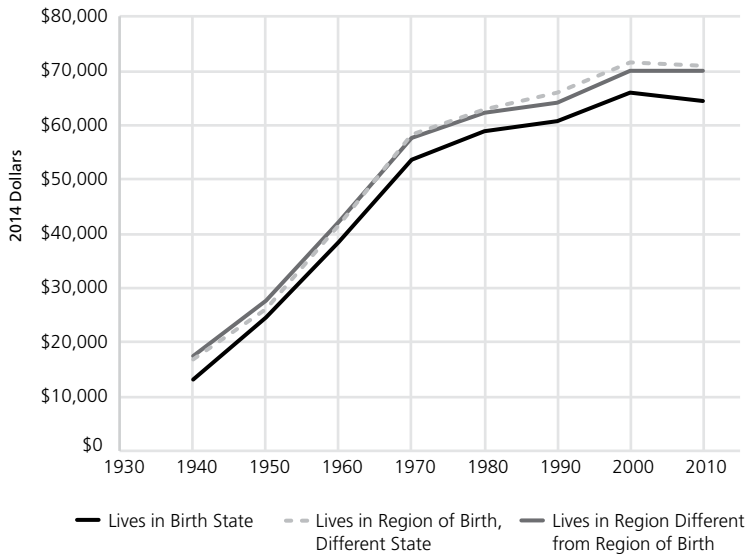
Source: Author's calculations based on data from 1940 census, Integrated Public Use Microdata Series

Figure 32. Median Family Wage & Salary Income, Thirtysomething Adults, by Intergenerational Residential Mobility, 1940—Women



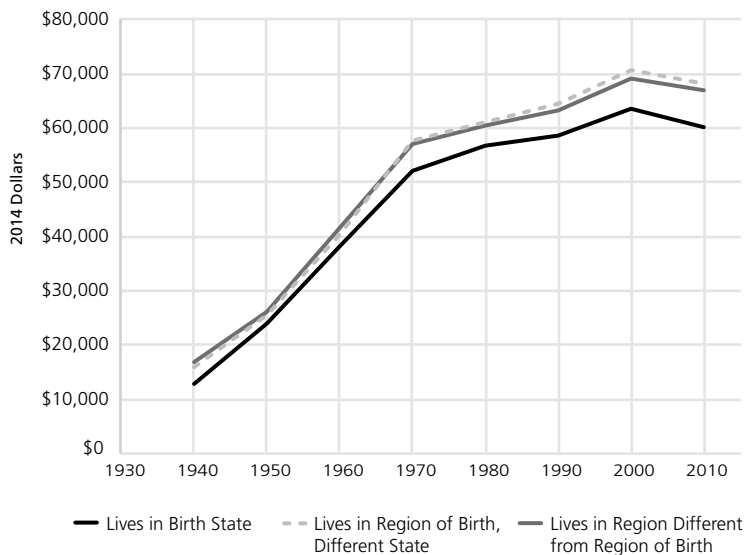
Source: Author's calculations based on data from 1940 census, Integrated Public Use Microdata Series

Figure 33. Median Family Income, Thirtysomething Adults, by Childhood-to-Adulthood Residential Mobility, 1940–2010—Men



Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

Figure 34. Median Family Income, Thirtysomething Adults, by Childhood-to-Adulthood Residential Mobility, 1940–2010—Women



Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

Family Income, 1940–2010

The same broad pattern for inter-generational residential mobility (found when examining men's and women's earnings) recurs with family income (specifically, family-level earnings in 1940). Adults with one or two immigrant parents have higher incomes than adults with only native-born parents, and those born in the same state as both parents have the lowest incomes (**Figure 31** and **Figure 32**). Women with a native-born parent born in a different state and an immigrant parent did especially well, having the highest median family income of any of the groups for men or women. Otherwise, the figures for men and women are nearly indistinguishable.

Men's and women's family income trends are remarkably similar when broken out by birth-to-adulthood residential mobility (**Figure 33** and **Figure 34**). The estimates show an increase, between 1980 and 2010, of about 10 percent—significantly smaller than in the preceding decades.

Both figures show that adults still living in their birth state have lower incomes than those living elsewhere. This gap has grown over time, equaling roughly \$6,000 in 2010. A smaller gap has opened in recent decades between those who live in a different region from the one in which they were born and those living in a different state but in the same region. Staying within the region, but outside one's birth state, is associated with median incomes higher by about \$1,000.

Family income trends according to residential mobility in the preceding five years are similar to those for male

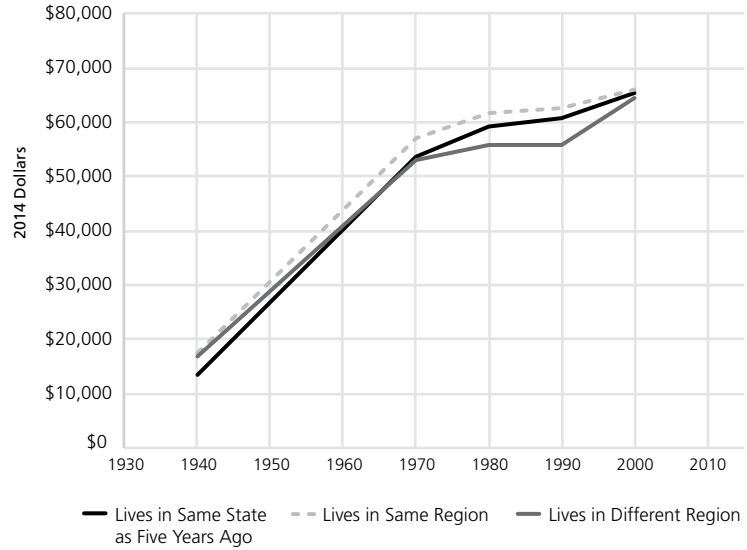
earnings (Figure 35 and Figure 36). Men and women who recently moved to a new state within their existing region had higher family incomes than everyone else from 1970 to 1990. Men and women who moved out of their region entirely had lower family incomes in 1980 and 1990. By 2000, the differences between the three groups of movers were minimal.

It is unclear what might account for the poor showing of out-of-region movers in some years. Perhaps it reflects selection—people who have gone so far as to move out of the region in the years before filling out their census form (instead of moving to a new place within the region) may have fewer skills than others. Or perhaps the answer is that certain regions went through economically difficult times, necessitating moves by, say, blue-collar workers who were unable to find comparable jobs in their new environs. At any rate, it is clear that the relationship between short-term residential mobility and income is complicated.

Summary

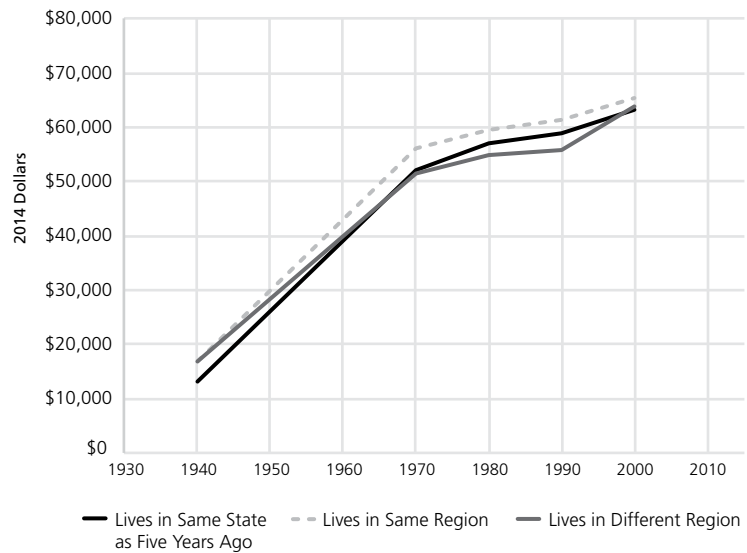
Additional analyses examining educational attainment and employment are included in the appendix (www.manhattan-institute.org/pdf/e21_r2_appendix.pdf). To summarize the full intergenerational residential mobility results: in 1940, adult women born in the same state as both parents fared worse than their peers—not only in terms of the educational requirements of their jobs and their individual and family earnings but in terms of their high school and college graduation rates. Men born in the same state as both parents also had worse outcomes in

Figure 35. Median Family Income, Thirtysomething Adults, by Last-Five-Years Residential Mobility, 1940–2000—Men



Source: Author's calculations based on data from decennial censuses, Integrated Public Use Microdata Series

Figure 36. Median Family Income, Thirtysomething Adults, by Last-Five-Years Residential Mobility, 1940–2000—Women



Source: Author's calculations based on data from decennial censuses, Integrated Public Use Microdata Series

1940, relative to other thirtysomething men—not only in terms of individual and family earnings but in terms of high school and college graduation rates. Adults with immigrant parents often had better outcomes than their peers during these years, except that they had lower educational attainment.

Unequal outcomes are also present when examining residential mobility between birth and adulthood. Across nearly all the outcomes examined, in most years, for both men and women, native-born thirtysomethings who remain in their birth state did worse than their peers. In many cases, especially for the educational requirements of jobs and college graduation rates, the gap widened. The exceptions are employment and unemployment rates, where the patterns were not so closely related to residential mobility; and high school dropout rates, where differences by residential mobility narrowed.

Compared with the patterns for intergenerational residential mobility and birth-to-adulthood moves, recent moves (over the preceding five years) seem less strongly related to adult outcomes. The familiar pattern—where adults who end up geographically farthest away from where they began do significantly better than other adults—shows up clearly only in the educational requirements of men’s jobs and in college graduation rates. Indeed, adults who have recently moved to a new region—not just a new state—regularly have worse outcomes than their peers, a result that may reflect “selection” (certain types of people moving to or from certain types of regions).

In light of the existing results—including those that were conditioned on birthplace or family income—the implication is that to the extent that residential mobility improves adult outcomes, it is the geographic movement that occurs between adolescence and adulthood that most clearly matters, and, by and large, it is out-of-state residential mobility that is beneficial. These kinds of moves appear to be

growing more closely related to adult benefits over time. It is much less clear that the willingness or ability of adults to move in the short run improves their economic outcomes, or ever did. Residential mobility by parents between the birth of a child and the child’s adolescence may actually worsen adult outcomes more often than not.

VII. CHANGES IN THE EXTENT OF RESIDENTIAL MOBILITY AND GROUP DIFFERENCES

The evidence from Section VI suggests that the ability and willingness to move may be more important today than in the past. If residential mobility has increased, that would be a force working in the direction of raising economic mobility. Conversely, falling residential mobility would raise the concern that the decline has hurt economic mobility rates over time. Also potentially worrisome: Has residential mobility risen less or fallen more among disadvantaged groups than among others?

Scholars have found a number of varying long-term trends in residential mobility. Jason Long and Joseph Ferrie found that 50 percent of white native-born men, aged 20–29, changed counties between 1870 and 1880, and 26 percent changed states. The figures for 1971–81 were just 42 percent and 22 percent, respectively.⁴⁷ However, Joshua Rosenbloom and William Sundstrom found that the share of native-born 20- to 29-year-olds who had left their birth state was somewhat higher in 1980 than in 1880, hovering around 30 percent in both years.⁴⁸

Both studies found that residential mobility declined among older men. Long and Ferrie found that in 1870–80, 35 percent of white native-born men aged 45–59 changed counties, and 23 percent changed states. The figures for 1971–81 were 17 percent and 9 percent, respectively. Rosenbloom and Sundstrom found modest declines for native-born adults aged 40–49 and 50–59.

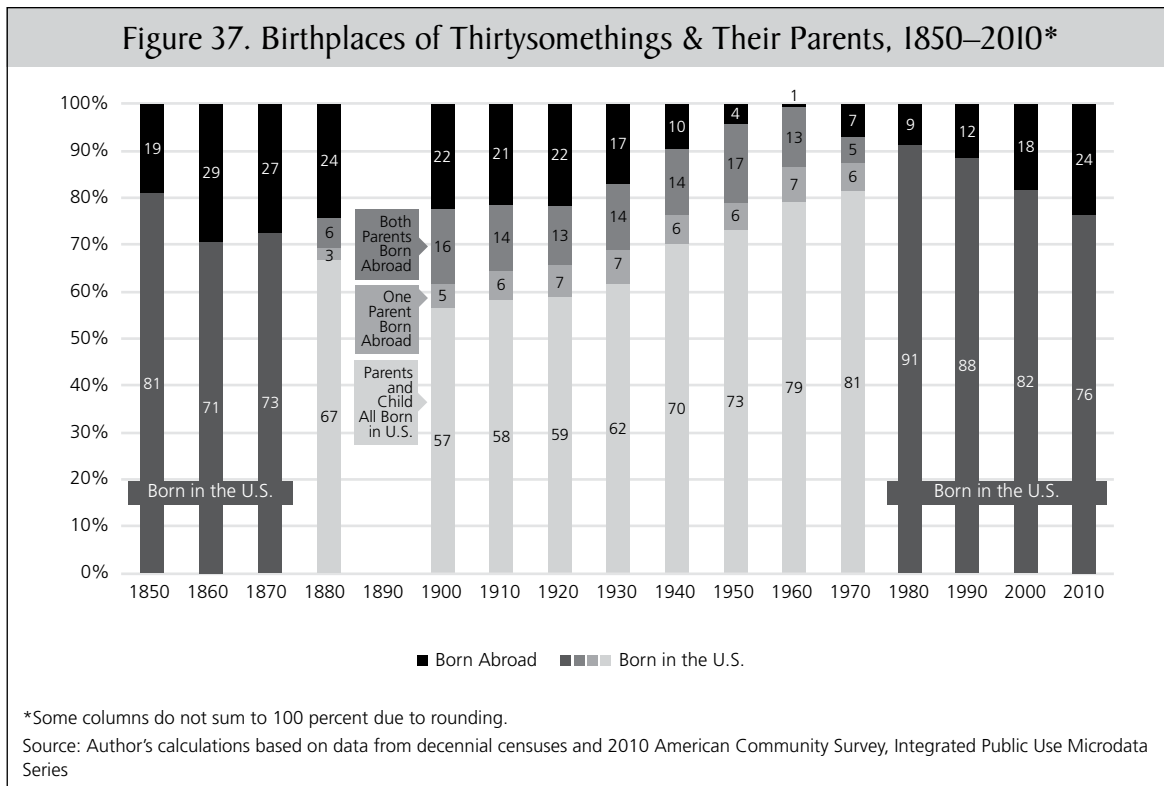
Rosenbloom and Sundstrom also provide a more detailed look at trends in interstate residential mobility between decades. They find that it declined between 1860 and the late nineteenth or early twentieth century; that it changed little between then and 1930 or 1940; that it subsequently rose until 1960; and that it was flat until 1990. For thirtysomethings, interstate residential mobility continued rising until 1980. Molloy, Smith, and Wozniak find that interstate mobility in the previous year among 25- to 44-year-olds fell from the 1980s through the 2000s.⁴⁹

In contrast to the trends on interstate mobility, William Frey shows that the share of the population that changed residences in the previous year fell steadily between the mid-1950s and 2007.⁵⁰ This type of mobility—which includes residential moves within a state, county, or neighborhood and which constitutes a very short-term window within which to consider mobility—has been the basis for concern about a secular decline in residential mobility.

In Section VII, trends for different kinds of residential mobility are presented to reconcile this conflicting literature. The results most closely resemble those of Rosenbloom and Sundstrom and indicate that residential mobility bottomed out several decades ago—in 1940 for birth-to-adulthood mobility and in 1970 for recently completed mobility (in the preceding five years)—and has been on the rise, or stable, in recent decades. The declines in recent decades found by past research appear to be small in historical perspective or to involve short-distance or recent moves—the kind with the weakest connection to adult outcomes in the previous section.

Intergenerational Residential Mobility—Birthplaces Versus Parental Birthplaces

Through the mid-twentieth century, the story of U.S. residential mobility between generations is dominated by immigration. **Figure 37** shows that in 1860, 29 percent of adults in their thirties had been born abroad, a figure that had fallen to



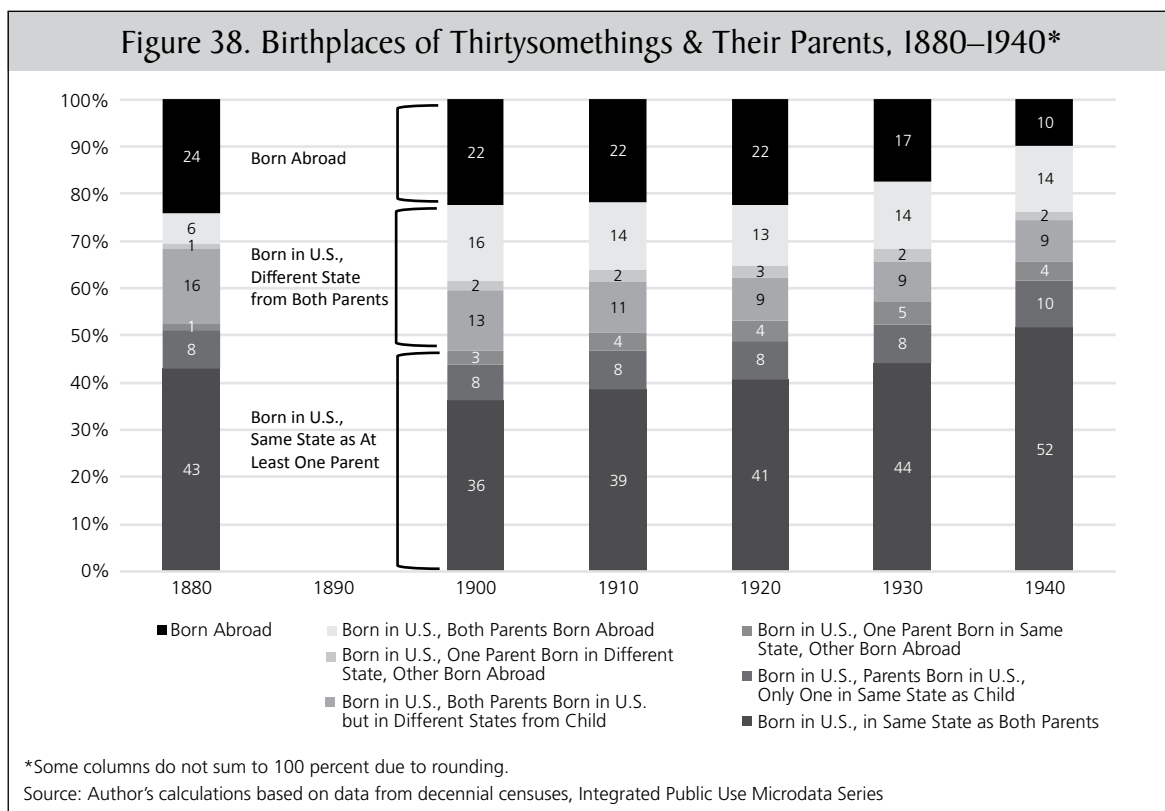
22 percent by 1900. The immigrant share of the population then rapidly declined to 1 percent by 1960, in the aftermath of legislative restrictions on immigration in the 1920s and administrative decisions by the Roosevelt administration during the Great Depression. Similarly, the share of thirtysomethings either born abroad or with at least one parent born abroad was 43 percent in 1900 but 19 percent in 1970. After immigration reform in 1965, the share of thirtysomething Americans born abroad rose steadily, from 1 percent in 1960 to 24 percent in 2010 (higher than in any year since the nineteenth century).

Through the mid-twentieth century, having been born in a different state from one's American-born parents was less common among thirtysomething adults than having been born to immigrant parents. In 1880, 24 percent of adults in their thirties had American-born parents, at least one of whom was born in a different state from where they were born (Figure 38). In contrast, 33 percent were born

abroad or had a parent born abroad. By 1940, 19 percent of thirtysomethings (born in the first decade of the twentieth century) had been born in a state that differed from one or both of their American-born parents, but 30 percent had been born abroad or had a parent born abroad.

Information on the birth state of parents is unavailable in the census data after 1940, but it was still the case in 1950 that 27 percent of adults in their thirties were immigrants or children of immigrants. It is likely that as late as 1970, among thirtysomething adults, about as many were immigrants or children of immigrants as had been born in a different state from one of their native-born parents. It is also likely that by 2010 (or even 2000), immigration again accounted for most intergenerational residential mobility in this sense.

Native-born adults with native-born parents have tended to live in the same state as their parents for well over a century. This tendency has grown stronger



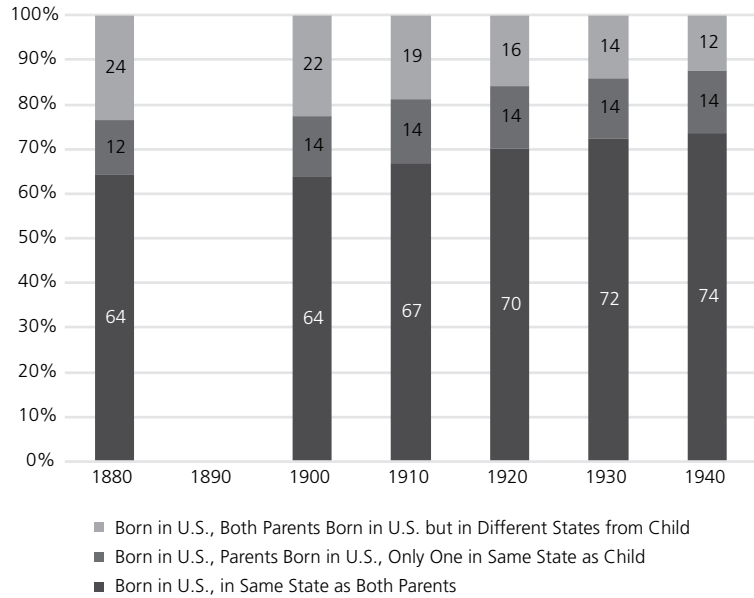
over time. As early as 1880, 64 percent of them (aged 30–39) had been born in the same state as both parents (Figure 39). That share rose to 74 percent by 1940. In contrast, the share born in a different state from both parents fell by half—from 24 percent in 1880 to 12 percent in 1940.

Immigration created substantial residential mobility during this period. Figure 38 shows that it was only in 1940 that a majority of thirtysomething adults in the U.S.—including immigrants and children of immigrants—had been born there and in the same state as both parents. The decline in immigration reduced intergenerational residential mobility significantly.

In the decades of heavy immigration, adult men were somewhat more likely than women to have been born abroad, but the residential mobility patterns are generally similar (Appendix Figures A66, A67, A78, A79, A90, and A91). Interesting differences emerge when adults are considered separately by race and education. Non-Hispanic whites were somewhat more likely to have been born abroad and somewhat less likely to have been born in the same state as both parents than Americans as a whole (Appendix Figures A68–A71, A80–A83, and A92–A95).⁵¹ African-Americans had much less intergenerational residential mobility. Through the 1960s, practically no African-Americans were immigrants or children of immigrants. In 1880, 77 percent of black thirtysomething adults were born in the U.S. and in the same state as both parents. By 1940, 82 percent were (compared with just 49 percent of whites).

African-Americans moved less than non-Hispanic whites, even among the native-born with native-born parents. Within this group, 78 percent of black thirtysomethings lived in the same state as both

Figure 39. Parent and Child Birthplaces, Children Born in the U.S. with U.S.–Born Parents, 1880–1940



Source: Author's calculations based on data from decennial censuses, Integrated Public Use Microdata Series

parents, as of 1880. That was higher than the 1940 level for white thirtysomethings—72 percent—while the 1940 level for blacks was 83 percent. Still, because of the absence of immigration, residential mobility among African-Americans consisted almost entirely of interstate moves.

The Hispanic pattern differs from those of both whites and blacks. In 1880, Hispanics were more likely than blacks and whites to be born abroad (40 percent, compared with 27 percent of whites). But the number of Hispanics born in the U.S. and in the same state as both parents still outnumbered those born abroad. However, from 1910 forward, foreign-born Hispanic thirtysomethings outnumbered those born in the U.S. and in the same state as both parents. From 1910 to 1940, the foreign-born were a majority of Hispanic adults. Hispanic immigration, however, declined to the point where, between 1920 and 1960, the share of thirtysomething adults born abroad fell from 64 percent to 20 percent.

Among the native-born with native-born parents, Hispanics resemble blacks during this period in terms of their low residential mobility: fully 89 percent of these thirtysomething adults were born in the same state as both parents in 1880, and 77 percent were in 1940. The trend for Hispanics was declining, however, unlike among blacks and whites.

Among nonwhite, nonblack, and non-Hispanic adults—primarily Asian-Americans in recent decades, but including Native Americans, too—the residential mobility story is dominated by sharply declining immigration. Nearly all adults in this “other” category were born abroad in 1860, falling to 54 percent by 1910 and 1 percent by 1960.⁵² Among the native-born adults of native-born parents, these thirtysomethings were mostly immobile, with 75 percent having been born in the same state as both parents in 1940 (though, as with Hispanics, down from nineteenth-century levels). (By 1940, it should be noted, just 1.6 percent of thirtysomething Americans were Hispanic and just 0.3 percent were something other than white, black, or Hispanic.)

Data on educational attainment are not available before 1940, but there is information on whether respondents can read and whether they can write (in any language) (Appendix Figures A72–A73, A84–A85, and A96–A97). Interpreting these results is made complicated by immigration, but looking just at the native-born children of native-born parents, residential mobility fell between 1880 and 1930 among both the literate and the illiterate—though it was always lower for the illiterate. In 1920, 91 percent of the illiterate were born in the same state as both parents, compared with 72 percent of the literate. Immobility was higher among the illiterate in 1880 than among the literate in 1930. Interpreting these trends requires keeping in mind that the share of American-born thirtysomethings with American-born parents who could both read and write rose from 80 percent in 1880 to 97 percent in 1930.

Among the native-born children of native-born adults in 1940, residential mobility rose with educational attainment. For those without a high school diploma (two-thirds of this group), 76 percent were born in the same state as both parents, while the figures were 68 percent and 63 percent for high school graduates and college graduates, respectively (who constituted 25 percent and 6 percent of American-born thirtysomethings with American-born parents, respectively) (Appendix Figures A74–A77, A86–A89, and A98–A101).⁵³

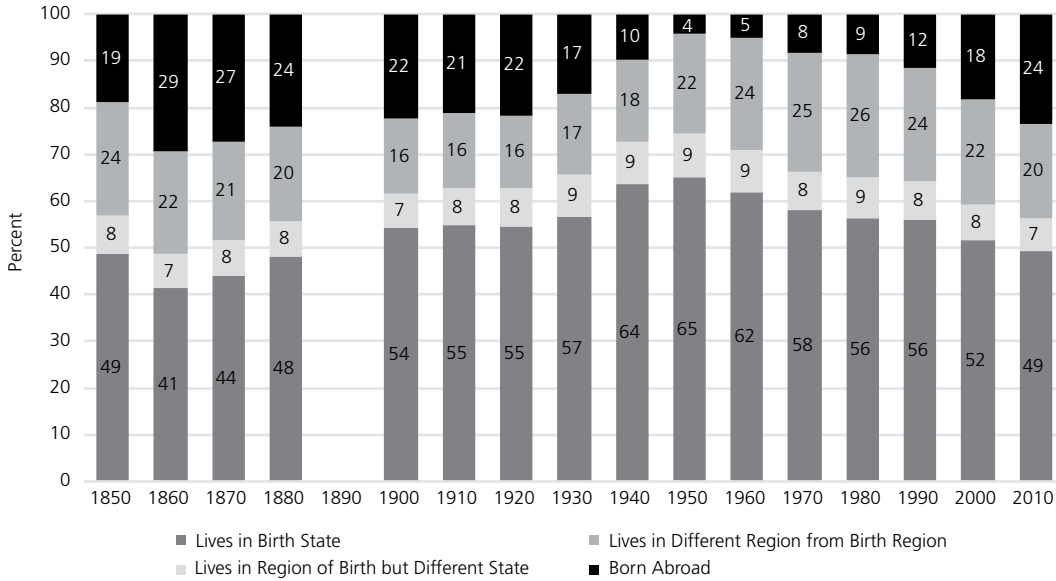
In sum, intergenerational residential mobility fell in the first decades of the twentieth century, though the pattern differed by race. It was generally lower among nonwhites and those less educated than among whites and those more educated.

Birth-to-Adulthood Residential Mobility

Consistent with the trends for intergenerational residential mobility, the birth-to-adulthood measure of mobility indicates that American thirtysomethings were less mobile in 1940 than in the second half of the nineteenth century. **Figure 40** shows trends in birth-to-adulthood mobility for all thirtysomething adults, while **Figure 41** displays the same information but excludes thirtysomethings born abroad.

In Figure 40, the decline and subsequent increase in immigration is again apparent. From 1860 to 1920, it was nearly as common for thirtysomething adults to have immigrated to the U.S. as it was for them to have moved from their state of birth. But immigration then dropped over the next 30 years. Only in 2010 did immigration again reach levels comparable with those of 1920. By that year, almost a quarter of adults in their thirties had been born abroad, and just over a quarter of thirtysomethings lived outside their birth state. Half of adults remained in the state in which they were born. That was fewer than at any time since the nineteenth century, suggesting historically strong levels of residential mobility.

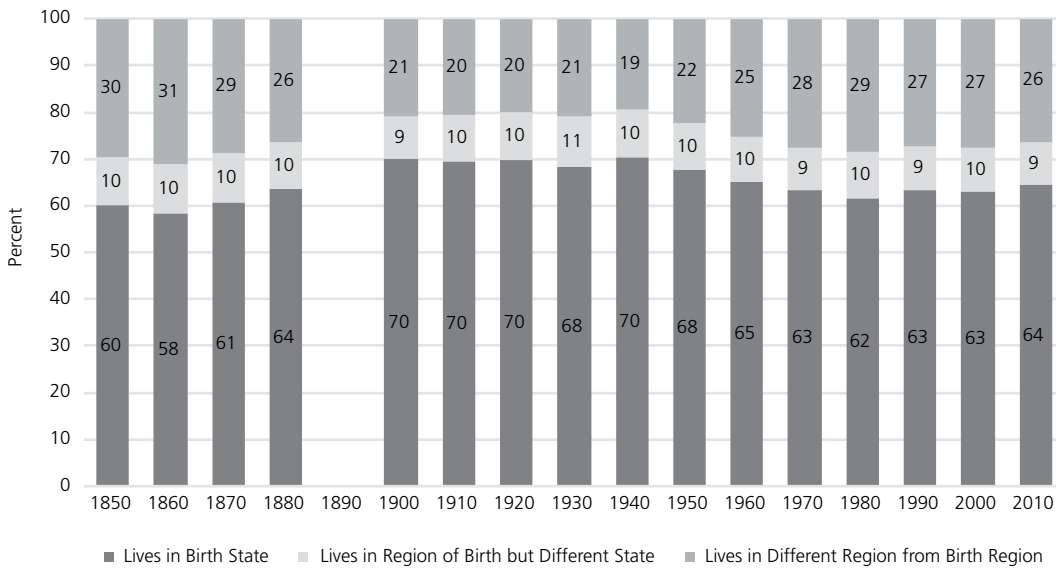
Figure 40. Birth-to-Adulthood Residential Mobility, Thirtysomething Adults, 1850–2010*



*Some columns do not sum to 100 percent due to rounding.

Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

Figure 41. Birth-to-Adulthood Residential Mobility, Native-Born Thirtysomething Adults, 1850–2010*



*Some columns do not sum to 100 percent due to rounding.

Source: Author's calculations based on data from decennial censuses and 2010 American Community Survey, Integrated Public Use Microdata Series

Focusing only on native-born adults, the changes over time are less pronounced (Figure 41). Mobility, in the sense of living outside one's birth state, fell during the late nineteenth century, rose back to pre-1900 levels by 1970, and then remained more or less flat. In 2010, nearly two-thirds of native-born thirtysomethings lived in their birth state, about the same as in 1960 and in 1880.

Over time, changes in mobility arise primarily from more or fewer adults moving from their birth state to an entirely different region. To be sure, some of these "interregional" moves simply involve crossing a state border into an adjacent region, where crossing a different border would have kept a migrant within the region. But while the distinction in any one year between an interregional and intraregional move is ambiguous, the fact that the former accounts for most of the change in mobility over time is nonetheless meaningful.

The fall in birth-to-adulthood mobility predates the fall in intergenerational residential mobility by about 40 years. One way of thinking about these patterns is that residential mobility became less common generally during the calendar years 1860 to 1900. Thus, we observe adults in their thirties with less mobility since birth in 1900 than 40 years earlier, and we observe adults in their thirties in 1940 (who would have been born around 1905, on average) having less mobility between their birthplace and those of their parents than adults in 1900 (who would have been born around 1865).

The same nineteenth-century years that featured falling birth-to-adulthood mobility among adults approaching middle age also saw declines in mobility among parents and would-be parents that would show up decades later as falling intergenerational residential mobility for their children. This interpretation would suggest that the 1900–40 period that followed the nineteenth-century drop in mobility may have featured uniquely low residential mobility

among native-born Americans. However, the results in the next section on recent (preceding-five-years) residential mobility complicate this view.

Appendix Figures A102–A125 provide trends for the same subgroups analyzed above. The discussion here will focus on Figures A114–A125, which show results for the native-born population. The patterns for men and women (Appendix Figures A114–A115) are essentially the same as shown in the chart for all thirtysomethings shown above (and thus, the same as each other). The patterns for non-Hispanic whites (Appendix Figure A116) are also nearly indistinguishable from the overall picture. In every case, mobility bottoms out in 1940 and is largely flat from 1980 to 2010 at nineteenth-century levels.

In contrast, mobility among native-born blacks was lowest in 1900 and then rose over the next six decades (Appendix Figure A117). This trend reflects the historic Great Migration of Southern African-Americans to northern and western cities in search of greater freedom and better opportunities. For 50 years, from 1930 to 1980, African-American thirtysomethings had higher rates of mobility than did whites.

But unlike the white trend, which leveled off, black mobility began falling after 1960 or 1970. By 2010, 70 percent of black thirtysomethings lived in the same state in which they were born, compared with 62 percent of whites. Nevertheless, because historically black residential mobility was relatively low, the 2010 level was comparable with levels in the nineteenth century, as was also the case for whites.

The Hispanic trend differs markedly from the white and black patterns (Appendix Figure A118). Residential mobility among native-born Hispanics has always been low, reflecting their relative concentration (until recently) in a few parts of the country. In 1850, 90 percent of these thirtysomethings lived in the same state in which they were born. That fell to 68 percent by 1950, the first and only time that Hispanics had more mobility than non-Hispanic

whites. From 1950 to 2010, mobility among Hispanics fell modestly, remaining lower than among blacks and whites after 1950. Over time, interregional mobility became increasingly important for Hispanics relative to intraregional movement.

Finally, among nonwhite, nonblack, non-Hispanic adults, residential mobility was especially low for much of the past 150 years. From 1910 to 1970, more thirtysomethings in this group lived in their birth state than was true of any other racial group (Appendix Figure A119). Starting in 1930—and accelerating between 1960 and 1980—mobility increased among these adults. By 2010, their mobility rate was as high as it was among whites.

Residential mobility among the literate and illiterate may be tracked from 1850 to 1930 (Appendix Figures A120–A121). Both groups saw a decline in mobility through 1900, as interregional mobility fell. Mobility leveled off from 1900 to 1930 among both groups. From 1860 forward, mobility was lower among the illiterate than among the literate; in 1930, 80 percent of illiterate thirtysomethings lived in their birth state, compared with just 68 percent of the literate. Literacy, it should be noted, spread over these years, rising from 89 percent to 96 percent between 1850 and 1930.

Examining results disaggregated by educational attainment, from 1940 to 1970, the share of high school dropouts living in their birth state while in their thirties fell only from 73 percent to 67 percent; among high school graduates without a college degree, it fell only from 66 percent to 65 percent. However, among college graduates in their thirties, the share living in their birth state fell from 60 percent to 50 percent between 1940 and 1970.

Beginning in about 1975, residential mobility began to fall modestly among all three groups. By 2010, thirtysomethings without a high school diploma were back to their 1940 mobility level, those with just a high school diploma had lower mobility rates

than in 1940, and mobility rates among college graduates were back to 1950 levels. The fact that residential mobility rose in the nation as a whole between 1940 and 2010 is partly due to increasing mobility among college graduates and partly reflects the fact that Americans' educational attainment rose, shifting people into higher-mobility education levels.

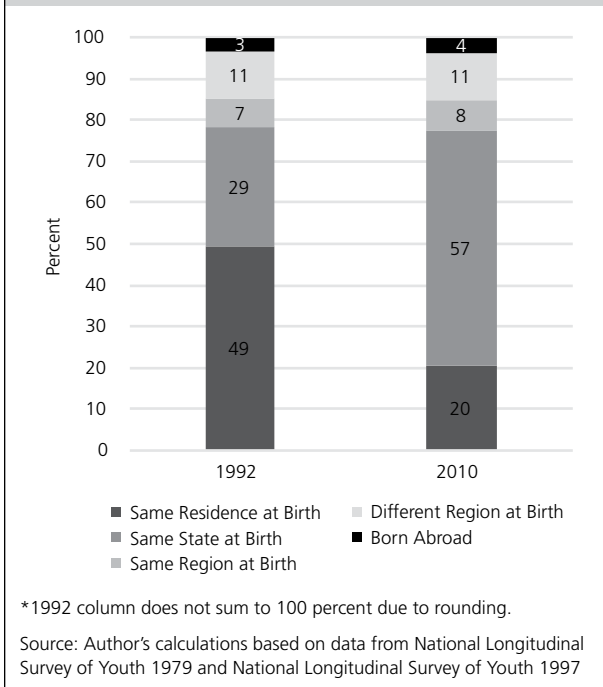
In sum, 1940 was probably a low point for residential mobility in the United States. The four decades from 1940 to 1980 represent the only sustained period in which residential mobility rose, and it increased among all the groups considered above (though the African-American rates began rising earlier and stopped sooner). In recent decades, residential mobility has held steady for the most part at relatively high levels, thanks to increases in educational attainment and higher mobility among college graduates. African-Americans are again the exception, having seen most of their earlier increase in mobility erased over this period.

Birth-to-Adolescence Residential Mobility

Typically available questions in censuses and surveys generally provide little information about moves between birth and adolescence or between adolescence and adulthood. Using the BLS data, it is possible to take the birth-to-adulthood measures of mobility and split them into these two distinct stages. Like Figure 41, which showed that the share of native-born adults living in their birth state was fairly constant from 1970 to 2010, **Figure 43** reveals that the share of native-born adults who, in adolescence, lived in their birth state was the same in 2010 as in 1992. (**Figure 42** includes foreign-born adults.)

This finding conceals a sizable shift in residential mobility—that to another residence within one's birth state. In 1992, 81 percent of native-born young adults had lived in the same state as a teen (at age 13, 14, 15, or 16, back in 1978) as at birth, and in 2010, 79 percent had (back in 1996). But the share living in the same residence over the period plummeted,

Figure 42. Distribution of Adolescents by Residential Mobility Between Birth and Adolescence, 1992 and 2010*

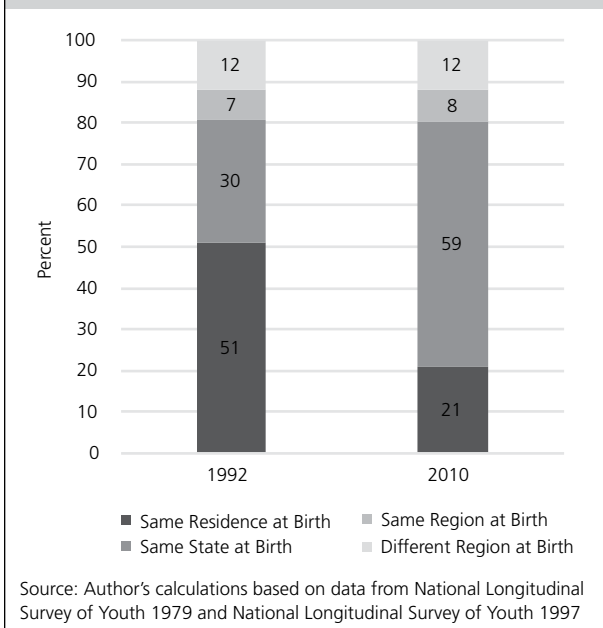


from 51 percent to 21 percent. This increased mobility may be more harmful than beneficial; earlier in this paper, relative and absolute economic mobility outcomes tended to be a bit better for those *not* having moved by adolescence than for those who had moved elsewhere in the state, though the differences were usually small.

Appendix Figures A126–A151 display residential mobility patterns for subgroups. Focusing on the native-born, women were less likely than men to have moved out of state by adolescence in 1992 but more likely to have done so by 2010, though the relatively small sample sizes do not statistically preclude the possibility that the share was constant for men and women alike (Appendix Figures A139–A140).

African-Americans were far less likely than whites in 1992 to have moved between birth and adolescence, 31 percent to 52 percent, respectively (Appendix Figures A141–A142).⁵⁴ In 2010, the two groups were equally likely to have moved between birth and adolescence, and both were much more likely to have moved than in 1992. Blacks were less likely than whites, in both years, to have moved out of state between birth and adolescence. Hispanics were the only group to become more likely to have remained in the same state in adolescence as at birth (Appendix Figure A143). Like African-Americans, Hispanics in 2010 were less likely than whites to have moved out of state.

Figure 43. Distribution of Native-Born Adolescents by Residential Mobility Between Birth and Adolescence, 1992 and 2010



Appendix Figures A144–A147 reveal that residential mobility between birth and adolescence increased as a parent's educational attainment rose, for adults in both 1992 and 2010.⁵⁵ (Note that parental education is being considered here, unlike in the analyses using the Census Bureau data.) However, some convergence across educational groups occurred over the period. By 2010, adults in all four categories of parental education were equally likely to have remained in their birth residence in adolescence (and all were less likely to have done so than adults in 1992 had been).

Adults raised in the richest quartile of childhood income experienced more residential mobility between birth and adolescence in both years, though that was less true in 2010 than in 1992. They were not, however, less likely to have remained in their birth residence (Appendix Figures A148–A151).

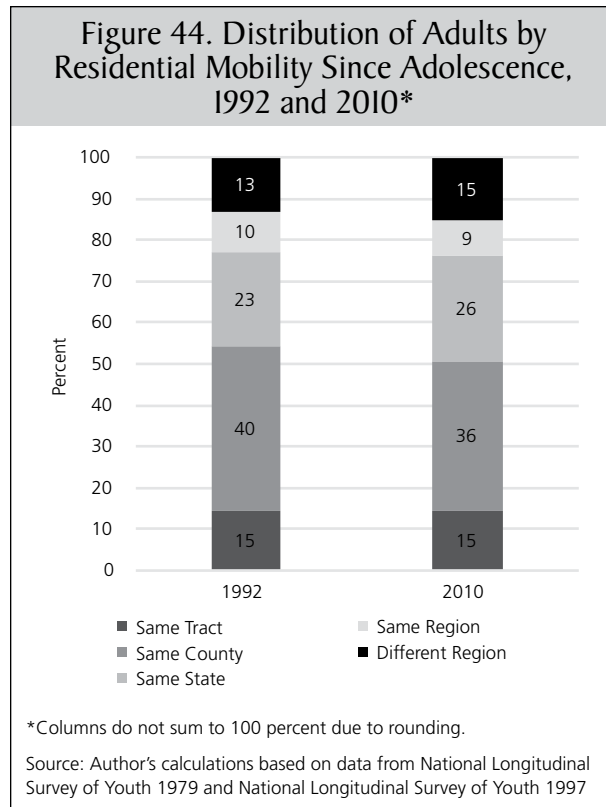
Adolescence-to-Adulthood Residential Mobility

The period between adolescence and adulthood might be considered especially important for residential mobility: it encompasses the transition to adulthood, including decisions about higher education, military service, and professional careers. **Figure 44** displays results from the BLS data, including adults who were born abroad but were in the U.S. as adolescents.

Fewer than 25 percent of adults in both years moved from the state in which they resided as an adolescent, and no more than 15 percent moved to a state outside the region. Just 15 percent remained in the census tract in which they lived in adolescence. Overall, the picture looks much the same in 2010 as in 1992, though there was a shift from moving within one’s adolescent county to moving to another county within the state.

The subgroup breakdowns are shown in Appendix Figures A152–A164. Men were more likely than women in both years to remain in their adolescent census tract as young adults; women were more likely in 2010 to have moved outside their adolescent county (Appendix Figures A152–A153). African-American and Hispanic adults in both years were less likely than whites to move and to move farther away from their adolescent residence. Nevertheless, blacks and Hispanics also were more likely to have moved outside their adolescent county in 2010 than they were in 1992 (Appendix Figures A154–A156).

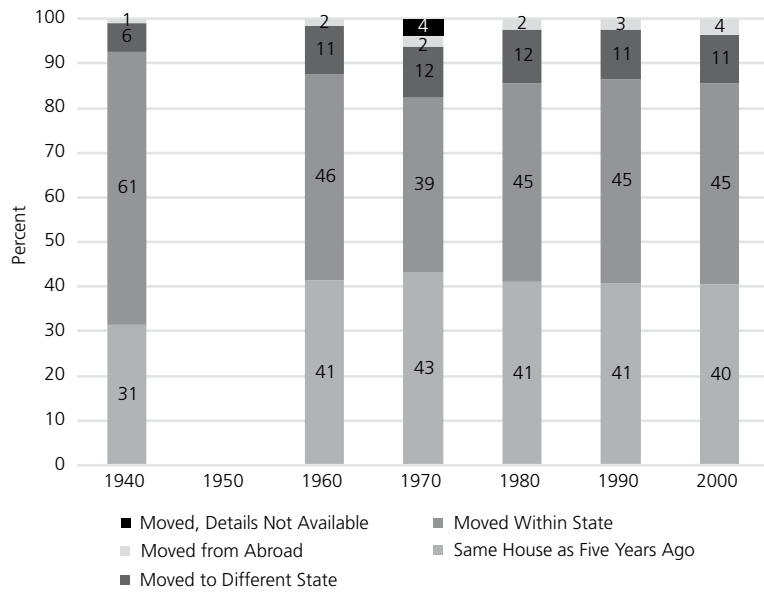
Appendix Figures A157–A160 display results for adults with different levels of parental educational attainment. The extent of residential mobility increases with parental education levels; these gaps



do not converge over time. If anything, children of college graduates became a little more mobile, while everyone else became a little less so. While 20 percent of the children of high school dropouts remained in the same census tract, as in adolescence, and 65 percent remained in the same county, among the children of college graduates in 2010, those figures were 8 percent and 37 percent; 9 percent of the children of high school dropouts had moved to a new region of the country as adults, compared with 25 percent of the children of college graduates.

Residential mobility patterns by childhood income tell a similar story (Appendix Figures A161–A164). While residential mobility between adolescence and adulthood increased for those raised in the poorest, second-richest, and richest quarters of childhood income, there is a rough tendency in both years for residential mobility to increase with parental income. Further, many of these childhood-income-based gaps widened over time.

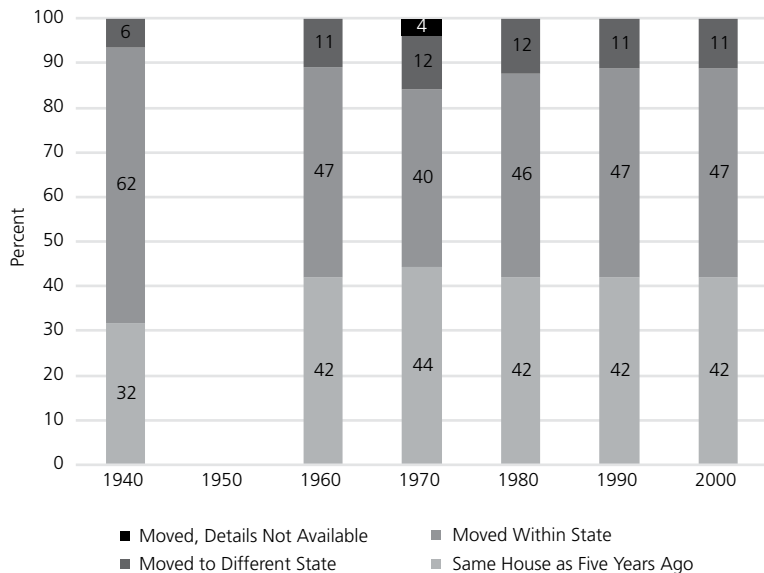
Figure 45. Residential Mobility, Past Five Years, Thirtysomething Adults, 1940–2000*



*Some columns do not sum to 100 due to rounding. Americans were not asked about where they lived five years earlier in 1950.

Source: Author's calculations based on data from decennial censuses, Integrated Public Use Microdata Series

Figure 46. Residential Mobility, Past Five Years, Thirtysomething Adults in the U.S. Five Years Earlier, 1940–2000*



*Americans were not asked about where they lived five years earlier in 1950.

Source: Author's calculations based on data from decennial censuses, Integrated Public Use Microdata Series

The two sets of BLS estimates—one for residential mobility from birth to adolescence and the other for adolescence-to-adulthood residential mobility—reinforce the results from the Census Bureau analyses showing that residential mobility between birth and adulthood has not declined in recent decades. The BLS results indicate that more disadvantaged groups tend to have less extensive residential mobility than more advantaged groups, though this inequality has not worsened across the board.

Residential Mobility in the Past Five Years

Recall that birth-to-adulthood residential mobility fell from 1860 to 1900, while intergenerational residential mobility fell from 1900 to 1940. The speculative interpretation offered was that calendar years 1860 to 1900 featured declining mobility that translated into the 1900–1940 decline in the likelihood that thirtysomething adults had been born in a state different from that of their parents. If true, the period of flat birth-to-adulthood mobility from 1900 to 1940 would mark a low point for residential mobility in America over the past 165 years. The short-run mobility trends presented in this section, however, are inconsistent with that conclusion.

Figure 45 shows short-run mobility with recent immigrants included. **Figure 46** omits adults who were living abroad five years earlier. Mobility, in the sense of living in a different home from five years earlier, fell between 1940 and 1960, fell a bit more in 1970, and rose slightly from 1970 to 1990, leveling off by 2000. The changes between 1960

and 2000 are fairly small. According to Figure 46, in 1940, 32 percent of established thirtysomething Americans lived in the same home as they did five years earlier, compared with 42 percent in 1960 and 42 percent in 2000. The 1960, 1990, and 2000 distributions are essentially the same.

Recent moves are much more likely to occur within a person's current state than they are to cross state lines. In 2000, for instance, 47 percent of established thirtysomethings moved to a new home in their existing state, compared with 11 percent who moved to a different one. Not shown in the figures, out-of-state moves are much more likely to lead to residence in a new region of the country than a new state within a person's current region.

Above all, Figures 45 and 46 indicate a surprising degree of within-state residential mobility throughout these decades. In 1940, for instance, 74 percent of native-born thirtysomethings had been born in the same state as both their parents (Figure 39), 70 percent of Americans in their thirties still lived in the state in which they'd been born (Figure 41), and 94 percent lived in the same state as five years earlier (Figure 46). However, just 32 percent lived in the same *home* as five years earlier. By 2000, 63 percent of native-born thirtysomethings still lived in their birth state, and 89 percent lived in the same state as five years earlier, but just 42 percent lived in the same home as they had five years earlier.

Appendix Figures A165–A184 provide the usual breakdown of these mobility results for various demographic groups. Women have less mobility than men on this dimension, though this gender gap is narrowing. In 1940, 34 percent of thirtysomething women who had been in the U.S. five years earlier were living in the same home, compared with 30 percent of men (Appendix Figures A175–A176). That gap widened to 48 percent and 40 percent by 1970 but fell to 43

percent and 41 percent in 2000. While men's mobility did not change much between 1960 or 1970 and 2000, it grew modestly among women. This increase could have something to do with the growth in graduate and professional degrees among women or delayed childbearing and marriage.

Among African-Americans, recent mobility bottomed out in 1980 rather than in 1970, but as for whites and adults generally, residential mobility in 2000 was at its 1960 levels. Interstate migration is generally less common among blacks than among whites (Appendix Figures A177–A178). Hispanic mobility falls until 1970 and then stabilizes at the same levels as whites (Appendix Figure A179). As with blacks, interstate mobility is lower than it is among whites. The pattern among nonwhite, non-black, non-Hispanics is unique—mobility hits a low in 1960, increases until 1980, and then falls again (Appendix Figure A180).

Short-run residential mobility is much more common among college graduates than among other adults (Appendix Figures A181–A184). In 2010, only 34 percent of thirtysomething college graduates lived in the same residence as five years earlier, while 45 percent of high school graduates and 44 percent of high school dropouts did. The difference was largely because of the greater likelihood that college graduates had moved from a different state compared with their peers. High school graduates were no more likely than high school dropouts to have moved out of their home, except in 1980. Recent residential mobility hit lows in 1970 for high school graduates, 1980 for dropouts, and 1990 for college graduates. Except for college graduates, mobility was about at 1960 levels in 2010.

In short, residential mobility in the preceding five years is quite high and has not fallen in recent decades. Interstate mobility is higher among whites than nonwhites and among college graduates than other adults.

CONCLUSION

The surprising conclusion from this paper's analyses is that America's residential mobility problem appears not to be that residential mobility has declined but that it has grown more important and is lower among disadvantaged groups.

Past research concluding that residential mobility has declined since the mid-twentieth century, the 1980s, or the 1990s generally highlights moves over the past year, including those within states or counties. These kinds of residential mobility have the weakest link to the adult outcomes examined here. The types of mobility that have the strongest association with adult outcomes involve residential mobility that occurs between generations or between childhood and adulthood, as well as mobility across not just states but regions. Those kinds of mobility are not especially low.

Nevertheless, because the gaps in adult outcomes between people who do and do not make such moves have generally widened and because those with lower economic mobility also have less residential mobility, crafting policies to promote residential mobility should be an important national priority. Before turning to policy options, it is useful to briefly review what is known about the factors behind the mobility declines that have been found in past research.

From the Left, Timothy Noah reviewed some of the factors in the *Washington Monthly* in 2013.⁵⁶ Noah considers the aging of the baby boomers, the increase in two-earner couples, the recent bursting of the housing bubble, the greater opportunities for telecommuting offered by the Internet, improved local job opportunities, and changes in state taxes. He convincingly argues that these possible explanations are unlikely to be major factors behind the decline.⁵⁷ Less convincingly, he highlights rising income inequality as an important factor, noting the widening gap between housing costs and working- and

middle-class incomes. Noah is skeptical of the efficiency of labor and housing markets but also emphasizes what is likely to be a crucial market distortion, the absence of which would likely render rising inequality irrelevant: exclusionary zoning and other housing regulation that limits the construction of affordable housing.

From the Right, an essay in *National Affairs* by Eli Lehrer and Lori Sanders emphasizes the proliferation of federal safety-net programs with state-varying eligibility rules, such as Medicaid and the Supplemental Nutrition Assistance Program (disability benefits could be added to their list), as well as a disproportionate emphasis on place-based antipoverty policies at the expense of ones that promote residential mobility.⁵⁸ (Brian Cadena and Brian Kovak instead cite unemployment insurance as inhibiting mobility, since it reduces the pressure to find work elsewhere.)⁵⁹

Lehrer and Sanders also point to federal policies that benefit homeowners instead of renters. Homeownership discourages residential mobility. While Noah points out that mobility has fallen for owners and renters alike, the increase in homeownership might still have been an important cause of declining mobility if homeowners are, in fact, less mobile than renters. Finally, Lehrer and Sanders highlight two areas also emphasized by Noah—insufficient public transportation networks and local housing regulations.

Several scholars have found that a decline in variation across local and state job markets is behind the drop in residential mobility. Places are less unique than they once were, the argument goes, so moving away offers less than it used to for workers seeking a change.⁶⁰

A number of other societal and economic changes—or continuities—could also be behind falling residential mobility. It is possible that the increase in immigration has filled local demand for labor

that would otherwise have encouraged migration among native-born Americans in search of higher wages to areas of job creation. The documented decline in innovation and economic dynamism—evident, for instance, in the falling number of start-ups—might also have dampened residential mobility to the extent that they tend to be geographically concentrated.

Another important market distortion that has potentially affected residential mobility across state lines is the expansion of occupational licensing in recent decades. Workers who have fulfilled arduous licensing requirements in one state will be reluctant to move to another state where they will have to be licensed all over again.

While the increase of two-worker families might be expected to reduce residential mobility—since it is more difficult for two people to disrupt their careers than it is for one spouse to do so—the increase in single parenthood could also have depressed mobility. Single parents rely more on networks of family and friends for help, so a move across state lines—or even neighborhoods—is especially daunting to them.

Residential mobility is also likely inhibited by racial discrimination in housing and hiring and by the perception—correct or not—of prevalent discrimination. Racial minorities considering a move may be concerned about how they will be accepted in predominantly white neighborhoods, cities, and states, especially to the extent that they will give up strong local networks of family and friends.

Finally, it may be that affluence itself discourages residential mobility, at least among those who do not prioritize professional growth. When living standards were much lower, any opportunity to improve one's circumstances may have been viewed as a worthwhile risk, or even a necessity. Today, the broad middle class is much better off than it was in the mid-twentieth century, and the returns to

moving may not be sufficiently high, given the costs entailed (including the risk of things not working out and the loss of social networks). How many of us today would consider the sorts of risks taken by westward-migrating pioneers—in their covered wagons—to improve our opportunities?

Regardless of whether U.S. residential mobility is on the decline, policies should aim to promote more of it because it appears related to economic opportunity and because its importance along some dimensions appears to be growing.

Addressing housing and land-use regulations that drive up the cost of housing in high-productivity areas is especially important.⁶¹ One set of policy reforms would reduce or eliminate federal subsidies for homeownership, from the tax deduction for mortgage interest payments to Federal Housing Administration insurance of mortgages to the implicit subsidies to Fannie Mae and the other government-sponsored enterprises involved in housing.

By making homeownership cheaper than markets would dictate, we make it easier for homeowners to amass enough political power to block affordable housing development that would potentially affect their home values but allow lower-income people to move to higher-productivity areas. One incremental reform would be to simply cap the mortgage interest deduction, so that it benefits fewer people in high-housing-cost areas and makes NIMBYism less rewarding.

Another way to counter NIMBYism would be to encourage markets for home equity insurance.⁶² This insurance would compensate home sellers who stand to make less because of local developments that lowered the value of their property. In addition, the federal government could tie aid to states and localities to deregulation of land use and housing. Deregulation could also help promote residential mobility by reducing the amount of occupational licensing, which has exploded in recent decades.⁶³

The federal government could promote certification as an alternative to licensing, tie federal aid to deregulation, provide federal funding and incentives for states to develop common regional licensing agreements, and encourage the “sharing economy” as a way of subverting licensing (Uber’s weakening of the taxicab cartel is a prime example).

As Lehrer and Sanders emphasize, consolidating federal antipoverty programs would make state differences in eligibility requirements somewhat less of a barrier to interstate mobility among low-income families. Federal policies could also encourage use of housing vouchers to move between local housing authorities rather than within them. Unemployment insurance could be reformed to allow people to take a lump sum—dubbed a “mobility grant” by Lehrer and Sanders—to pay for relocation expenses instead of receiving monthly payments that discourage job search. These sorts of safety-net reforms would have the advantage of being relatively accessible levers for federal policymakers.

Changing federal safety-net policies is a more direct way of encouraging residential mobility than some of the bank-shot ideas that require the federal government to persuade state and local policymakers to implement reforms or that depend on lowering inflated housing prices to counter NIMBYism. At the same time, it may be that the payoff from enacting safety-net reforms, in the form of greater residential mobility, would not be as large as that from other policies if they could be successfully implemented.

More federal, state, and local attention to discrimination in mortgage lending and among real-estate agents would also promote more residential mobility among African-Americans and other racial minorities.⁶⁴

Even policies in seemingly unrelated areas could promote more residential mobility. Deregulation, corporate tax reform, and intellectual property reform could promote economic dynamism, which might create local and regional centers of innovation that would encourage migration to high-productivity areas.⁶⁵ Rebalancing immigration policy so that it is less focused on family reunification—which, by increasing the supply of lower-skilled labor might reduce migration of native-born Americans to places that would otherwise seek them out—and more focused on skilled workers (who would raise productivity levels and reduce inequality) could affect residential mobility.

Promoting planned and marital childbearing—by eliminating marriage penalties in the tax code and providing tax incentives to married parents—could reduce single parenthood, which might increase mobility.⁶⁶ Policies to increase college graduation rates (and reduce dropout rates) would also promote interstate and interregional migration.

Given the provisional evidence in this paper and elsewhere that Americans who are willing and able to move have better economic outcomes, if we want to increase economic mobility, we should try a variety of approaches to increasing residential mobility. Doing so would almost certainly pay off in higher economic growth rates, too.

The analyses in this paper suggest that, just as we should worry less than we do that economic opportunity is on the decline in the U.S., we should be less concerned than we are about declining migration among Americans. Nevertheless, we should strive for more economic mobility—regardless of whether it is falling—and, therefore, we should do more to increase residential mobility.

ENDNOTES

1. Pew Economic Mobility Project (2012). *Pursuing the American Dream: Economic Mobility Across Generations* (Washington, D.C.: Pew Charitable Trusts).
2. On poverty trends, see Christopher Wimer et al. (2013). "Trends in Poverty with an Anchored Supplemental Poverty Measure." Working paper; Bruce D. Meyer and James X. Sullivan (2012). "Winning the War: Poverty from the Great Society to the Great Recession." *Brookings Papers on Economic Activity* 45(2): 133–200.
3. Robert Sampson (2012). *The Great American City: Chicago and the Enduring Neighborhood Effect* (Chicago: University of Chicago Press); Patrick Sharkey (2013). *Stuck in Place: Urban Neighborhoods and the End of Progress Toward Racial Equality* (Chicago: University of Chicago Press).
4. Ichiro Kawachi and Lisa F. Berkman, eds. (2003). *Neighborhoods and Health* (Oxford: Oxford University Press).
5. Peter Ganong and Daniel Shoag (2014). "Why Has Regional Income Convergence in the U.S. Declined?." Working paper.
6. Enrico Moretti (2012). *The New Geography of Jobs* (New York: Houghton Mifflin Harcourt).
7. For a review of the neighborhoods literature, see Patrick Sharkey and Jacob W. Faber (2014). "Where, When, Why, and for Whom Do Residential Contexts Matter? Moving Away from the Dichotomous Understanding of Neighborhood Effects." *Annual Review of Sociology* 40: 559–79; Robert J. Sampson, Jeffrey D. Morenoff, and Thomas Gannon-Rowley (2002). "Assessing 'Neighborhood Effects': Social Processes and New Directions in Research." *Annual Review of Sociology* 28: 443–78; Narayan Sastry (2012). "Neighborhood Effects on Children's Achievement: A Review of Recent Research." In Rosalind King and Valerie Maholmes, eds. *The Oxford Handbook of Poverty and Child Development* (Oxford: Oxford University Press); Steven N. Durlauf (2004). "Neighborhood Effects." In J. V. Henderson and J. F. Thisse, eds. *Handbook of Regional and Urban Economics*, vol. 4 (Elsevier).

Notable neighborhoods research that uses nonexperimental evidence includes Jonathan T. Rothwell and Douglas S. Massey (2015). "Geographic Effects on Intergenerational Income Mobility." *Economic Geography* 91(1): 83–106; Geoffrey T. Wodtke, David J. Harding, and Felix Elwert (2011). "Neighborhood Effects in Temporal Perspective: The Impact of Long-Term Exposure to Concentrated Disadvantage on High School Graduation." *American Sociological Review* 76: 713–36; Patrick Sharkey (2012). "An Alternative Approach to Addressing Selection into and out of Social Settings: Neighborhood Change and African-American Children's Economic Outcomes." *Sociological Methods and Research* 41(2): 251–93; Robert J. Sampson (2008). "Moving to Inequality: Neighborhood Effects and Experiments Meet Social Structure." *American Journal of Sociology* 114(1): 189–231.

8. Rothwell and Massey (2015) review this literature. They also note that one study finds a positive effect on adult earnings from having been randomly assigned to a better kindergarten class. See Raj Chetty and John N. Friedman (2011). "Does Local Tax Financing of Public Schools Perpetuate Inequality?." *National Tax Association Proceedings* 103: 112–18.
9. Olof Åslund et al. (2011). "Peers, Neighborhoods, and Immigrant Student Achievement: Evidence from a Placement Policy." *American Economic Journal: Applied Econometrics* 3(2): 67–95. Eric D. Gould, Victor Lavy, and M. Daniele Paserman (2004). "Immigrating to Opportunity: Estimating the Effect of School Quality Using a Natural Experiment on Ethiopians in Israel." *Quarterly Journal of Economics* 119: 489–526.

Similar quasi-random refugee studies have found evidence of other "neighborhood effects" on welfare use, crime, and labor-market outcomes. Olof Åslund and Peter Fredriksson (2009). "Peer Effects in Welfare Dependence: Quasi-Experimental Evidence." *Journal of Human Resources* 44(3): 798–825. Anna Piil Damm (2009). "Ethnic Enclaves and Immigrant Labor Market Outcomes: Quasi-Experimental Evidence." *Journal of Labor Economics* 27: 281–314. Anna Piil Damm (2014). "Neighborhood Quality and Labor Market Outcomes: Evidence from a Quasi-Random Neighborhood Assignment of Immigrants." *Journal of Urban Economics* 79: 139–66. Anna Piil Damm and

Christian Dustmann (2014). "Does Growing Up in a High Crime Neighborhood Affect Youth Criminal Behavior?." *American Economic Review* 104: 1806–32.

10. Examples of this research include experiments and court-ordered policy changes in Mount Laurel, New Jersey; Yonkers, New York; Toronto; Montgomery County, Maryland; and Denver. See Rebecca Casciano and Douglas S. Massey (2012). "Neighborhood Disorder and Anxiety Symptoms: New Evidence from a Quasi-Experimental Study." *Health Place* 18(2): 180–90; Rebecca C. Fauth, Tama Leventhal, and Jeanne Brooks-Gunn (2007). "Welcome to the Neighborhood? Long-Term Impacts of Moving to Low-Poverty Neighborhoods on Poor Children's and Adolescents' Outcomes." *Journal of Research on Adolescence* 17(2): 249–84; Philip Oreopoulos (2003). "The Long-Run Consequences of Living in a Poor Neighborhood." *Quarterly Journal of Economics* 118(4): 1533–75. Heather Schwartz (2010). "Housing Policy Is School Policy: Economically Integrative Housing Promotes Academic Success in Montgomery County, Maryland" (New York: Century Foundation); Anna Maria Santiago et al. (2014). *Opportunity Neighborhoods for Latino and African-American Children* (Washington, D.C.: U.S. Department of Housing and Urban Development).
11. Stefanie DeLuca et al. (2010). "Gautreaux Mothers and Their Children: An Update." *Housing Policy Debate* 20(1): 7–25; James E. Rosenbaum and Stefanie DeLuca (2008). "What Kinds of Neighborhoods Change Lives? The Chicago Gautreaux Housing Program and Recent Mobility Programs." *Indiana Law Review* 65(3): 659–62. The Gautreaux program did not involve randomized assignment or include a control group, but movers were, for the most part, assigned to neighborhoods without their own input or choice.
12. Mark Votruba and Jeffrey R. Kling (2009). "Effects of Neighborhood Characteristics on the Mortality of Black Male Youth: Evidence from Gautreaux, Chicago." *Social Science and Medicine* 68(5): 814–23.
13. Jens Ludwig et al. (2008). "What Can We Learn About Neighborhood Effects from the Moving to Opportunity Experiment?." *American Journal of Sociology* 114(1): 144–88. Available at <http://home.uchicago.edu/ludwigj/papers/AJS-Ludwig-2008.pdf>.
14. Raj Chetty, Nathaniel Hendren, and Lawrence F. Katz (2015a). "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment." *American Economic Review* (forthcoming).
15. Raj Chetty et al. (2014). "Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States." *Quarterly Journal of Economics* 129(4): 1553–1623.
16. Raj Chetty and Nathaniel Hendren (2015b). "The Effects of Neighborhoods on Intergenerational Mobility: Childhood Exposure Effects and County Level Estimates." Working paper.
17. In the censuses, contemporary states are not always included before they were admitted to the union. Wyoming (admitted 1890) is absent from 1850 and 1860; Oklahoma (admitted 1907) is absent from the 1850, 1870, and 1880 data; and Alaska and Hawaii (admitted 1959) are absent from 1850 through 1900, in 1940, and in 1950. The 1970 data set that I use excludes states without large metropolitan areas, including Delaware, Idaho, Montana, North Dakota, South Dakota, Vermont, and Wyoming.
18. After 70 years, complete census records are made public, making it possible to attempt to link the same people across census years using their names, birth years, and other information. The most recent year for which entire censuses are available is 1940, which was the first year in which people were asked about their incomes. Some research has used the data sets between 1850 and 1940 to examine changes in occupational mobility up to this point in history. See Jason Long and Joseph Ferrie (2007). "The Path to Convergence: Intergenerational Occupational Mobility in Britain and the U.S. in Three Eras." *Economic Journal* 117(519): C61–C71; Long and Ferrie (2013). "Intergenerational Occupational Mobility in Britain and the U.S. Since 1850." *American Economic Review* 103(4): 1109–1137; Claudia Olivetti and M. Daniele Paserman (2015). *American Economic Review* 105(8): 2695–2724; Bruce Sacerdote (2005). "Slavery and the Intergenerational Transmission of Capital." *Review of Economics and Statistics* 87(2): 217–34; Joseph P. Ferrie (2005). "History Lessons: The End of American Exceptionalism? Mobility in the United States Since 1850." *Journal of Economic Perspectives* 19(3): 199–215.

19. Daniel Aaronson and Bhashkar Mazumder (2005). "Intergenerational Economic Mobility in the United States, 1940 to 2000." *Journal of Human Resources* 43(1): 139–72.
20. Aaronson and Mazumder's measure is analogous to the conventional summary measure in mobility studies, the "intergenerational elasticity," or IGE. The IGE is the coefficient on logged parental income in predicting the logged incomes of adult children. It indicates the extent to which economic inequalities between children persist into adulthood. If the IGE is 0.5, that means that a 50 percent difference in family income between two children typically leads to a 22 percent difference in earnings when the children are adults. When the IGE is 0.0, childhood gaps typically dissolve entirely by adulthood. When the IGE is less than 0.0, poorer children often end up better off than richer children. When the IGE is greater than 1.0, initial gaps between rich and poor children widen, rather than shrink, in adulthood. While much depends on the methodological details used, the IGE typically ranges between 0.2 and 0.7 in the U.S. and other countries (in the U.S., between 0.4 and 0.7).
21. By giving adults the average family income of children born around the same time and in the same state, Aaronson and Mazumder must discard income variation between children born in the same state and around the same time. That variation is a substantial amount of overall variation in childhood family income. In my analyses, typically 85 percent or more of the variation occurred within birth cohorts and birth states. Worse, the share of overall income variation that occurs within birth state and birth cohort might change over time, which would make estimated trends in the Aaronson-Mazumder measure unreflective of trends in the IGE.

My analyses indicated that, over time, the "within" variation in income grew as a share of total variation. Consider the difference between the IGE—computed as the covariance of individual childhood incomes and adult incomes, divided by the variance of childhood incomes—and the Aaronson-Mazumder measure. Their measure is computed as the covariance of individuals' cohort-birth-state income mean and individual adult incomes, divided by the between-cohort-birth-state income variance. The denominator in that measure becomes smaller relative to the denominator in the IGE as the within-cohort-birth-state variance grows, causing the Aaronson-Mazumder denominator to be biased upward as a measure of the IGE denominator and pushing their trend toward finding rising immobility over time compared with the IGE trend. The numerator in the Aaronson-Mazumder measure is also affected by their substitution of individual parental incomes with cohort-birth-state means, so the extent and direction of bias in their measure as an IGE proxy is indeterminate.

Nevertheless, in my analyses, the rank-rank estimates rose over time—indicating falling mobility—not because the covariance in the numerator rose (it fell) but because the variance in the denominator fell even more. In contrast, the variance of individual parental incomes rose over time. If one assumes that the IGE was flat over time, as suggested by past research, then a rising denominator would indicate that the covariance between individual parental incomes and adult incomes rose correspondingly. When I simply held constant the covariance in the Aaronson-Mazumder measure used in this report at its 1970 level and let the variance in the denominator grow at the same rate as the variance in individual parental incomes, the resulting IGE fell over time (from 0.59 to 0.46) instead of starting and ending at 0.59.

22. Conceptually, the IGE is a measure of mobility that is affected by changes in inequality, making it an impure measure of the former. When inequality rises more between generations, the IGE will be larger than when inequality rises less or falls, even if the ability to rise from lower ranks to higher ranks in the income distribution has not changed. Computationally, the IGE is sensitive to very low incomes and changes in the number of very low incomes reported. The often substantial underreporting of income among poor families can also artificially affect mobility levels and trends. Another problem is that the IGE tends to be sensitive (at least in survey data) to the number of years of income used to estimate parent and child income and to the age at which these incomes are measured.

23. The rank-rank slope was used by Molly Dahl and Thomas DeLeire and popularized by Chetty and his colleagues. See Dahl and DeLeire (2008). “The Association Between Children’s Earnings and Fathers’ Lifetime Earnings: Estimates Using Administrative Data.” Institute for Research on Poverty Discussion Paper No. 1342-08. Chetty et al. (2014).
24. A rank-rank slope of 0.5 indicates that a 50-percentile gap in childhood family income tends to lead to a 25-percentile gap in adult earnings (i.e., half as large). The rank-rank slope is not affected by low reported incomes or by changes in inequality. At least in administrative data, it is insensitive to the age at which parental and child income is measured (though not below age 30 for child income) and to the number of years of income averaged. Chetty et al. (2014). As with Aaronson and Mazumder’s mobility measure, comparing the rank-rank slope across groups is problematic for assessing which group has more mobility. These measures examine the extent of intergenerational income convergence *within* a group. If one finds that adults who experienced residential mobility have a lower IGE or rank-rank slope than adults who did not change residence, that simply says that among movers, there is more income convergence than there is among non-movers. It does not tell you that among all adults, low-income movers tend to do better than low-income non-movers. It could be that all non-movers do better than all movers, even though a poorer child who moves will gain more, versus a richer child who moves, than will a poorer child who doesn’t move, versus a richer child who doesn’t move. For this reason, I combine the rank-rank slope with the constant in my regression models to look at the expected adult incomes (and other outcomes), conditional on starting at the 25th percentile of birthplace income. Chetty et al. (2014) refer to this measure as “absolute mobility,” but that is appropriate only because all comparisons are made using percentiles based on a single income distribution in each generation. In that case, the percentiles always correspond to an actual income level that does not change across groups or over time. In my analyses, I compute different childhood and adult percentiles for each census, so an expected adult percentile of 40 does not correspond to the same level of income over time.
25. I begin in 1940 because it is the first year in which a family-income measure is available. I end in 1980 because the parental income estimates from this year will be used for adults in 2010, the last decennial year available. Unfortunately, this allows me to show trends for adults only from 1970 to 2010, whereas Aaronson and Mazumder present results from 1950 to 2000. However, my analyses revealed that their estimates for 1950 and 1960 are sensitive to the methodological decisions that they made (each relying, in part, on out-of-sample projections).

In 1940, the only income measure available is total wage and salary income within the household head’s family. The data from each year constitute a 1 percent (1940–70, 2010) or 5 percent (1980–2000) sample of the national population from that year. All the Census Bureau data come from the IPUMS-USA website of the Minnesota Population Center. (Steven Ruggles et al. Integrated Public Use Microdata Series: Version 5.0 [Machine-readable database]. Minneapolis: Minnesota Population Center [producer and distributor], 2010.)

I drop children in group quarters and those born outside the 50 states and Washington D.C. (I do the same for the adult sample). I restrict the sample to one child aged 0–14 in each household. Aaronson and Mazumder used five-year—rather than 15-year—birth-cohort windows; I found that computing percentiles using five-year windows produced much less precise results, given that I do not pool as much data as they do. Aaronson and Mazumder include children as old as 19 in imputing parental incomes to adults. This choice is potentially problematic because some children no longer reside at home at 19, and their “family income” will reflect their own family rather than that of their parents. In addition, the distinction between one’s birth state and one’s state as of the census year is more problematic the older the child (see n. 26 below). I also chose to restrict my adult sample to age 30–44 because prior research has shown that incomes below age 30 are poor indicators of the incomes that adults eventually attain, and mobility estimates therefore tend to be biased downward when younger adults are not excluded. Narrowing my age groups to 0–9 and 30–39 made virtually no difference to my results, though restricting to 0–4 and 30–34 made the estimates more variable over time (without changing the 1970–2010 trend). I use 0–14 and 30–44 to maximize my sample while avoiding the problem of children who do not live at home.

26. Following Aaronson and Mazumder, I average within the state in which a child resides at the time of the census after restricting to children who remain in their birth state. Children still living in their birth state are unlikely to be representative of all children born in the state. However, since I am interested in an indicator of birthplace circumstances, including for purposes of computing averages, the incomes from other states for children who have moved from their birthplace is a departure from the ideal indicator. Importantly, I compute percentiles across states before computing the average percentile within each state. Computing percentiles within each state would produce an average income percentile of 50 for every state in every birth cohort, which would then be assigned to every thirtysomething adult in every birth cohort in every state.
27. I include men who report \$0 in earnings in all these mobility analyses, including in the computation of percentiles. I do the same for \$0 reports of family income. Because of the great changes in women's labor-force participation over time and because many women still remain out of the labor force to care for children, I drop women who report no earnings, including in the computation of percentiles, in the analyses for women.
28. This is a much simpler model than the one used by Aaronson and Mazumder, who additionally fit a quadratic in age, interacted with calendar year and logged income, and include fixed-cohort effects, fixed-year effects, and a cohort-by-income interaction. Their model is more complex because they impute parental incomes from multiple cohort-year cells, whereas cohort and year are equivalent in my setup, and because they are attempting to distinguish age, period, and cohort effects. My setup is selected so that age, period, and cohort are essentially equivalent. The exception is that I have age-by-birth-year variation within 15-year cohorts; but unless this variation changes over time, the results should be unaffected. Effectively, one can view my estimates as showing trends for men aged 30 to 44, from 1970 to 2010, or across cohorts of men aged 30 to 44, born 1926–40 through 1966–80. It should be noted that few mobility-trend studies attempt to distinguish between periods and cohorts.
29. The "earnings" estimates do not include self-employment income. Both earnings and family income are reported before taking out taxes. In the decennial censuses, respondents provide earnings or income for the previous year, so figures for, say, 1940 and 1970 actually refer to earnings or income in 1939 and 1969. In the 2010 ACS, respondents provide amounts for the previous twelve months, which represents some weighted combination of 2009 and 2010 earnings and income, depending on the month in which the household was surveyed.
30. Not shown in the figure, the rank-rank slope itself—a measure of "relative mobility" that is more comparable with conventional estimates—indicates a large increase in mobility between 1970 and 1980, followed by a smaller but sizable decline over the next 30 years. This pattern of falling mobility is in contrast with most of the literature measuring economic mobility between actual parents and children. The majority of these studies find minimal changes in economic mobility over time. See Chetty et al. (2014); Robert T. Reville (1996). "Two Essays on Intergenerational Earnings and Wage Mobility." Ph.D. diss., Brown University; Mary Corcoran (2001). "Mobility, Persistence, and the Consequences of Poverty for Children: Child and Adult Outcomes." In Sheldon H. Danziger and Robert H. Haveman, eds. *Understanding Poverty* (New York and Cambridge, Mass.: Russell Sage Foundation and Harvard University Press); David I. Levine and Bhashkar Mazumder (2002). "Choosing the Right Parents: Changes in the Intergenerational Transmission of Inequality—Between 1980 and the Early 1990s." Federal Reserve Bank of Chicago Working Paper 2002-08; Angela R. Fertig (2003). "Trends in Intergenerational Earnings Mobility in the United States." *Journal of Income Distribution* 12: 108–30; Yunju Nam (2004). "Is America Becoming More Equal for Children? Changes in the Intergenerational Transmission of Low- and High-Income Status." *Social Science Research* 33: 187–205; Susan E. Mayer and Leonard M. Lopoo (2005). "Has the Intergenerational Transmission of Economic Status Changed?." *Journal of Human Resources* 40(1): 169–85; David J. Harding et al. (2005). "The Changing Effect of Family Background on the Incomes of American Adults." In Samuel Bowles, Herbert Gintis, and Melissa Osbourne Groves, eds. *Unequal Chances: Family Background and Economic Success* (New York and Princeton, N.J.: Russell Sage Foundation and Princeton University Press); Tom Hertz (2007). "Trends in the Intergenerational Elasticity of

Family Income in the United States." *Industrial Relations* 46(1): 22–50; Chul-In Lee and Gary Solon (2009). "Trends in Intergenerational Income Mobility." *Review of Economics and Statistics* 91(4): 766–72.

The literature on educational "relative mobility" and occupational "exchange mobility" also tend to find little change or mixed evidence over time. For a review, see Scott Winship (2015). "Has Rising Income Inequality Worsened Inequality of Opportunity in the United States?." *Social Philosophy and Policy* 31(2): 28–47. The Aaronson and Mazumder paper is a notable exception, but, as noted, their measure is not comparable with conventional mobility estimates. Their mobility estimates also may be imprecisely estimated in earlier years, where they must make out-of-sample extrapolations. For other exceptions finding declines in mobility, see David I. Levine and Bhashkar Mazumder (2007). "The Growing Importance of Family: Evidence from Brothers' Earnings." *Industrial Relations* 46(1): 7–21; Deirdre Bloome and Bruce Western (2011). "Cohort Change and Racial Differences in Educational and Income Mobility." *Social Forces* 90(2): 375–95. Gregory Clark (2014). *The Son Also Rises: Surnames and the History of Social Mobility* (Princeton, N.J.: Princeton University Press); Nathaniel G. Hilger (2015). "The Great Escape: Intergenerational Mobility Since 1940." NBER Working Paper No. 21217 (Cambridge, Mass.: National Bureau of Economic Research).

The Levine and Mazumder paper and Bloome and Western paper use the two earlier panels of the National Longitudinal Study, and in forthcoming work, I find that mobility looks lower again in the most recent NLS panel. For a critique of the Clark book, see Chetty et al. (2014). The Hilger study is essentially an examination of "absolute mobility," where the "mobility" measure is not based on ranks but on parental income and the educational attainment of adult children. Changes in the distribution of income and education can therefore affect the results. Because it is problematic to compare the rank-rank slopes of different groups, such as movers and non-movers, for the reasons discussed in these endnotes, I focus on the expected-income mobility measure in this section.

31. In Figure 2, adults with no earnings are excluded (unlike in Figure 1). This makes trend analyses more meaningful, as changes in female workforce participation reduce the number of non-earners over time. Still, the changing composition of the workforce is likely to substantially affect the trends for women and is probably the main factor behind the decline in mobility. Keep in mind that mobility here is measured within the adult female population, excluding men. Percentiles are computed taking into account only women with earnings. Figure 2 cannot be compared with Figure 1 to draw inferences about gender gaps.
32. This residential mobility variable is unavailable in 2010.
33. The NLSY97 is designed to be representative (after weighting) of the civilian noninstitutionalized population for the relevant birth cohorts, while the NLSY79 is representative of the entire national population in the cohorts (including those in the military and residing in institutions). I exclude from the sample those youth who were in school during the year in which adult incomes were measured, who did not live with a parent in the year in which "parental" family income is measured, or who are missing information on parental income. The sample sizes for these analyses start at about 3,700–4,000 people in the NLSY79 and 3,200–3,500 in the NLSY97 but are reduced in looking at subpopulations.

I examine the 1978 income of NLSY79 adolescents and the 1996 income of NLSY97 adolescents (when they were aged 13–16). Family income is reported by parents in both surveys and reflects pretax income. It actually includes the income of all household members in the NLSY97 (including unmarried partners of the head), while confined to the family members of the household head in the NLSY79. Adolescents' adult family income consists of actual family income in both surveys; but in the NLSY97, unmarried partners of the head are included in the "family." Earnings include wage and salary income, plus self-employment income. I cannot compare child earnings with the earnings of fathers or mothers because the latter are unavailable in the NLSY79. Further, earnings of nonresident fathers are unavailable in both surveys, and the rise in single motherhood raises the concern that missing earnings for nonresident fathers might bias the trend. See Anders Bjorklund and Laura Chadwick (2003). "Intergenerational Income Mobility in Permanent and Separated Families." *Economics Letters* 80: 239–46; Angela R.

Fertig (2007). "Is Intergenerational Earnings Mobility Affected by Divorce?." Center for Research on Child Well-Being Working Paper 2002-04. Available at http://hogwarts.spia.uga.edu/~afertig/research/Fertig_igemdivorce.pdf.

All incomes and earnings are adjusted for inflation using the Bureau of Economic Analysis implicit price deflator for personal consumption expenditures (PCE); dollar amounts are shown at 2014 levels. For the estimates that consider the likelihood of moving up from the poorest quarter of family income or down from the next-poorest quarter, I adjust the family income of parents and adult children for needs by dividing by the square root of family or household size. I top-code income and earnings at the 97th percentile in all years in all surveys. All results include parents who report \$0 in income and adult children who report \$0 in earnings, the latter of which became more prevalent over time (even after excluding students).

34. I had originally hoped to analyze the relationship between economic and residential mobility with the BLS data for subgroups defined by sex, race, and parental education. Unfortunately, the sample sizes proved insufficient to yield meaningful results.
35. This measure is computed from the constant and regression coefficient in a bivariate regression of adult family income percentile on childhood income percentile. Another way of assessing relative mobility is to focus on the rank-rank slope, which ignores the constant from the bivariate regression. This measure is unhelpful for comparing different groups, however, because it indicates how much family incomes converge between generations, where "convergence" is confined to the particular group. We are generally more interested, for instance, in whether blacks are less able to transcend their family origins than whites are, but the rank-rank slope tells us only the extent to which the children of the richest black families and the poorest black families are converging. They might, as a group, generally be stuck at lower incomes.
36. As discussed in n. 29 (above), the census estimates are actually for 1989 and 2009 rather than 1990 and 2010. Interestingly, the "rank-rank slope" in the BLS data is not consistent with the Census Bureau data. (The expected percentiles analyzed in the paper depend on the rank-rank slope and the "constant" estimated from the regression equations.) While the Census Bureau data show the rank-rank slope rising for men (from 0.46 to 0.56) and women (from 0.46 to 0.62) between 1990 and 2010, the BLS data show it falling for men (from 0.30 to 0.25) and rising only slightly among women (from 0.32 to 0.34). This reinforces that the Aaronson-Mazumder estimates may prove unreliable as an indicator of trends in how closely parent and child income ranks are connected.
37. There is limited information on geographic areas available in the public-use NLSY79 and NLSY97 data sets. In order to examine residential mobility in these surveys, I turned to restricted-use information from the surveys that included the birth states of survey participants, as well as their state, county, and census tract of residence in each survey year.
38. In these analyses, moves to states that share a border are never categorized as constituting a move between regions (unlike in the Census Bureau analyses). Otherwise, I use the Census Bureau's nine "divisions" as my "regions," not its four "regions." Thus, my regions include (moving southward and westward) New England, Middle Atlantic, South Atlantic, East North Central, East South Central, West North Central, West South Central, Mountain, and Pacific.
39. See <http://www.census.gov/hhes/www/income/data/historical/families/2014/f05.xls>.
40. See http://www.bls.gov/news.release/history/work_102093.txt; http://www.bls.gov/news.release/archives/work_12082011.htm.
41. Figures for "all men" and "all women" include the foreign-born. I focus on adults aged 30–39 to partly take life-cycle factors into account that would complicate analyses that included younger and older adults. Adults in their thirties are, by and large, done with schooling and have accumulated significant work experience; they have also generally formed families, though this is less true of more recent cohorts of thirtysomethings. Information for 1890 is unavailable; the census records for that year were destroyed by fire in 1921. For parental birthplaces, the 1950 census distinguishes only between Alaska, Hawaii, and everywhere else in the U.S., and the censuses of 1960 through 2000 (as well as the 2010 ACS) distinguish only between the countries or territories of birth.

42. All analyses in this section are restricted to native-born adults, except that figures for “all adults,” “all men,” and “all women” include the foreign-born.
43. See n. 38 above. I start in 1940 because few of my outcomes are available before then, and those that are do not show especially interesting trends.
44. In the 1950 census and the 2010 ACS, similar questions were asked about where Americans resided one year ago, but no year features both sets of questions. Neither question was asked in 1960. I originally hoped to examine mobility within and between metropolitan areas in this section, too, but from 1980 forward, the metropolitan status of many Americans cannot be determined, and the problem is specific to particular states and types of metropolitan areas. Hence, a consistent series across years is impossible, and a meaningful understanding of within- and between-metropolitan-area mobility is doubtful even in any one of these years.
45. All income figures in this report are expressed in 2014 dollars using the Bureau of Economic Analysis’s PCE deflator.
46. These estimates compare incomes in 1949, 1979, and 2009 rather than 1950, 1980, and 2010. See n. 29 (above). According to the National Income and Product Accounts, nonwage compensation was 5 percent of pay in 1939 and 12 percent in 1969. Over the next 30 years, that share rose to 18 percent; by 2009, it was 20 percent. Applying these percentages to the estimates in Figure 27 produces the results above. It should be noted that 2009 was at the depths of the Great Recession, while 1979 and 1969 were peak years in the business cycle. Comparing 1979 with 2007 would produce somewhat larger increases. Census Bureau estimates include institutionalized men and women, who generally have no earnings.
47. Jason Long and Joseph Ferrie (2013). “Intergenerational Occupational Mobility in Great Britain and the United States Since 1850.” *American Economic Review* 103(4): 1109–37.
48. Joshua L. Rosenbloom and William A. Sundstrom (2004). “The Decline and Rise of Interstate Migration in the United States: Evidence from the IPUMS, 1850–1990.” *Research in Economic History* 22: 289–325.
49. Raven Molloy, Christopher L. Smith, and Abigail Wozniak (2011). “Internal Migration in the United States.” *Journal of Economic Perspectives* 25(3): 173–96.
50. William H. Frey (2009). “The Great American Migration Slowdown: Regional and Metropolitan Dimensions.” Brookings Institution. Available at http://www.brookings.edu/~media/research/files/opinions/2011/1/12%20migration%20frey/1209_migration_frey.pdf.
51. The IPUMS data include a created race variable that assigns a single race to multiracial respondents in 2000 and 2010, predicted from individual and geographic variables. It also includes a created Hispanic indicator that imputes Hispanic origin to individuals before 1980; since 1980, a consistently reliable question about Hispanic origin has been asked in the census and ACS.
52. Few Native Americans were enumerated in the census until 1890, the first year that the census attempted to systematically count Native Americans on reservations or “roaming ... over unsettled tracts of country.” Nevertheless, the inclusion of Native Americans does not appear to affect the trend much between 1880 and 1900, as the appendix figures show.
53. I use “high school dropout” synonymously with having less than 12 years of schooling; in reality, someone might obtain a GED without having 12 years of schooling. Similarly, I use “college graduate” synonymously with having at least 16 years of schooling. Before 1990, the information in the data relates to the highest year of school completed; from 1990 forward, the highest degree earned was recorded for those who had at least completed high school. The IPUMS data recode the recent years for comparability with the pre-1990 data, assigning people the number of years of schooling typical of a given degree.
54. In the 1979 panel, “white” includes all nonblack, non-Hispanic adolescents; in the 1997 panel, “white” includes all nonblack, non-Hispanics except multiracial adolescents (who are excluded from these analyses).

55. The variable is based on questions asked of parents about the number of years of schooling they had. In both panels, I take whichever is bigger between the mother's and father's educational attainment.
56. Timothy Noah (2013). "Stay Put, Young Man." *Washington Monthly*, November/December.
57. Raven Molloy and her colleagues find that the increase in two-earner families is not an important factor. Greg Kaplan and Sam Schulhofer-Wohl conclude the same of telecommuting. Both find no support for housing-market fluctuations or demographic changes as explanations. Young and Varner dismiss taxes as an important factor. Contrary to Noah's claim, Kaplan and Schulhofer-Wohl speculate that the Internet may have contributed to declining mobility by allowing people to be more deliberative and to assess their options before deciding on a move. See Raven Molloy, Christopher L. Smith, and Abigail Wozniak (2011). "Internal Migration in the United States." *Journal of Economic Perspectives* 25(3): 173–96; Greg Kaplan and Sam Schulhofer-Wohl (2012). "Understanding the Long-Run Decline in Interstate Migration." NBER Working Paper No. 18507 (Cambridge, Mass.: National Bureau of Economic Research); Cristobal Young and Charles Varner (2011). "Millionaire Migration and State Taxation of Top Incomes: Evidence from a Natural Experiment." *National Tax Journal* 64 (2, pt. 1): 255–84.
58. Eli Lehrer and Lori Sanders (2014). "Moving to Work." *National Affairs* 18.
59. Brian Cadena and Brian Kovak (2013). "Immigrants Equilibrate Local Labor Markets: Evidence from the Great Recession." NBER Working Paper No. 19272 (Cambridge, Mass.: National Bureau of Economic Research).
60. Kaplan and Schulhofer-Wohl (2012); Raven Molloy, Christopher L. Smith, and Abigail Wozniak (2014). "Declining Migration Within the U.S.: The Role of the Labor Market." IZA Discussion Paper No. 8149; Mark D. Partridge et al. (2012). "Dwindling U.S. Internal Migration: Evidence of Spatial Equilibrium or Structural Shifts in Local Labor Markets." *Regional Science and Urban Economics* 42: 375–88.
61. Ryan Avent (2011). *The Gated City* (Kindle Single eBook); Edward Glaeser (2011). *The Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier* (New York: Penguin).
62. William A. Fischel (2001). "An Economic History of Zoning and a Cure for Its Exclusionary Effects." Working paper.
63. Morris M. Kleiner (2015). "Reforming Occupational Licensing Policies." Hamilton Project Discussion Paper 2015-01 (Washington, D.C.: Brookings Institution).
64. Douglas S. Massey and Nancy A. Denton (1993). *American Apartheid: Segregation and the Making of the Underclass* (Cambridge, Mass.: Harvard University Press).
65. Brink Lindsey, ed. (2015). *Reviving Economic Growth* (Washington, D.C.: Cato Institute).
66. Scott Winship (2015). "Up: Expanding Opportunity in America." (New York and Washington, D.C.: Manhattan Institute; Center on Budget and Policy Priorities; and Peter G. Peterson Foundation).

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