

# The State of Working America

## 12th Edition

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### Mobility

#### EPI DIGITAL EDITION

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# Mobility

## Not offsetting growing inequality

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*The State of Working America* documents growing economic inequality in the United States over the last few decades. Due to this rise in inequality, increases in living standards for most American families have lagged overall economic growth.

For many, these highly troubling developments could arguably be somewhat mitigated by increased economic mobility. If American families were regularly climbing up and down the income ladder even as the ladder's rungs grow farther apart, the historically high level of economic inequality may be of less concern.

In fact, some observers argue that inequality is not such a serious problem, as everyone has an equal chance of winding up at the top. Their assertion is the essence of the American Dream: Regardless of where you begin, if you work hard, you have opportunities to succeed.

This chapter examines mobility, a critical measure of economic well-being. Specifically, mobility measures the likelihood of moving up or down the distribution of incomes, earnings (i.e., labor income/wages), and wealth, comparing people and families relative to one another across time. If the data showed, for example, that many families are likely to move from the bottom fifth on the income or wealth scale to the top over time, or that children of wealthy families switch places with middle-class children when they become adults, we could conclude that the benefits of economic growth were more broadly shared than the inequalities highlighted in the other chapters suggest.

But the research does not find that increasing mobility is offsetting the increasingly skewed distribution of growth. Rather, most families are stuck in place while economic growth passes them by. In this respect, then, reality does not match the dream. Mobility—movement among economic classes—is much more restricted than in the opportunity-rich ideal of the American Dream.

Of course, some families do move up and down the income scale, but most maintain their relative positions, meaning that relative to other families in their age cohort, they remain at or near the income or wealth position in which they started out. According to one study discussed later, 61.0 percent of families that start in the bottom fifth are still there a decade later, while 52.2 percent of families that start in the top fifth finish there at the end of the decade. In addition, 84.3 percent of families starting out in the bottom fifth end up in the bottom two-fifths a decade later.

Intergenerational mobility—mobility across generations—is also not great in the United States. Your economic position in childhood largely determines your position in adulthood. Specifically, research highlights a significant correlation between parents' economic position and that of their adult children, implying that class barriers are such that children's economic fate is largely determined by their family's position on the income, earnings, or wealth scale. For example, one study found that two-thirds (66.7 percent) of sons of low-earning fathers end up in the bottom two-fifths, while only 18.1 percent make it to the top two-fifths. This persistence in relative position across generations suggests, for instance, that a middle-class child's chances of becoming a rich adult are low. If where you start out has a strong influence on where you end up, then the rate of economic mobility is low. More practically, if researchers can look at a child's characteristics—such as her race, parental income, neighborhood, and so on—and predict with some accuracy what her adult income, earnings, or wealth will be, then this is also evidence of low mobility.

American lore often emphasizes the idea that anyone with the gumption and smarts to prevail can travel up the income scale in his lifetime. In fact, conventional wisdom holds that mobility is higher in the United States than in the advanced economies in Europe (particularly Scandinavia) in part because their more extensive public sectors, income transfers, and social protections dampen the entrepreneurial spark that generates rags-to-riches stories. The evidence suggests otherwise. A study found that in Denmark, Norway, and Finland, parents' economic positions tend to be *less* correlated with their children's incomes as adults, meaning these nations have more intergenerational mobility than the United States.

One particularly disturbing aspect of U.S. mobility is the lower mobility of African Americans compared with whites. One study discussed later shows that nearly two-thirds (62.9 percent) of black children who start out in the bottom fourth on the income scale remain there as adults, compared with about one-third (32.3 percent) of white children. Another study finds that more than a third (34.1 percent) of African American children who start out in middle-income families are downwardly mobile, ending up in poor families (in the bottom fifth on the income scale) as adults, compared with 15.6 percent of whites.

Unequal educational opportunities explain some of the lack of mobility in the United States. Children from rich families have much greater access to higher education than children from low-income families, even when controlling for innate skills. This educational barrier places profound limits on income mobility. Only 16 percent of children who grew up in low-income families and earned a college degree ended up low-income (in the bottom fifth of the income distribution) as adults. In contrast, nearly half (45 percent) of low-income children who didn't graduate from college ended up in the bottom fifth as adults. In other words, among children who grew up in low-income families, those who failed to graduate college were almost three times more likely than their college-educated peers to still be in the bottom fifth as adults.

This unequal distribution of opportunities leads to one of the central conclusions of this chapter: Americans who do not object to unequal outcomes, only to unequal opportunities, must realize that unequal outcomes themselves may lead to unequal opportunities.

It is one thing to have a society where some people are much more economically successful than others because they work harder, make better choices, or are just plain smarter. But when success favors those who are not necessarily more meritorious but are instead born wealthier, more connected, more powerful, whiter, male, etc., then it violates the basic American value of equal opportunity. Trends in inequality suggest that economic growth flows mostly to those at the top of the scale, meaning their children may have not only greater, but *increasingly* greater, access to quality education relative to children from less well-placed families. When some neighborhoods get parks, libraries, and grocery stores while others do not, this too restricts opportunity. When quality health care is more accessible to haves than the have-nots, then the latter face a mobility barrier borne of inequality.

If income concentration leads to a level of political influence that tilts against the have-nots, this too will reduce opportunity and ultimately lower the rate of economic mobility. If, for example, opportunity-enhancing programs that aid disadvantaged children (e.g., subsidized health care and policies to create jobs for their parents) are cut in order to maintain high-end tax cuts, then the likelihood that economically disadvantaged children will experience significant mobility is diminished.

Debates over policies that impede or advance mobility are particularly crucial now, in the face of more than three decades of growing income inequality. Recent cross-country evidence suggests that higher inequality is associated with lower mobility. It seems to make sense that when the gaps are wider, people have a harder time traversing them, and, if this is true, the United States may be facing a future of diminished mobility as income inequality increases. Regardless of the accuracy of this prediction, there is no evidence to suggest that mobility has

*increased* to offset rising inequality. Income classes are further apart now than in the past, and families are no more likely to traverse that greater distance.

*Figure notes at the end of this chapter provide documentation for the data, as well as information on methodology, used in the figures that follow.*

## **Intragenerational mobility**

One way to examine mobility is to look at whether and how far individuals and families move up or down the income scale over their lives. If where you start on the income scale has a strong influence on where you end, then the degree of economic mobility is low. If, on the other hand, where you start is largely unrelated to where you end, then mobility is high.

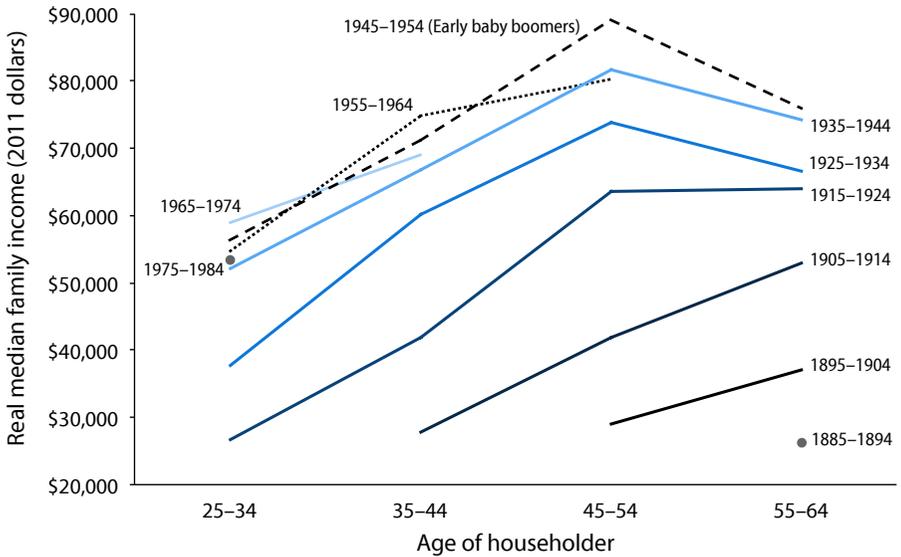
### ***Lifetime mobility against the backdrop of generational stagnation***

An important element of this line of research is that people and families generally follow a pattern of growing income throughout their lives. **Figure 3A** shows U.S. median family income over the prime working years (age 25–64) of the family’s adult head (“householder”), by his or her year of birth. This plot is best read starting from the bottom right with the earliest birth cohort, 1885–1894, and reading counterclockwise, ending nearly 100 years later, with those born from 1975 to 1984. Because data only range between 1949 and 2009, only later years of the life cycle are available for early cohorts (because they were not observed when they were young), and only earlier years are available for more recent cohorts (who generally are still in the middle of their work lives).

This plot tells a crucial story about income growth in the United States. First, it shows that over the life cycle of the householder, family incomes typically increase over the first 20 prime working years. (That does not mean that families are mobile over that time or that their mobility has increased—this determination requires analyzing longitudinal data, which will be discussed shortly.)

Second, it shows that each cohort from the first birth cohort up through the early baby boomers (those born from 1945 to 1954) saw substantial income gains compared with the cohort that preceded them—though the gains from cohort to cohort generally slowed over that time. Perhaps most importantly, it shows that after the early baby boomers (at the top of the figure), the progress stops—judged by where their median family income falls at the end of the available data, birth cohorts following the early baby boomers have seen no additional improvements. In other words, the families headed by early baby boomers were the last to achieve higher living standards than the cohort that preceded them.

**Figure 3A** Median family income over the householder’s working life, by birth cohort



Note: Data range from 1949 to 2009.

Source: Authors’ analysis of Current Population Survey Annual Social and Economic Supplement *Historical Income Tables* (Table F-11)

This loss of continually improving living standards for successive generations strikes at the heart of the American Dream. This figure suggests that today’s middle-income families may not be doing as well as those of previous generations, and children may not achieve the economic success of their parents.

As troubling as the story underlying this figure is—a story told more fully in chapters 2 and 4 of this book—the message in this chapter is perhaps even more grim.

Mobility research, which goes beyond examining how families in a given age cohort compare with families in other cohorts, measures how well families do relative to one another over time. It finds that opportunities for families to move up are not as plentiful as the American Dream would suggest.

**Family and individual mobility trends**

The central question addressed in this section is: How far do families move up or down the income scale over their life spans? In other words, of those families that start at the bottom, middle, or top of the income distribution, what share are still there years later? Recall the analysis of Figure 3A: Identifying growth in a cohort’s

income from one decade to another can show whether families in the cohort are better or worse off in terms of absolute income, but is not sufficient to conclude that families in the cohort are upwardly mobile. Mobility requires changes in family income *relative* to incomes of other families in the cohort.

To make these relative comparisons, researchers assign each family (or person, in the case of individual mobility) to an income fifth at the beginning of the observation period, based on the income distribution at that time. At some later point (after some number of years, depending on data and the research question), new fifths are calculated so researchers can assess where families ended up. This approach allows a better comparison of families relative to their cohort as opposed to simply determining whether they are better or worse off in terms of their absolute incomes.

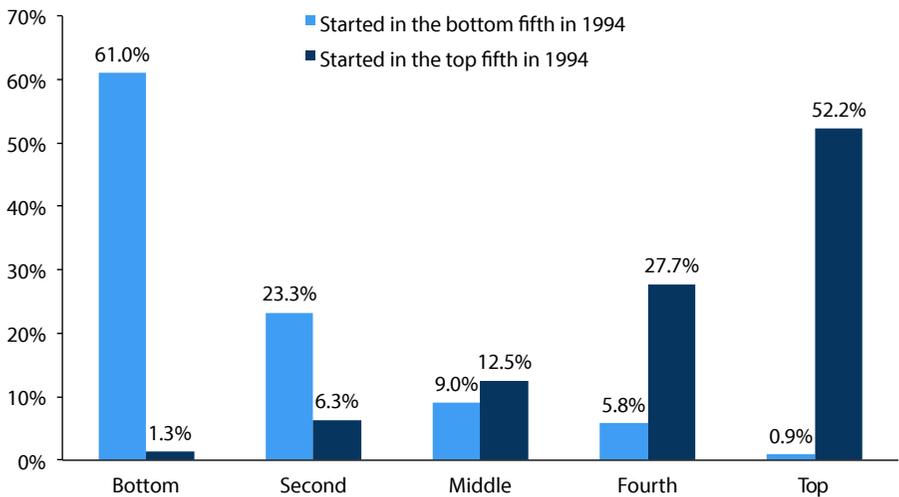
This type of analysis requires longitudinal data, survey data that follow individuals and families over time. One of the most frequently used data sources for mobility research is the Panel Study of Income Dynamics (PSID). Begun in 1968 with a sample of approximately 5,000 families, the PSID follows families and their descendants over time, tracking changes in incomes, behaviors, and living situations. The PSID was administered annually between 1968 and 1997, and every two years thereafter.

Acs and Zimmerman (2008a) use the PSID to track family income across income fifths over 10 years from 1994 to 2004. Using two-year averages to control for transitory income fluctuations, the lightly shaded bars in **Figure 3B** illustrate the share of families starting in the bottom fifth of the income distribution in 1994 that remained there or moved to higher income fifths by 2004. In a society with perfect mobility, all of the bars would equal 20 percent. As shown, 61.0 percent of those in the bottom fifth in 1994 remained in the bottom fifth in 2004, while about 16 percent reached at least the middle fifth of the income distribution (placing them in the top 60 percent of the income distribution). Using income levels from families in 2010 to translate these findings into more recent terms, these results suggest that only about 16 percent of families with incomes below \$27,527 would reach at least \$49,514 in income a decade later. Less than 1 percent of families with incomes below \$27,527 would have incomes of \$117,333 or more (placing them in the top fifth) a decade later. (See Table 2.3.)

The darkly shaded bars illustrate where those starting in the highest income fifth in 1994 were in 2004. More than half (52.2 percent) of those starting in the highest fifth were still there 10 years later, and more than a quarter (27.7 percent) had fallen to the next-highest fifth. Altogether, 92.4 percent were in or above the middle fifth.

While a family's position in the income distribution largely appears to persist from one decade to another, actual individual income may change from one year to the next. Dahl and Schwabish (2008) look specifically at wage income

**Figure 3B** Share of families in the bottom and top income fifths in 1994 ending up in various income fifths in 2004

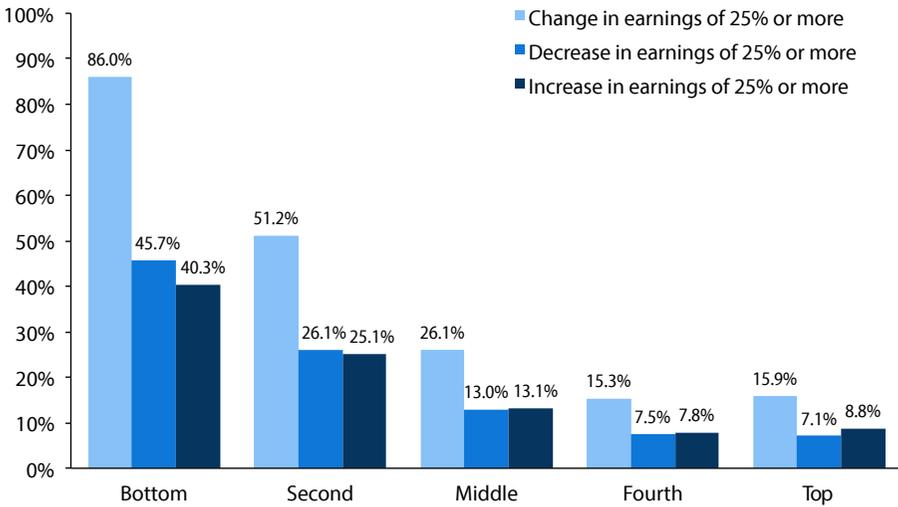


Source: Authors' analysis of Acs and Zimmerman (2008a, Table 2)

(earnings) and find that the extent of swings, or volatility, in workers' earnings from one year to the next depends on where one falls on the earnings scale. **Figure 3C** illustrates the share of workers at different earnings levels who experienced swings in annual real earnings of 25 percent or more from 2002 to 2003, and shows what portion of these shifts were increases or decreases. Workers in the bottom fifth of the earnings distribution were more than five times more likely to experience swings in earnings of 25 percent or more than those in the top fifth. Further, as a share of total fluctuations in earnings, those at the bottom were more likely to experience large drops than gains, while those at the top were more likely to experience large gains than drops. This higher earnings insecurity at the bottom may have contributed to the persistence in income position shown in the previous figure, as families may have experienced shocks to their financial well-being that kept them from moving ahead, or investing in their future.

Unlike data from the PSID, tax return data allow us to measure income and earnings mobility not just among fifths, but also within the top fifth. The U.S. Department of the Treasury (2007) examined income mobility in the United States from 1996 to 2005 using data from the tax returns of approximately 169,300 primary and secondary taxpayers (persons listed first and second on tax returns). The Treasury report breaks down the top 20 percent of taxpayers into the top 10, 5, and 1 percent of earners. Also unlike the earlier-cited PSID study, the Treasury study uses single-year estimates of income as opposed to two-year

**Figure 3C** Share of workers with large shifts in real annual earnings from 2002 to 2003, by earnings fifth



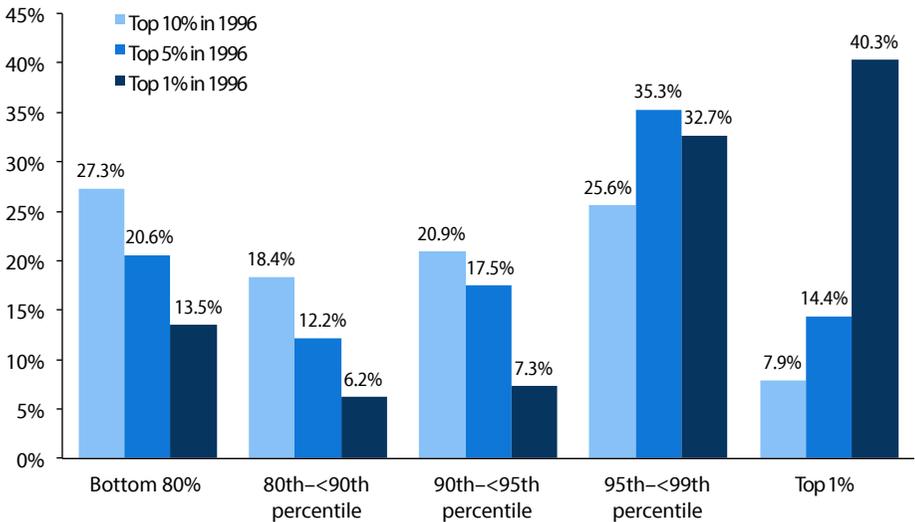
Source: Authors' analysis of Dahl and Schwabish (2008, Table 1)

averages, thereby increasing the likelihood of capturing transitory fluctuations, meaning that one specific year of data may not be particularly representative of how the tax filer was doing generally at that time (and therefore may overstate mobility at the top).

Using these data, **Figure 3D** illustrates the share of taxpayers in the top 1 percent, top 5 percent, and top 10 percent of the income distribution in 1996 who wound up in various income groups in 2005. This figure demonstrates considerable persistence in relative income at the high end of the income scale. Turning first to the darkly shaded bars, more than 40 percent of those who were in the top 1 percent of income in 1996 were still in the top 1 percent in 2005, and nearly 33 percent had fallen only to the next-highest level, where incomes were between the 95th and 99th percentiles. Taken together, nearly three-fourths (73.0 percent) of those who began in the top 1 percent were in the top 5 percent a decade later, and only about 14 percent fell into the bottom 80 percent. Nearly half (49.7 percent) of those who started in the top 5 percent of income were in the top 5 percent in 2005, which includes almost 15 percent in the top 1 percent. Nearly 73 percent of those in the top 10 percent of income in 1996 were in the top 20 percent in 2005.

In conclusion, Figures 3B and 3D illustrate the fact that many of those at the top and bottom of the income distribution tend to remain there over the span of a decade.

**Figure 3D** Share of taxpayers at the top of the income distribution in 1996 ending up in various income groups in 2005



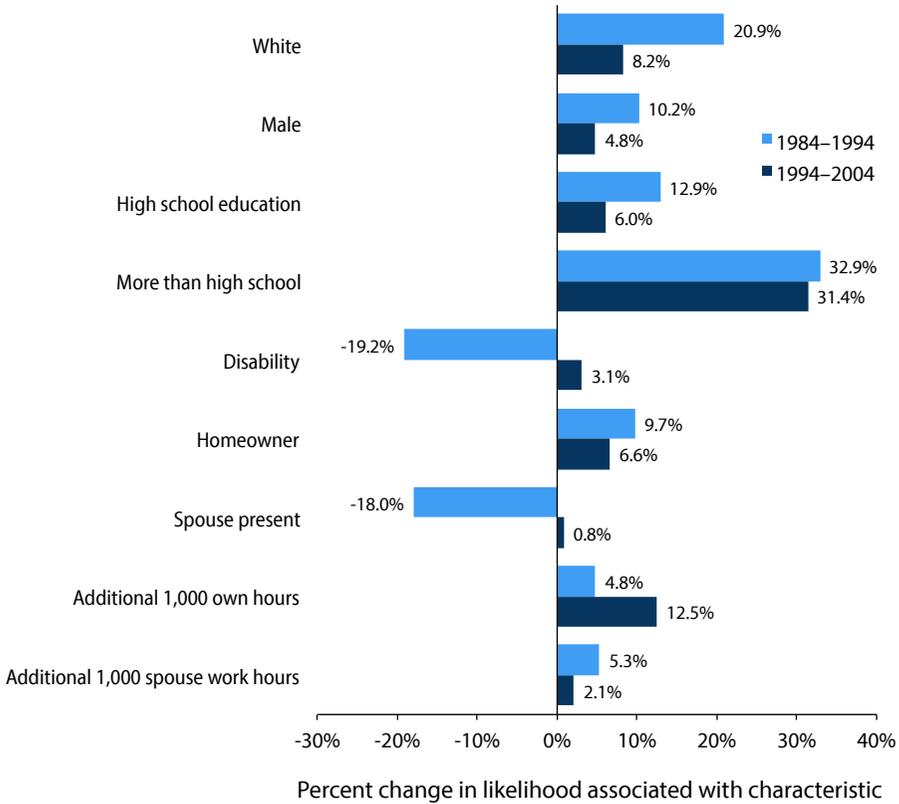
Source: Authors' analysis of U.S. Department of the Treasury (2007, Table 2)

### ***Factors associated with intragenerational mobility***

While many individuals and families maintain their place in the income distribution over 10 years, by no means does the United States have a totally stagnant, immobile society, where everyone is stuck in place decade after decade. But neither are Americans moving that far from where they start. Most who start at the bottom are there a decade later. The vast majority of those who start in the middle are still in or near the middle a decade later. Recent research has attempted to explore factors associated with these movements (or lack thereof), particularly movements to and from the bottom 20 percent of the income distribution.

In a regression framework, Acs and Zimmerman (2008b) use the PSID to examine which characteristics of individuals were related to either exiting or entering the bottom fifth of family income over two 10-year periods, 1984–1994 and 1994–2004 (**Figures 3E** and **3F**). As Figure 3E shows, being white and male are positively associated with upward mobility, while being disabled appears to impede upward mobility (the positive coefficient on disability in the latter period is not statistically significant).

The role of education is also pronounced: A household whose head has a high school education or more is far more likely than one whose head did not finish high school to leave the bottom fifth 10 years later. Although Acs and Zimmerman's analysis suggests that the interaction between marital status and work hours

**Figure 3E Characteristics associated with leaving the bottom income fifth**

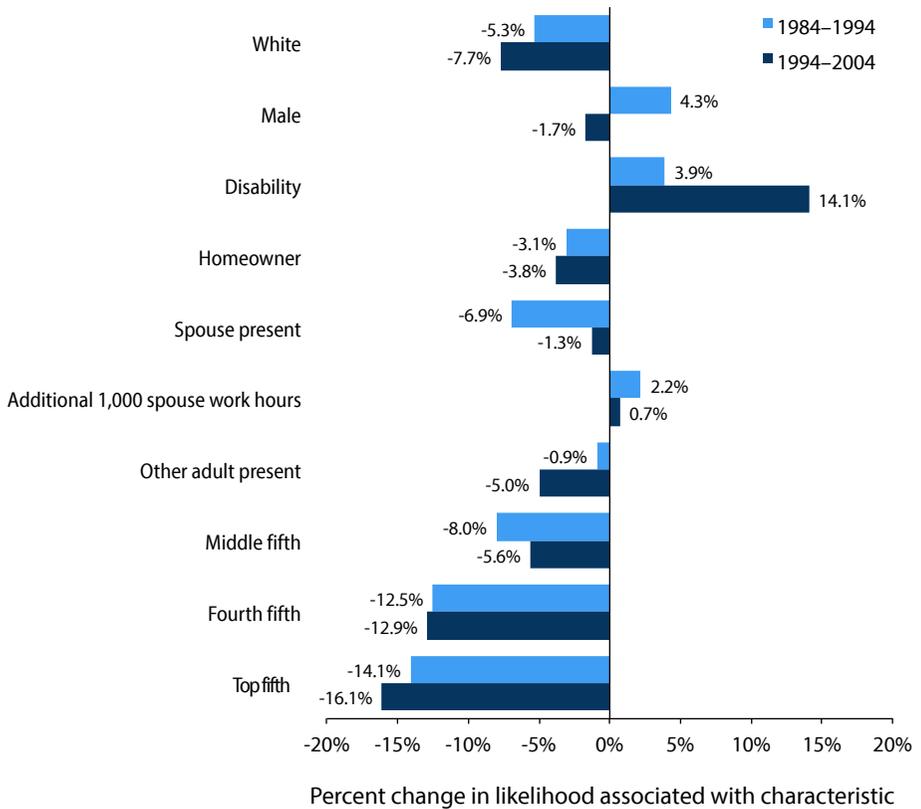
Note: Bars show how much the chance of leaving the bottom income fifth changes if the head of household has the identified characteristic relative to not having it (e.g., being white relative to being nonwhite or having a high school education relative to not having completed high school).

Source: Adapted from Acs and Zimmerman (2008b, Figure 5)

is complex and changing over time, it is clear that both the household head's and spouse's work hours are positively associated with leaving the bottom fifth.

Figure 3F illustrates factors associated with moving down into the bottom fifth of the income distribution. As already discussed, individuals and families tend not to move far over 10-year periods, so it is not surprising that households in the middle, fourth, and top fifths of income are increasingly less likely than those in the second lowest to enter the bottom fifth. Not being white or being disabled increases the likelihood of falling into the bottom fifth of income, while owning a home or having a spouse or other adult in the household decreases the likelihood of falling into the bottom fifth.

**Figure 3F** Characteristics associated with entering the bottom income fifth



Note: Bars show how much the chance of entering the bottom income fifth changes if the head of household has the identified characteristic relative to not having it (e.g., being white relative to being nonwhite). The change in likelihood associated with being in the middle, fourth, or top income fifth is relative to being in the second-lowest fifth.

Source: Adapted from Acs and Zimmerman (2008b, Figure 6)

It is clear that race, health, education, assets (in particular, owning a home), and other sources of family income are significant drivers of mobility in the United States. Some of these factors will be explored in greater depth later in this chapter.

## Intergenerational mobility

While the prior section tracked family and individual mobility within generations as they age, this section examines mobility between generations. Intergenerational mobility is the relationship between the income of parents and that of their adult children. If one's position on the earnings, income, or wealth scale is largely a function of birth, then we are left with a more rigid society where even those with prodigious talents will be held back by entrenched class barriers. Conversely, if there is little correlation between parents' position and that of their children, we have a society with more fluidity among classes where one's economic fate can be directed through intelligence and hard work.

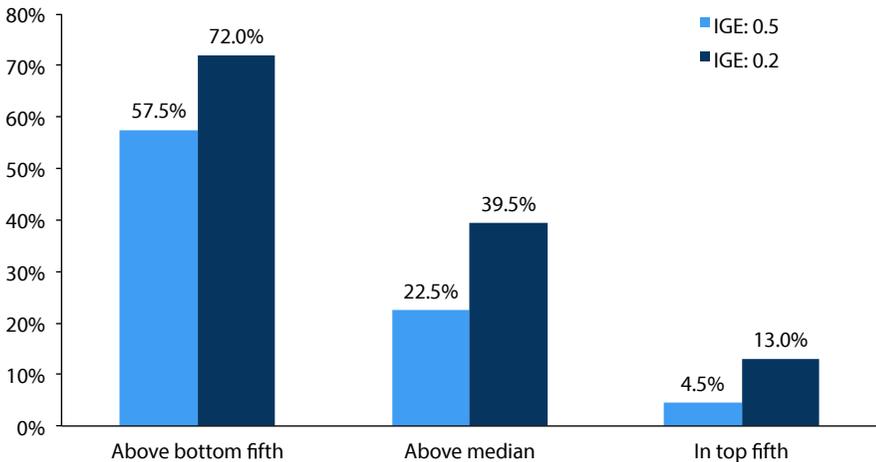
Economists measure the extent of intergenerational mobility by calculating the correlation between income or earnings of parents and that of their children once they grow up and earn their own income—this is known as intergenerational elasticity, or IGE. An IGE of zero would mean there is no relationship, and thus complete intergenerational mobility, with poor children just as likely as rich children to end up as rich adults. The higher the IGE, the greater the influence of one's birth circumstances on later life position.

Lee and Solon (2006) find an intergenerational elasticity of 0.49 between parents and sons and 0.46 between parents and daughters. An IGE of about one-half belies the notion of a totally fluid society with no class barriers. Yet, without various benchmarks against which to judge these correlations, it is difficult to know what to make of them. Using Solon's 1992 exercise relating IGEs to the likelihood of moving to different parts of the earnings distribution, **Figure 3G** attempts to put these intergenerational elasticities in perspective, and can assist in interpreting different IGE estimates across countries.

Taking different IGE estimates, the bars demonstrate the likelihood that sons of low-earning fathers (with earnings at or below the 10th percentile) would wind up at different points in the earnings distribution as adults. The lightly shaded bars show that while earnings mobility certainly exists at an IGE of 0.5—close to that of the United States—these children have a less than 60 percent chance of earning above the bottom fifth by adulthood. They have a 22.5 percent chance of surpassing the median and a very slight chance (4.5 percent) of ending up in the top fifth. Using wage levels from 2011, a son whose father earns about \$8.52 an hour has about a 5 percent chance of earning more than \$30.93 per hour as an adult. That son has only a 22.5 percent chance of exceeding wages of \$17.72 an hour. (See Table 4.5.)

One way to judge the extent of mobility under these metrics is to determine how the probabilities in Figure 3G would change if the elasticity were 0.2 instead of 0.5. At the lower IGE (signifying a greater level of intergenerational mobility), the son has a 72.0 percent chance of moving out of the bottom fifth, a 39.5 percent chance of exceeding the median, and a 13.0 percent chance of reaching

**Figure 3G** Likelihood that sons of low-earning fathers end up above various earnings thresholds as adults, depending on estimated ease of mobility



Note: The higher the estimated intergenerational elasticity (IGE), the lower the extent of mobility. Low-earning fathers are defined as those in the bottom 10th percentile.

Source: Authors' analysis of Solon (1989, Table 5)

the top fifth. In other words, his chances of becoming a middle or high earner are roughly double under the lower IGE scenario.

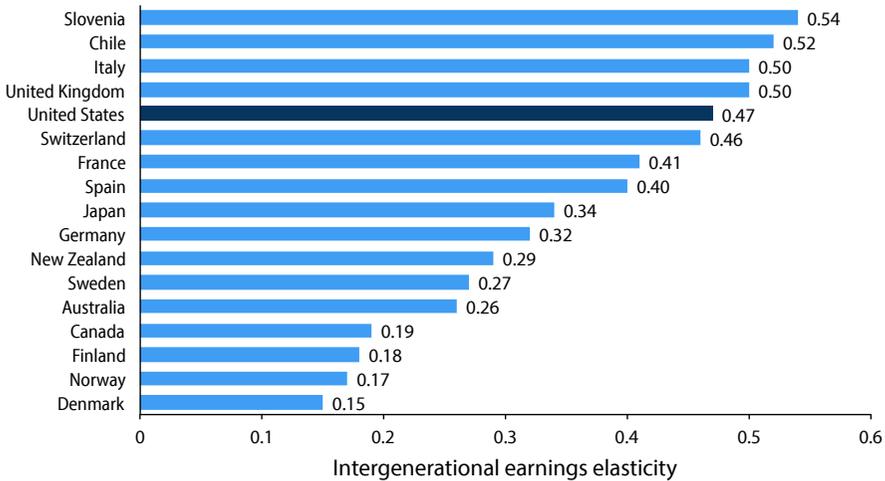
### ***Cross-country comparisons***

One of the most interesting areas of mobility research compares the extent of economic mobility across countries. Such comparisons shed light on the reality of the American Dream. The notion that low class barriers in America enable anyone who is willing and able to “pull themselves up by their bootstraps” and achieve significant upward mobility is deeply embedded in U.S. society. Conventional wisdom holds that class barriers in the United States are the lowest among the advanced economies, and that more Americans move up than Europeans.

Motivating this set of beliefs is the notion that there is a tradeoff between market regulation and mobility. The European economic model is characterized by higher taxes, greater regulation, more union coverage, universal health care, and a more comprehensive social contract. Because some see these policies and institutions as impediments to mobility, mobility is believed to be greater in the United States.

The belief that ambition and hard work are important in getting ahead is fairly pervasive in the United States, more so than among countries overall, according

**Figure 3H** Intergenerational correlations between the earnings of fathers and sons in OECD countries



Note: The higher the intergenerational elasticity, the lower the extent of mobility.

Source: Adapted from Corak (2011, Figure 1)

to data from the International Social Survey Programme (ISSP), an annual research project covering various topics in social science research. In 2009, the ISSP surveyed people in 38 (mostly developed) countries on a series of questions about social inequality.

A full 91.4 percent of U.S. respondents said that ambition is “very important” or “essential” to getting ahead, compared with 71.7 percent of respondents from all the countries. An even higher share, 95.5 percent, of U.S. respondents said that hard work is very important or essential in getting ahead, compared with 76.2 percent of respondents from all the countries. Furthermore, a higher percentage of U.S. respondents (88.3 percent) said that working hard is a very important determinant of pay, compared with 77.7 percent of all respondents (International Social Survey Programme 2009).

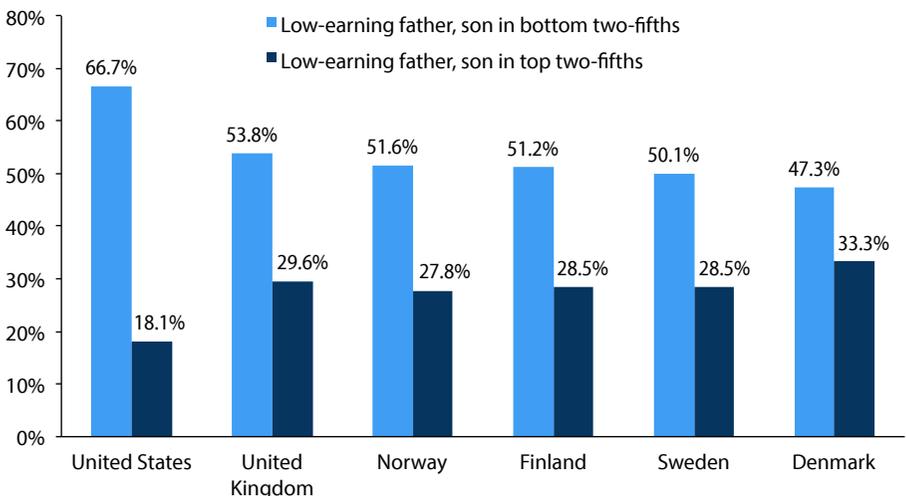
While faith in the American Dream is deep, evidence suggests that the United States lacks policies to ensure the opportunities that the dream envisions. According to the data, there is considerably more mobility in most other developed economies. **Figure 3H** uses intergenerational elasticities to illustrate correlations between earnings of fathers and sons in member countries of the Organisation for Economic Co-operation and Development (OECD) for which data are available. Except for the United Kingdom and Italy, the IGE of father-son earnings is higher in the United States than in the other OECD countries with similar incomes,

meaning U.S. mobility is among the lowest of major industrialized economies. For example, the relatively low correlations between father-son earnings in Scandinavian countries provide a stark contradiction to the conventional wisdom. As Figure 3G showed, an IGE of 0.5, which is close to that of the United States (0.47), offers much less likelihood of moving up than an IGE of 0.2 or less, as characterizes Canada, Finland, Norway, and Denmark.

Further evidence of the lack of intergenerational mobility in the United States relative to peer countries is shown in **Figure 3I**. The figure presents the likelihood that sons of low-earning fathers (fathers in the bottom 20 percent of the wage distribution) end up in the bottom 40 percent or make it to the top 40 percent. Two-thirds (66.7 percent) of the sons of low-earning fathers in the United States end up in the bottom 40 percent, compared with about half in the other countries. Conversely, in the United States, only 18.1 percent of these sons of low-earning fathers make it to the top 40 percent, compared with 27.8 percent to 33.3 percent in the other countries.

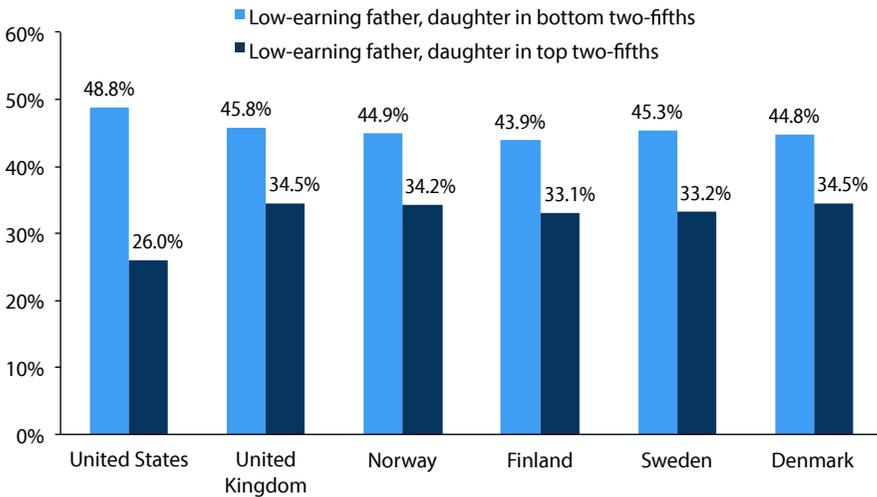
The chance that a daughter who has a low-earning father remains in the bottom 40 percent is lower than that of sons, implying more mobility for girls than boys (**Figure 3J**). There is also more similarity across countries. Though research is only beginning to examine these gender differences, it is possible that mating patterns play a role: Higher-earning women, including those from humbler

**Figure 3I** Share of sons of fathers in the bottom earnings fifth ending up in the bottom or top two-fifths as adults, by country



Source: Authors' analysis of Jäntti et al. (2006, Table 12)

**Figure 3J** Share of daughters of fathers in the bottom earnings fifth ending up in the bottom or top two-fifths as adults, by country



Source: Authors' analysis of Jäntti et al. (2006, Table 13)

backgrounds, tend to marry higher-earning men, and this weakens the association between their families' income while young and their incomes as adults. However, daughters of low-earning fathers in the United States are less likely to make it to the top 40 percent than daughters in the other countries pictured.

## The impact of race, wealth, and education on mobility

According to polling data, more than 80 percent of Americans say they believe that hard work, ambition, staying healthy, and having a good education are essential or very important factors in upward economic mobility (Corak 2010). Only 28 percent reported that coming from a wealthy family is very important, and even fewer (15 percent) thought race was very important to economic mobility.

This section examines those beliefs by looking at the impact of race, wealth, and education. It dispels the myth that race is unimportant, and notes that since education is correlated with income, education is less of an equalizing influence than might seem the case: If children of highly educated parents have a better chance of achieving high levels of education themselves, this will lead to greater persistence of income positions (i.e., less mobility) across generations. Similarly, wealth is correlated across generations, as wealthy parents make bequests to their children. All these factors play a role in the income persistence, i.e., lack of mobility, documented thus far in this chapter.

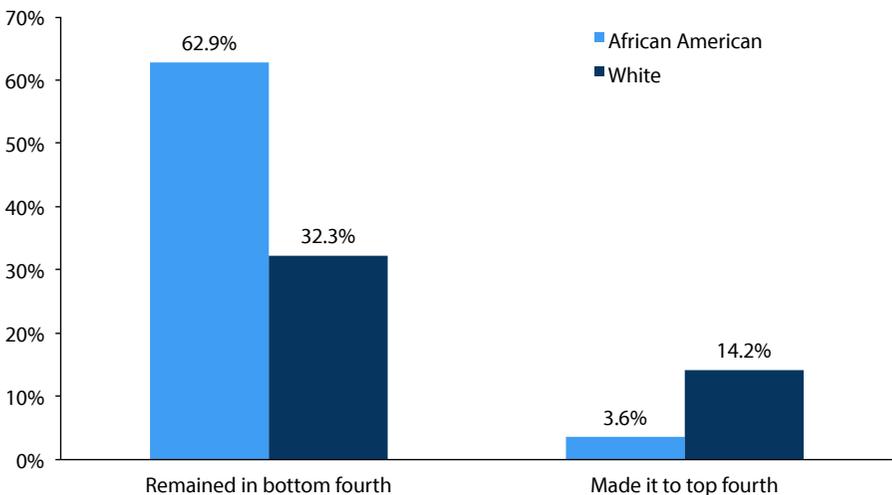
## Race

**Figure 3K** illustrates the extent of upward and downward mobility of children, by race. The figure focuses on children who started out in families in the bottom fourth of all families by income, and shows what share remained in the bottom fourth, and what share made it all the way to the top fourth as adults. Close to two-thirds (62.9 percent) of African American children who started out in the bottom fourth remained there as adults. The share of white children remaining in the lowest fourth was about half as large, at 32.3 percent.

Conversely, only 3.6 percent of African American children made it to the top fourth of the income scale as adults, compared with 14.2 percent of white children. Such results suggest that mobility barriers, while large for both groups, are steeper for blacks.

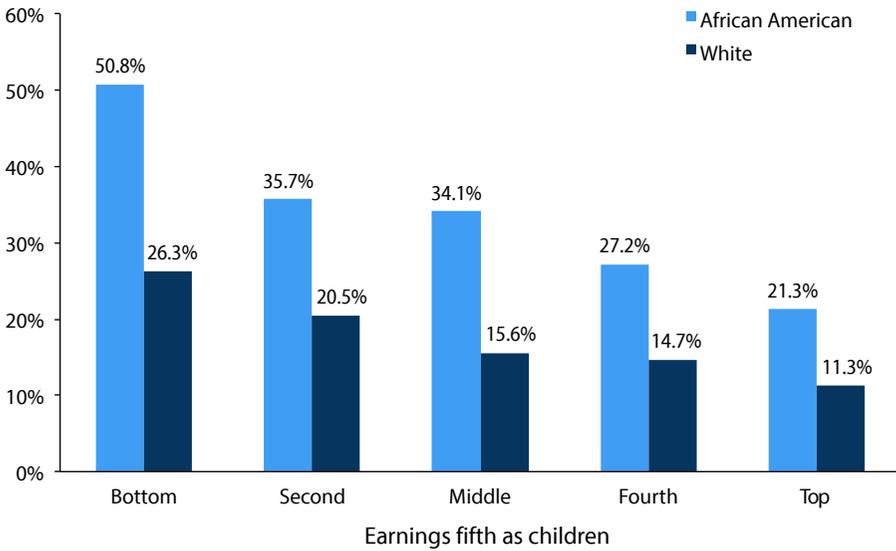
**Figure 3L** shows more significant backsliding by African American children compared with whites. The figure examines the share of children born in each earnings fifth who ended up in the bottom fifth of earnings as adults. About a quarter (26.3 percent) of white children and half (50.8 percent) of African American children ended up where they started, in the bottom earnings fifth. But even when they started out in middle-income families, more than one-third (34.1 percent) of African American children slid into the bottom fifth, compared with 15.6 percent of white children.

**Figure 3K** Share of children in the bottom income fourth ending up in either the bottom or top income fourth as adults, by race



Source: Authors' analysis of Hertz (2006, Table 1)

**Figure 3L** Share of children from various earnings fifths ending up in the bottom fifth as adults, by race



Source: Authors' analysis of Mazumder (2011, Table 7)

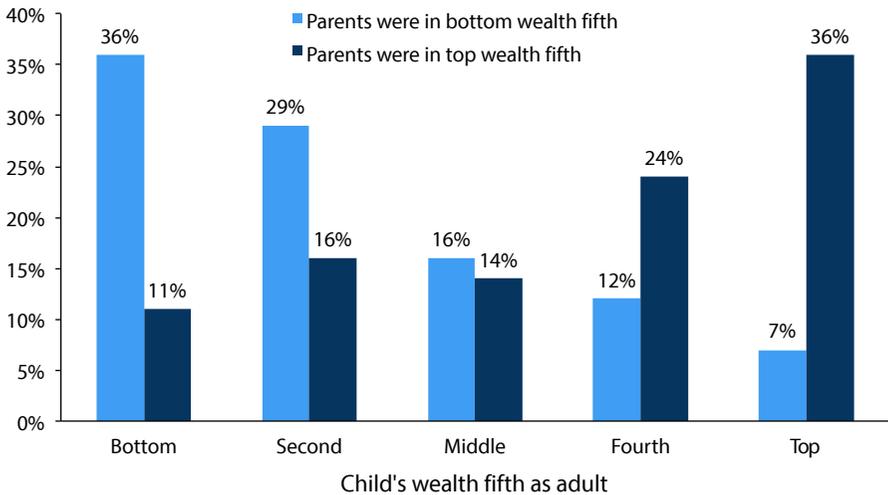
The finding that significant shares of children, especially African American children, are downwardly mobile warrants more careful study. One hypothesis is that middle-class African American children lack the social and societal supports—from informal networks to anti-discrimination rules—to keep them from losing ground. A related hypothesis, explored briefly below, is that higher returns to education in today's economy compared with a generation ago especially disadvantage children without access to higher education. Such access is often blocked for low-income children, even those with high cognitive skills. Since a greater share of minority children are in low-income families (see Chapter 7), they are more likely to lack access to higher education. But, as Figure 3L shows, even African American children from higher-earning families are nearly twice as likely to backslide to the lowest fifth as are white children from higher-earning families.

## Wealth

Figure 3M shows the extent of wealth mobility of children given their parents' position. This figure shows the share of children who by their mid-30s reached a particular wealth fifth, given their parents' position on the wealth scale.

In a society with perfect mobility, all bars in the graph would equal 20 percent. However, more than a third (36 percent) of those with parents in the bottom

**Figure 3M** Share of children in the bottom and top wealth fifths ending up in various wealth fifths as adults



Source: Authors' analysis of Charles and Hurst (2002, Table 2)

wealth fifth ended up there as adults, while only 7 percent ended up in the top wealth fifth by their mid-30s. Adding the first two lightly shaded bars, 65 percent of children with parents in the bottom wealth fifth ended up in the bottom two-fifths (40 percent) of the wealth distribution. More than a third (36 percent) of the children of parents in the top wealth fifth also ended up in the top fifth, and 60 percent stayed in the top two-fifths.

To the extent that less wealth translates into a diminished ability to make educational investments that boost earning power, those at the bottom are even less likely to have the resources to move up themselves or create an environment enabling their children to move up. (For more detail on the distribution of wealth, see Chapter 6.)

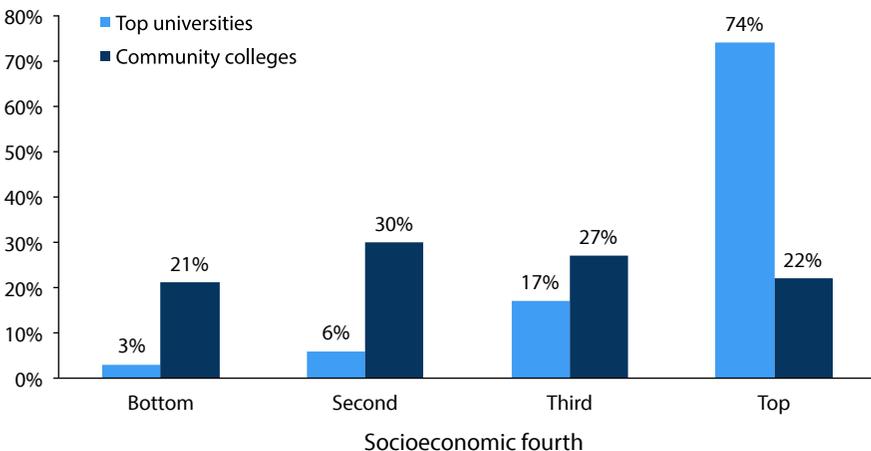
## Education

Education is a critical component of economic mobility. If children's educational attainment is closely correlated with that of their parents, a damaging class barrier inhibits merit-based mobility. As the findings presented in this section show, children from families with low incomes are much less likely to complete college, even after controlling for cognitive ability (as measured by test scores). This provides strong evidence of considerable barriers to opportunity.

One relevant issue is the quality of education accessible to children from families with different backgrounds. **Figure 3N** compares the family socioeconomic status—measured using a combination of family income and parents’ educational attainment and occupation—of students in the entering classes at top-tier universities with the family socioeconomic status of students entering community colleges. In this study (Carnevale and Rose 2003), top-tier universities were defined as the nation’s 146 most competitive four-year colleges, whose enrollments represent less than 10 percent of the nation’s college freshman class (including four-year and two-year colleges). Nearly three-fourths (74 percent) of those entering top-tier universities came from families with the highest socioeconomic status, while 3 percent and 6 percent, respectively, came from the bottom and second-lowest socioeconomic groups—that is, the bottom half of families. In contrast, the family socioeconomic status of students entering community colleges was much more uniform.

Still, one might argue that those findings represent meritocracy at work—that students from socioeconomically advantaged families have, perhaps through their privileged positions, acquired the intellectual faculties required to gain admittance to and succeed at top schools. **Figure 3O** refutes this argument. The figure shows that even after controlling for academic ability, students of higher socioeconomic status are still more likely to complete college. Each set of bars

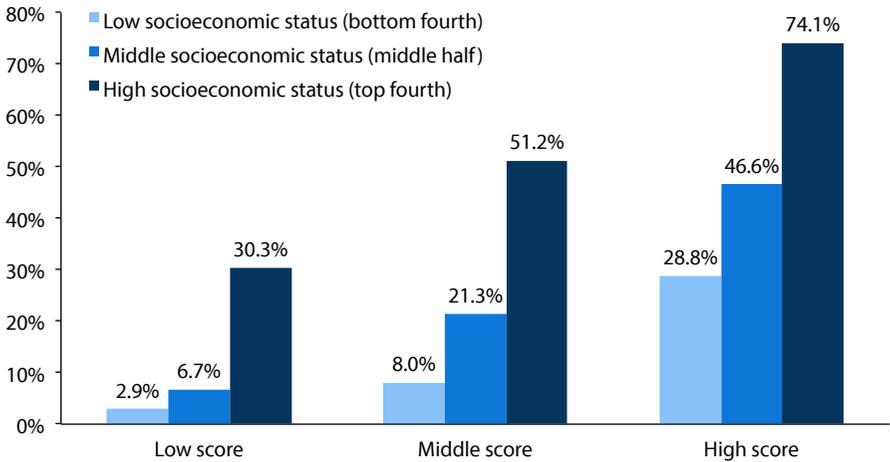
**Figure 3N** Share of entering classes at top universities and community colleges coming from families in various socioeconomic fourths



Note: Socioeconomic status is measured by a composite score that includes family income, parental education, and parental occupation.

Source: Authors’ analysis of Carnevale and Rose (2003, Table 1.1)

**Figure 30** Share of students completing college, by socioeconomic status and eighth-grade test scores



Note: Socioeconomic status is measured by a composite score that includes family income, parental education, and parental occupation.

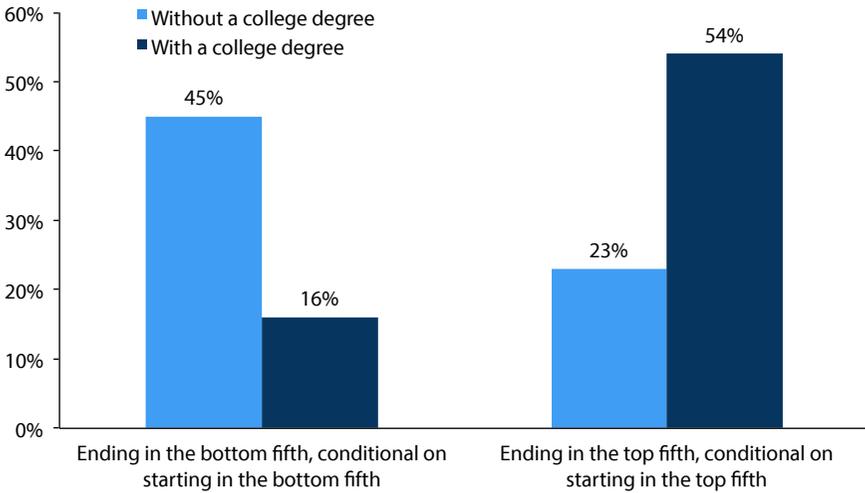
Source: Authors' analysis of Fox, Connolly, and Snyder (2005, Table 21)

shows the share of students who completed college, based on family socioeconomic status and math test scores in eighth grade. For example, 2.9 percent of students with low scores and from families of low socioeconomic status completed college, compared with 30.3 percent of low-scoring students from high-socioeconomic-status families.

The fact that college completion was higher for each successive socioeconomic group among similarly scoring students is evidence that we do not have a completely meritocratic system. If opportunity were only a function of test scores, the bars within each score category would be equal. Instead, at every test-score level, higher socioeconomic status led to higher completion rates. Notably, 28.8 percent of high-scoring students from low-socioeconomic-status families completed college, just under the rate for low-scoring, high-socioeconomic-status students (30.3 percent). In other words, high-scoring students from families with low socioeconomic status are no more likely to complete college than low-scoring students from families with high socioeconomic status.

The barriers to higher education highlighted in these last two figures are costly in terms of reduced mobility, as shown in **Figure 3P**. By adding college completion to the intergenerational analysis, the figure reveals that educational achievement is an important mobility booster. The first set of bars shows that among children in the lowest-income families (in the bottom fifth of income),

**Figure 3P** Share of adults remaining in the same income fifth they were in as children, by college attainment



Source: Authors' analysis of Isaacs, Sawhill, and Haskins (2008, Figure 6)

college completion was strongly associated with leaving the bottom fifth in adulthood: Only 16 percent of those with a college degree remained low-income as adults, compared with 45 percent of those without a college degree. Similarly, 54 percent of high-income children who completed college were high-income (in the top fifth) as adults. While Figure 3O shows that high-socioeconomic-status children (defined as those in the top 25 percent) are much more likely to *complete* college, Figure 3P shows that 23 percent, or almost a fourth, of high-income children (defined here as those in the top 20 percent) who did *not* get a college degree still maintained their high-income status. Clearly, education *and* income/socioeconomic status matter for getting ahead and staying ahead.

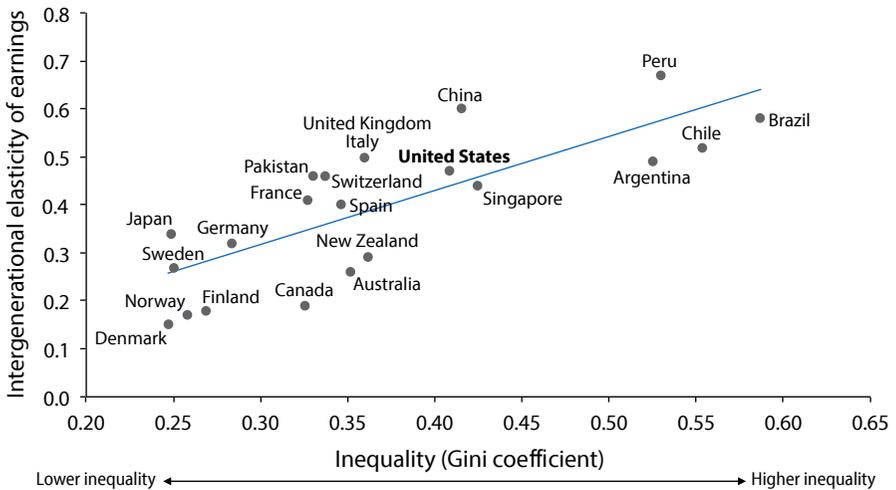
An interesting corollary to the role of education in mobility is the financial return to education, that is, the wage advantage of more highly educated workers over those with less education. In the last few decades, the returns to education have increased. As Chapter 4 shows, increasing returns to education do not come close to explaining the dramatic increase in inequality over the last 30 years. Nevertheless, the increasing returns to education reinforce the immobility related to intergenerational educational attainment. That is, a child of a parent who went to college has a greater chance of attending college and thus a greater chance of benefiting from the higher relative wages earned by college-educated workers today compared with decades earlier.

These results do not imply that *everyone* should get a college degree. In fact, for the foreseeable future, the U.S. labor market will have a large number of jobs that do not require a college degree (see “Jobs of the future” in Chapter 4). While most college graduates come from the top of the income distribution, many people who are suited to go to college are not in the top of the income distribution. The policy objective is to make college accessible across the income distribution regardless of whether that is the appropriate goal for everyone.

### Income inequality and mobility

The previous section explored how education, though providing no guarantee of rising from the lowest income levels, is key to getting ahead. This section examines whether income inequality itself could be driving lower mobility in the United States compared with other advanced economies. **Figure 3Q** examines the relationship between income inequality and intergenerational elasticities (IGEs) of earnings in a set of countries for which relatively comparable data can be found. In this figure, income inequality is measured by the Gini coefficient, a measure of dispersion wherein zero expresses perfect equality (everyone has exactly the same income) and one expresses maximal inequality (only one person has all the income). As explained earlier, an IGE number of zero would signify complete

**Figure 3Q** Intergenerational mobility and income inequality in 22 countries



Note: The higher the Gini coefficient, the higher the inequality. The higher the intergenerational elasticity, the lower the extent of mobility. Equation for the trend line is  $y = 1.1253x - 0.0202$  and the  $R^2 = 0.5934$ .

Source: Adapted from Corak (2012, Figure 2)

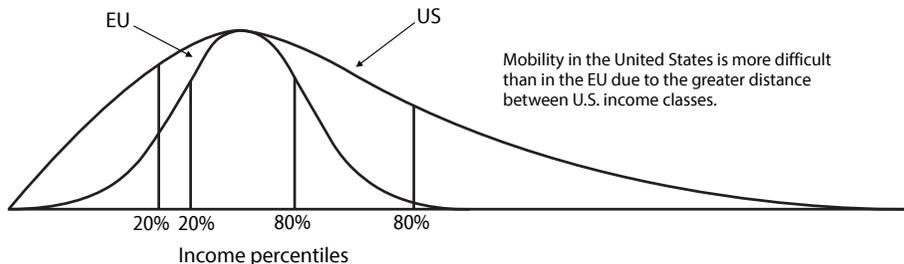
intergenerational mobility, with children in low-earning families just as likely to end up rich adults as children in high-earning families. The higher the IGE, the greater the influence of one's birth circumstances on later life position.

The line in the figure represents the simple regression of IGE on the inequality measure. While the IGEs across countries were calculated using different methodologies (for example uniform datasets are not available across countries), and the choice of when inequality should be measured is debatable (e.g., when the next generation is born, are teenagers, are adults, etc.), this figure illustrates a striking positive relationship between higher inequality and less mobility.

It is clear from Figure 3Q that the United States generally has higher inequality and lower mobility than many other developed countries—those shown to the lower left of the United States in the figure. If inequality does indeed lower mobility, the United States may face a future of diminished mobility as income inequality increases.

One explanation for why mobility may be lower in countries with more income inequality is suggested in **Figure 3R**. Since most advanced economies have less income inequality than the United States (see Chapter 2), the distance between income classes is smaller, so a family or an individual has less distance to cover to move from the bottom to the top. Figure 3R places the hypothetical European income distribution within that of the United States. Because income is far less dispersed (i.e., far less unequal) in the European Union, families that fall in the bottom fifth on the income scale are closer to those in the top fifth than is the case in the United States. All else equal, this would make it easier in Europe to move from one income fifth to another. Here, then, is another way in which the higher levels of inequality in the United States dampen the rates of mobility, in this case compared with other advanced, but more equal, economies.

**Figure 3R** Distance between income groups in the United States versus the European Union (hypothetical)



It is important to remember that mobility refers to movements down the income distribution as well as up. Opportunities to move up hinge on some people moving down. Here, again, Figure 3R presents an important illustration of the income distribution in the United States versus that in Europe. Income at the 80th percentile in Europe is lower than in the United States, but income at the 20th percentile is higher. So, while Europeans can rise more quickly, if they fall, they will not fall quite as far. And, to the extent that the safety net is stronger in Europe than in the United States, the fall from higher income levels may be less of a concern. (For more on the international comparison of income distributions, particularly at the bottom, see Chapter 7.) The inadequate safety net and relative lack of opportunities for those at the bottom likely factor into the correlation between growing inequality and reduced mobility in the United States.

## Has the American Dream become more or less attainable over time?

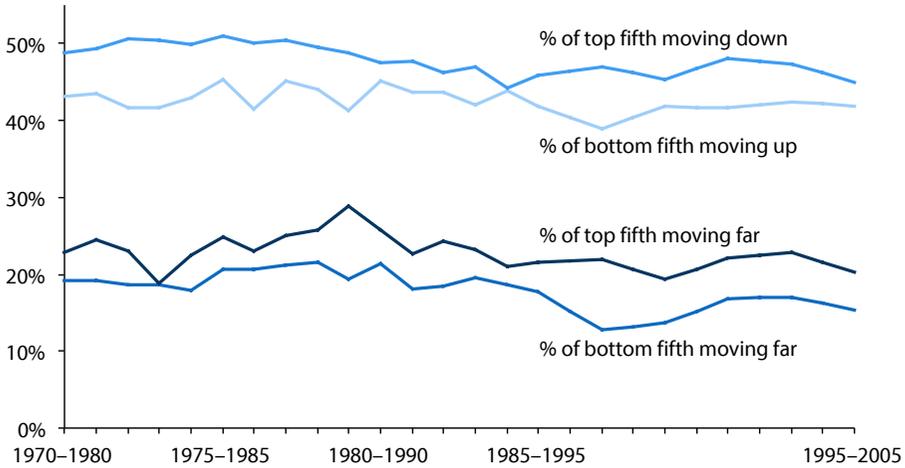
Though troubling, the high levels of income inequality reported in Chapter 2 could be somewhat less cause for alarm if successive generations of American families were able to ascend the income ladder even as the ladder's rungs grow farther apart. However, if the relationship between income inequality and mobility holds, as suggested by the previous section, then growing inequality in the United States suggests diminishing mobility.

This section examines how mobility has changed over time, exploring *trends* in intragenerational mobility, short-term income volatility, and intergenerational mobility. In short, research indicates that there has not been an acceleration in mobility that might offset the higher income inequality observed in Chapter 2.

To assess whether families are moving up or down the income distribution at an increasing or decreasing rate, we look at intragenerational income mobility—changes in families' positions in the income distribution over a relatively short time frame (generally 10 years). **Figure 3S** examines the share of people in the bottom and top family-income fifths who moved up or down, and moved far, over a 10-year period. For those who started in the top fifth at year one, moving far is defined as moving into the middle fifth or lower by year 10; similarly, for those who started in the bottom fifth, moving far entails moving to the middle fifth or higher.

Arguably, the data show increased persistence, as the richest fifth, for example, experienced a decline in those who moved down. The share of the top income fifth who moved down (the top line) between 1970 and 1980 was 48.8 percent, compared with 45.0 percent who moved down between 1995 and 2005. Those 3.8 percentage points may or may not be considered a significant increase in persistence; in other words, it may not be sufficient evidence to say that mobility has

**Figure 3S** Share of people in the bottom and top family income fifths moving along the income scale, 1970–1980 to 1995–2005



Note: Moving far means moving at least two income fifths (e.g., from the bottom to the middle fifth, or from the top to the middle fifth). Data are missing for 1986–1996, 1988–1998, 1990–2000, 1992–2002, and 1994–2004.

Source: Adapted from Bradbury (2011, Figure 2)

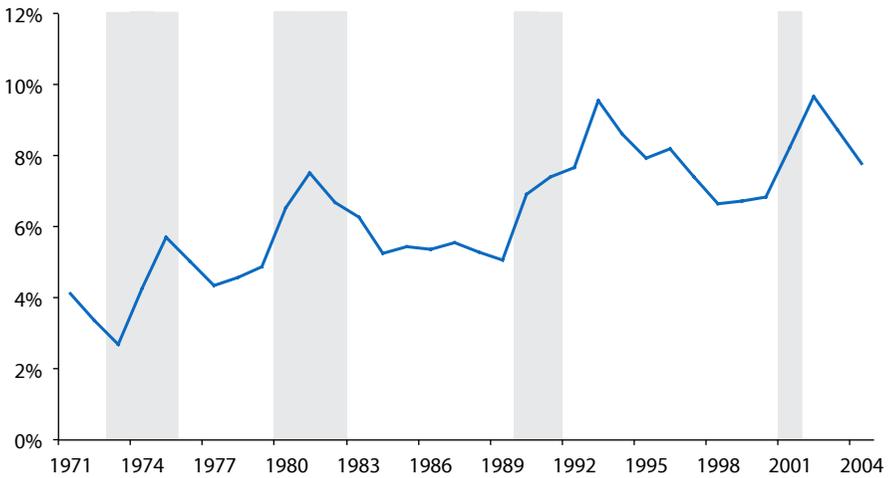
clearly decreased. However, it is clear that the share of top income earners who remained at the top did not shrink, evidence that mobility has clearly not increased. In fact, the share who remained in the top fifth fluctuated only 6.7 percentage points over the entire period.

Turning to the bottom line in the figure, the share of the bottom fifth who moved far (to the middle fifth or higher) fell 3.7 percentage points, while the range of estimates remained within 8.9 percentage points. Although many argue that greater income inequality in the United States is more acceptable if mobility is greater, this figure clearly shows that mobility has not increased to offset the dramatic rise in inequality over the last 30 years.

**Figure 3T** focuses on another component of mobility: the probability of large income losses over two years. The figure reveals that the share of working-age individuals who experienced a large drop (50 percent or greater) in their family income climbed steadily—from about 4 percent or less in the early 1970s to nearly 10 percent in the early 2000s. While the likelihood of large income losses rises in recessions, a structural increase—an underlying increasing trend—is clear from the figure.

What conclusions can be drawn from the increase in short-term volatility? Analysts generally agree that an increase in income jumps and dips makes families

**Figure 3T** Share of working-age individuals experiencing a 50% or greater drop in family income over two years, 1971–2004



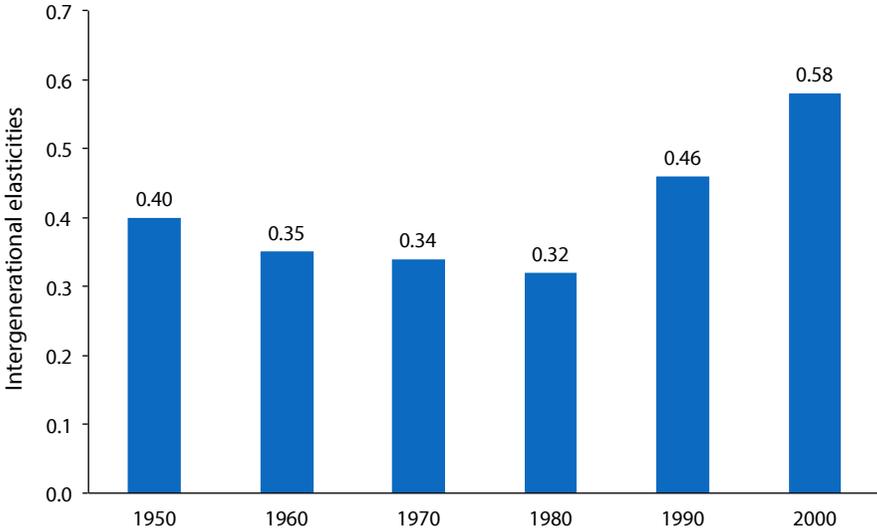
Note: Data after 1996 are every two years. Shaded areas denote recessions.

Source: Authors' analysis of Hacker and Jacobs (2008, Figure C)

more economically insecure; whereas a smooth, predictable income trajectory tends to benefit a family, increased “shocks,” even if temporary, create the sense that a family’s economic foundation may be shakier than previously thought. Thus, the trends shown here may help explain why many families report feeling less confidence in their own, and their children’s, economic fate. (This is particularly true for lower earners, who experience more income volatility than higher earners, as shown earlier in Figure 3C.)

Survey data confirm this: Nearly half of young adults (18–34 years old) say that their generation will be worse off than their parents’ generation (Demos and Young Invincibles 2011). But because recent polls may be highly influenced by young people’s economic misfortunes in the Great Recession and its aftermath (see Chapter 5), it is valuable to examine the evidence on changes in intergenerational mobility over time.

The data certainly provide little evidence that mobility has increased in recent decades. **Figure 3U** examines the relationship between earnings of sons and income of their parents from 1950 to 2000 by graphing the implied intergenerational elasticity for 40- to 44-year-old sons in each decade. From 1950 through the 1970s, intergenerational mobility initially increased (as seen in declining elasticity). After 1980, mobility markedly declined (i.e., intergenerational elasticity increased), precisely at the same time that inequality increased (for example, see

**Figure 3U** Elasticities between parental income and sons' earnings, 1950–2000

Note: The higher the intergenerational elasticity (IGE), the lower the extent of mobility. The IGEs shown are for 40- to 44-year-old sons.

Source: Authors' analysis of Aaronson and Mazumder (2007, Table 1)

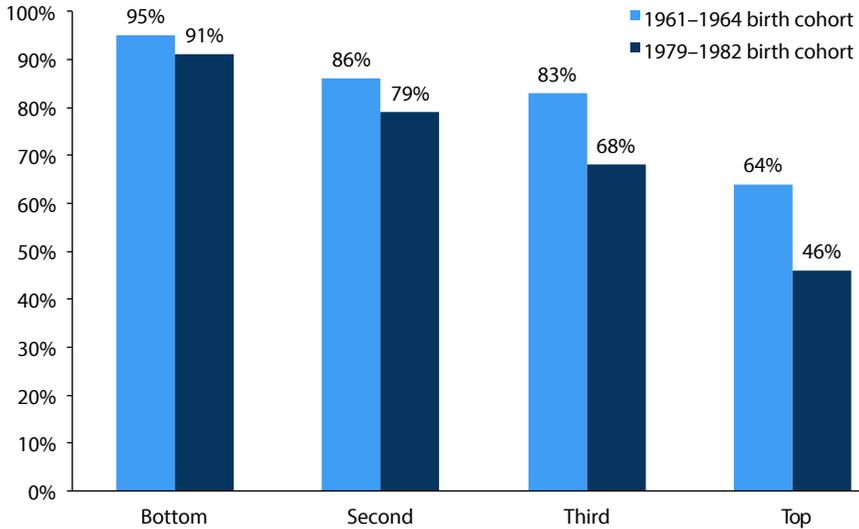
Figure 2M in Chapter 2). Instead of increases in mobility that might have offset rising inequality, mobility decreased.

However, the evidence on decreasing mobility is by no means conclusive. Examining cohorts born between 1952 and 1975, Lee and Solon (2006) do not find major changes in intergenerational mobility. In many respects, it is too early to report definitive trends in mobility, particularly regarding the impact of increasing inequality. Nevertheless, it is clear that growing income inequality is expanding the distances between income classes; therefore, it would not be surprising if it were harder to jump income classes.

To more closely examine the role of opportunity in bridging the income gap over time, it again is important to review data on educational opportunities. Figures 3N, 3O, and 3P earlier in this chapter demonstrated unequal access to higher education and education's importance in moving up or remaining in the top of the income distribution. **Figure 3V** looks at how educational attainment as a function of parental income has changed over time.

The figure shows the share of 25-year-olds from each family income fourth who have not attained a college degree. The lightly shaded bars represent the share without a college degree from the earlier cohort (born 1961–1964), and the darkly shaded bars represent educational attainment of the cohort born nearly

**Figure 3V** Share of 25-year-olds from each family income fourth without a college degree, by birth cohort



Note: Family income fourths are those of 25-year-olds when they were children.

Source: Authors' analysis of Bailey and Dynarski (2011, Figure 3)

20 years later (1979–1982). While the share of 25-year-olds without a college degree declined overall, the declines steadily increased from the bottom to the top income fourth. In other words, children from lower income groups were always more likely to lack a college degree than children from higher income groups, but those differences have become more pronounced.

Figure 3D, earlier, suggests that college education is an important mobility booster, while the lack of a college degree stunts upward mobility. Therefore, Figure 3V suggests that as those at the lower end of the income distribution continue to largely attain less than a college degree (the share without a college degree only declined from 95 percent to 91 percent), their position in the income distribution is likely to persist. Conversely, it appears that those whose family incomes fall in the top fourth are increasingly less likely to move downward over time (as the share of this group who did not obtain a college degree fell from 64 percent to 46 percent).

The findings on educational attainment hint that intergenerational mobility is likely to decline well into the future. It is too early to measure the full extent of mobility of cohorts born in periods of increasing inequality (such as the 1980s) because it is still too early in their work lives. However, the data presented in this

chapter contradict the claim that increased mobility has offset rising inequality. Thus, policies that more actively encourage investment in human capital (such as those concerning health and education) could help slow these trends, making the American Dream more, instead of less, attainable.

## **Conclusion**

Inequality means that some income earners claim a larger slice of the pie than others. Some might argue this is not such a significant problem if everyone has an equal chance of winding up at the top. Some even claim that this is the essence of the American Dream; that regardless of where you begin, if you work hard, you can have all the opportunities to succeed.

Unfortunately, income mobility—movement between income classes—is less common than broadly assumed. This suggests that the rising inequality of outcomes outlined in Chapter 2 is not counterbalanced by rising equality of opportunity.

As income and wealth become more concentrated in American society, so do access to higher education, to political power, to good neighborhoods with good schools, to decent health care, and ultimately to opportunity itself. This reality undermines a core American principle: fair opportunity for all. The indicators and trends investigated in this chapter warrant action. If market forces are failing to provide fair opportunities—and there is ample evidence to support this claim—then policy intervention is necessary.

## Figure notes

**Figure 3A. Median family income over the householder's working life, by birth cohort.** Data are from Current Population Survey Annual Social and Economic Supplement *Historical Income Tables*, Table F-11, "Age of Householder—Families, All Races by Median and Mean Income: 1947 to 2010." Data are inflated to 2011 dollars using the CPI-U-RS (Consumer Price Index Research Series Using Current Methods). Income measured is family money income, defined in Chapter 2.

**Figure 3B. Share of families in the bottom and top income fifths in 1994 ending up in various income fifths in 2004.** Data are from AcS and Zimmerman (2008a), Table 2, "Quintile Transitions, Two-Year Average Income (Relative Mobility)." Data for other years and relationships are available on *The State of Working America* website (<http://stateofworkingamerica.org/>).

**Figure 3C. Share of workers with large shifts in real annual earnings from 2002 to 2003, by earnings fifth.** Data are from Dahl and Schwabish (2008), Table 1, "Distribution of Changes in Workers' Annual Real Earnings from 2002–2003, by Sex, Age, and Earnings Quintile." The sample consists of workers age 25 to 55 who had earnings from employment covered by Social Security in 2002 or 2003. Earnings include wages and salaries, tips, and other forms of compensation; they exclude self-employment income and deferred compensation. Before the percentage change was calculated, earnings were adjusted for inflation using the CPI-U-RS.

**Figure 3D. Share of taxpayers at the top of the income distribution in 1996 ending up in various income groups in 2005.** Data are from U.S. Department of the Treasury (2007), Table 2, "The Degree of Mobility Remains Substantial after Restricting the Analysis to Taxpayers Included in the Panel of Tax Returns." The table uses the tax returns of primary and secondary nondependent taxpayers who were age 25 and older in 1996 and filed for both 1996 and 2005. Income cutoffs for the percentiles are based only on the tax returns of the panel population. Income is cash income in 2005 dollars.

**Figure 3E. Characteristics associated with leaving the bottom income fifth.** The figure is adapted from AcS and Zimmerman (2008b), Figure 5, "Characteristics Associated with Leaving the Bottom Quintile." Coefficients are based on a linear probability regression that includes these characteristics as well as dummy variables for age, the presence of children, and the presence of other adults in the household. *Own* and *spouse work hours* are measured in thousand-hour units. AcS and Zimmerman do not differentiate between spouses and permanent cohabiters, and interact the spouse hours variable with a dummy variable for the spouse's presence. Only characteristics with statistically significant coefficients in at least one time period are shown. In the 1984–1994 time period, the coefficients for *white*, *more than high school*, *disability*, and *spouse present* are statistically significant at the 99 percent confidence level; *high school education* is statistically significant at the 95 percent confidence level; and *male*, *homeowner*, *own hours*, and *spouse's hours* are statistically significant at the 90 percent confidence level. In the 1994–2004 time period, the coefficients for *more than high school* and *own hours* are statistically significant at the 99 percent confidence level.

**Figure 3F. Characteristics associated with entering the bottom income fifth.** The figure is adapted from AcS and Zimmerman (2008b), Figure 6, "Characteristics Associated with Entering

the Bottom Quintile.” Coefficients are based on a linear probability regression that includes these characteristics as well as dummy variables for age, education, the presence of children, and own work hours. *Own* and *spouse work hours* are measured in thousand-hour units. Acs and Zimmerman do not differentiate between spouses and permanent cohabiters, and interact the spouse hours variable with a dummy variable for the spouse’s presence. Only characteristics with statistically significant coefficients in at least one time period are shown. In the 1984–1994 time period, the coefficients for *middle fifth*, *fourth fifth*, and *top fifth* are statistically significant at the 99 percent confidence level; *male* and *spouse present* are statistically significant at the 95 percent confidence level; and *spouse work hours* is statistically significant at the 90 percent confidence level. In the 1994–2004 time period, the coefficients for *disability*, *fourth fifth*, and *top fifth* are statistically significant at the 99 percent confidence level; *white* is statistically significant at the 95 percent confidence level; and *homeowner*, *other adult present*, and *middle fifth* are statistically significant at the 90 percent confidence interval.

**Figure 3G. Likelihood that sons of low-earning fathers end up above various earnings thresholds as adults, depending on estimated ease of mobility.** Data are from Solon (1989), Table 5, “Probability that Son’s Long-Run Status Is in Specified Decile Given Percentile of Father’s Status.” Data are from the 1985 follow-up to the 1968 Panel Study of Income Dynamics. “Earnings” refers to wages.

**Figure 3H. Intergenerational correlations between the earnings of fathers and sons in OECD countries.** The figure is adapted from Corak (2011), Figure 1, “Comparable Estimates of the Intergenerational Elasticity between Father and Son Earnings for the United States and Twenty Four Other Countries.” “Earnings” refers to wages.

**Figure 3I. Share of sons of fathers in the bottom earnings fifth ending up in the bottom or top two-fifths as adults, by country.** Data are from Jäntti et al. (2006), Table 12, “Intergenerational Mobility Tables—Earnings Quintile Group Transition Matrices Corrected for Age for Fathers and Sons.” These results include only those father-son pairs that have non-zero earnings (wages).

**Figure 3J. Share of daughters of fathers in the bottom earnings fifth ending up in the bottom or top two-fifths as adults, by country.** Data are from Jäntti et al. (2006), Table 13, “Intergenerational Mobility Tables—Earnings Quintile Group Transition Matrices Corrected for Age for Fathers and Daughters.” These results include only those father-daughter pairs that have non-zero earnings (wages).

**Figure 3K. Share of children in the bottom income fourth ending up in either the bottom or top income fourth as adults, by race.** Data are from Hertz (2006), Table 1, “Mobility Experience of Children Born in the Bottom Quintile, By Race.” The quartile boundaries change over time, as real incomes grow. The black-white gap in the likelihood of upward mobility was statistically significant at the 1 percent level, and persists after controlling for one’s starting position within the quartile, and for parental education.

**Figure 3L. Share of children from various earnings fifths ending up in the bottom fifth as adults, by race.** Data are from Mazumder (2011), Table 7, “Transition Matrices by Race Using SIPP-SSA Sample.” Both panels use subsamples drawn from a sample of 16,782 men from the

Survey of Income and Program Participation and Social Security Administration data and use a multiyear average of sons' earnings over 2003–2007 and parents' earnings over 1978–1986.

**Figure 3M. Share of children in the bottom and top wealth fifths ending up in various wealth fifths as adults.** Data are from Charles and Hurst (2002), Table 2, “Intergenerational Transition Matrix of Age-Adjusted Log Wealth Position.” The sample includes all PSID parent-child pairs in which the following conditions were met (1,491 pairs): Parents were in the survey in 1984–1989 and alive in 1989, the child was in the survey in 1999, the parent was not retired and was between age 25 and 65 in 1984, the child was between age 25 and 65 in 1999, and the child and parent both had positive wealth when measured.

**Figure 3N. Share of entering classes at top universities and community colleges coming from families in various socioeconomic fourths.** Data are from Carnevale and Rose (2003), Table 1.1, “Socioeconomic Status of Entering Classes.” Socioeconomic status is measured by a composite score that includes family income, parental education, and parental occupation.

**Figure 3O. Share of students completing college, by socioeconomic status and eighth-grade test scores.** Data are from Fox, Connolly, and Snyder (2005), Table 21, “Percentage Distribution of 1988 Eighth-Graders' Educational Attainment by 2000, by Eighth-Grade Mathematics Achievement and Selected Student Characteristics: 2000.” Socioeconomic status is measured by a composite score that includes family income, parental education, and parental occupation.

**Figure 3P. Share of adults remaining in the same income fifth they were in as children, by college attainment.** Data are from Isaacs, Sawhill, and Haskins (2008), Figure 6, “Chances of Getting Ahead for Children with and without a College Degree, from Families of Varying Income.”

**Figure 3Q. Intergenerational mobility and income inequality in 22 countries.** The figure is adapted from Corak (2012), Figure 2, “More Inequality at a Point in Time Is Associated with Less Generational Earnings Mobility in Twenty Five Countries with Comparable Estimates of the Intergenerational Elasticity Between Father and Son Earnings.” Note that data points for Italy and the United Kingdom overlap, and that the upward sloping line is the least squares fitted regression line.

**Figure 3R. Distance between income groups in the United States versus the European Union (hypothetical).** Authors' illustration.

**Figure 3S. Share of people in the bottom and top family income fifths moving along the income scale, 1970–1980 to 1995–2005.** The figure is adapted from Bradbury (2011), Figure 2, “Position-relative Origin-specific Mobility for Poorest and Richest Quintiles.”

**Figure 3T. Share of working-age individuals experiencing a 50% or greater drop in family income over two years, 1971–2004.** Data are from Hacker and Jacobs (2008), Figure C, “Prevalence of a 50% or Greater Drop in Family Income.” The line traces the share of individuals age 25 to 61 who experience a 50 percent or greater drop in before-tax total family income (adjusted for family size) from one year to two years later. Data after 1996 are only available every two years.

**Figure 3U. Elasticities between parental income and sons' earnings, 1950–2000.** Data are from Aaronson and Mazumder (2007), Table 1, “Estimates of the IGE Using Census IPUMS Data.” Data reflect annual family income for the parents and annual earnings for the sons.

**Figure 3V. Share of 25-year-olds from each family income fourth without a college degree, by birth cohort.** Data are from Bailey and Dynarski (2011), Figure 3, “Fraction of Students Completing College, by Income Quartile and Year of Birth,” which is based on data from the National Longitudinal Survey of Youth, 1979 and 1997. Family income fourths are those of 25-year-olds when they were children.