

## Diverging Destinies

ALL IN ALL, 1972 LOOKED LIKE a good year to graduate from high school. The Vietnam War still gripped the country, but both the war and the draft were about to end. The OPEC oil embargo was still a year away and the nation was enjoying not only cheap gasoline but also low inflation. Transistors were beginning to revolutionize computing, although in early 1972 handheld calculators often weighed two pounds, cost two hundred dollars, and could still perform only the four basic arithmetic functions.<sup>1</sup>

There was little need for high school graduates to worry if they wanted to pass up college and head directly into the labor market. The economy was recovering from a minor recession, with the unemployment rate headed below 5 percent. Even unemployment among teenagers was low.<sup>2</sup> To be sure, college graduates earned more than high school grads, but their 40 percent wage advantage was modest by historical standards and small enough that some would-be college students were no doubt convinced to change their plans.<sup>3</sup> Indeed, a book published in the middle of the decade, *The Overeducated American*, made headlines for concluding that the earnings payoff to higher education was declining.<sup>4</sup>

The year 1972 also marked the beginning of a landmark study of high school seniors. Some nineteen thousand students in the study were selected at random from more than one thousand schools.<sup>5</sup> For one-third of them, high school graduation would mark the end of their formal schooling.<sup>6</sup> But even their high school diplomas were an indication of the kind of intergenerational mobility that was a source of pride for most Americans;

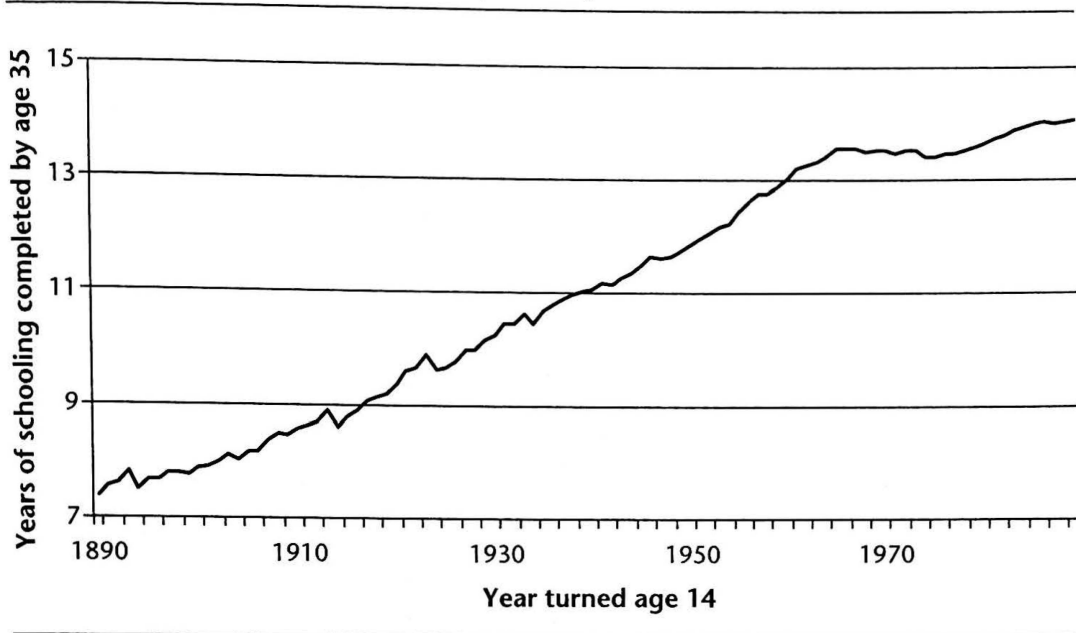
## 8 RESTORING OPPORTUNITY

nearly one-third of the graduates had already completed more schooling than either of their parents.<sup>7</sup>

Most of the male high school graduates would go on to begin promising careers. A follow-up survey conducted in 1979, when respondents were in their mid-twenties, found that more than 90 percent of the men with just a high school diploma were working full-time. Most held skilled blue-collar jobs and enjoyed earnings that were close to the national average.<sup>8</sup> These successes were hardly a surprise at the time, given that technology-driven productivity increases across the 1950s and 1960s had led to steep gains in the economic fortunes of both high- and low-skilled workers. Today we tend to think of technology in terms of the breathtaking advances made possible by microprocessors, nanotechnology, and biotechnology. But the broad sweep of the twentieth century included advances such as the introduction of electric power into homes and factories, assembly line production techniques, and the construction of the interstate highway system. These advances catalyzed economic growth and increased earnings opportunities for both highly educated workers and those with relatively little formal education.

Fueling the economic growth that resulted from these advances was America's remarkable support for universal secondary education and access to college for all who could qualify. The spectacular growth in schooling is shown in figure 2.1.<sup>9</sup> In 1890, the average fourteen-year-old ended up completing fewer than eight years of school. Educational attainments increased steadily for the next seventy years, with the early-wave baby boomers born shortly after World War II completing between thirteen and fourteen years of school, on average. These increases, coupled with technological progress, drove the economic progress that put American standards of living well ahead of virtually all other industrialized countries. Indeed, the picture was so rosy that few people suspected that America's stellar track record of upward intergenerational mobility was about to take a sharp turn for the worse.<sup>10</sup>

In fact, a perfect storm was brewing to sink the labor market prospects of workers with modest educational attainments. The recession in the early 1980s would become the worst downturn since the Great Depression.

**Figure 2.1** Years of schooling completed by U.S. adults

Source: Adapted from figure 1.4 in Claudia D. Goldin and Lawrence F. Katz, *The Race Between Education and Technology* (Cambridge, MA: Belknap Press of Harvard University Press, 2008).

But much larger forces would prove even more important. In particular, technological changes came to be dominated by advances in computers, which were becoming ever smaller, less expensive, and more powerful. In the decades to come, this change would link educational attainment and earnings more tightly than ever before.

The microprocessor revolution dealt a double blow to the less educated. Whereas prior technological advances had boosted the earnings of both college- and high-school educated workers, computer-based technological advances fueled the demand for highly educated workers alone, while simultaneously reducing the demand for workers hired for routine tasks such as bookkeeping and much of assembly-line production work. These tasks, which had previously provided jobs for many high school graduates, have been the easiest for computers or computer-driven machinery to take over.

Moreover, advances in telecommunication have made it increasingly possible for American companies to offshore to lower-wage countries many of the tasks that American workers, especially those without college training, had performed in the past. The net result has been that a growing

number of high school graduates now find themselves competing for service jobs such as preparing and serving food and caring for the elderly. While the number of jobs in many service occupations is growing because the work is difficult to computerize or send offshore, the pay is low because there is an ample supply of workers vying for these jobs.<sup>11</sup>

Anthony Mears is one of those earning that low pay.<sup>12</sup> At age twenty, with just a high school degree, Anthony has found a job working for \$12 an hour at a construction job in lead abatement, thanks to the help of a friend. He aspires to start a business in home remodeling and real estate, but those prospects seem remote. By earning a high school diploma, Anthony has already completed more education than his father and grandfathers. But unfortunately, Anthony grew up at a time when a high school diploma was no longer the passport to the middle class.

Born in the mid-1980s and growing up in a working-class urban neighborhood, Anthony experienced a childhood much like that of his parents. He spent most of his considerable free time playing made-up games with his fourth-grade friends, with no adults in sight. One of his favorites involved calling out a command (touch your toes, clap three times) to follow between ball bounces. Like many boys his age, Anthony and his friends spent an inordinate amount of time haggling over the rules, devising new ones, and settling disputes. However, unlike many more affluent children, Anthony and his friends did so without the intervention of a coach or another adult. That's not to say there was no oversight. Anthony's mother set strict rules for him and his older sister. He had to finish his homework before he could go out and play, he had to stay within his neighborhood, and he had to return home when called. But within these boundaries, he and his friends were free to play or invent whatever games appealed to them.

In the context of the early 1990s, Anthony's family enjoyed a degree of working-class financial stability that others in his neighborhood—a stable working-class black neighborhood with its fair share of crime—did not. His mother earned about \$30,000 a year (in 2012 dollars) as a secretary and managed her company's fleet of cars. Her job provided health insurance and allowed the family to rent a four-bedroom home. Anthony's parents were divorced, but his father saw his children regularly, and though



he did not pay child support, he did help out, when he could, when the children needed things like clothing.

Family income was high enough to put food on the table and finance weekly trips to a fast-food restaurant and monthly trips to the local Sizzler steakhouse, but these little luxuries depleted an emergency fund meant to cover unexpected bills and keep the family car running. The family managed to take a vacation at the beach every summer, but only because Anthony's mother put in extra hours at work to cover the additional expense.

Anthony's parents struggled to keep his schooling on track. In elementary school, he had been a well-behaved student and earned mostly Bs and Cs. When it was time for high school, he initially enrolled in a charter school but yearned to play on the basketball team with his friends in his local public high school. His mother agreed to the switch but quickly regretted it, as Anthony spent much more time with his friends than on his studies and was even locked up briefly in juvenile hall. Desperate for a change, his mother pleaded successfully with Anthony's father for a \$6,000 loan (she promised to repay half) to pay for private school for his senior year. Realizing that this was a considerable sacrifice for his parents, Anthony buckled down and managed to finish high school on time.

Like most blue-collar parents, Anthony's parents hoped that their sacrifices and support would allow their son to attend college and secure a middle-class job that would lead to a higher living standard than they were able to muster for themselves. Theirs was not a pie-in-the-sky hope. For many generations, most American children had achieved a higher standard of living than their parents, and rising educational attainments were the mechanism that made this possible. This did not happen in Anthony's case. Neither Anthony's parents nor his school pushed him to take the SAT college entrance exam. While his parents were able to scrape together the \$2,500 needed to pay for four community college classes, Anthony showed little motivation to acquire more education, and he fell short of earning enough credits for a two-year degree.

Forty years ago, Anthony's childhood of made-up games, haggles over rules, and a middling performance in school would have likely sufficed to earn him a job in a factory or at a shipyard—with job security and a living

wage. Bypassing college would not come with a sizable penalty as it does today. He could have looked forward to a decent career with a fairly steady income. But today's world, as we will show, demands much more to succeed, from greater parental oversight to exposure to a wider range of adults and experiences, to more income so that parents are able to cultivate the skills, interests, and pursuits that help set a child apart in today's highly competitive economy.

Another boy, and another story, underscore the elements it takes to get ahead today in contrast to a generation ago. As a fourth-grader growing up around the same time as Anthony, Alexander Williams lived in a well-to-do community in a large northeastern city.<sup>13</sup> Like Anthony, Alexander and his parents are African American, as are most of the families in their neighborhood. Both of Alexander's parents are accomplished professionals; his mother is in management and his father is a lawyer specializing in medical malpractice cases. At that time, the family's combined yearly income exceeded \$300,000 (in 2012 dollars), which paid for a large house with a spacious lawn as well as music lessons and private school for Alexander. Like Anthony's mother, Alexander's mother was devoted to her son's school success. But while Anthony's family finances were always tight, Alexander's parents enjoyed a level of financial security that allowed them to focus on providing their son with academic stimulation.

Alexander attended an academically demanding, mostly white private school from kindergarten through high school, but his parents made sure he was not the sole African American in his classes. Unlike Anthony, Alexander led a life that was chock-full of carefully chosen, adult-supervised activities—piano, choir, soccer, a school play—that kept him busy some days until nine o'clock at night.

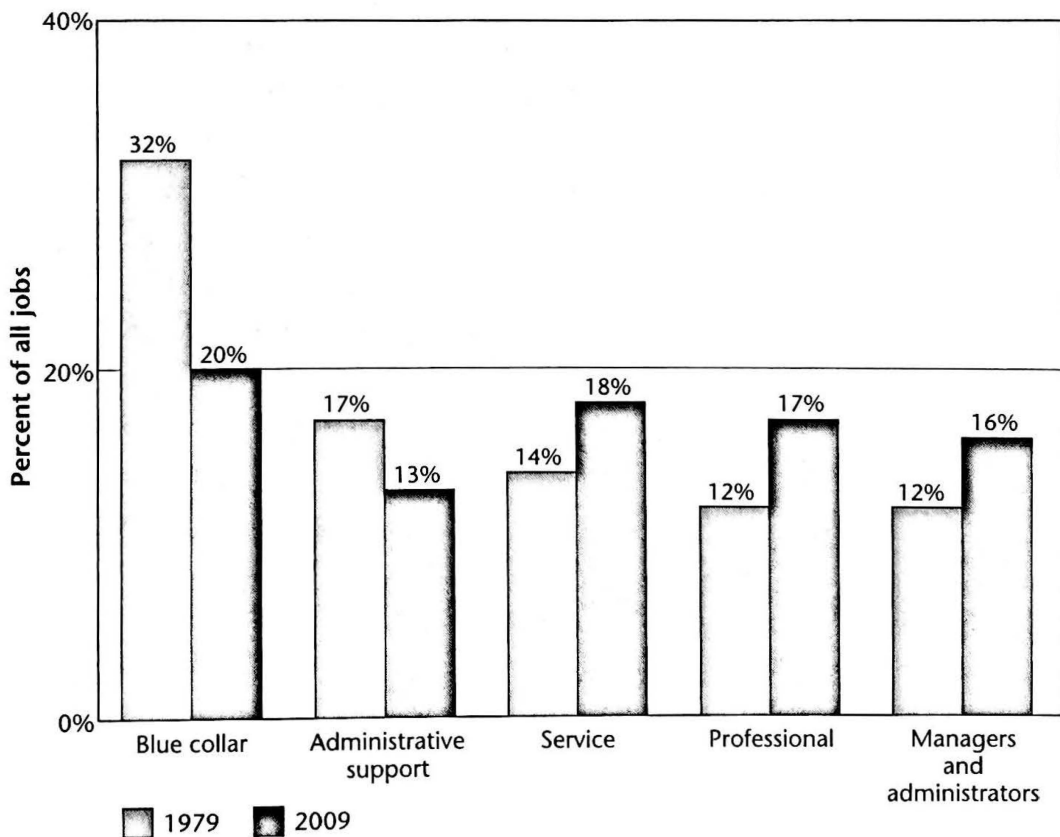
Alexander's parents seized teachable moments at every opportunity. On Saturday mornings, when many kids were watching cartoons, Alexander and his mom were out of the house by 8:15 for a full day of "more productive" activities, as she called them. Alexander was raised to believe in his abilities. He also was taught the subtle people skills that are so important for getting ahead in life. At one medical checkup, he was confident enough to interrupt and correct the doctor. Alexander did very well in school—all A's, typically. He would later score 1350 out of a possible 1600 on the SAT

college entrance test, and his achievements in high school would win him admission to a special eight-year program at an exclusive university that combines an undergraduate education with medical school.

Barring some unforeseen disaster, Alexander will assume his position in the upper middle class, as his parents have hoped and expected. But Anthony, unlike prior generations, risks not just remaining in the working class, like his parents, but slipping further down the social ladder. If Anthony had been born thirty years earlier, he would have walked into a factory job. But that world was disappearing by the time he was born.

As figure 2.2 shows, in 1979 blue-collar positions, most of which were in the manufacturing sector, accounted for nearly one-third of all jobs; by 2009, that share had shrunk to one-fifth.<sup>14</sup> Some white-collar occupations

**Figure 2.2** Growth and decline of selected occupations



Source: Data provided by David Autor, Department of Economics, MIT, who tabulated the percentages from Current Population Surveys.

also diminished in importance as a result of computerization, in particular the filing clerk and administrative support jobs that had provided employment for many female high school graduates. And while the share of jobs in high-skilled occupations for professionals and managers has grown, so too has the share of jobs in low-skilled service occupations. In other words, the distribution of the nation's jobs has polarized, with a large decline in the share of jobs in blue-collar and administrative support positions—jobs that used to provide middle-class opportunities for generations of men and women with relatively low levels of education.<sup>15</sup>

Technological advances have also made a difference in the tasks workers in particular occupations carry out as well as in the educational credentials employers seek when hiring new workers. Consider, for example, the changing nature of secretarial work in recent decades. According to the U.S. Department of Labor's *Occupational Outlook Handbook* for 1976, "Secretaries relieve their employers of routine duties so they can work on more important matters."<sup>16</sup> And indeed, in 1976 many high-school-educated secretaries spent their entire work day typing. Yet with the advent of computer-based word processing, a growing number of professionals found that it made more sense to type their own letters and memos than to dictate them to secretaries. Advances in computer-based speech recognition enhanced this trend and drove down the demand for typists. Secretaries still exist, but their *Handbook* definition now includes the kind of fleet management tasks that were part of the secretarial job held by Anthony's mother: "Office automation and organizational restructuring have led secretaries to assume a wide range of new responsibilities once reserved for managerial and professional staff. Many secretaries now provide training and orientation to new staff, conduct research on the Internet, and learn to operate new office technologies."<sup>17</sup> Although Anthony's mother managed to get her job without having a college degree, the difference between the 1976 and 2000 descriptions makes it easy to understand why a growing number of employers now seek secretaries with college-level training.

At the same time, other forces contributed to the decline in the earnings of workers without postsecondary education. The overall share of unionized jobs in the American economy dropped, as did the inflation-adjusted

value of the minimum wage, while the number of immigrants competing for low-skilled jobs rose sharply.<sup>18</sup> All of these factors played at least some role in the eroding labor-market position of workers with less education, but none was as important as technological change and globalization.<sup>19</sup>

The net effect of economic and demographic forces on the earnings of high school graduates and four-year-college graduates has been dramatic. Between 1979 and 1987, the inflation-adjusted earnings of male high school graduates plunged by 16 percent, while the earnings of college-educated workers rose by nearly 10 percent. In the following two decades, while Anthony and Alexander were growing up, the earnings of the less educated continued to fall, albeit more slowly, while the earnings of college graduates rose modestly.<sup>20</sup>

## THE WIDENING GULF IN SCHOOLING OUTCOMES

Historically, the decisions young Americans make about enrolling in and completing college have been influenced by the labor market rewards of a college degree. When the payoff is high, young people flock to college. When it's not, they think twice. This helps to explain why college enrollments stagnated during the 1970s, a decade when the college–high school earnings differential was relatively modest. But it would also lead us to expect a rapid increase in college attendance among young Americans during the 1980s, when the college–high school earnings differential grew markedly. That did not happen. As shown in figure 2.1, the level of schooling eventually completed increased only very slowly for individuals who were adolescents in the 1980s, and this pattern of very slow growth has continued to this day, even though the earnings differential has remained high by historical standards. This threatens future prosperity because the skills of the labor force are a key determinant of the productivity of the economy.

Why the sluggish growth in the rate of college completion? College decisions are often based on the “payoff,” but they must also take into account college costs and the ability of students to do college-level work. The sticker price of college has more than doubled in the last twenty years.<sup>21</sup> This has deterred many students from enrolling in and completing college,



especially those whose parents, like Anthony's, lack the resources to pay a large share of the bill. While financial aid, including federally funded Pell Grants, has eased the financial crunch for many low-income students and their parents, others either lack awareness of available aid or are discouraged by the extremely complex federal financial aid application form.<sup>22</sup>

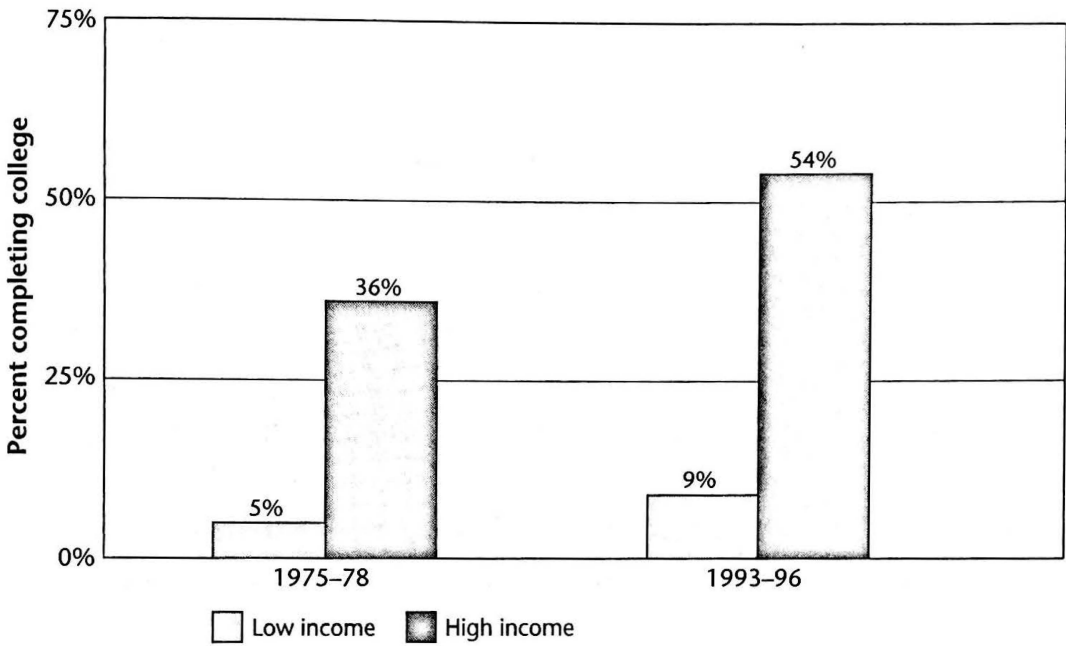
The second factor contributing to slower growth in the number of college graduates in recent decades is the weak academic preparation of many high school graduates. Just as the gap between affluent and low-income children in the ability to pay for college has increased, so too has the gap in academic preparation, as measured by reading and mathematics test scores. Using SAT-type score scales to track these trends, the math achievement gap among eighth graders in 1978 amounted to 96 points, roughly one standard deviation.<sup>23</sup> Since eighth-grade students typically learn the equivalent of about 25 to 30 SAT points in math or reading over the school year, the 96-point gap in 1978 was huge.<sup>24</sup>

Although test scores of low-income children increased modestly between 1978 and 2008, scores of high-income children rose much more rapidly, resulting in a 35-point *increase* in the gap.<sup>25</sup> In other words, in the last thirty years, the gap between the average scores of eighth-graders from high- and low-income families has increased by an amount equal to a year's worth of learning.

Given the importance of academic preparation in determining educational success, it should come as no surprise that growth in the income-based gap in children's reading and mathematics achievement has contributed to a growing gap in the rate of college completion (figure 2.3). A little more than one-third of students from affluent families who entered high school in the mid-1970s graduated from college. Among students from affluent families who entered high school about two decades later, the college graduation rate was 18 percentage points higher. In contrast, among children from low-income families, the graduation rate for the later cohort (9 percent) was only 4 percentage points higher than that of the earlier cohort (5 percent).<sup>26</sup>

Analysts differ in their assessments of the relative importance of college costs and academic preparation in explaining the increasing gulf between



**Figure 2.3** College graduation rates for low- and high-income children

Source: Data based on Bailey and Dynarski (2011), who tabulated the percentages from National Longitudinal Survey of Youth files.

Note: Low and high incomes are defined as the bottom and top 25% of the parent income distribution. Dates indicate the calendar years in which the subjects turned age 14.

the college graduates rates of affluent and low-income children in our country.<sup>27</sup> However, as we explain in the next two chapters, both are rooted, at least in part, in the growth in family income inequality. For affluent children like Alexander Williams, whose families benefited the most from increasing incomes, college graduation rates jumped sharply. In contrast, very few children raised in low-income families graduated from college at any time during the last two decades. Anthony was no exception. As a result, children raised in higher-income families accounted for nearly all of the growth in college graduation rates. And it is important to stress that our classification of high- and low-income families does not include only the superrich and desperately poor; each of our groups encompasses nearly twenty million American children, and together they include half of all children.<sup>28</sup>

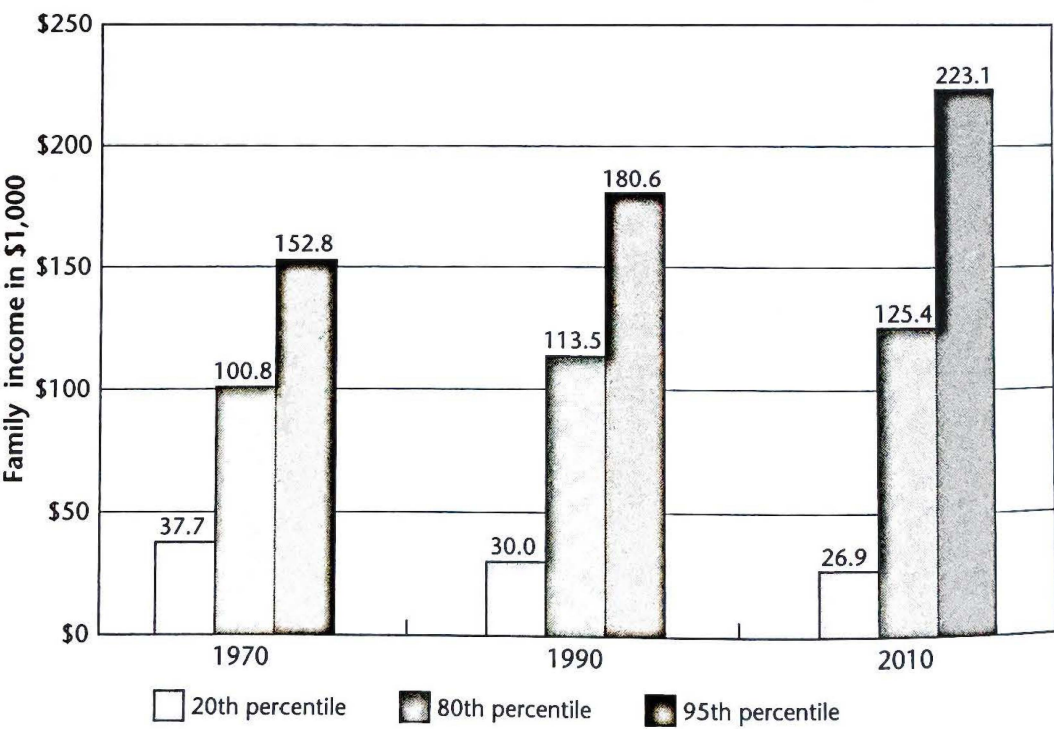
Thus all of the achievement and attainment data point to the same conclusion: the slowdown in the rate of growth of educational attainments of

American young adults coincides with a growing divergence in educational outcomes between children from higher- and lower-income families. We now turn to some of the forces that have produced this troubling pattern.

FAMILY INCOME INEQUALITY AND THE GROWING EDUCATION GAP

The quarter century following World War II was a golden era for the U.S. economy, as the benefits of economic growth were shared by both high- and low-income families.<sup>29</sup> In contrast, economic changes favoring highly educated workers, plus demographic shifts such as the rise of single-parent families, produced sharply growing income gaps between high- and low-income families beginning in the 1970s. The left-hand bars in figure 2.4 show income trends for children at the 20th percentile of the nation’s fam-

Figure 2.4 Children’s family income over time



Note: Chart shows 20th, 80th, and 95th percentiles of the distribution of family incomes for all children age 5–17, based on data from the U.S. Bureau of the Census and adjusted for inflation. Amounts are in 2012\$.

ily income distribution.<sup>30</sup> This means that, in a given year, 20 percent of children lived in families with incomes below that level while 80 percent had incomes above it. In 1970, the dividing line was drawn at \$37,664 (in 2012 dollars). We refer to this group as “low income” rather than “poor” because it includes many families with incomes above the poverty line. Many of the children in this group have working parents.<sup>31</sup>

The middle bars show the trend in family incomes at the 80th percentile of the distribution, which was about \$100,000 (in 2012 dollars) in 1970. The right-hand bars show the trend for very high-income families—those with incomes higher than 95 percent of U.S. families (a little more than about \$150,000 in 1970 in 2012 dollars).

In contrast to the two decades before 1970, when the incomes of these three groups grew at virtually identical rates, economic growth over the next four decades failed to lift all boats. The family income (net of inflation) at the 20th percentile was more than 25 percent lower in 2010 than it was in 1970. In contrast, the incomes of families at the 80th percentile were 24 percent higher in 2010 (\$125,000) than they were in 1970, while the incomes of the richest 5 percent of families rose even more over this period.<sup>32</sup> The decline of the incomes of families at the lower end of the spectrum is also reflected in the nation’s child poverty rate, which at 21.9 percent in 2011 was up sharply from 15.1 percent in 1970.<sup>33</sup>

The simple consequence of these changes is that high-income families had a lot more money to spend on their children while the purchasing power of families on the lower rungs of the income ladder declined. All of these advantages can translate into increased school success for children from high-income families.

## SCHOOLING AND INTERGENERATIONAL MOBILITY

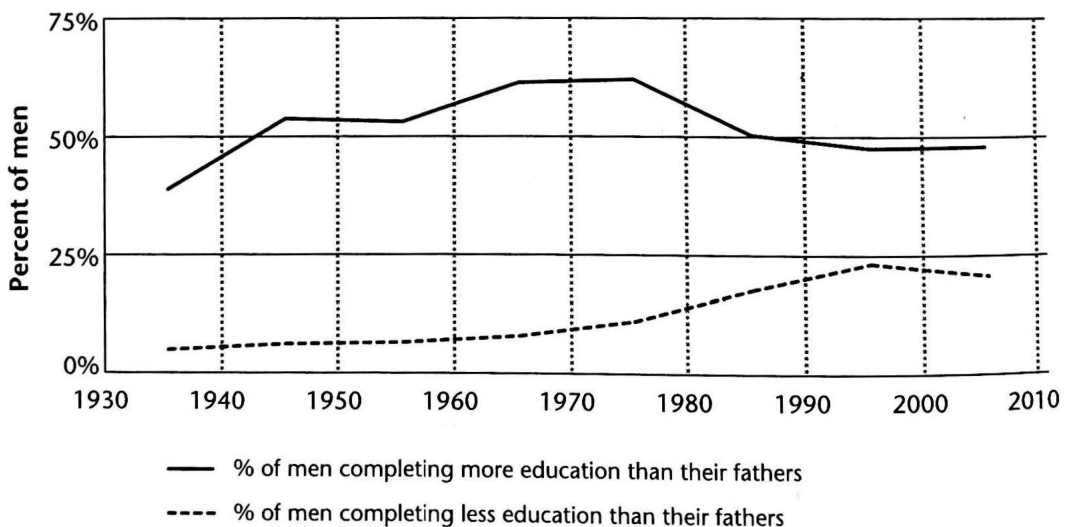
Although the nation has never fulfilled the promise of offering equal educational opportunity to all, the openness of the American educational system made it possible for generations of hard-working children from low-income families to obtain more education than their parents had. The skills and credentials resulting from these educational investments

provided the means for many Americans who had grown up poor to join the middle class. By the mid-twentieth century, more than one-half of young adult men and women had completed more years of education than their parents, a percentage that would continue to grow for the next twenty-five years (figure 2.5).<sup>34</sup> But that trend would come to a halt and then decline steadily through the 1990s.

Because education has been the dominant pathway to upward intergenerational mobility in the United States, the growing gap in educational attainments between children from low- and upper-income families is likely to perpetuate income inequality in future generations and undermine the mobility that has been a central part of the American Dream.<sup>35</sup> Taken together, changes in the economy, greater income inequality, and low-quality education for a great many low-income children pose a serious threat to the upward intergenerational mobility of which Americans have been so proud.

While educational attainments have stagnated in the United States, especially for children from low-income families, in many other countries

**Figure 2.5** Trends in intergenerational mobility



Source: Hout and Janus in Duncan, Greg J., and Richard J. Murnane, eds. Figure 8.3, "Percentage Upwardly and Downwardly Mobile by Year Turned Twenty-Five and Gender: U.S.-Educated Persons, Twenty Seven to Sixty-Four Years Old at Time of Interview." p. 173. In *Whither Opportunity*. © 2011 Russell Sage Foundation, 112 East 641 Street, New York, NY 10065. Reprinted with permission.

Note: Dates indicate the calendar years in which the subjects turned age 14.

this has not been the case. Since education plays such an important role in intergenerational mobility, it is not surprising that there is greater upward economic mobility in the United Kingdom, the Nordic countries, and many continental European countries than in our country.<sup>36</sup>

Given the magnitude of the economic and demographic disruptions of the past forty years, it will not be easy to restore the degree of shared prosperity and upward intergenerational mobility that American children used to enjoy, and in particular to make education once again a force that reduces inequality rather than reinforcing it. However, it is possible to improve education for low-income children and to support their families. To appreciate what it will take to make education part of the solution, we need to understand the roles both families and schools have played in increasing the gap between the educational outcomes of affluent and low-income children. We turn to these topics in the next two chapters.