

# Intergenerational Mobility for Women and Minorities in the United States

---

*Melissa S. Kearney*

---

## Summary

Now that some of the historic barriers to economic success for U.S. women and minorities have begun to fall, women and blacks, in particular, are moving upward on the nation's socioeconomic ladder. Melissa Kearney reviews evidence that improved economic opportunities for these two groups make sex and race less important than they once were in determining economic status. But sex- and race-based differences in wages and income persist, and interactions between sex and class and between race and class continue to play a role in the intergenerational transmission of income status.

Kearney surveys studies and data showing that marriage remains important in determining women's economic status, even though marriage rates among women aged eighteen to thirty-four have been falling—from 73 percent in 1960 to 44 percent in 2000. Not only do spousal earnings continue to dominate family income for married women, but also women tend to marry men whose position in the income distribution resembles their fathers' position. Marriage thus facilitates the transmission of economic status from parents to daughters.

Racial wage gaps persist, says Kearney, largely because of differences in education, occupation, and skill. It also appears likely that the effects of discrimination, both current and past, continue to impede racial economic convergence. Kearney notes that the transmission of income class from parents to children among blacks differs noticeably from that among whites. Black parents and white parents pass their economic standing along to children at similar rates. But because mean income is lower among blacks than among whites, the likelihood of upward mobility in the *overall* income distribution is substantially lower among blacks. Black children are much more likely than white children to remain in the lower percentiles of the income distribution, and white children are more likely to remain in the upper reaches of the income distribution. Downward mobility from the top quartile to the bottom quartile is nearly four times as great for blacks as for whites.

[www.futureofchildren.org](http://www.futureofchildren.org)

---

Melissa S. Kearney is a fellow in the Economic Studies Program at the Brookings Institution. The author thanks Daniel Theisen and Rebecca Vichniac for extremely capable research assistance. She is also grateful to the editors of this volume and participants in the authors' conference at Princeton University in October 2005 for helpful comments and suggestions.

In a society with high intergenerational mobility, each new generation encounters a more-or-less level economic playing field. How well a child fares relative to others is determined far more by his or her own talent and effort than by his or her parents' income. By contrast, in a less mobile society, a parent's socioeconomic status is very influential in determining a child's relative position. The offspring of the rich are likely to be rich themselves as adults, while the adult offspring of the poor are likely to be poor. This article considers intergenerational mobility for women and minorities, in particular blacks, in the United States.<sup>1</sup>

Because of the historical importance of race and sex in determining an individual's economic outcomes, it is important to consider how the interactions between class and race and between class and sex affect intergenerational mobility. Women and minorities have historically faced barriers to economic success that have impeded the prospects for upward economic mobility (through means other than marriage, in the case of women). The intergenerational transmission of economic status has therefore likely been, and potentially still is, different among black and white families and from parents to daughters and parents to sons. To make the point, consider that if black men are disadvantaged in the labor market relative to white men, then it will be more difficult for a poor black child to achieve economic success than it will be for a white child from a similar economic background. With regard to the importance of sex, if high-paying jobs are not available to women, then it will be more difficult for a daughter than a son from a low-income family to achieve economic success through her own career advancement. These are the types of issues I consider in this article.

Recent cohorts of women and nonwhites have far better economic opportunities than their parents and grandparents had. They enter professions that were once closed to them and earn wages far more comparable to those of white men than in the past. In 2004, women held half of all positions in management, professional, and related occupations. Nearly 60 percent of women who worked did so full time and full year. Nearly 33 percent of women aged twenty-five to sixty-four had a college degree. In fact, among 2004 high school graduates, young women were more likely than young men to enroll in college, 72 percent versus 61 percent. Just thirty-five years ago, in 1970, only 41 percent of women worked full time, full year, and only 11 percent of women aged twenty-five to sixty-four had a college degree.<sup>2</sup>

The economic progress of American blacks has also been dramatic. In 1940 approximately 90 percent of black men and women lived in poverty. Black men earned, on average, 43 percent of what white men earned. Only 12 percent of blacks aged twenty-five to twenty-nine had completed high school; less than 2 percent had a college degree.<sup>3</sup> By 2000 the poverty rate among blacks had fallen to 30 percent; relative average earnings among black men had risen to 73 percent; and roughly 15 percent of blacks aged twenty-five to twenty-nine had a college degree.<sup>4</sup> In 1963 black men were 4.7 times as likely as white men to have wages in the lowest 10 percent. By 2001 this ratio had declined to 1.73.<sup>5</sup> In 1960 the share of white male workers in professional and managerial occupations was 3.5 times that of black male workers; by 2000 that ratio had fallen to 1.7. The standard of living of blacks in America today is greatly improved not only as measured against earlier generations of blacks, but also relative to whites.

But although sex and race are not nearly as important as they once were in determining economic status, sex- and race-based differences in labor market outcomes persist, and interactions between sex and class and race and class continue to be important in the intergenerational transmission of income status. Though women are marrying at lower rates and working and earning at higher rates than in the past, marriage continues to be extremely important in determining the family income of adult women. Because women tend to marry men whose economic backgrounds are similar to their own, marriage appears to facilitate the transmission of economic status from parents to daughters. And although blacks have made tremendous progress compared with earlier generations, they remain at a substantial disadvantage to whites in terms of education, labor force participation, and earnings, especially among men. Consequently, even though intergenerational correlations of income are similar between white parents and their children and black parents and their children, the likelihood of a child's moving up or down in the *overall* income distribution varies in important ways between blacks and whites. In particular, the intergenerational poverty trap appears to be much greater for blacks.

### **Income Mobility among Women**

Some statistics on key economic outcomes illustrate both the economic progress made by women and the remaining labor market gaps. These statistics make clear the relative economic position of women and the potential they have for upward mobility through their own professional attainment. They are also important for understanding and interpreting recent estimates of intergenerational income mobility for women.

### **Relative Labor Market Outcomes and Worker Characteristics**

Per hour worked, women's earnings are now about 80 percent of men's earnings.<sup>6</sup> In *Explaining the Gender Gap*, economist Claudia Goldin reports that in the U.S. farm economy of 1820, the ratio of female to male full-time earnings stood at about 0.3. By 1859, in the new manufacturing economy, that ratio had risen to about 0.5. The ratio increased again, from 0.46 to 0.56, as the clerical and sales sectors began to grow during the first three decades of the twentieth century. Between 1950 and 1980, Goldin reports, the ratio of female to male earnings for full-time, full-year employees was virtually constant at 0.60, likely because of the large influx of inexperienced women into the labor force.<sup>7</sup> But the gender gap narrowed again between 1980 and 1991, when the ratio of female to male median earnings among full-time workers climbed from 0.64 to 0.74. Women of all age groups, education levels, and experience levels shared in the gains.<sup>8</sup>

The convergence in average male and female wages notwithstanding, a gap of 20 percentage points remains. Women still systematically earn less than men. In exploring why, economists typically distinguish between gender differences in workers' characteristics, such as education, and in *returns* to characteristics. So, for example, if women are less well educated than men and if better educated workers tend to command higher wages in the labor market, then women will systematically earn less than men per hour worked. If an additional year of schooling increases the hourly wage of a male worker more than that of a female worker, then the return to education is lower for women. Differences both in characteristics and in the returns to characteristics could be due to worker preferences (such as women's

stronger preference for jobs with flexible work schedules), unobserved characteristics (such as differences in leadership potential), or discrimination. Drawing almost exclusively on research from the field of economics, I review some of the most compelling evidence on these points below.

A lower accumulation of labor market experience is one important explanation for

---

*Though women have made great strides in entering high-paying professions, important gender-related differences in occupations remain.*

---

women's systematically lower wages. Women have historically worked fewer years, on average, than men and have been more likely to work part time. In recent decades, as women's work experience has increased, so too have their relative wages. Francine Blau and Lawrence Kahn, using detailed labor market experience data from the Panel Study of Income Dynamics (PSID), find that changes in women's accumulated experience have been far larger than changes in women's education, and that changes in experience also explain a much larger share of the narrowing of the gender gap in wages during the 1980s.<sup>9</sup>

Women also differ from men in the *timing* of labor market experience. They are much more likely to take time away from work to care for children. Audrey Light and Manuelita Ureta find that a career interruption causes a similar initial wage drop for

women and for men and that the wages of women recover more quickly.<sup>10</sup> They also find that the wage gap narrows after women have nine years of experience, which is consistent with their earlier finding that continuously employed women perform similarly to their male counterparts. At nine years of experience, 12 percent of the wage gap is due to differences in the timing of experience, while 30 percent is due to differences in the return to experience.

Though women have made great strides in entering high-paying professions, important gender-related differences in occupations remain. Table 1 reports the occupational distribution of workers by sex, race, and ethnicity (where whites and blacks are defined as non-Hispanic), using data from the 2004 March Current Population Survey, the primary source for U.S. labor force statistics. Even today, women are much more likely to be in services and in office and administrative support than are men. Women are, however, as likely to be in occupations defined as management, business, and finance or professional and related occupations. Of course, even within occupations, men and women tend to hold different jobs.

Researchers estimate that differences in the kinds of jobs held by women and by men account for a substantial share—between 20 and 40 percent—of the male-female wage gap. Blau and Kahn find that differences in industry, occupation, and collective bargaining explain roughly 40 percent of that gap in 1988 (9 out of 22 percentage points).<sup>11</sup> Joseph Altonji and Rebecca Blank explore how much of the gender wage gap is attributable to differences in characteristics and how much to differences in returns to characteristics by estimating wage models using data in the 1996 March Current Population Survey. They find that oc-

**Table 1. Occupation Distribution, by Sex, Race, and Ethnicity, 2004**

Percent

Occupation category	All	Males			Females		
		White	Black	Hispanic	White	Black	Hispanic
Management, business, and financial	14.0	18.3	7.8	6.0	14.3	9.3	7.5
Professional and related	20.2	17.9	13.6	7.0	26.8	20.6	14.9
Service	16.5	10.3	20.6	20.0	17.3	26.8	30.7
Sales and related	11.4	12.0	8.1	7.4	12.4	10.9	12.1
Office and administrative support	14.0	5.7	9.5	6.6	23.3	22.4	20.7
Farming, Fishing, and Forestry	0.7	0.8	0.7	2.8	0.2	0.2	1.7
Construction and extraction	6.3	11.0	7.7	19.5	0.4	0.3	0.4
Installation, maintenance, and repair	3.7	7.0	5.1	6.3	0.3	0.5	0.4
Production	7.0	8.3	10.7	12.6	3.5	5.9	8.0
Transportation and material moving	6.2	8.7	16.3	12.2	1.7	3.1	3.8

Source: March 2004 Current Population Survey. Sample includes population aged sixteen to sixty-four. White and black are non-Hispanic.

occupational differences between the sexes account for roughly one-fifth of the 28 percentage point gender wage gap, and that differences in education explain virtually none of the gap. Again, most of the gap is due to differences in the returns to characteristics.<sup>12</sup> (This finding is in marked contrast to the racial gap in wages and labor force participation, which is largely explained by differences in worker characteristics.) Altonji and Blank also confirm that as minorities and women have gotten more education and experience, differences in these characteristics have become less important in explaining wage gaps.<sup>13</sup>

Historically, many of the occupational differences between men and women have reflected constraints placed on women, including explicit rules barring hiring or training women in certain occupations. Goldin also notes that women were forced to quit certain jobs upon marriage.<sup>14</sup> It is difficult to discern how much the remaining differences reflect constraints and how much they reflect women's choices. It is almost certainly true that some gender discrimination persists in

the labor market. This distinction between choice and constraint is an extremely important issue, needing more research.<sup>15</sup>

To the extent that men and women do make different choices and differ in their preferences for work outside the home or for various job characteristics, such as more or less reliance on physical labor or more flexibility to work from home, occupations will differ among men and women. Of course, an important underlying question, *why* women and men might have different occupational preferences, is largely speculative. Do these "choices" reflect societal norms or differences in the way parents and educators treat girls and boys? Or do they reflect genuine differences in taste? The economics literature offers no definitive answers to these questions.

### Estimates of Intergenerational Income Mobility for Women

Any discussion of economic mobility among women must consider the role of marriage in determining economic status and how that role has changed over time. The economic

history of women, particularly married women, in the twentieth century is far more complicated and nuanced than can be reviewed succinctly here; the interested reader is referred to Claudia Goldin's *Explaining the Gender Gap*, already noted. That said, the bare statistics, as cited by Goldin, are striking. In 1890, only 2.5 percent of married white women reported an occupation outside the home.<sup>16</sup> By 2000, 66 percent of married

---

*“Marrying up” was once the primary—if not the only—means for a woman to improve her economic status over that of her parents.*

---

women were in the labor force, 47 percent full time. Growth has been steady since 1940, when the labor force participation rate among married women was 15 percent. In 1950 the rate was 20 percent, and it increased roughly 10 percentage points each decade, reaching 65 percent in 1990. In 1940, only 7 percent of married women with children worked full time, as against 46 percent in 2000.<sup>17</sup>

As labor force participation rates have been climbing, marriage rates have been falling. The share of women aged eighteen to thirty-four who were married fell from 73 percent in 1960 to 54 percent in 1980 to 44 percent in 2000. Yet marriage remains extremely important in determining women's economic status. The share of wives' earnings in family income was 26.6 percent in 1980, 30.7 percent in 1990, and 35.5 percent in 2003. In 2003,

among two-earner couples, 25 percent of wives earned more than their husbands.<sup>18</sup> For married women on average, however, more than 60 percent of their family income is *not* attributable to their own earnings.

These statistics illustrate that as a practical point of measurement, the role of marriage must be taken into account. A measure that considers only the correlation between parents' income and their daughters' own earned income will likely misstate the economic well-being of low-earning daughters. But a measure focusing only on the correlation between parents' income and their daughter's household's income would not distinguish between a daughter's upward mobility achieved through marriage and that gained through her own occupational success. This latter point raises a conceptual challenge.

Much of the earlier literature on intergenerational income mobility focused on the transmission of income status from parents to sons. In recent work, however, economists Laura Chadwick and Gary Solon focus on daughters.<sup>19</sup> They estimate the elasticity, or proportional responsiveness, of a daughter's income with respect to her parents' income using data from the 1992 survey of the longitudinal PSID. Improving on earlier studies of daughters, they consider separately the role of marriage and include nonworking women. Their elasticity estimates, which range from 0.35 to 0.43, suggest substantial persistence in economic status between parents and daughters. Note that a positive elasticity implies that daughters from high-income families tend to have higher family income themselves as adults. (The corresponding estimates for sons are a bit larger, ranging from 0.51 to 0.59, but these differences are not always statistically significant.)



Importantly, Chadwick and Solon also consider how “assortative mating,” or the tendency for like people to marry, affects the transmission of income status from parents to daughters. They separately estimate the correlation between parents’ income and daughter’s earnings and between parents’ income and daughter’s husband’s earnings to learn whether women marry men whose earnings and income are similar to those of their birth family.<sup>20</sup> In the sample of 365 married daughters, the mean value of the husband’s share of the couple’s combined earnings is 0.71. Strikingly, the estimated elasticity of a husband’s earnings with respect to his wife’s parents’ income is just as great as the elasticity of her own earnings to her parents’ income.<sup>21</sup> Assortative mating clearly contributes to the persistence of economic status from parents to daughters.

Earlier work by Elizabeth Peters also finds that marriage plays an important role in the persistence of income status across generations. Her study, based on data from the National Longitudinal Survey for the cohort of adults in the late 1970s and early 1980s who were teenagers during the 1960s, finds that the intergenerational correlation of income is similar for sons and daughters. But daughters have substantially more *earnings* mobility than *income* mobility, whereas for sons, intergenerational earnings and income mobility are similar. For daughters, income from a husband’s earnings reduces the amount of a daughter’s mobility measured by earnings alone.<sup>22</sup>

One conceptual issue beyond the reach of these statistics is whether economic status achieved through one’s own earnings should be valued differently from that achieved through marriage. “Marrying up” was once the primary—if not the only—means for a

woman to improve her economic status over that of her parents. Today, women are more likely to improve their status through occupation and earnings, though as the studies discussed above indicate, marriage remains a powerful means of improving economic status. Should the two avenues to advancement—marriage and occupation—be treated neutrally? Consider the following. A woman whose parents are in the lower third of the income distribution “marries well,” moving her to the upper third; or the same woman enters the medical profession and thereby moves into the upper third. Is there something different about these situations? One way to potentially address this issue is to consider how women value self-earned income relative to income derived from their husbands. For example, to what extent does income brought into the home by a woman affect her role as a decisionmaker in the household with regard to number of children or family expenditures? I merely raise these questions and make no attempt to answer them.

A related conceptual challenge is how to determine whether a woman’s earned income truly reflects her economic status. Economists generally consider nonparticipation in the labor force by men as resulting from economic constraints or barriers. For women, researchers think that labor market participation, or nonparticipation, often reflects a choice. For example, women with higher-earning husbands can more easily afford not to work outside the home. A similar issue arises in considering the *timing* of labor force participation. In a cross-section of women, lower point-in-time earnings might reflect a privilege of choice. For example, women with higher skill levels in more professional occupations can better negotiate time out of work or part-time arrangements to care for a

new baby or sick family member. This example illustrates one reason why it is important to consider life-cycle earnings, as opposed to a single snapshot of earnings, when measuring income, especially for female workers.

The important role of preferences in shaping women's labor force outcomes, as well as the transmission of these preferences from mothers to daughters, is highlighted in work by Joseph Altonji and Thomas Dunn.<sup>23</sup> Using the National Longitudinal Survey to explore gender differences in parental influence on wages, earnings, and hours, they find that father's and mother's wages have similar effects on son's and on daughter's wages, but that patterns in family influences on hours and earnings differ for sons and daughters. Strong family similarities in work hours run along gender lines and are due primarily to intergenerational and sibling correlations in preferences, rather than to labor supply responses to similarities in wages. For young men, only 15 percent of the variation in earnings is due to differences in preferences for hours. For young women, that figure is 56 percent.<sup>24</sup>

It is important to note that this discussion of marriage has not emphasized significant racial differences in the role of marriage in determining economic status. The empirical research reviewed suggests that marriage plays an important role in the intergenerational transmission of economic status for women. But black women are far less likely to have the advantage of a husband's earnings as a stable source of income. According to the U.S. Census Bureau, only 31 percent of black women aged eighteen and older were married with spouse present in 2003, as against 56 percent of white women and 52 percent of Hispanic women. In 2004 only 35 percent of black children under the age of eighteen

lived with two married parents, as against 77 percent of white children and 65 percent of Hispanic children.<sup>25</sup> With poverty nearly five times as likely among children from single-parent families, racial differences in marriage rates must certainly contribute to racial differences in economic status that are passed from one generation to the next.

### **Income Mobility among Blacks**

Key statistics on relative economic outcomes document both the recent economic progress of blacks and persistent racial gaps. Education and discrimination both play potentially crucial roles in impeding racial economic convergence. Continuing barriers to economic success will make it especially difficult for black children born to families in the lower ranks of the income distribution to move to the higher ranks—and for those born in the upper ranks to stay there. Recent evidence on intergenerational mobility among nonwhites finds striking differences in the mobility patterns of blacks and whites.

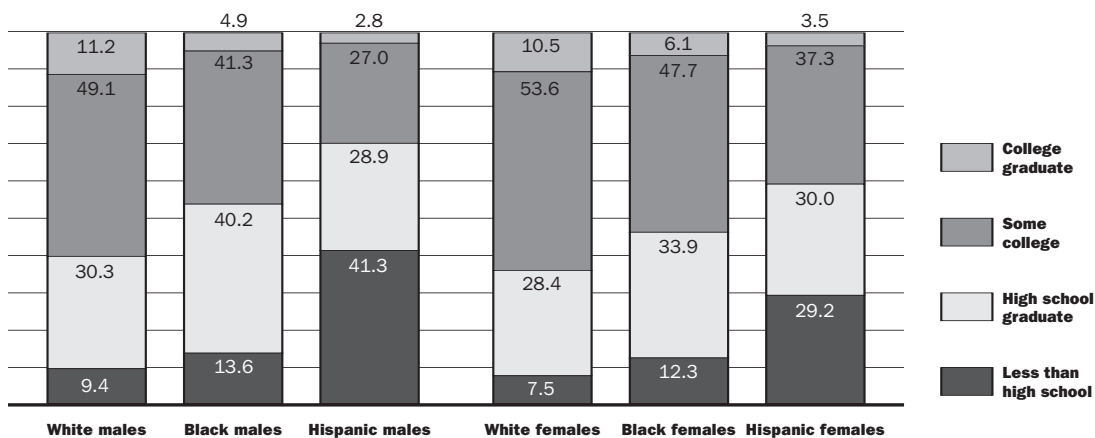
### **Relative Labor Market Outcomes and Worker Characteristics**

Recent decades have seen a convergence of blacks and whites on many measures of economic well-being. Between 1970 and 2000, the number of black men aged twenty-five to twenty-nine with a four-year college degree more than doubled, and the black-white ratio of median earnings for male full-time workers increased from 0.5 to 0.73.<sup>26</sup> Unlike the gender gap in earnings, however, the racial earnings gap narrowed during the 1960s and early 1970s but has since largely stagnated.<sup>27</sup> And substantial differences in labor force participation rates persist. In 1980, the rate for men aged eighteen and older was 78 percent among whites and 70 percent among blacks. In 2004 a 7 percentage point difference remained, with the rates at 74 percent



**Figure 1. Educational Distribution of Workers, 2004**

Percent



Source: See table 1.

and 67 percent. I focus on men, incidentally, not because racial differences among women are not important, but because of space constraints.

Characteristics of black and white male workers differ markedly. As shown in figure 1, workers' education varies substantially by race and ethnicity. White workers are much more likely to be college graduates and much less likely to be high school dropouts. And as shown earlier in table 1, workers' occupations also differ by race and ethnicity. White men are more than twice as likely as black men, and three times as likely as Hispanic men, to be in management, business, or finance, while black and Hispanic men are twice as likely to be in services. White women are more than 1.5 times as likely as black or Hispanic women to be in management, business, and finance, while black and Hispanic women are more than 1.5 times as likely to be in services.

Unlike the gender gap in wages, nearly all of the black-white wage gap can be explained by racial differences in labor market characteris-

tics. In their 1999 *Handbook of Labor Economics*, Joseph Altonji and Rebecca Blank, using data from the 1996 March Current Population Survey, find that the 21 percent hourly wage gap between black and white men falls to 12 percent when they take into account differences in education, experience, and region, and to 9 percent when they take into account a full set of variables, including occupation and industry. In other words, differences in characteristics account for almost 60 percent of the 1995 wage gap. When the authors take into account "ability," or skill, as measured by the Armed Forces Qualifying Test (AFQT) score, the gap disappears almost entirely, consistent with previous research.<sup>28</sup>

The above discussion has focused on racial differences in labor market characteristics, but another important and perhaps even more troubling trend is the increasing numbers of young black men who are neither in the labor force nor in school but are amassing criminal records and prison time.<sup>29</sup> While it is true that incarceration rates have been steadily rising in the population as a whole, black men are disproportionately likely to be

in prison. Census data from 2000 reveal that incarceration rates for men aged eighteen to sixty-four are seven times higher among blacks than whites—7.9 percent as against 1.07 percent.<sup>30</sup> Using unpublished data from the Bureau of Justice Statistics, sociologists Bruce Western and Becky Petit find that from 1982 to 1996 the share of men aged twenty to thirty-five in prison or jail increased from 0.8 percent to 2.1 percent among whites and from 5.5 percent to 12.2 percent among blacks. More than a third of black male high school dropouts in this age group were in prison or jail on an average day in 1996.<sup>31</sup> Although evidence is mixed, a growing body of research suggests that incarceration worsens the already disadvantaged economic position of black men through its adverse effects on wages and wage growth after their release.<sup>32</sup>

### Barriers to Upward Mobility

The evidence reviewed above leads us to the unavoidable question of *why* blacks have poorer labor market characteristics than whites, on average. Two leading explanations are educational differences and discrimination. The article by Cecilia Rouse and Lisa Barrow in this volume considers the relationship between K–12 education and social mobility in detail. Here I offer only a brief sketch of how the issue might play out with a racial dimension.

Racial differences in family background can lead directly to racial differences in the accumulation of human capital, generally thought of as educational attainment. The channels through which this might occur include, but are not limited to, differences in parental wealth, in the home environment, and in the emphasis placed on learning, along with neighborhood or peer effects and early childhood health effects. Traditional economic models assume that the optimal education for

an individual is determined by his or her ability. So if ability is evenly distributed across white and black families, then on average white and black children should receive the same amount of schooling.<sup>33</sup> But if labor market expectations are lower for black children—say, because of discrimination, either real or perceived—then blacks might rationally choose lower levels of human capital investment. Credit constraints would also lead to different investment in skills. If minority families tend to have less access to wealth or credit than white families, then minority children would also be likely to get less schooling than white children of comparable ability. Racial differences in school quality are also important to relative labor market outcomes and are the subject of much research.

Labor market discrimination occurs when workers who are equally productive in an economic sense are treated unequally (in terms of compensation or promotion) in a way that is systematically related to a characteristic such as sex, race, or ethnicity. Title VII of the Civil Rights Act of 1964 prohibits such discrimination. Nonetheless, evidence is compelling that some such racial discrimination persists.

Economic theories about labor market discrimination generally fall into two broad classes.<sup>34</sup> The first views it as a reflection of the prejudice or “taste” of some members of the majority group against members of the minority group. The second sees discrimination as being rooted in imperfect information: employers make inferences about a potential worker’s qualifications based on the average behavior of members in the worker’s “group.” As evidence of discrimination, researchers often note that differences in characteristics such as education and experience do not fully explain gaps in earnings: if two

otherwise similar people who differ only in terms of race or gender receive different wages, they argue, the gap in wages must be due to discrimination. This argument is misleading for two reasons. First, differences in labor market outcomes not explained by differences in characteristics may in part reflect discrimination, but they also reflect unobserved group differences in productivity and tastes. Second, differences in observed characteristics, such as education, might also reflect the effect of discrimination.

Given how hard it is to identify discrimination, researchers have tried to devise creative empirical tests. Audit studies, for example, compare the hiring probabilities of people who are identical in all characteristics relevant to the job at hand but who differ in race, ethnicity, or gender. Trained “auditors,” paired to match each other as closely as possible in all relevant characteristics, are sent out to interview for jobs and are given essentially identical resumes. A 1991 audit study of black and white men in Washington and Chicago, a 1990 study of Hispanic and white non-Hispanic men in San Diego and Chicago, and a 1991 study of Hispanics, blacks, and whites in Denver all found evidence consistent with discrimination against blacks and Hispanics.<sup>35</sup> But limitations of the experiments—in particular, the difficulty of identifying pairs of applications that are truly identical on all relevant dimensions—make it hard to draw firm conclusions from these studies.

An experiment by Marianne Bertrand and Sendhil Mullainathan provides compelling evidence of discrimination based on perceived race as signaled by name. The authors sent fictitious resumes to help-wanted ads in Boston and Chicago newspapers, randomly assigning names that sounded African Ameri-

can or white, such as Latoya and Tyrone or Emily and Brendan. Not only did “white” names get 50 percent more callbacks for interviews, callbacks for those names were also more responsive to resume quality.<sup>36</sup>

Disentangling the effects of past discrimination from current discrimination is another

---

*Labor market discrimination occurs when workers who are equally productive in an economic sense are treated unequally (in terms of compensation or promotion) in a way that is systematically related to a characteristic such as sex, race, or ethnicity.*

---

challenge. It is standard in economics research to distinguish between current discrimination given worker characteristics and past discrimination that may have shaped the characteristics a worker brings to the labor market. For example, discrimination in the housing market could lead to residential segregation, which could cause minority groups to live in areas with inferior schools and therefore to get a poorer education.

Shelly Lundberg and Richard Startz have developed a model to explain the persistence of racial inequality that is based on precisely this premise. They start with the observation that although many “artificial” barriers to economic success have been removed for blacks—for example, by antidiscrimination

legislation—racial inequalities persist. The experience of blacks in this country stands in contrast to the experiences of immigrant groups from Europe and Asia, whose standard of living has converged rapidly with the general population. In the view of Lundberg and Startz, the source of persistence in racial differentials is the influence of the group on the individual and the forces that create segregated communities. When the “social capital” of a community affects the accumulation of skills by individuals (as might happen, for example, to a talented black male youth growing up in an inner-city neighborhood with virtually no positive male role models), group disparities in earnings can persist indefinitely.<sup>37</sup> Racial segregation, which in large part reflects historical discrimination, is arguably an important barrier to black social and economic upward mobility.

### Estimates of Intergenerational Income Mobility for Nonwhites

The improved economic outcomes of recent generations of blacks suggest that, all else equal, we might expect to see a higher rate of intergenerational income mobility for blacks than for whites. The recent relative economic success of blacks means, for example, that there are more high-income sons than high-income fathers.<sup>38</sup> But high intergenerational income mobility among blacks would not necessarily imply that black men have higher upward mobility than white men in the *overall* income distribution. If earnings and income among blacks are systematically lower than earnings and income among whites, then a similar rate of intergenerational income transmission would imply that black sons would be lower than white sons in the overall income distribution. Thus a complete picture of social mobility requires us to consider more than a simple correlation measure of intergenerational income.

Elizabeth Peters finds that black parents and white parents pass their economic standing along to children at similar rates. The correlation between parents’ and sons’ income and earnings is the same for whites and nonwhites, as is the correlation between parents’ and daughters’ earnings.<sup>39</sup> But if, as noted, mean income is lower among blacks than among whites, and if sons and daughters “regress to the mean” income of their racial group, as is typical, then the likelihood of upward mobility in the *overall* income distribution is substantially lower among blacks and the likelihood of downward mobility, substantially greater.

Research by Thomas Hertz suggests that this is indeed the case. Hertz studied a representative sample of 6,273 white and black individuals from the Panel Study of Income Dynamics who were born between 1942 and 1972 and who were observed as both children and adults.<sup>40</sup> He found that intergenerational correlation in long-run average income in the United States is on the order of 0.4 or higher, consistent with other recent studies.

But he also found that black children are substantially more likely than white children to remain in the lower percentiles of the overall income distribution. Only 17 percent of white children born in the bottom decile of income remain there as adults, as against 42 percent of black children. Likewise, 32 percent of white children born in the bottom quartile remain there as adults, as against 63 percent of black children. And “rags to riches” experiences are much less common among blacks. Fewer than 4 percent of black children from families in the bottom quartile move to the upper quartile as adults, as against 14 percent of white children.

In contrast, among children born in the upper reaches of the income distribution,

persistence is more likely and downward mobility less likely among whites. Any child born in the top decile has a 30 percent chance of attaining the top decile as an adult and only a 3.5 percent chance of being in the bottom decile. But although white children born in the top quartile have a 45 percent chance of remaining there, black children have only a 15 percent chance. Moreover, downward mobility from the top quartile to the bottom quartile is nearly four times as great for blacks as for whites. Economically successful blacks do not appear to transmit their success to their children as effectively as white parents do. These findings do not merely reflect the fact that actual income might be greater for whites in a particular income decile or quartile than blacks. Using regression analyses, Hertz finds evidence of a black-white mobility gap of between 25 and 40 percent between the adult incomes of blacks and whites who grew up in families with identical long-run average incomes.

### **Summary Discussion**

Several important issues complicate the study of intergenerational mobility for women and minorities. For women, marriage plays an important role in the intergenerational transmission of income. Not only do spousal earnings continue to dominate family income for married women, but also women tend to marry men whose position in the income distribution resembles that of their fathers. Nevertheless, women have made great strides in terms of their ability to attain economic success through their own

earnings and occupations. Women's education, labor force participation, experience accumulation, and conditional earning (that is, earnings conditional on labor force participation) have largely come to resemble those of men.

Among blacks, too, recent cohorts have had economic opportunities and outcomes far superior to those of earlier cohorts. But blacks continue to be, on average, disadvantaged relative to whites, and the racial gap in economic outcomes persists. Successful black parents have a more difficult time transmitting their economic success to their children than do white parents. Black children born in the lowest income deciles are less likely than white children to reach the highest income deciles. Still, the picture is not all bleak. One cause for optimism is the growth of the black middle class, and particularly the black elite. Increasing numbers of blacks hold public office, own businesses, and work in professional and managerial occupations.<sup>41</sup>

Other articles in this volume discuss family background, education, health, and other such important drivers of social and economic mobility that also affect the persistent racial gap in economic outcomes. American society has come some way in improving the economic opportunities of minorities, and even more so of women. Progress remains to be made, but recent advances have enabled today's women and minorities to achieve economic mobility through reliance on their own talents and efforts.

## Notes

1. It is a limitation of this article that it almost entirely associates minority status in the United States with being black. This largely reflects the reality that the empirical economics literature has focused almost exclusively on black-white differences in economic outcomes. Hispanic and non-Hispanic differences have received far less research attention, and largely because of data limitations, even less work has been done on other minority groups, including Asian Americans and Native Americans. A separate article in this volume considers the mobility experience of immigrants.
2. These figures are based on data from the U.S. Bureau of Labor Statistics.
3. Michael Hout, "Educational Progress for African-Americans and Latinos in the United States from the 1950s to the 1990s: The Interaction of Ancestry and Class," in *Ethnicity, Social Mobility and Public Policy: Comparing the US and UK*, edited by Glenn C. Loury, Tariq Modood, and Steven M. Teles (Cambridge University Press, 2004), pp. 262–86.
4. Rebecca Blank, "An Overview of Social and Economic Trends, by Race," in *America Becoming: Racial Trends and Their Consequences*, edited by Neil J. Smelser, William J. Wilson, and Faith Mitchell (Washington: National Academy Press, 2001), vol. 1, pp. 21–40. Of course, while these figures illustrate great improvement, they also reveal a far from ideal portrait of current conditions.
5. Finis Welch, "Catching Up: Wages of Black Men," *American Economic Review* 93, no. 2 (2003): 320–25.
6. This is an adjusted figure from U.S. Bureau of Labor Statistics data. It simply compares the median earnings of female and male full-time workers. Below, I discuss differences in pay adjusted for differences between men and women in labor market characteristics.
7. Claudia Goldin, *Understanding the Gender Gap: An Economic History of American Women* (Oxford University Press, 1990).
8. June O'Neill and Solomon Polachek, "Why the Gender Gap in Wages Narrowed in the 1980s," *Journal of Labor Economics* 11, no. 1 (1993): 205–28.
9. Francine D. Blau and Lawrence M. Kahn, "Swimming Upstream: Trends in the Gender Wage Differential in the 1980s," *Journal of Labor Economics* 15, no. 1 (1997): 1–42. This investigation improves upon other analyses of the effect of experience on gender wage differentials by using a measure of actual labor market experience, which is unavailable in most data sets, rather than relying on "potential" experience (age minus education minus 6), which generally overstates experience for women.
10. Audrey Light and Manuelita Ureta, "Early-Career Work Experience and Gender Wage Differentials," *Journal of Labor Economics* 13, no.1 (1995): 121–54; Audrey Light and Manuelita Ureta, "Women's Labor Market Mobility: Evidence from the NLS," *American Economic Review* 80, no. 2 (1990): 293–97.
11. Blau and Kahn, "Swimming Upstream" (see note 9).
12. Joseph G. Altonji and Rebecca M. Blank, "Race and Gender in the Labor Market," in *Handbook of Labor Economics*, vol. 3c, edited by O. Ashenfelter and D. Card (Amsterdam: Elsevier Science, 1999), pp. 3143–259.
13. A related issue is the well-documented fact that the wages of both men and women are lower in occupations dominated by female workers. A 1995 paper by David Macpherson and Barry Hirsch investigates how much



of this relationship between wages and the proportion of female workers is due to job characteristics. The authors link CPS data on earnings and occupations from 1983 to 1993 with data on occupational job characteristics. They find that skill-related characteristics explain roughly one-quarter of the gender composition effect for women and one-half for men. See David A. Macpherson and Barry T. Hirsch, "Wages and Gender Composition: Why Do Women's Jobs Pay Less?" *Journal of Labor Economics* 13, no. 3 (1995): 426–71.

14. Goldin, *Understanding the Gender Gap* (see note 7).
15. Though explicit labor market discrimination on the basis of race is illegal, some amount of gender discrimination almost surely exists in the labor market. A 1996 paper by Claudia Goldin and Cecilia Rouse offers convincing evidence of gender discrimination in the context of hiring members of an orchestra. In the 1970s and 1980s many orchestras adopted the use of a screen or other device to hide an auditioning musician from the judges. This allows the researchers to determine whether women benefited from having their sex "hidden." It appears that they did. Among nine orchestras, the proportion of female members increased from about 0.10 in 1970 to about 0.20 in 1990. The authors conclude that the use of the screen reduced discrimination against women in orchestra hiring and can explain a large fraction of the increase in the proportion of female players. See Claudia Goldin and Cecilia Rouse, "Orchestrating Impartiality: The Impact of 'Blind' Auditions on Female Musicians," *American Economic Review* 90, no. 4 (2000): 715–41.
16. Claudia Goldin, *Understanding the Gender Gap* (see note 7).
17. Single women have always participated in the labor force in large numbers. The percentage was 58 percent in 1940, 63 percent in 1970, and 72 percent in 1990.
18. U.S. Bureau of Labor Statistics, "Women in the Labor Force: A Databook" (Department of Labor, May 2005), [www.bls.gov/cps/wlfdatabook2005.htm](http://www.bls.gov/cps/wlfdatabook2005.htm) (accessed September 2005).
19. Laura Chadwick and Gary Solon, "Intergenerational Income Mobility among Daughters," *American Economic Review* 92, no. 1 (2002): 335–44.
20. The authors note that this elasticity might be substantial, as suggested by the finding of Altonji and Dunn of a 0.26 correlation between the log earnings of a daughter's husband and her father. See Joseph G. Altonji and Thomas A. Dunn, "Relationships among the Family Incomes and Labor Market Outcomes of Relatives," in *Research in Labor Economics*, edited by Ronald G. Ehrenberg, vol. 12 (London: JAI Press, 1991), pp. 269–310. Lam and Schoeni point out that if assortative mating is strong and if the earnings of husbands are more dispersed than those of their wives, then the elasticity of a husband's earnings to those of the wife's father might be even stronger than the elasticity of a daughter's earnings to her father's. See David Lam and Robert F. Schoeni, "Effects of Family Background on Earnings and Returns to Schooling: Evidence from Brazil," *Journal of Political Economy* 101, no. 4 (1993): 710–40; David Lam and Robert F. Schoeni, "Family Ties and Labor Markets in the United States and Brazil," *Journal of Human Resources* 29, no. 4 (1994): 1235–58.
21. The empirical approach of the paper has two important advantages over the previous literature on the topic. First, it is based on data from the Panel Study of Income Dynamics, a nationally representative data set. It therefore avoids the problems associated with using a homogeneous sample—an issue in many early studies of intergenerational mobility. Second, the longitudinal nature of the data allows the authors to construct income and earnings measures from multiple years of observations. As others have pointed out, this yields a more reliable measure of income and earnings than does a single-year observation.

22. Elizabeth H. Peters, "Patterns of Intergenerational Mobility in Income and Earnings," *Review of Economics and Statistics* 74, no. 3 (1992): 456–66.
23. Joseph G. Altonji and Thomas A. Dunn, "An Intergenerational Model of Wages, Hours, and Earnings," *Journal of Human Resources* 35, no. 2 (2000): 221–58.
24. A 2003 study of intergenerational earnings mobility by Angela Fertig also looks separately at the experience of sons and daughters. She examines data on five cohorts from the PSID. The earliest cohort has parents' earnings from 1968 to 1972 and children's earnings from 1985 to 1989, and the most recent cohort has parents' earnings from 1972 to 1976 and children's earnings from 1989 to 1993. She finds that equality of opportunity for sons with respect to fathers rose over this period and equality of opportunity for sons with respect to mothers remained roughly constant, and she finds mixed evidence for daughters. See Angela R. Fertig, "Trends in Intergenerational Earnings Mobility in the U.S.," *Journal of Income Distribution* 4, no.12 (2003–04): 108–30.
25. From [www.childtrendsdatabank.org](http://www.childtrendsdatabank.org) (accessed February 2006).
26. Welch, "Catching Up" (see note 5).
27. The research of James Smith and Finis Welch finds that while the relative wages of blacks increased over the 1960s and 1970s, there is little evidence of improvements within cohort. Rather, they find that the gains are dominated by the labor-market arrival of cohorts who would do better than earlier arrivals, but not as well as subsequent cohorts. See James P. Smith and Finis Welch, "Black-White Male Wage Ratios, 1960–1970," *American Economic Review* 67, no. 3 (1977): 323–28; James P. Smith and Finis Welch, "Affirmative Action and Labor Markets," *Journal of Labor Economics* 2, no. 2 (1984): 269–301; James P. Smith and Finis Welch, "Black Economic Progress after Myrdal," *Journal of Economic Literature* 27, no. 2 (1989): 519–64.
28. The authors note that it is not appropriate to consider AFQT scores as a measure of innate ability. When they are included in a model that controls for years of schooling, as theirs does, it is perhaps most appropriate to interpret AFQT scores as a measure of how much an individual has learned, conditional upon years of schooling; note that school quality would be an important factor in that measure.
29. Sociologists Bruce Western and Becky Pettit combine labor force data from the 1982–96 March CPS surveys with survey data on prison and jail populations to construct employment-to-population ratios that are adjusted for incarceration. Their estimates suggest that standard labor force data substantially understate black-white differences in employment. Bruce Western and Becky Pettit, "Incarceration and Racial Inequality in Men's Employment," *Industrial and Labor Relations Review* 54, no. 1 (October 2000): 3–16.
30. From *Human Rights Watch Press Backgrounder* (February 22, 2002), table 2a, [www.hrw.org/backgrounder/usa/race](http://www.hrw.org/backgrounder/usa/race) (accessed February 2006). Figures calculated on the basis of U.S. Census Bureau data on state residents and incarcerated population from the 2000 census. The reported rates of incarceration per 100,000 men aged eighteen to sixty-four are 1,072 for whites, 7,923 for blacks, and 2,703 for Hispanics.
31. Western and Pettit, "Incarceration and Racial Inequality in Men's Employment" (see note 29).
32. For a review of this literature, see Bruce Western, Jeffrey R. Kling, and David F. Weiman, "The Labor Market Consequences of Incarceration," *Crime and Delinquency* 47, no. 3 (2001): 410–27. A more recent paper by Bruce Western finds large effects of having been incarcerated on both the wages (10 to 20 per-

- cent) and wage growth (30 percent) of young men. See Bruce Western, "Incarceration, Wages, and Inequality," *American Sociological Review* 67, no. 4 (2002): 526–46.
33. In their seminal papers of 1979 and 1986, Gary Becker and Nigel Tomes present an economic model of intergenerational transmission in which families bequeath human capital and financial assets to their offspring. Families choose the level of human capital investment in their children by comparing the financial return to educational investment and the return on alternative investments. Under the assumption of perfect credit markets, parental income and wealth play no role in determining child education or earnings. The model assumes that the return is increasing in ability. Hence, the level of investment in education is solely determined by child ability. Differences in child ability within a family could lead to different levels of educational investment across siblings. But, if ability is distributed randomly across families, there should be no systematic differences across families. In other words, two children of similar ability levels should receive the same level of education, even if one comes from a wealthy family and the other does not. Gary S. Becker and Nigel Tomes, "An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility," *Journal of Political Economy* 87, no. 6 (1979): 1153–89; Gary S. Becker and Nigel Tomes, "Human Capital and the Rise and Fall of Families," *Journal of Labor Economics* 4, no. 3, pt. 2 (1986): S1–39.
34. I refer the interested reader to Altonji and Blank, "Race and Gender in the Labor Market" (see note 12) for an extensive review of economic theories of discrimination.
35. Margery Turner, Michael Fix, and Raymond Struyk, *Opportunities Denied, Opportunities Diminished: Racial Discrimination in Hiring* (Washington: Urban Institute Press, 1991); Harry Cross and others, *Employer Hiring Practices: Differential Treatment of Hispanic and Anglo Job Seekers* (Washington: Urban Institute, 1990); Franklin James and Steve W. DelCastillo, *We May Be Making Progress toward Equal Access to Jobs: Evidence from Recent Audits* (University of Colorado at Denver, 1992).
36. Marianne Bertrand and Sendhil Mullainathan, "Are Emily and Brendan More Employable than Latoya and Tyrone? Evidence on Racial Discrimination in the Labor Market from a Large Randomized Experiment," *American Economic Review* 94, no. 4 (2004): 991–1013.
37. Shelly J. Lundberg and Richard Startz, "On the Persistence of Racial Inequality," *Journal of Labor Economics* 16, no. 2 (1998): 292–324.
38. Smith and Welch, "Black-White Male Wage Ratios" (see note 27); Smith and Welch, "Affirmative Action and Labor Markets" (see note 27); and Smith and Welch, "Black Economic Progress after Myrdal" (see note 27).
39. Peters, "Patterns of Intergenerational Mobility" (see note 22).
40. Thomas Hertz, "Rags, Riches, and Race: The Intergenerational Economic Mobility of Black and White Families in the United States," in *Unequal Chances: Family Background and Economic Success*, edited by Samuel Bowles, Herbert Gintis, and Melissa Osborne Groves (New York: Russell Sage and Princeton University Press, 2004), pp. 165–91.
41. See, for example, Smith and Welch, "Black Economic Progress after Myrdal" (see note 27); Thomas Boston, "Trends in Minority-Owned Businesses," in *America Becoming*, edited by Smelser, Wilson, and Mitchell, vol. 2, pp. 190–221 (see note 4).

