ISSUE 3

Is There Discrimination in U.S. Labor Markets?

YES: William A. Darity, Jr., and Patrick L. Mason, from "Evidence on Discrimination in Employment: Codes of Color, Codes of Gender," *Journal of Economic Perspectives* (Spring 1998)

NO: James J. Heckman, from "Detecting Discrimination," *Journal of Economic Perspectives* (Spring 1998)

ISSUE SUMMARY

YES: Professor of economics William A. Darity, Jr., and associate professor of economics Patrick L. Mason assert that the lack of progress made since the mid-1970s toward establishing equality in wages between the races is evidence of persistent discrimination in U.S. labor markets.

NO: Professor of economics James J. Heckman argues that markets—driven by the profit motive of employers—will compete away any wage differentials that are not justified by differences in human capital.

Over 45 years have passed since Rosa Parks refused to give up her seat on a segregated Montgomery, Alabama, bus. America has had these years to finally overcome discrimination, but has it? Have the domestic programs of Presidents John F. Kennedy and Lyndon Johnson that were enacted after those turbulent years following Parks's act of defiance made it possible for African Americans to succeed within the powerful economic engine that drives American society? Or does racism still stain the Declaration of Independence, with its promise of equality for all?

Before we examine the economics of discrimination, perhaps we should look backward to see where America has been, what progress has been made, and what is left—if anything—to accomplish. American history, some say, reveals a world of legalized apartheid where African Americans were denied access to the social, political, and economic institutions that are the mainstays of America. Without this access, millions of American citizens were doomed to live lives on the fringes of the mainstream. Thus, the Kennedy/Johnson programs left one

legacy, which few now dispute: These programs effectively dismantled the system of legalized discrimination and, for the first time since the end of slavery, allowed blacks to dream of a better life.

The dream became a reality for many. Consider the success stories that are buried in the poverty statistics that were collected and reported in the 1960s. Poverty scarred the lives of one out of every five Americans in 1959. But poverty was part of the lives of fully one-half of all African American families. Over time fewer and fewer Americans, black and white, suffered the effects of poverty; however, even though the incidence of poverty has been cut in half for black Americans, more than 25 percent of African American families still live in poverty. Even more distressing is the reality that African American children bear the brunt of this economic deprivation. In 1997, 37.2 percent of the "next generation" of African Americans lived in families whose total family income was insufficient to lift them out of poverty. (Note that although black Americans suffer the effects of poverty disproportionately, white-not-Hispanic families are the single largest identifiable group who live in poverty: white-not-Hispanic people make up 46.4 percent of the entire poor population; white-Hispanic, 22.2 percent; and black, 25.6 percent.)

The issue for economists is why so many African Americans failed to prosper and share in the great prosperity of the 1990s. Few would deny that in part the lack of success for black Americans is directly associated with a lack of "human capital": schooling, work experiences, and occupational choices. The real question, however, is whether differences between blacks and whites in terms of human capital can explain most of the current wage differentials or whether a significant portion of these wage differentials can be traced to labor market discrimination.

In the following selections, William A. Darity, Jr., and Patrick L. Mason argue that a significant part of the reason for black Americans' lack of economic success is discrimination, while James J. Heckman maintains that the issue is all human capital differences.

William A. Darity, Jr., and Patrick L. Mason

YES

Evidence on Discrimination in Employment

There is substantial racial and gender disparity in the American economy. As we will demonstrate, discriminatory treatment within the labor market is a major cause of this inequality. The evidence is ubiquitous: careful research studies which estimate wage and employment regressions, help-wanted advertisements, audit and correspondence studies, and discrimination suits which are often reported by the news media. Yet, there appear to have been periods of substantial reductions in economic disparity and discrimination. For example, Donohue and Heckman (1991) provide evidence that racial discrimination declined during the interval 1965–1975. Gottschalk (1997) has produced statistical estimates that indicate that discrimination against black males dropped most sharply between 1965 and 1975, and that discrimination against women declined during the interval 1973–1994. But some unanswered questions remain. Why did the movement toward racial equality stagnate after the mid-1970s? What factors are most responsible for the remaining gender inequality? What is the role of the competitive process in elimination or reproduction of discrimination in employment?

The Civil Rights Act of 1964 is the signal event associated with abrupt changes in the black-white earnings differential (Bound and Freeman, 1989; Card and Krueger, 1992; Donohue and Heckman, 1991; Freeman, 1973). Along with other important pieces of federal legislation, the Civil Rights Act also played a major role in reducing discrimination against women (Leonard, 1989). Prior to passage of the federal civil rights legislation of the 1960s, racial exclusion and gender-typing of employment was blatant. The adverse effects of discriminatory practices on the life chances of African Americans, in particular, during that period have been well-documented (Wilson, 1980; Myers and Spriggs, 1997, pp. 32–42; Lieberson, 1980). Cordero-Guzman (1990, p. 1) observes that "up until the early 1960s, and particularly in the south, most blacks were systematically denied equal access to opportunities [and] in many instances, individuals with adequate credentials or skills were not, legally, allowed to apply to certain positions in firms." Competitive market forces certainly did

From William A. Darity, Jr., and Patrick L. Mason, "Evidence on Discrimination in Employment: Codes of Color, Codes of Gender," *Journal of Economic Perspectives,* vol. 12, no. 2 (Spring 1998). References and some notes omitted.

not eliminate these discriminatory practices in the decades leading up to the 1960s. They remained until the federal adoption of antidiscrimination laws.

Newspaper help-wanted advertisements provide vivid illustrations of the openness and visibility of such practices. We did an informal survey of the employment section of major daily newspapers from three northern cities, the *Chicago Tribune,* the *Los Angeles Times* and the *New York Times,* and from the nation's capital, *The Washington Post,* at five-year intervals from 1945 to 1965. (Examples from southern newspapers are even more dramatic.) . . .

With respect to gender-typing of occupations, help-wanted advertisements were structured so that whole sections of the classifieds offered job opportunities separately and explicitly for men and women. Men were requested for positions that included restaurant cooks, managers, assistant managers, auto salesmen, sales in general, accountants and junior accountants, design engineers, detailers, diemakers, drivers, and welders. Women were requested for positions that included household and domestic workers, stenographers, secretaries, typists, bookkeepers, occasionally accountants (for "girls good at figures"), and waitresses.[1] The *Washington Post* of January 3, 1960, had the most examples of racial preference, again largely for whites, in help-wanted ads of any newspaper edition we examined. Nancy Lee's employment service even ran an advertisement for a switchboard operator—presumably never actually seen by callers—requesting that all *women* applying be white! Advertisements also frequently included details about the age range desired from applicants, like men 21–30 or women 18–25. Moreover, employers also showed little compunction about specifying precise physical attributes desired in applicants.[2]

Following the passage of the Civil Rights Act of 1964, none of the newspapers carried help-wanted ads that included any explicit preference for "white" or "colored" applicants in January 1965. However, it became very common to see advertisements for "European" housekeepers (a trend that was already visible as early as 1960). While race no longer entered the help-wanted pages explicitly, national origin or ancestry seemed to function as a substitute. Especially revealing is an advertisement run by the Amity Agency in the *New York Times* on January 3, 1965, informing potential employers that "Amity Has Domestics": "Scottish Gals" at $150 a month as "mothers' helpers and housekeepers," "German Gals" at $175 a month on one-year contracts, and "Haitian Gals" at $130 a month who are "French speaking." Moreover, in the "Situations Wanted" section of the newspaper, prospective female employees still were indicating their own race in January 1965.

The case of the help-wanted pages of the *New York Times* is of special note because New York was one of the states that had a state law against discrimination and a State Commission Against Discrimination in place, long prior to the passage of the federal Civil Rights Act of 1964. However, the toothlessness of New York's State Commission Against Discrimination is well-demonstrated by the fact that employers continued to indicate their racial preferences for new hires in help-wanted ads, as well as by descriptions of personal experience like that of John A. Williams in his semi-autobiographical novel, *The Angry Ones* (1960 [1996], pp. 30–1).

Help-wanted ads were only the tip of the iceberg of the process of racial exclusion in employment. After all, there is no reason to believe that the employers who did not indicate a racial preference were entirely open-minded about their applicant pool. How successful has the passage of federal antidiscrimination legislation in the 1960s been in producing an equal opportunity environment where job applicants are now evaluated on their qualifications? To give away the answer at the outset, our response is that discrimination by race has diminished somewhat, and discrimination by gender has diminished substantially. However, neither employment discrimination by race or by gender is close to ending. The Civil Rights Act of 1964 and subsequent related legislation has purged American society of the most overt forms of discrimination. However, discriminatory practices have continued in more covert and subtle forms. Furthermore, racial discrimination is masked and rationalized by widely-held presumptions of black inferiority.

Statistical Research on Employment Discrimination

Economic research on the presence of discrimination in employment has focused largely on black-white and male-female earnings and occupational disparities. The position typically taken by economists is that some part of the racial or gender gap in earnings or occupations is due to average group differences in productivity-linked characteristics (a human capital gap) and some part is due to average group differences in treatment (a discrimination gap). The more of the gap that can be explained by human capital differences, the easier it becomes to assert that labor markets function in a nondiscriminatory manner; any remaining racial or gender inequality in employment outcomes must be due to differences between blacks and whites or between men and women that arose outside the labor market. . . .

Regression Evidence on Racial Discrimination

When we consider economic disparities by race, a difference emerges by gender. Using a Blinder-Oaxaca approach in which women are compared by their various racial and ethnic subgroups, Darity, Guilkey and Winfrey (1996) find little systematic evidence of wage discrimination based on U.S. Census data for 1980 and 1990.[3] However, when males are examined using the same Census data a standard result emerges. A significant portion of the wage gap between black and white males in the United States cannot be explained by the variables included to control for productivity differences across members of the two racial groups.

Black women are likely to have the same school quality and omitted family background characteristics as black men (the same is true for white women and men). Hence, it strains credibility to argue that the black-white earnings gap for men is due to an omitted labor quality variable unless one also argues that black women are paid more than white women conditional on the unobservables. The findings of Darity, Guilkey and Winfrey (1996), Rodgers and

Spriggs (1996) and Gottschalk (1997) indicate that in 1980 and 1990 black men in the United States were suffering a 12 to 15 percent loss in earnings due to labor market discrimination.

There is a growing body of evidence that uses color or "skin shade" as a natural experiment to detect discrimination. The approach of these studies has been to look at different skin shades within a particular ethnic group at a particular place and time, which should help to control for factors of culture and ethnicity other than pure skin color. Johnson, Bienenstock, and Stoloff (1995) looked at dark-skinned and light-skinned black males from the same neighborhoods in Los Angeles, and found that the combination of a black racial identity and a dark skin tone reduces an individual's odds of working by 52 percent, after controlling for education, age, and criminal record! Since both dark-skinned and light-skinned black males in the sample were from the same neighborhoods, the study *de facto* controlled for school quality. Further evidence that lighter-complexioned blacks tend to have superior incomes and life chances than darker-skinned blacks in the United States comes from studies by Ransford (1970), Keith and Herring (1991) and Johnson and Farrell (1995).

Similar results are found by looking at skin color among Hispanics. Research conducted by Arce, Murguia, and Frisbie (1987) utilizing the University of Michigan's 1979 National Chicano Survey involved partitioning the sample along two phenotypical dimensions: skin color, ranging from Very Light to Very Dark on a five-point scale; and physical features, ranging from Very European to Very Indian on a five-point scale. Chicanos with lighter skin color and more European features had higher socioeconomic status. Using the same data set, Telles and Murguia (1990) found that 79 percent of $1,262 of the earnings differences between the dark phenotypic group and other Mexican Americans was *not* explained by the traditional variables affecting income included in their earnings regression. Further support for this finding comes from Cotton (1993) and Darity, Guilkey, and Winfrey (1996) who find using 1980 and 1990 Census data that black Hispanics suffer close to ten times the proportionate income loss due to differential treatment of given characteristics than white Hispanics. Evidently, skin shade plays a critical role in structuring social class position and life chances in American society, even between comparable individuals within minority groups.

Cross-national evidence from Brazil also is relevant here. Despite conventional beliefs in Brazil that race is irrelevant and class is the primary index for social stratification, Silva (1985) found using the 1976 national household survey that blacks and mulattos (or "browns") shared closely in a relatively depressed economic condition relative to whites, with mulattos earning slightly more than blacks. Silva estimated that the cost of being nonwhite in Brazil in 1976 was about 566 cruzeiros per month (or $104 U.S.). But Silva found slightly greater unexplained income differences for mulattos, rather than blacks vis-à-vis whites, unexplained differences he viewed as evidence of discrimination. A new study by Telles and Lim (1997), based upon a random national survey of 5000 persons conducted by the Data Folha Institute des Pesquisas, compares economic outcomes based upon whether race is self-identified or interviewer-identified. Telles and Lim view interviewer-identification as more useful for

establishing social classification and treatment. They find that self-identification underestimates white income and over-estimates brown and black incomes relative to interviewer-classification.

Despite the powerful results on skin shade, some continue to argue that the extent of discrimination is overestimated by regression techniques because of missing variables. After all, it seems likely that the general pattern of unobserved variables—for example, educational quality or labor force attachment—would tend to follow the observed variables in indicating reasons for the lower productivity of black males (Ruhm, 1989, p. 157). As a result, adjusting for these factors would reduce the remaining black-white earnings differential.[4]

As one might imagine, given the framework in which economists tackle the issue of discrimination, considerable effort has been made to find measures of all imaginable dimensions of human capital that could be used to test the presence of labor market discrimination. This effort has uncovered one variable in one data set which, if inserted in an earnings regression, produces the outcome that nearly all of the black-white male wage gap is explained by human capital and none by labor market discrimination. (However, thus far no one has suggested a reasonable missing variable for the skin shade effect.) The particular variable that eliminates evidence of discrimination in earnings against black men as a group is the Armed Forces Qualifying Test (AFQT) score in the National Longitudinal Survey of Youth (NLSY).

A number of researchers have confirmed with somewhat different sample sizes and methodologies that including AFQT scores in an earnings equation virtually will eliminate racial differences in wages. . . .

The conclusion of this body of work is that labor market discrimination against blacks is negligible or nonexistent. Using Neal and Johnson's (1996) language, the key to explaining differences in black and white labor market outcomes must instead rest with "premarket factors." These studies have led Abigail and Stephan Thernstrom (1997) in a prominent *Wall Street Journal* editorial to proclaim that "what may look like persistent employment discrimination is better described as employers rewarding workers with relatively strong cognitive skills."

But matters are not so straightforward. The essential problem is what the AFQT scores are actually measuring, and therefore what precisely is being controlled for. There is no consensus on this point. AFQT scores have been interpreted variously as providing information about school quality or academic achievement (O'Neill, 1990), about previously unmeasured skills (Ferguson, 1995; Maxwell, 1994; Neal and Johnson 1996), and even about intelligence (Herrnstein and Murray, 1994)—although the military did not design AFQT as an intelligence test (Rodgers and Spriggs, 1996).[5] The results obtained by O'Neill (1990), Maxwell (1994), Ferguson (1995), and Neal and Johnson (1996) after using the AFQT as an explanatory variable are, upon closer examination, not robust to alternative specifications and are quite difficult to interpret.

The lack of robustness can be illustrated by looking at how AFQT scores interact with other variables in the earnings equation. Neal and Johnson (1996), for example, adjust for age and AFQT score in an earnings equation, but not for

years of schooling, presumably on the assumption that same-age individuals would have the same years of schooling, regardless of race. However, this assumption does not appear to be true. Rodgers, Spriggs and Waaler (1997) find that white youths had accumulated more schooling at a given age than black or Hispanic youths. When AFQT scores are both age and education-adjusted, a black-white wage gap reemerges, as the authors report (p. 3):[6]

> . . . estimates from models that use our proposed age and education adjusted AFQT score [show] that sharp differences in racial and ethnic wage gaps exist. Instead of explaining three-quarters of the male black-white wage gap, the age and education adjusted score explains 40 percent of the gap. Instead of explaining the entire male Hispanic-white gap, the new score explains 50 percent of the gap . . . [B]lack women no longer earn more than white women do, and . . . Hispanic women's wage premium relative to white women is reduced by one-half.

Another specification problem arises when wage equations are estimated using both AFQT scores and the part of the NLSY sample that includes measures of psychological well-being (for "self-esteem" and "locus of control") as explanatory variables. The presence of the psychological variables restores a negative effect on wages of being African-American (Goldsmith, Veum and Darity, 1997).[7]

Yet another specification problem becomes relevant if one interprets AFQT scores as providing information about school quality. But since there is a school survey module of the NLSY which can be used to provide direct evidence on school quality, using variables like the books/pupil ratio, the percent of students classified as disadvantaged, and teacher salaries, it would surely be more helpful to use this direct data on school quality rather than the AFQT scores. In another method of controlling for school quality, Harrison (1972) compared employment and earnings outcomes for blacks and whites living in the same black ghetto communities, on grounds that school quality would not be very different between them. Harrison found sharp differences in earnings favoring whites.[8]

One severe difficulty in interpreting what differences in the AFQT actually mean is demonstrated by Rodgers and Spriggs (1996) who show that AFQT scores appear to be biased in a specific sense. . . . [They] create a hypothetical set of "unbiased" black scores by running the mean black characteristics through the equation with the white coefficients. When those scores replace the actual AFQT scores in a wage equation, then the adjusted AFQT scores no longer explain black-white wage differences. A similar result can be obtained if actual white scores are replaced by hypothetical scores produced by running white characteristics through the equation with black coefficients.[9] Apparently, the AFQT scores themselves are a consequence of bias in the underlying processes that generate AFQT scores for blacks and whites. Perhaps AFQT scores are a proxy for skills that do not capture all skills, and thus leave behind a bias of uncertain direction. Or there may be other predictors of the test that are correlated with race but which are left out of the AFQT explanatory equation.

To muddy the waters further, focusing on the math and verbal subcomponents of AFQT leads to inconsistent implications for discriminatory differentials. For example, while a higher performance on the verbal portion of the AFQT contributes to higher wages for black women versus black men, it apparently has little or no effect on the wages of white women versus white men (Currie and Thomas, 1995). However, white women gain in wages from higher scores on the math portion of the AFQT, but black women do not. Perhaps this says that white women are screened (directly or indirectly) for employment and pay on the basis of their math performance, while black women are screened based upon their verbal skills. Perhaps this is because white employers have a greater "comfort zone" with black women who have a greater verbal similarity to whites. Or perhaps something not fully understood and potentially quirky is going on with the link between these test results and wages.

Finally, since skill differentials have received such widespread discussion in recent years as an underlying cause of growing wage inequality in the U.S. economy—see, for example, the discussion in the Spring 1997 issue of *The Journal of Economic Perspectives*—it should be pointed out that growth in the rewards to skill does not mean that the effects of race have diminished. If the importance of race and skill increase simultaneously, then a rising skill premium will explain more of the changes in *intraracial* wage inequality, which may well leave a larger unexplained portion of interracial wage inequality. For example, when Murnane et al. (1995) ask whether test scores in math, reading, and vocabulary skills for respondents in the National Longitudinal Study of the High School Class of 1972 and High School and Beyond datasets have more explanatory power in wage equations for 1980 graduates than 1972 graduates, their answer is "yes"—the rate of return to cognitive skill (test scores) increased between 1978 and 1986. However, in these same regressions, the absolute value of the negative race coefficient is larger for the 1980 graduates than it is for the 1972 graduates! These results confirm that there are increasing returns to skills measured by standardized tests, but do not indicate that the rise in returns to skills can explain changes in the black-white earnings gap very well.

The upshot is the following. There is no doubt that blacks suffer reduced earnings in part due to inferior productivity-linked characteristics, like skill gaps or school quality gaps, relative to nonblack groups. However, evidence based on the AFQT should be treated with extreme caution. Given that this one variable in one particular data set is the only one that suggests racial discrimination is no longer operative in U.S. employment practices, it should be taken as far from convincing evidence. Blacks, especially black men, continue to suffer significantly reduced earnings due to discrimination and the extent of discrimination.

Direct Evidence on Discrimination: Court Cases and Audit Studies

One direct body of evidence of the persistence of employment discrimination, despite the presence of antidiscrimination laws, comes from the scope and dispensation of job discrimination lawsuits. A sampling of such cases from recent

years . . . reveals [that] discriminatory practices have occurred at highly visible U.S. corporations often having multinational operations. The suits reveal racial and gender discrimination in employment, training, promotion, tenure, layoff policies, and work environment, as well as occupational segregation.

Perhaps the most notorious recent case is the $176 million settlement reached between Texaco and black employees after disclosure of taped comments of white corporate officials making demeaning remarks about blacks, remarks that revealed an outlook that translated into corresponding antiblack employment practices. Clearly, neither federal antidiscrimination laws nor the pressures of competitive markets have prevented the occurrence of discriminatory practices that have resulted in significant awards or settlements for the plaintiffs.

Another important source of direct evidence are the audit studies of the type conducted in the early 1990s by the Urban Institute (Mincy, 1993). The Urban Institute audit studies sought to examine employment outcomes for young black, Hispanic, and white males, ages 19–25, looking for entry-level jobs. Pairs of black and white males and pairs of Hispanic and non-Hispanic white males were matched as testers and sent out to apply for jobs at businesses advertising openings. Prior to application for the positions, the testers were trained for interviews to minimize dissimilarity in the quality of their self-presentation, and they were given manufactured résumés designed to put their credentials on a par. The black/white tests were conducted in Chicago and in Washington, D.C., while the Hispanic/non Hispanic tests were conducted in Chicago and in San Diego.

A finding of discrimination was confirmed if one member of the pair was offered the position and the other was not. No discrimination was confirmed if both received an offer (sequentially, since both were instructed to turn the position down) or neither received an offer. This is a fairly stringent test for discrimination, since, in the case where no offer was made to either party, there is no way to determine whether employers were open to the prospect of hiring a black or an Hispanic male, what the overall applicant pool looked like, or who was actually hired. However, the Urban Institute audits found that black males were three times as likely to be turned down for a job as white males, and Hispanic males also were three times as likely as non-Hispanic white males to experience discrimination in employment (Fix, Galster and Struyk, 1993, pp. 21–22).

Bendick, Jackson and Reinoso (1994) also report on 149 race-based (black, white) and ethnicity-based (Hispanic, non-Hispanic) job audits conducted by the Fair Employment Council of Greater Washington, Inc. in the D.C. metropolitan area in 1990 and 1991. Testers were paired by gender. The audit findings are striking. White testers were close to 10 percent more likely to receive interviews than blacks. Among those interviewed, half of the white testers received job offers versus a mere 11 percent of the black testers. When both testers received the same job offers, white testers were offered 15 cents per hour more than black testers. Black testers also were disproportionately "steered" toward lower level positions after the job offer was made, and white testers were disproportionately

considered for unadvertised positions at higher levels than the originally advertised job.

Overall, the Fair Employment Council study found rates of discrimination in excess of 20 percent against blacks (in the black/white tests) and against Hispanics (in the Hispanic/non-Hispanic tests). In the Hispanic/non-Hispanic tests, Hispanic male job seekers were three times as likely to experience discrimination as Hispanic females. But, surprisingly, in the black/white tests, black females were three times as likely to encounter discrimination as black males. The racial results for women in this particular audit stand in sharp contrast with the results in the statistical studies described above.

The most severe criticisms of the audit technique have come from Heckman and Siegelman (1993). At base, their central worry is that testers cannot be paired in such a way that they will not signal a difference that legitimately can be interpreted by the prospective employer as a difference in potential to perform the job, despite interview training and doctored résumés.[10] For example, what about intangibles like a person's ability to make a first impression or the fact that certain résumés may be unintentionally superior to others?

In an audit study consciously designed to address many of the Heckman and Siegelman (1993) methodological complaints, Neumark, Bank, and Van Nort (1995) examined sex discrimination in restaurant hiring practices. Four testers (all college students, two men and two women) applied for jobs waiting tables at 65 restaurants in Philadelphia. The restaurants were separated into high, medium, and low price, according to average cost of a meal. Waiters at the high price restaurants tend to receive greater wages and tips than their counterparts in low price restaurants; specifically, the authors find that average hourly earnings for waiters were 47 and 68 percent higher in the high price restaurant than the medium and low price restaurant, respectively. One man and one woman applied for a job at each restaurant, so there were 130 attempts to obtain employment. Thirty-nine job offers were received.

One interesting twist to this methodology is that three reasonably comparable résumés were constructed, and over a three-week period each tester used a different résumé for a period of one week. This résumé-switching mitigates any differences that may have occurred because one résumé was better than another. To reduce other sources of unobserved ability—for example, the ability to make a good first impression—the testers were instructed to give their applications to the first employee they encountered when visiting a restaurant. That employee was then asked to forward the résumé to the manager. In effect, personality and appearance were eliminated as relevant variables for the interview decision, if not for the job offer decision.

Neumark et al. (1995) find that in the low-priced restaurants, the man received an offer while the woman did not 29 percent of the time. A woman never received an offer when the man did not. In the high-priced restaurants, the man received an offer while the woman did not in 43 percent of the tests, while the woman received an offer while the man did not in just 4 percent of the tests. Also, at high-priced restaurants, women had roughly a 40 percent lower probability of being interviewed and 50 percent lower probability of obtaining a job

offer, and this difference is statistically significant. Hence, this audit study shows that within-occupation employment discrimination may be a contributing source to wage discrimination between men and women. . . .

The Theoretical Backdrop

Standard neoclassical competitive models are forced by their own assumptions to the conclusion that discrimination only can be temporary. Perhaps the best-known statement of this position emerges from Becker's (1957) famous "taste for discrimination" model. If two groups share similar productivity profiles under competitive conditions where at least some employers prefer profits to prejudice, eventually all workers must be paid the same wage. The eventual result may involve segregated workforces—say, with some businesses hiring only white men and others hiring only black women—but as long as both groups have the same average productivity, they will receive the same pay. Thus, in this view, discrimination only can produce temporary racial or gender earnings gaps. Moreover, alternative forms of discrimination are separable processes; wage discrimination and employment segregation are unrelated in Becker's model.

Despite the theoretical implications of standard neoclassical competitive models, we have considerable evidence that it took the Civil Rights Act of 1964 to alter the discriminatory climate in America. It did not, by any means, eliminate either form of discrimination. Indeed, the impact of the law itself may have been temporary, since there is some evidence that the trend toward racial inequality came to a halt in the mid-1970s (even though interracial differences in human capital were continuing to close) and the momentum toward gender equality may have begun to lose steam in the early 1990s. Moreover, we believe that the forms of discrimination have altered in response to the act. Therefore, it is not useful to argue that either racial or gender discrimination is inconsistent with the operation of competitive markets, especially when it has taken antidiscrimination laws to reduce the impact of discrimination in the market. Instead, it is beneficial to uncover the market mechanisms which permit or encourage discriminatory practices.

Since Becker's work, orthodox microeconomics has been massaged in various ways to produce stories of how discrimination might sustain itself against pressures of the competitive market. The tacit assumption of these approaches has been to find a way in which discrimination can increase business profits, or to identify conditions where choosing not to discriminate might reduce profits.

In the customer discrimination story, for example, businesses discriminate not because they themselves are bigoted but because their clients are bigoted. This story works especially well where the product in question must be delivered via face-to-face contact, but it obviously does not work well when the hands that made the product are not visible to the customer possessing the "taste for discrimination." Moreover, as Madden (1975, p. 150) has pointed out, sex-typing of jobs can work in both directions: "While service occupations are more contact-oriented, sexual preference can work both ways: for example, women are preferred as Playboy bunnies, airline stewardesses, and lingerie

salespeople, while men seem to be preferred as tire salespeople, stockbrokers, and truck drivers."

Obviously, group-typing of employment will lead to a different occupational distributions between group A and B, but will it lead to different earnings as well? Madden (1975, p. 150, emphasis in original) suggests not necessarily:

> . . . consumer discrimination causes occupational segregation rather than wage differentials. If the female wage decreases as the amount of consumer contact required by a job increases, women seek employment in jobs where consumer contact is minimal and wages are higher. Only if there are not enough non-consumer contact jobs for working women, forcing them to seek employment in consumer-contact jobs, would consumer discrimination be responsible for wage differentials. Since most jobs do not require consumer contact, consumer discrimination would segregate women into these jobs, but not *cause* wage differentials.

Perhaps the best attempt to explain how discrimination might persist in a neoclassical framework is the statistical discrimination story, which, at base, is a story about imperfect information. The notion is that potential employers cannot observe everything they wish to know about job candidates, and in this environment, they have an incentive to seize group membership as a signal that allows them to improve their predictions of a prospective candidate's ability to perform.

However, this model of prejudicial beliefs does not ultimately wash well as a theory of why discrimination should be long-lasting. If average group differences are perceived but not real, then employers should *learn* that their beliefs are mistaken. If average group differences are real, then in a world with antidiscrimination laws, employers are likely to find methods of predicting the future performance of potential employees with sufficient accuracy that there is no need to use the additional "signal" of race or gender. It seems implausible that with all the resources that corporations put into hiring decisions, the remaining differentials are due to an inability to come up with a suitable set of questions or qualifications for potential employees.

Moreover, models of imperfect competition as explanations of discrimination do not solve the problem completely either. The reason for the immutability of the imperfection is rarely satisfactorily explained—and often not addressed at all—in models of this type (Darity and Williams, 1985). Struggle as it may, orthodox microeconomics keeps returning to the position that sustained observed differences in economic outcomes between groups must be due to an induced or inherent deficiency in the group that experiences the inferior outcomes. In the jargon, this is referred to as a deficiency in human capital. Sometimes this deficiency is associated with poor schooling opportunities, other times with culture (Sowell, 1981).[11] But the thrust of the argument is to absolve market processes, at least in a putative long run, of a role in producing the differential outcome; the induced or inherent deficiency occurs in premarket or extra-market processes.

Certainly years of schooling, quality of education, years of work experiences and even culture can have a role in explaining racial and gender earnings

differences. However, the evidence marshaled above indicates that these factors do not come close to explaining wage differentials and employment patterns observed in the economy. Instead, discrimination has been sustained both in the United States and elsewhere, for generations at a time. Such discrimination does not always even need direct legal support nor has it been eliminated by market pressures. Instead, changes in social and legal institutions have been needed to reduce it.

James Heckman (1997, p. 406) draws a similar conclusion in his examination of a specific sector of employment, the textile industry:

> . . . substantial growth in Southern manufacturing had little effect on the labor-market position of blacks in Southern textiles prior to 1965. Through tight and slack labor markets, the proportion of blacks was small and stable. After 1964, and in synchronization with the 1964 Civil Rights Act, black economic progress was rapid. Only South Carolina had a Jim Crow law prohibiting employment of blacks as textile workers, and the law was never used after the 1920s. Yet the pattern of exclusion of blacks was prevalent throughout Southern textiles, and the breakthrough in black employment in the industry came in all states at the same time. Informally enforced codes and private practices, and not formally enforced apartheid, kept segregation in place, and market forces did not break them down.

Nontraditional alternatives to orthodox microeconomic analysis can lead to a logically consistent basis for a persistent gap in wage outcomes. These alternatives typically break down the line between in-market and pre-market discrimination so often drawn in conventional economics. The first of these involves a self-fulfilling prophecy mechanism. Suppose employers believe that members of group A are more productive than members of group B on average. Suppose further that they act upon their beliefs, thereby exhibiting a stronger demand for A workers, hiring them more frequently and paying them more.

Next, suppose that members of group B become less motivated and less emotionally healthy as a consequence of the employment rebuff. Notice that the original decision not to hire may have been completely unjustified on productivity grounds; nonetheless, the decision made *in* the labor market—a decision not to hire or to hire at low pay—alters the human capital characteristics of the members of group B so that they become inferior candidates for jobs. The employers' initially held mistaken beliefs become realized over time as a consequence of the employers' initial discriminatory decisions. As Elmslie and Sedo (1996, p. 474) observe in their development of this argument, "One initial bout of unemployment that is not productivity based can lay the foundation for continued future unemployment and persistently lower job status even if no future discrimination occurs."

More broadly, depressed expectations of employment opportunities also can have an adverse effect on members of group B's inclination to acquire additional human capital—say, through additional schooling or training. The effects of the past could be passed along by the disadvantaged group from generation to generation, another possibility ignored by orthodox theory. For example, Borjas (1994) writes of the ethnic intergenerational transmission of

economic advantage or disadvantage. He makes no mention of discrimination in his work but a potential interpretation is that the effects of past discrimination, both negative and positive, are passed on to subsequent generations. Other evidence along these lines includes Tyree's (1991) findings on the relationship between an ethnic group's status and performance in the past and the present, and Darity's (1989) development of "the lateral mobility" hypothesis based upon ethnic group case histories.

More narrowly, the group-typed beliefs held by employers/selectors also can have a strong effect on the performance of the candidate at the interview stage. In an experiment performed in the early 1970s, psychologists Word, Zanna and Cooper (1974, pp. 109–120) found that when interviewed by "naïve" whites, trained black applicants "received (a) less immediacy, (b) higher rates of speech error, and (c) shorter amounts of interview time" than white applicants. They then trained white interviewers to replicate the behavior received by the black applicants in the first phase of their experiment, and found that "naïve" white candidates performed poorly during interviews when they were "treated like blacks." Such self-fulfilling prophecies are familiar in the psychology literature (Sibicky and Dovidio, 1986).

A second nontraditional theory that can lead to a permanent gap in intergroup outcomes is the noncompeting groups hypothesis advanced by the late W. Arthur Lewis (1979). Related arguments emerge from Krueger's (1963) extension of the trade-based version of the Becker model, Swinton's (1978) "labor force competition" model for racial differences, and Madden's (1975) male monopoly model for gender differences, but Lewis's presentation is the most straightforward. Lewis starts with an intergroup rivalry for the preferred positions in a hierarchical occupational structure. Say that group A is able to control access to the preferred positions by influencing the required credentials, manipulating opportunities to obtain the credentials, and serving a gatekeeping function over entry and promotion along job ladders. Group B is then rendered "noncompeting."

One theoretical difficulty with this argument that its proponents rarely address is that it requires group A to maintain group solidarity even when it may have subgroups with differing interests. In Krueger's (1963) model, for example, white capitalists must value racial group solidarity sufficiently to accept a lower return on their capital as the price they pay for a generally higher level of income for all whites (and higher wages for white workers). In Madden's (1975) model, male capitalists must make a similar decision on behalf of male workers.

This noncompeting group hypothesis blurs the orthodox distinction between in-market and pre-market discrimination, by inserting matters of power and social control directly into the analysis. This approach then links discrimination to racism or sexism, rather than to simple bigotry or prejudice. It leads to the proposition that discrimination—in the sense of differential treatment of those members of each group with similar productivity-linked characteristics—is an endogenous phenomenon. "In-market" discrimination need only occur when all the earlier attempts to control access to jobs, credentials, and qualifications are quavering.

One interesting implication here is that growth in skills for what we have been calling group B, the disadvantaged group, may be accompanied by a surge of in-market discrimination, because that form of discrimination has become more necessary to preserve the position of group A. There are several instances of cross-national evidence to support this notion. Darity, Dietrich and Guilkey (1997) find that while black males were making dramatic strides in acquiring literacy between 1880 and 1910 in the United States, simultaneously they were suffering increasing proportionate losses in occupational status due to disadvantageous treatment of their measured characteristics. Geographer Peggy Lovell (1993) finds very little evidence of discrimination in earnings against blacks in northern Brazil, where blacks are more numerous, but substantial evidence of discrimination against them in southern Brazil. Northern Brazil is considerably poorer than southern Brazil and the educational levels of northern black Brazilians are more depressed than in the south.[12] It is easy to argue that the exercise of discrimination is not "needed" in the north, since blacks are not generally going to compete with whites for the same sets of jobs. Indeed, there is relatively more evidence of discrimination against mulattos than blacks, the former more likely to compete directly with whites for employment. A third example, in a study using data for males based upon a survey taken in Delhi in 1970, Desi and Singh (1989) find that the most dramatic instance of discriminatory differentials in earnings was evident for Sikh men vis-à-vis Hindu high caste men. On the other hand, most of the earnings gap for Hindu middle caste, lower caste and scheduled caste men was due to inferior observed characteristics. Since these latter groups could be excluded from preferred positions because of an inadequate educational background, it would not be necessary for the upper castes to exercise discrimination against them. Sikh males, on the other hand, possessed the types of credentials that would make them viable contestants for the positions desired by the Hindu higher castes.

A final alternative approach at construction of a consistent economic theory of persistent discrimination evolves from a reconsideration of the neoclassical theory of competition. Darity and Williams (1985) argued that replacement of neoclassical competition with either classical or Marxist approaches to competition—where competition is defined by a tendency toward equalization of rates of profit and where monopoly positions are the consequence of competition rather than the antithesis of competition—eliminates the anomalies associated with the orthodox approach (Botwinick, 1993; Mason, 1995, forthcoming-b). A labor market implication of this approach is that wage diversity, different pay across firms and industries for workers within the same occupation, is the norm for competitive labor markets. In these models, remuneration is a function of the characteristics of the individual and the job. The racial-gender composition of the job affects worker bargaining power and thereby wage differentials. In turn, race and gender exclusion are used to make some workers less competitive for the higher paying positions. This approach emphasizes that the major elements for the persistence of discrimination are racial or gender differences in the access to better paying jobs within and between occupations.

Whatever alternative approach is preferred, the strong evidence of the persistence of discrimination in labor markets calls into question any theoretical apparatus that implies that the discrimination must inevitably diminish or disappear.

Notes

1. The only significant exception to the help-wanted ads pattern of maintaining a fairly strict sexual division of labor that we could detect was evident in the *Los Angeles Times* employment section of early January 1945, where we found women being sought as aircraft riveters, assemblers, and army photographers. Of course, World War II was ongoing at that stage, and the comparative absence of men produced the "Rosie the Riveter" phenomenon. However, despite wartime conditions, even this temporary breakdown in gender-typing of occupations was not evident in the help-wanted ads for the *Chicago Tribune,* the *New York Times,* or the *Washington Post* at the same time. Moreover, racial preferences also remained strongly pronounced in wartime advertisements of each of the four newspapers.

2. The C.W. Agency, advertising in the *Los Angeles Times* on January, 1, 1950, wanted a "Girl Model 38 bust, 25 waist, 36 hips"; "Several Other Types" with physical characteristics unspecified in the advertisement apparently also were acceptable.

3. The 1980 and 1990 Censuses provide only self-reported information on interviewees' race and their ancestry, which makes it possible to partition the American population into 50 different detailed ethnic and racial groups, like Asian Indian ancestry women, Mexican ancestry women, Polish ancestry women, French Canadian ancestry women, and so on. The explanatory variables were years of school, years of college, number of children, married spouse present, years of work experience, years of work experience squared, very good or fluent English, disabled, born in the United States, assimilated (that is either married to a person with a different ethnicity or having claimed two different ethnic groups in the census), location, region, and occupation. Annual earnings was the dependent variable. There was no control for the difference between potential and actual experience; hence, to the extent that the gap between potential and actual experience and the rate of return to actual experience varies by race, the results for the female regressions may be less reliable than the results for the male regression.

4. For a view that unobservable factors might favor black male productivity, thereby meaning that the regression coefficients are underestimating the degree of discrimination, see Mason (forthcoming-a).

5. Indeed, if one uses a measure that, unlike the AFQT, was explicitly designed as a measure of intelligence, it does not explain the black-white gap in wages. Mason (forthcoming-b; 1996) demonstrates this by using in a wage equation an explanatory variable that comes from a sentence completion test given to 1972 respondents to the Panel Study of Income Dynamics (PSID)—a test which was designed to assess "g," so-called general intelligence. Mason finds that the significant, negative sign on the coefficient for the race variable is unaffected by inclusion of the PSID sentence completion test score as an explanatory variable. Indeed, Mason (1997) finds that although discrimination declined during 1968 to 1973, discrimination grew by 2.0 percent annually during 1973–1991. On the other hand, the rate of return to cognitive skill (IQ) was relatively constant during 1968–1979, but had an annual growth rate of 1.6 percent during 1979–1991.

6. Mason (1997) finds a similar result when age and education-adjusted IQ scores are used.
7. Attention to the psychological measures also provides mild evidence that blacks put forth more effort than whites, a finding consistent with Mason's (forthcoming-a) speculation that there may be unobservables that favor black productivity. Mason argues that effort or motivation is a productivity-linked variable that favors blacks, based upon his finding that blacks acquire more schooling than whites for a comparable set of resources.
8. Card and Krueger (1992) also directly control for school quality. They find that there is still a substantial wage gap left after controlling for school quality.
9. Systematic racial differences in the structural equations for the determination of standardized test scores also are evident in the General Social Survey data. Fitting equations for Wordsum scores separately for blacks and whites also yields statistically distinct structures (White, 1997).
10. Although some of their criticisms along these lines frankly strike us as ridiculous; for example, concerns about facial hair on the Hispanic male testers used by the Urban Institute.
11. To address the effects of culture, following Woodbury (1993), Darity, Guilkey, and Winfrey (1996) held color constant and varied culture by examining outcomes among blacks of differing ancestries. Unlike Sowell's expectation, black males of West Indian and non-West Indian ancestry were being confronted with the same racial penalty in U.S. labor markets by 1990.
12. The portion of the gap that can be explained by discrimination is much lower in the high black region of Brazil, the Northeast, than the rest of Brazil. We know of no evidence which suggests that this is or is not true for the U.S. south.