

Employer Hiring Decisions and Antidiscrimination Policy

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Abstract

Have federal antidiscrimination policies been effective in improving employment outcomes for minorities and females? If so, why have the relative wages and employment of blacks deteriorated in recent years? What other factors on the demand side of the labor market have contributed to these developments, and what are the appropriate public policy responses?

In this paper I address these issues. I begin by reviewing evidence in the literature on the recent employment problems of minorities and on hiring discrimination. I specifically consider the effectiveness of Equal Employment Opportunity laws and Affirmative Action programs in improving employment outcomes for minorities as well as females.

I then provide new evidence from a recent survey of over 3000 employers on the determinants of hiring. I focus on employer skill needs and hiring procedures, as well as the racial mix of the firm's applicants and customers, in determining employment outcomes for minorities and females. Employer use of Affirmative Action in recruiting and hiring is considered as well.

Finally, I consider the implications of these findings for the usefulness of antidiscrimination policies and other approaches for improving employment outcomes for less-skilled minorities.

Employer Hiring Decisions and Antidiscrimination Policy

In the past few decades, the employment and earnings of young blacks have deteriorated significantly, especially among those less educated. This deterioration has occurred in spite of efforts to protect and enhance their employment status through a variety of governmental antidiscrimination efforts, such as federal Equal Employment Opportunity (EEO) laws and Affirmative Action programs for government contractors. Furthermore, the employment and earnings of females have improved during the same period, and even less-educated females have made gains relative to less-educated males.

A fairly large body of research suggests that various changes on the demand side of the labor market, such as growing skill needs of employers and their changing geographic locations, have heavily contributed to these developments. But little direct evidence has been available on these issues to date, since so little data have been available from the demand side of the labor market.

In this paper I provide new evidence on employer skill needs, hiring behavior, and their effects on employment of minorities and women. I use data from a new survey of over 3000 employers in four large metropolitan areas that are described more fully below.

I first review the literature on government antidiscrimination policies and on the recent deterioration in labor market outcomes for blacks, then present empirical evidence on employer hiring of minorities and women. I conclude with a discussion of implications for antidiscrimination policies and for government efforts more generally aimed at the demand side of the labor market for minorities and women.

DISCRIMINATION, GOVERNMENT POLICY, AND MINORITY/FEMALE EMPLOYMENT: THE LITERATURE

Federal antidiscrimination efforts in the past 30 years have largely consisted of two types of policies: (1) legislation, beginning with the Civil Rights Act of 1964, that makes it illegal for employers to discriminate against minorities and women in hiring, pay, and promotion; and (2) executive orders, first issued in the Kennedy and Johnson administrations, requiring that employers with federal contracts undertake “Affirmative Action” to improve the relative employment and earnings of these “protected groups.”¹

Have these policies been successful in reducing labor market discrimination against minorities and women, thereby increasing their employment and earnings? This question has been the subject of a great deal of research over the previous few decades. The rapid improvement in the relative occupational status and earnings of blacks during the late 1960s and early 1970s, particularly in the South, has been attributed by some (e.g., Freeman 1973, 1981; Heckman and Payner, 1989; Donahue and Heckman, 1991) to a reduction in labor market discrimination associated with the passage of the Civil Rights Act in 1964. Others have stressed South-to-North migration and improvements in the relative quantity and quality of education attained by blacks over longer time periods as major determinants of their economic progress (e.g., Smith and Welch, 1989; Margo, 1990; Card and Krueger, 1992).² But federal antidiscrimination activities, especially through court rulings on school

¹The various laws, court rulings, and enforcement activities by agencies of the federal government that have developed over the past 30 or so years are described elsewhere in great detail. See, for instance, Donohue and Siegelman (1991) or Bloch (1994). The discussion below will not include activities that have been undertaken at the state or local levels of government, such as “Comparable Worth” policies to equalize pay across predominantly male versus female occupations. For discussions of these issues see Killingsworth (1990) and Sorensen (1994).

²The studies focusing on the impacts of migration and improved education among blacks generally use data from several decennial censuses to document long-run effects. In contrast, the papers by Freeman as well as Heckman and his coauthors show large discrete improvements (in both short-run outcomes and trends over time) in relative earnings or employment starting in 1965, with striking changes occurring fairly quickly in the South. While some authors (e.g., Butler and Heckman, 1977) had earlier contended that these changes might reflect a rising tendency of low-wage blacks to drop out of the labor force, it now appears that dropouts cannot account for

desegregation (such as *Brown v. Board of Education* in 1954), appear to be at least partly responsible for the relative educational improvements as well (Boozer, Krueger, and Wolkon, 1992).

Some improvements in the relative earnings and occupational status of women have also been attributed to EEO policies, though these effects are somewhat harder to discern before the 1970s. Apparently, the increased labor force participation of less-experienced women in the 1960s and 1970s at least partly offset the effects of EEO policies on the relative earnings of females during those decades.³

The impact of Affirmative Action requirements of government contractors on the employment and earnings of minorities and women has been analyzed most extensively by Jonathan Leonard.⁴ He has found clear evidence that, during the 1970s, Affirmative Action programs helped raise the employment, earnings, and occupational status of minorities and women, relative to those of white males, in contractor establishments. Leonard argues that Affirmative Action programs achieved these results without the use of rigid “quotas” and without generating reduced productivity in heavily targeted areas and industries (Leonard, 1984a).

The costs imposed on white males through these policies have not been enormous, even while generating significant improvements for minorities (and somewhat smaller ones for white females).⁵

more than a small fraction of the relative wage improvements of blacks in this period (Brown, 1984; Donohue and Heckman, 1991).

³Though the unadjusted ratio of female to male earnings in the United States did not improve until the 1980s, the adjusted differential (i.e., after accounting for differences in experience and other personal characteristics) did fall by about 4 percentage points during the 1970s (Blau and Beller, 1988). For more discussion of these issues see Gunderson (1989).

⁴His 1990 review paper summarizes a lengthy body of his own work on this topic. See also Brown (1982) for a review of earlier research on the effects of EEO and Affirmative Action.

⁵Leonard’s data (as reported in his 1990 paper) indicate that the share of employment accounted for by white males in contractor establishments (which constitute about 60 percent of all in his sample) declined by just 1.5 percentage points (or 2.7 percent) more than in noncontractor establishments between 1974 and 1980 (which was the period during which the monitoring and enforcement of Affirmative Action policies were significantly increased). Assuming inelastic labor supply among white males and the standard range of estimates of labor demand elasticities (Hamermesh, 1993), the wages of white males (and perhaps other workers as well) in the noncontractor sector would have declined by roughly 1–2 percent. On the other hand, the increases in shares of

The benefits to minorities and women (and apparently the costs to white males) in contractor establishments can also be found across the entire range of occupations and skill categories, though the magnitudes of the changes appear to be somewhat larger among white-collar than blue-collar occupations.⁶ These findings parallel those from earlier work on the distributional effects of EEO policies, which showed greater relative gains for more-educated young blacks than for others.⁷

But the apparent success of EEO laws and Affirmative Action in improving labor market outcomes for minorities and women during the 1960s and 1970s raises some additional questions. For one thing, does discrimination against these groups in the labor market persist, despite governmental efforts to eliminate it? It is well known that gaps in earnings and employment by race or gender, even after controlling for *observable* differences in personal characteristics or jobs, cannot necessarily be attributed to labor market discrimination. Unobserved differences in preferences or skills across various groups of workers might instead account for any such remaining statistical gaps.⁸

But more direct evidence on the existence of discrimination in hiring against minorities has recently appeared in a few different contexts. One is the use of labor market *audit* studies, in which pairs of white and minority job applicants with comparable education and work experience are matched

employment accounted for by black males and females in the contractor sector were .5 and .3 percentage points, respectively, which constituted increases of 7.8 percent and 7.1 percent; while for white females it was .6 percentage points (or 2.1 percent). In addition to these employment shifts, improvements in the relative earnings and occupational status of blacks and females also occurred within the contractor sector.

⁶Leonard (1984b) finds that employment shares for black males in contractor establishments rose in each occupational category except for laborers and white-collar trainees, while for black females they increase in each category except for technical, craft, and white-collar trainees. On the other hand, increases for black males in the white-collar and craft occupations exceeded those in the operative, laborer, and service categories.

⁷Freeman (1973) shows that black-white earnings gaps traditionally were largest among the most highly educated workers, implying that educated blacks had suffered the worst discrimination (and lower rates of return to education than comparable whites). But these patterns disappeared in the 1970s, and young blacks enjoyed rates of return to education in that decade that were as high or higher than those of their white counterparts.

⁸For women, the issues of occupational preferences and gaps in labor market experience or job tenure associated with periods of withdrawal from the labor force have long been associated with reduced earnings—see, for example, Gunderson (1989) or Killingsworth (1990). For blacks, unobserved skill differences (as explanations of recent changes in relative wages) are emphasized in Juhn, Murphy, and Pierce (1993).

and sent to seek job offers. These studies, reviewed and critiqued recently in a volume of papers edited by Fix and Struyk (1994), have found evidence of lower probabilities of receiving job offers among both black and Hispanic job applicants compared to whites, thereby refuting the notion that “reverse discrimination” against white males is more prevalent today than is discrimination against traditionally disadvantaged groups.⁹

More qualitative evidence, based on interviews with employers, has been presented by Kirschenman and Neckerman (1991) and by Moss and Tilly (1995). These studies generally document very negative employer perceptions of blacks, especially young black males, in terms of skills, work performance, and attitudes toward work; and it is presumed that these stereotypic perceptions reduce employer hiring of these groups. Whether such discriminatory behavior would be “pure” or “statistical” in nature is, of course, harder to discern from these studies.¹⁰

The apparent persistence of labor market discrimination against minorities also raises some questions about the overall effectiveness of governmental antidiscrimination efforts, despite the successes described above. For instance, Donohue and Siegelman (1991) argue that rising federal enforcement activities and expenses during the 1970s generated greatly diminished returns, as a rising fraction of EEO suits became concentrated in individual *discharge* cases rather than the more effective

⁹For instance, a study of black and white auditors in Chicago and Washington, D.C., found that 29 percent of white auditors received job offers compared to 19 percent for blacks; thus the offer arrival rate was more than half as large for white applicants within the relevant time period. For audit evidence on gender differences in hiring, see Neumark, Bank, and Van Nort (1995).

¹⁰“Statistical” discrimination (Cain, 1986) would imply that negative employer perceptions of blacks are correct at the mean, although variance in productivity among blacks cannot be discerned by these employers. On the other hand, the perceived gaps in prospective productivity may be exaggerated by employers, partly out of their own preferences for white employees. While the audit studies suggest “pure” discrimination, since they control for observable personal characteristics such as education and experience, employer perceptions of average racial differences in *unobservables* (which may or may not be accurate) likely influence their hiring behavior here.

class-action hiring or promotion cases.¹¹ Indeed, they argue (as does Bloch, 1994) that employer fears of lawsuits from people whom they hire could actually have led to *greater* discrimination at the hiring stage (though no clear evidence of this has ever been provided).

While rising employment discrimination cannot possibly be attributed to Affirmative Action programs (which have led to rising employment levels as well as wages for minorities and women at contractor firms), the weakening of federal enforcement of Affirmative Action during the 1980s apparently led to some reversals of the gains enjoyed by these groups during the previous decade (Leonard, 1994).

Although we have no direct evidence of this, it is also possible that the degree of labor market discrimination against some of these groups has actually risen in the past decade or so. For instance, employers' fears of young, less-educated black males that are documented by Kirschenman (1991) may have grown worse over time as the participation of young black males in crime has increased (Freeman, 1994) and as the available supply of less-educated immigrants (who may be preferred by some employers) has grown.¹²

Of course, these forces are part of a much broader set of labor market developments that have affected the labor market outcomes of blacks, women, and other groups in recent years. For a period of at least three decades through the mid-1970s, employment levels of blacks (especially among the

¹¹Donohue and his coauthors argue that the effectiveness of EEO laws during the 1960s was primarily due to their targeting on the South, where discriminatory employer behavior was so blatant; they question its ability to generate major improvements where forms of discrimination are more subtle. Leonard (1990) also stresses the relative effectiveness of class-action hiring and promotion suits that generated major legal precedents, such as the "disparate impact" ruling that arose in the *Griggs v. Duke Power* case of 1971.

¹²Kirschenman and Neckerman (1991) report that employers frequently express a preference for immigrants over native-born blacks for low-skill work. Borjas, Freeman, and Katz (1992) and Topel (1994) relate declining wages for less-educated workers to rising immigrant populations, though Jaeger (1995) shows that these effects are substantial only in those geographic areas (such as the Pacific coast region) where immigrants settle in substantial numbers.

young) had been declining while their relative earnings had been improving.¹³ But in the past 15–20 years, both the real earnings and employment levels of blacks and less-educated males more generally have sharply deteriorated. In contrast, those of women have risen in relative terms. Indeed, the real earnings and employment of college-educated young women have grown substantially, while those with a high school or less education have not deteriorated nearly so much as have those of less-educated males.¹⁴

The literature on the growing employment problems of less-educated black males during this period attributes them to a variety of other labor market forces besides discrimination. These include (1) growing skill needs of employers, which have reduced the employment and earnings of less-skilled males, among whom blacks happen to be overrepresented (Juhn, Murphy, and Pierce, 1993); (2) declining employment in blue-collar jobs and/or manufacturing (Bound and Freeman, 1992; Bound and Holzer, 1993; Kasarda, 1995); (3) the movement of employers away from inner-city areas, while the mobility of minorities remains impeded by residential segregation and/or transportation problems (Ihlanfeldt and Sjoquist, 1990; Holzer, 1991; Kain, 1992); and (4) declining labor force activity in response to declining market wages and/or rising returns to illegal activities (Juhn, 1992; Freeman, 1994).

All of these factors (including, at least partly, the last) directly originate in changes that have apparently occurred on the *demand* side of the labor market for less-skilled and minority workers, and to which adjustments by these groups on the *supply* side have lagged behind. The resulting

¹³Cogan (1982) attributes much of the employment decline of blacks in the earlier part of this period to the disappearance of low-wage jobs in Southern agriculture associated with mechanization. The papers in Freeman and Holzer (1986) provide evidence that a variety of demand- and supply-side factors helped to limit the employment of blacks in the 1970–80 period.

¹⁴For a good review of the overall trends in earnings, see Levy and Murnane (1992). Bound and Freeman (1992) and Moss and Tilly (1992) provide reviews of the labor market changes affecting blacks, while Blau and Kahn (1994) provide evidence on the changing relative fortunes of less-educated males and females.

“mismatches” in the labor market (Wilson, 1987) result in lower wages and/or employment for these groups, at least in the short run.¹⁵

Despite the central role played by labor demand shifts in these hypotheses, we have had very little direct evidence on these forces from the demand side of the labor market. Much of the evidence has instead come from traditional supply-side data sources, such as the Current Population Survey or the Census of Population, to which more aggregated industry- or area-level data are sometimes appended.¹⁶

In addition to generating cleaner tests of the various demand-side hypotheses listed above at the micro level, demand-side data (especially on the hiring behavior of employers and on the characteristics of jobs they are filling) should enable us to answer some basic questions that are critical for the formation of appropriate policy responses to these problems. For instance, exactly where are the jobs for less-skilled workers now located, in terms of geography and sector of the economy? What skills do employers seek, and how do they recruit and screen applicants with these skills? What kinds of applicants do they receive, in terms of race and/or gender? Who ultimately gets hired in different kinds of jobs, and does Affirmative Action have any independent effects on these outcomes?

Answers to these questions would surely give us greater insight into the relative roles of discrimination and other demand-side forces in limiting the employment options of minorities as well

¹⁵“Mismatch” does not necessary imply the existence of disequilibrium or high unemployment in the labor market, but as long as labor supply elasticities among the relevant groups are positive, the shifts in labor demand away from the less-skilled should generate both lower employment levels and lower wages until offsetting labor supply shifts occur (through higher educational attainment, migration, etc.). The existence of wage rigidities and disequilibria would exacerbate the effects of demand shifts on employment and unemployment while reducing them on wages.

¹⁶Inferences about the roles of demand shifts in these data have come from positive correlations between wage and employment changes across groups (e.g., Katz and Murphy, 1992); from data on changes in the industry or occupational composition of employment that are sometimes interpreted as exogenous labor demand shifts (as in the case of declining manufacturing employment); from industry-level data on R&D expenditures (Berman, Bound, and Griliches, 1994) or import penetration (e.g., Sachs and Shatz, 1994); or from area-level data on average commute times (e.g., Ihlanfeldt and Sjoquist, 1990).

as women. They might also enable us to modify existing antidiscrimination efforts by identifying areas and sectors where such policy currently appears to be less effective.

To date, the paucity of available demand-side data on labor markets has limited our understanding of these issues. We therefore turn to results from a new survey of employers that is described below.

EMPLOYER DATA AND RESULTS

As part of a project entitled the Multi-City Study of Urban Inequality (funded by the Ford and Russell Sage Foundations), I recently administered a phone survey to roughly 800 employers in each of four metropolitan areas: Atlanta, Boston, Detroit, and Los Angeles. The survey was administered over the period of May 1992 through May 1994. The characteristics of the survey instrument and the sample of firms are described in greater detail in an appendix at the end of this paper.

Summary Data

We begin by presenting summary data on the employment outcomes at these firms by race and gender. Table 1 presents these distributions for all employees and for the last employee hired at each firm.

These outcomes are shown for all recently filled jobs, as well as for subsets of firms and jobs based on educational requirements (college degree required, not required);¹⁷ location within the metropolitan area (primary central city, suburbs, other locations, the last category including other

¹⁷Overall employment levels of firms by race are only gauged in the survey for positions that do not require college degrees.

TABLE 1
Employment Statistics by Race and Gender, from the Employer Survey (Means)

	All Jobs	Jobs Require College Degree		No College Degree			Affirmative Action	
		Yes	No	PCC	SUB	OTH	Yes	No
<i>Proportion of Employees:</i>								
White males	-	-	.335	.243	.370	.361	.311	.366
White females	-	-	.353	.265	.375	.334	.360	.344
Black males	-	-	.092	.149	.064	.123	.099	.082
Black females	-	-	.092	.166	.054	.103	.101	.079
Hispanics	-	-	.124	.145	.128	.097	.130	.117
Asians	-	-	.043	.056	.040	.025	.051	.034
<i>Last Hired Worker:</i>								
White males	.286	.373	.260	.167	.301	.263	.217	.314
White females	.350	.384	.341	.293	.370	.310	.358	.318
Black males	.083	.049	.096	.149	.063	.126	.098	.093
Black females	.088	.055	.102	.170	.070	.109	.112	.090
Hispanic males	.081	.045	.089	.092	.086	.094	.092	.085
Hispanic females	.060	.034	.067	.067	.067	.065	.074	.058
Asian males	.026	.034	.023	.038	.019	.011	.027	.017
Asian females	.020	.022	.017	.012	.021	.012	.016	.019

Notes Both columns under “Affirmative Action” in all tables refer only to jobs that do not require college degrees. “PCC”, “SUB”, and “OTH” refer to Primary Central Cities, Suburbs, and Other Areas, respectively, which are defined in the text. All means are sample-weighted.

central cities in the metro area and other municipalities having at least 30 percent black residents);¹⁸ and whether or not the respondent reported that Affirmative Action was used by the firm in filling jobs.¹⁹ The results by location and by use of Affirmative Action are presented only for positions that do not require college degrees. All results are sample-weighted.

The results show that blacks account for under 20 percent of recent hires in these metropolitan areas (column 1), while Hispanics account for an additional 12–14 percent and Asians for 4–5 percent.²⁰ Furthermore, females account for over half of newly hired workers. This is not surprising when one considers the distribution of occupations represented in this sample—over half of these employees are in white-collar jobs, and clericals alone account for roughly 30 percent.²¹ Depending on their location, the median starting wages on the non-college-degree jobs in the sample are in the \$7–8 an hour range, with 70–80 percent providing health care coverage for the employee and about half providing employer contributions to pensions (Holzer, 1996).²²

¹⁸The Census Bureau categorizes municipalities as “central cities” based on their population size, the ratios of employees to residents, and the fractions of workers who also live there. Other central cities (besides the primary ones, which are the largest in each metro area) are Marietta in Atlanta; Brockton, Cambridge, Framingham, Gloucester, Haverhill, Lawrence, Lowell, Lynn, Salem, and Waltham in the Boston area; Dearborn and Pontiac in Detroit; and Long Beach, Pasadena, and Pomona in Los Angeles.

¹⁹The survey gauged whether or not respondents had used Affirmative Action either during the recruiting or the screening process of filling the most recent job; an answer of “yes” to either question is interpreted here as use of Affirmative Action. Though the questions were asked only about the most recent hire, any use of Affirmative Action likely reflects government contractor status by the establishment, and therefore can be applied to the larger measure of employees there as well.

²⁰Blacks are concentrated in Atlanta and Detroit while Hispanics and Asians are concentrated in Los Angeles (and, to a lesser extent, in Boston). Dummies for metropolitan area are included in all estimated regression equations presented below.

²¹This sample overrepresents high-turnover jobs *within* firms and also jobs experiencing net employment growth. But the distributions of all employees and of new hires across occupations do not look very different from one another.

²²Wages are generally higher in Boston and Los Angeles than in Atlanta and Detroit, and are consistently higher for jobs located in primary central-cities than in other areas. Even in jobs not requiring college, starting wages for white males are 8.5 percent higher than for white females and 20–30 percent higher than those for blacks and Hispanics (though at least part of the racial difference reflects the relatively greater concentration of whites in Boston and Los Angeles).

We find that the representation of blacks and especially Hispanics rises among jobs not requiring college degrees (columns 2 and 3); and the fraction of jobs filled by blacks is 2–3 times as high for non-college-degree jobs located in primary central cities as well as for those in the suburbs (columns 4 and 5). Likewise, the fraction of minorities and females among employees and new hires is consistently higher for firms using Affirmative Action (columns 5 and 6), while the fraction of white males is lower by several percentage points. Thus, the preliminary results at least suggest that the skill needs, spatial locations, and antidiscrimination efforts of employers all affect their tendencies to hire minority workers.

In Table 2 we present summary data on several other characteristics of these jobs, for the same sample and subsamples that we used in the previous table. These include whether each of a particular set of social and cognitive tasks (e.g., directly dealing with customers, reading or writing paragraphs, performing arithmetic or using computers) are generally performed on a daily basis and whether each of a set of credentials (e.g., having a high school diploma, general or specific work experience, references, or vocational training) is absolutely necessary or strongly preferred for getting hired. The fractions of jobs requiring *none* of these tasks or none of the credentials are also presented.

The results of Table 2 show that the vast majority of new jobs involve the daily performance of social and cognitive tasks and have major requirements in terms of credentials. While task performance and required credentials are clearly higher among jobs requiring college degrees than among those that do not, even among the latter they are substantial.²³ Each of the tasks is performed daily in roughly 50–70 percent of all newly filled non-college-degree jobs; and all of the credentials

²³Standard errors on these dichotomous variables can be calculated as the square root of $(P*(1-P)/N)$, where P is the mean and N is the sample size. Standard errors on *differences* across nonintersecting categories can be calculated as the square root of the sum of the squared individual standard errors. Differences in means that are discussed in the text are generally those that are significant at the conventional levels.

TABLE 2
Characteristics of Firms and Jobs, from the Employer Survey (Means for Last Hired Workers)

	All Jobs	Jobs Require College Degree		No College Degree			Affirmative Action	
		Yes	No	PCC	SUB	OTH	Yes	No
<i>Daily Task Performance:</i>								
Customer interaction	.716	.825	.702	.768	.678	.683	.711	.690
Reading/writing	.647	.898	.613	.659	.613	.543	.643	.575
Arithmetic	.664	.775	.650	.650	.649	.651	.623	.684
Computers	.537	.735	.511	.571	.495	.469	.561	.446
None of above	.070	.001	.079	.056	.084	.100	.074	.086
<i>Hiring Requirements:</i>								
High school diploma	.748	1.000	.715	.761	.704	.684	.780	.632
General exp.	.694	.766	.684	.722	.670	.672	.705	.656
Specific exp.	.627	.740	.612	.667	.596	.582	.652	.561
References	.742	.863	.726	.735	.721	.728	.752	.691
Previous training	.400	.530	.383	.417	.388	.310	.399	.362
None of above	.051	.020	.055	.041	.061	.054	.038	.077

Note: A given factor is counted as a “Hiring Requirement” for a firm if that factor is considered either “Absolutely Necessary” or “Strongly Preferred” in order to be hired.

are required or preferred in roughly 40–70 percent of them. Furthermore, *the fractions of non-college-degree jobs in which none of the cognitive tasks are required or none of the hiring credentials is required is very small*—just 6 percent and 4 percent of the total respectively in the central city, and a bit higher in the suburbs.²⁴

Though we do not have exactly comparable data from the supply side of the market on the characteristics of potential workers, the data we do have suggest that the numbers of such workers in the central cities are likely to be greater than the numbers of available jobs; and that these imbalances are likely to be aggravated by welfare reform legislation that will soon require many more less-educated people to enter the labor force in these areas.²⁵

Furthermore, while these labor markets may adjust somewhat over time to shifts in local labor supplies, downward wage rigidities may well limit the magnitudes of any potential adjustments. Thus, the skill requirements on new jobs suggest a very limited availability of employment to the least-skilled workers in urban areas, even at very low wages.

In Table 3 we consider one additional characteristic of firms: the fractions of job applicants as well as employees or new hires who are black males, black females, Hispanics, and Asians. The applicant variables measure the quantity of labor *supply* that firms face from each of these demographic groups; while the ratio of employees or new hires to applicants measures the relative

²⁴If we allow for somewhat less restrictive definitions of very low-skill jobs—e.g., those that require only high school diplomas or only interactions with customers on a daily basis—these percentages rise to 10 percent and 7 percent, respectively, in the central city.

²⁵We make this inference from the fractions of working-age and nonenrolled populations in the central cities without high school diplomas or recent work experience. For example, medium- and long-term AFDC recipients (i.e., those who have been on the rolls for more than 2 years) alone account for 10–15 percent of household heads in these cities; the majority of these women have no high school diplomas, no recent work experience, poor reading/writing abilities (as measured by test scores) and little history of job search in suburban areas. See Holzer (1996), Chapter 3.

TABLE 3
Applicants and New Hires, by Race and Gender, from the Employer Survey

	All Jobs	Jobs Require College Degree		No College Degree			Affirmative Action	
		Yes	No	PCC	SUB	OTH	Yes	No
<i>Proportion of Applicants</i>								
<i>Who Are:</i>								
Black males	.146	.082	.168	.242	.125	.205	.170	.165
Black females	.124	.111	.128	.190	.095	.145	.149	.103
Hispanics	.137	.109	.145	.155	.144	.135	.149	.141
Asians	.058	.068	.055	.055	.058	.045	.067	.041
<i>Ratio of New Hires to</i>								
<i>Applicants:</i>								
Black males	.568	.598	.571	.616	.504	.615	.576	.564
Black females	.710	.495	.797	.895	.737	.752	.752	.874
Hispanics	1.029	.725	1.076	1.026	1.063	1.178	1.114	1.014
Asians	.793	.824	.727	.909	.690	.511	.642	.878
<i>Ratio of Employees to</i>								
<i>Applicants:</i>								
Black males	-	-	.630	.616	.512	.600	.588	.497
Black females	-	-	.742	.874	.568	.710	.678	.767
Hispanics	-	-	.905	.935	.889	.719	.872	.830
Asians	-	-	.741	1.018	.690	.556	.761	.829

Note: "Ratios" refer to ratios of means rather than vice-versa.

labor *demand* for the applicants of each group.²⁶ Ratios greater than one indicate a relative inclination of employers to hire from a particular group of applicants, while those less than one indicate a disinclination.²⁷ Both the applicant measures and the ratios appear in Table 3, for the entire sample of firms and for each of the subsets used above.

The results point to several important findings. Blacks and Hispanics are more likely to apply for jobs that do not require college degrees, that are located in primary central cities, and that practice Affirmative Action in hiring. The last of these findings holds for Asians as well.

The gap in black application rates between firms located in central cities versus those in the suburbs is striking. Indeed, the magnitude of this locational gap among applicants parallels that in employment for blacks between these two areas. This large racial gap in applicant locations suggests that it may be access to jobs, rather than skill gaps or the racial attitudes of employers, that limit the employment of blacks in suburban areas. Thus, this evidence is very consistent with the idea of *spatial mismatch*, in which blacks whose residences are concentrated in the central city (owing to housing market segregation and discrimination) have difficulty obtaining suburban jobs because of transportation costs, limited information, or other problems (Holzer, 1991; Kain, 1992).²⁸

²⁶The applicant questions in the survey were not specific to the last-filled job, which suggests that comparison with the establishment wide employee measures may be more appropriate. On the other hand, the most recently filled jobs reflect recent hiring behavior, which the wider employee measures may not. Furthermore, the most recently filled jobs in firms should (on average) be more heavily represented in their overall pool of employees as well, thus making comparisons between the applicant measure and either measure of hiring fairly reasonable in large samples.

²⁷Appropriately weighted averages of these ratios across all groups, including whites, should sum to one. However, we did gauge these measures for whites in the survey.

²⁸Since these data tell us *where* rather than *whether* different groups of people work, we cannot directly infer “mismatch” from these results. Indeed, if employers and jobs were distributed in direct proportion to where people live, or if commuting over local distances were relatively costless, the location of employment for different groups would tell us nothing about their relative employment or wage rates. However, the relatively lower ratios of vacancies to unemployed workers and lower wages in jobs located near minority residences (e.g., Holzer, 1996; Ihlanfeldt, 1995; Holzer and Ihlanfeldt, 1995) suggest that labor markets for less-educated workers are tighter in the suburban areas, implying some disadvantage for those who have limited access to these markets.

On the other hand, there is some evidence here that applicants *self-select* into firms by applying where they are most likely to be hired. For instance, the higher applicant rates of minorities (especially black females) at firms using Affirmative Action suggests some responsiveness of labor supply to differences in the demand for these groups, thus making it more difficult to infer exogenous determinants of outcomes from either side of the market using these data.

As for the ratios of employees and new hires to applicants, we find the following:

- These ratios are generally closest to one for Hispanics, somewhat lower for Asians, and lowest for blacks;
- They are lower for black males than for females, and lower in the suburbs than in the central-cities;
- For black males and Hispanics, they are higher in jobs where Affirmative Action is used (though the opposite appears to be true for black females and Asians);²⁹
- For all minority groups except Asians, the ratios are comparable or higher in jobs that do not require college degrees.

Of course, without controlling for the *quality* of applicants (in terms of skills, attitudes, etc.) relative to skill needs on jobs, it is hard to make inferences about discrimination from these relative preferences of employers. Differences across groups in the average qualities of applicants that employers face might arise either because of populationwide differences or the self-selection processes by which applicants choose where to apply for work. For instance, it is at least possible that whites and Hispanics are more likely than blacks to apply for jobs at which their chances of receiving an offer are higher.³⁰

²⁹For black females and Asians, employment rises in jobs and firms that use Affirmative Action, but applicants rise by even greater proportions.

³⁰This might be true if, for example, some groups had lower reservation wages than others, and were therefore more likely to apply for low-wage jobs; or if they were more likely to apply for jobs where they have some personal contacts. For evidence of black-white differences in these search behaviors among young males, see

On the other hand, populationwide education levels and test scores are generally higher among blacks than Hispanics. Furthermore, the gaps between education levels of whites and blacks are generally higher among central-city residents and employees than among suburban ones, and (as we noted above) task and credentials requirements are generally higher in the central city as well.³¹ The biases that might be caused by omitted measures of applicant quality thus seem to go against the results presented above.

Therefore, the findings here strongly suggest that *employer discrimination in hiring is stronger against blacks than Hispanics, and is stronger in suburban than in central-city areas.*

In Table 3 we see that the relative employer preference for Hispanics over blacks is especially pronounced among non-college-degree jobs. This is also true where cognitive and social task requirements are relatively low, such as in blue-collar and manufacturing jobs (Holzer, 1996). Indeed, the fractions of Hispanics employed in these jobs and industries are well above those observed for whites, while for black males the opposite is now true in these areas.³²

The hiring patterns noted here are also consistent with more qualitative evidence in which employers generally express their preferences for immigrants over native-born blacks in jobs that require few skills, and for black females over black males (Kirschenman, 1991; also Kirschenman and Neckerman, 1991). These preferences seem to reflect widespread employer perceptions that immigrants have better attitudes and greater “work ethic” than do native-born blacks, as well as employers’ relatively greater fears of behavioral problems and crime from young black males.

Holzer (1986, 1987).

³¹See Hauser and Phang (1993) for evidence on education levels and Grissmer et al. (1994) for data on test scores across racial and ethnic groups. In Holzer (1995a), I show that whites who work in the city of Detroit have higher education levels than those working in the suburbs, while the opposite is true for blacks.

³²For instance, .45 of recent Hispanic male new hires were in manufacturing, relative to .29 and .20 for white and black males, respectively. For blue-collar jobs, comparable fractions are .56, .43, and .40, respectively. The relative underrepresentation of black males in manufacturing constitutes a major reversal from twenty years earlier in the industrial Midwest, where blacks were heavily overrepresented in this type of work. See Bound and Holzer (1993).

The relatively low preference of suburban employers for black applicants is also consistent with the notion that employers are not randomly distributed within metropolitan areas; indeed, those with discriminatory tastes are more likely to choose to locate in suburban areas (Kain, 1992). Thus, at least part of the difference in employment locations across geographic areas may really be due to *race* rather than *space* (Ellwood, 1986).

Furthermore, these differences are relatively more pronounced in some occupations and industries than in others. Holzer (1996) presents hiring ratios in suburbs and central cities for blacks by 1-digit occupation and industry. In general, I find particularly low ratios of employees to hires for black males at retail trade and service firms and in clerical and sales jobs located in the suburbs. These findings suggest hiring behavior that may be related to the tastes of customers, as in Becker's seminal model (1971). This possibility is explored more systematically below.³³

Regression Estimates

The data presented in the previous section suggest that the geographic location, group preferences, and use of Affirmative Action of employers all affect their tendencies to hire minorities and women. Other factors, such as their task performance needs and required credentials, might affect these tendencies as well. But employers located in the central city are also more likely to use Affirmative Action in hiring. Firms in both categories are not only more likely to receive black applicants than are others, but they are also generally larger and more likely to receive black

³³Becker's model also implies that employer discrimination will be based on their own preferences as well as those of their employees. We have no direct evidence on the former here, as a few questions in the survey in which we tried to gauge such preferences yielded little variance and few believable results. The same was true of a question in which we tried to gauge employer perceptions of employee preferences for those of their own race or ethnic group. While we did gauge the race/gender of the respondent (who was responsible for hiring), these measures are quite highly correlated with race/gender of new hires, and we could not sort out causal effects of the former on the latter from their being jointly determined by the same set of other factors.

customers.³⁴ Since all of these factors might conceivably be associated with the hiring of blacks, we need multivariate regression analysis to separate out their effects to the greatest extent possible.

In Table 4 I present the results of an estimated equation for the probabilities that firms hire individuals from various race/gender groups. The dependent variable is categorical, based on the race and gender of the last worker hired.³⁵ The sample is limited to workers hired into jobs that do not require college degrees. The equation has been estimated through multinomial logit, with white males as the omitted group.

The independent variables consist of both firmwide and job-specific measures. The firmwide measures include industry dummies, dummies for central city/suburban/other location as well as for MSA, percentage of employees covered by collective bargaining, establishment size dummies, use of Affirmative Action, and the race/gender compositions of customers and applicants. The job-specific measures include dummies for daily task performance and credentials needed for the job, as well as the age and education of the worker hired. Thus, a wide range of employer skill needs and racial preferences as well as personal human capital characteristics of workers are controlled in these equations.

Though not presented here, a variety of specifications of this equation have been estimated. For instance, the racial composition of customers and applicants across firms may well be endogenous to the use of Affirmative Action and to minority employment more generally. Including these variables reduces the estimated effects of other factors, such as Affirmative Action and central city location, on the hiring of minorities, and may be generating downward biases in these estimates. On

³⁴Blacks account for 26 percent of customers at firms in the primary central cities, but only 15 percent at suburban firms. Also, establishments with 100 or more employees account for 40 percent and 34 percent of those in each location, while they constitute 45 percent of establishments practicing Affirmative Action but only 23 percent of those that do not.

³⁵Males and females are pooled for Hispanics and Asians in the Tobit equations, since the establishmentwide employment questions in the survey appeared that way; but they appear separately in the logits, as they were separately gauged in the question for last hired worker.

TABLE 4
Effects of Race/Gender on Most Recent Hire in Noncollege Jobs: Multinomial Logit Estimates

	White Female	Black Male	Black Female	Hispanic Male	Hispanic Female	Asian Male	Asian Female
Geographic Location:							
PCC	.074 (.150)	.846 (.204)	.902 (.205)	.808 (.243)	.624 (.249)	1.290 (.375)	-.091 (.463)
OTH	-.050 (.162)	.459 (.232)	.458 (.236)	.355 (.274)	-.070 (.318)	.248 (.509)	.034 (.529)
Establishment Size:							
1–20	-.180 (.228)	-1.270 (.308)	-1.523 (.301)	-.611 (.407)	-.394 (.407)	-1.077 (.584)	-1.664 (.616)
21–50	.056 (.239)	-.811 (.320)	-.769 (.310)	-.051 (.421)	.001 (.424)	-.795 (.588)	-1.828 (.777)
51–100	.078 (.255)	-.488 (.332)	-.508 (.329)	-.206 (.431)	.228 (.430)	-.864 (.631)	-.052 (.602)
101–500	.177 (.229)	-.297 (.286)	-.327 (.283)	-.129 (.385)	.072 (.386)	-.540 (.512)	-.608 (.540)
Proportion of Applicants in Group	—	.030 (.004)	.051 (.006)	.024 (.004)	.028 (.005)	.048 (.011)	.054 (.012)
Proportion of Customers in Group	—	.019 (.005)	.025 (.005)	.016 (.007)	.017 (.007)	.017 (.010)	.007 (.011)
Daily Tasks:							
Customer interaction	.970 (.148)	.068 (.203)	.973 (.232)	-.221 (.240)	.166 (.264)	-.902 (.385)	.118 (.438)
Reading/writing	-.279 (.131)	-.292 (.184)	-.305 (.188)	.210 (.217)	.049 (.232)	-.012 (.392)	-.150 (.424)
Arithmetic	-.046 (.129)	-.751 (.181)	-.392 (.182)	-.337 (.209)	.002 (.224)	.073 (.359)	-.066 (.409)
Computers	1.000 (.128)	.116 (.193)	.825 (.189)	-.424 (.233)	.697 (.233)	.510 (.387)	.166 (.424)

(table continues)

TABLE 4, continued

	White Female	Black Male	Black Female	Hispanic Male	Hispanic Female	Asian Male	Asian Female
Hiring Requirements:							
High school diploma	.332 (.155)	-.030 (.207)	.112 (.220)	-.653 (.229)	.007 (.266)	-.580 (.408)	.084 (.526)
Specific experience	-.083 (.132)	-.211 (.192)	-.329 (.190)	-.314 (.228)	-.287 (.238)	.130 (.393)	.245 (.450)
Vocational training	-.273 (.126)	-.252 (.192)	-.233 (.188)	.007 (.226)	-.205 (.228)	-.720 (.367)	-.159 (.387)
Affirmative Action	.164 (.122)	.264 (.183)	-.163 (.182)	.402 (.210)	.338 (.224)	.283 (.362)	-.066 (.403)
Log L	-3204.5	-3204.5	-3204.5	-3204.5	-3204.5	-3204.5	-3204.5

Notes: White males are the omitted category for the multinomial logit equations. Other controls include dummy variables for MSA, industry, and collective bargaining at the firm; as well as the age and education of the last worker hired. “Proportion of Applicants” is identified by race for all groups except whites and by gender for blacks only. “Proportion of Customers” is identified by race for all groups except whites.

the other hand, controlling for the supply of minority applicants to firms gives us at least some confidence that most other estimated effects truly reflect the choices of employers, conditional on the characteristics of the applicant pool.

Turning to the results of Table 4, we generally find that Affirmative Action raises the employment of most minority groups and females relative to white males. The effect on the employment of Hispanic males is largest and most significant, while the effects for white and Hispanic females as well as black and Asian males are at least marginally significant as well.

How much redistribution of employment from less-educated white males to those in “protected groups” do these estimates imply? Estimates from equations in which the dependent variables reflect the hiring of white males suggest that the presence of Affirmative Action reduces their employment shares by roughly 3.5 percentage points, or 10 percent.³⁶

These estimates are larger than those of Leonard (1984b), and may well reflect further unobserved heterogeneity across firms, though the range of control variables here for skill needs and employer preferences is quite extensive.³⁷ It is also unclear here whether the increases in minority and female employment just offset the declines in male employment or actually exceed them among non-college-degree jobs (which would imply some net substitution of noncollege for college jobs).³⁸

³⁶This estimate is derived from a Tobit equation with the same firmwide variables as the equation in Table 4, except that the dependent variable is the percentage of employees in non-college-degree jobs at each firm who are white males; and from a binomial logit with exactly the same specification as in Table 4, in which the dependent variable is a dummy for whether or not the last hired noncollege worker is a white male.

³⁷Leonard used federal contractor status rather than self-reported use of Affirmative Action as his primary measure of that activity. Firms that practice Affirmative Action in response to various state-level requirements, or because they choose to do so, will be included in the Affirmative Action sector in my results but not in his. Also, Leonard uses *changes* between 1974 and 1980 rather than levels of employment as his dependent variables, and his controls generally differ from those included here.

³⁸It is possible that employment gains induced by Affirmative Action for minorities and women exceed the losses of white males among the *less* educated, while the opposite is true among more educated. The program could also cause a shift in employment *between* the educational categories as well as within them. But within this single cross-section of firms we find a strong *positive* correlation between education levels of hires and Affirmative Action, implying a shift toward more-educated groups that is very likely biased upward and which would cause the within-group estimates to be biased in the opposite direction.

Overall, the results suggest that Affirmative Action continues to improve the employment prospects of less-skilled females and minorities.

Other results in Table 4 imply the following:

- Establishment size has powerful effects on the hiring of minorities: larger firms hire more blacks (but smaller firms hire somewhat more Hispanics);
- The race/gender compositions of customers as well as applicants also have large effects on who gets hired;
- Firms located in primary central cities generally hire more minorities;
- Firms with high task performance needs and hiring criteria generally hire fewer minorities.

The estimated effects of skill needs on hiring are jointly significant, and many of the individual effects are at least marginally significant as well. In general, there are gender as well as race effects; for instance, females are more likely than males of each racial group to be hired into jobs requiring customer contact or computer use.

But within each gender, these tasks and credentials have important effects on hiring patterns by race. In particular, black and Hispanic males are the most negatively affected by cognitive skill requirements and hiring credentials. Black males are particularly hurt by the need for arithmetic and reading/writing in jobs, as well as requirements of previous vocational training and specific experience. Hispanic males are hurt by some of these same requirements (i.e., arithmetic, specific experience, and also computer use), and especially by the requirements of high school diplomas. The latter appears to reflect the continuing high rate of dropping out of high school by Hispanics (Hauser and Phang, 1993).

The employment of black and Hispanic females is also reduced, *especially relative to white females*, by many of these same job characteristics. Furthermore, the magnitudes of these effects are

not necessarily small when converted into partial derivatives (evaluated at sample means), relative to the means for group-specific employment that appear in Table 1.³⁹

These findings suggest that minorities are hurt in the hiring process by employer perceptions of their weaknesses in cognitive skills and observable credentials. To some extent, these perceptions are no doubt accurate; despite recent gains, blacks and Hispanics continue to score lower than whites on tests measuring cognitive abilities (e.g., Grissmer et al., 1994). Other studies have found that these gaps explain major parts of black-white earnings and employment differences.⁴⁰ Differences in education levels and in early labor market experience also contribute to the lower credentials that employers perceive for these groups.⁴¹

But employer perceptions of these weaknesses among minority job candidates may be overstated, especially with regard to credentials that they do not observe at the time of hiring; and the extent to which these predict future job performance remains unclear as well.⁴² Thus, the estimated effects of skill needs and hiring requirements here may well reflect some degree of employer discrimination (whether pure or “statistical”) as well as legitimate skill needs.

³⁹Partial derivatives on all of the tasks and hiring requirements for black males (including customer contact and computer use) are all negative and in the range of 1–8 percentage points (Holzer, 1995b). The customer and computer partials are negative for white males as well as black ones, thus explaining the lack of negative coefficients on these attributes in Table 4.

⁴⁰See, for instance, O’Neill (1990), Rivera-Batiz (1992), Ferguson (1993), and Neal and Johnson (1994).

⁴¹The estimated experience effects differ somewhat from those estimated by Ellwood (1982), Meyer and Wise (1982) and others, who found negative effects of early unemployment on later wages but not on later employment. Those results were based on data from the early 1970s; whether or not they would hold up today is unclear. Indeed, some recent work by Rich (1994) suggests longer-term effects on employment of early unemployment among youth.

⁴²One interpretation of the audit studies described above, in which blacks and whites with identical *observable* characteristics are paired, is that employers believe that whites are preferable to blacks in terms of *unobservables* (such as work attitudes, etc.); whether they are correct in this regard is unclear. The question of the extent to which hiring criteria actually predict job performance is at the center of the legal issues of “disparate impact” and the validation of these criteria that began with the Supreme Court ruling in *Griggs v. Duke Power* (1971) and was addressed more recently in the Civil Rights Act of 1991.

A few other points deserve mention. First, most of these hiring requirements have significant effects on wages as well as who gets hired.⁴³ These wage effects indicate that, on average, these requirements represent meaningful skills in the eyes of employers. They also suggest that, in conjunction with their effects on who gets hired, the skill requirements may contribute somewhat to observed wage differentials between race and gender (as well as educational) groups. Indeed, the various hiring requirements account for a substantial fraction (roughly 30 percent) of the residual wage differences between black and white males (after controlling for other observable characteristics of individuals, jobs, and firms) in this sample (Holzer, 1995b).

The skill requirements account for virtually none of the gender differences in wages, which is clear from the fact that women are employed in jobs that contain relatively more of these skills and requirements. Remaining gender differences in *starting* wages (where no job tenure has been accumulated) after controlling for educational attainment of individuals, skill requirements of jobs, and other firm characteristics may reflect factors such as occupational choice, expected future job tenure, or discrimination (Gunderson, 1989). On the other hand, the apparent growth in the demand for many of these tasks (such as computers) may well have contributed to the improved relative wages of less-educated women in the past decade and to the deteriorating relative wages of less-educated (and especially minority) males (Holzer, 1995b).

With regard to other determinants of hiring, the strong effects of customer composition and establishment size after controlling for the applicant pool, as well as any remaining effects of central-city location, likely reflect various demand-side considerations.⁴⁴ The effects of customer composition suggest that employers cater to their perceptions of their customers' tastes. Large employers and/or

⁴³Indeed, all have significant positive effects on wages except for customer contact and the requirement that workers have references. See Holzer (1995b).

⁴⁴If the minority applicant measures are endogenous with respect to race and gender hiring patterns more generally, the estimated coefficients on other determinants of minority hiring will likely be biased toward zero.

those located in the central city may feel particular pressure to hire minorities and women, owing to their greater visibility and proximity to these groups; or they may actually prefer these employees to a relatively greater extent than do their smaller and suburban counterparts.⁴⁵

Whatever the exact interpretation, these results suggest that hiring behavior tends to be more discriminatory among the smaller and suburban groups of employers, thus limiting the employment prospects of minorities in these firms. On the other hand, differences in task performance and credential requirements can account for more of the observed differences in earnings between whites and blacks than had previously been noted, and may help account for the relatively strong performance of less-educated females in the previous one or two decades.

DISCUSSION

In this paper I have reviewed the literature on the effectiveness of antidiscrimination activities by the federal government, and on the persistence of discrimination against minorities and women in the labor market more generally. I have also presented new evidence on the determinants of hiring and wages for members of different race/gender groups, primarily in jobs which do not require college degrees. The evidence is based on a new survey of employers in four large metropolitan areas that I recently administered.

The review of the literature showed that both antidiscrimination laws and Affirmative Action programs caused significant improvement in the relative earnings of blacks and females during the 1960s and 1970s. While both caused greater relative improvement among the more highly educated

⁴⁵Larger employers will generally have personnel (or human resources) departments that use more formal recruitment and screening methods, which may be relatively beneficial for blacks (Holzer, 1987); and their relative proximity to the black population in central cities may tend to reduce stereotypical notions about the characteristics and behavior of the latter group (Bobo and Klugel, 1991). It seems unlikely that the greater tendency of large and/or inner-city firms to hire more minorities can be attributed to their receiving a higher *quality* of minority applicants relative to whites, as noted above.

groups, the benefits of these programs could be seen across the educational and occupational spectrum. Redistribution of employment away from white males in firms practicing Affirmative Action (and presumably downward pressure on their wages in other firms) has clearly occurred, but it does not appear to be severe in magnitude.

On the other hand, the more recent evidence on these programs has been somewhat more discouraging. EEO activities are increasingly focused on individual discharge cases, rather than the kinds of broader class-action suits on hiring and promotion cases that are likely to generate legal precedents and larger effects on relative labor market status. There has been speculation (though no real evidence) that these activities may contribute to employer reluctance to hire minorities in the first place. Enforcement of Affirmative Action regulations also deteriorated during the 1980s, as did their relative effects on employment of minorities at contractor establishments.

Both quantitative and qualitative evidence suggest that employment discrimination against blacks continues to exist. Furthermore, their relative labor market status has clearly declined in the past 10–20 years, as labor demand has apparently shifted away from less-educated workers in general and less-educated blacks in particular. On the other hand, the relative earnings of women clearly improved in this period.

The empirical results presented above imply that discrimination continues to limit the employment prospects of less-educated blacks. The data suggest that hiring discrimination is more severe against blacks than Hispanics, against black males than black females, and in smaller and/or suburban establishments, especially in jobs that involve contact with predominantly white customers.

Other factors, such as the lower access of central-city blacks to suburban firms and the various skill requirements of employers, also seem to have important effects on where they are employed; and increases in those skill needs may play major roles in accounting for differing trends over time in the relative earnings of blacks and females among the less-educated.

What do these results imply about policies, especially those targeted to the demand side of the labor market, to improve the employment and earnings prospects of less-educated minorities and females?

It seems unlikely that any major expansion of Affirmative Action programs can be realistically considered at this time. Given the strong political opposition that these programs seem to face, the major question for the short term is whether they will survive at all. Aside from political constraints, we have little strong evidence to date on the efficiency effects of these programs, or on whether they generate any net new employment for less-educated workers. Thus, arguing for a major expansion of Affirmative Action even on its own merits is premature, though more rigorous enforcement of existing guidelines might well be in order.

But these results do suggest some possibilities for strengthening government antidiscrimination efforts. In particular, we need to improve our monitoring of employment practices in smaller and/or suburban firms, and to increase social or legal pressure on these firms to increase their hiring of minorities. Such activities would effectively extend the scope of current antidiscrimination activity, and therefore might avoid the “diminishing returns” that appear to be plaguing these efforts.

But exactly how to bring greater pressure to bear on such establishments is not clear. Legal proof of employment discrimination at any establishment often depends on the racial composition of employees at the establishment relative to the composition of the local population (Bloch, 1994). Since at least some of the suburban firms have deliberately located far away from minority populations, the basis for claiming employment discrimination in many such cases may be lacking.

An alternative legal strategy might rely on the racial composition of *job applicants* at firms as well as the local population in computing the relevant base with which to compare the racial composition of employment. The use of audits by applicants to generate legal proceedings against firms is one version of such a strategy, and has recently been debated in policy circles and in the courts.

We might more generally be interested in using the composition of job applicants to measure the minority labor supply faced by firms, and these could be used more extensively than they are today in suburban areas. But many firms do not keep records of rejected applicants, and may not record race even when they do. Other ways of monitoring the racial composition of applicant flows at individual firms would have to be developed for such an approach to work.

More important, this raises the larger question of how to generate more minority job applicants in suburban areas in the first place. Indeed, we might view various *mobility* strategies, designed to raise the supply of minority labor in suburban areas, as complementary to (and even preconditions for) effective antidiscrimination efforts targeted at the demand side of the labor market in these areas.

Proponents of residential mobility strategies for increasing black representation in the suburbs (such as Kain) argue for stricter enforcement of antidiscrimination laws in housing and for housing vouchers for low-income residents; while others (e.g., Hughes and Sternburg, 1992) place more emphasis on transportation and job placement approaches for those who will continue to be residents of central cities. Over the longer term the former approach has greater appeal, though the latter appear to be more cost effective and politically popular.⁴⁶

In addition to these strategies, we must also confront the problem of real deficiencies in skills and credentials among minority applicants. The need for improved education and job training for these applicants is quite obvious. While a full discussion of these issues is clearly beyond the scope of this paper, one potential policy targeted at firms deserves some mention here. Since there is evidence that minorities get less formal on-the-job training than do white employees (e.g., Lynch, 1992), lowering the cost of such training to employers (through subsidies for private sector training, etc.) might increase

⁴⁶The potential benefits of residential mobility programs in terms of raising employment among minority and low-income people was most clearly demonstrated in the evaluation of the Gautreaux housing experiments (Rosenbaum and Popkin, 1991). Though no transportation program has yet been rigorously evaluated, Hughes and Sternburg provide some descriptions and casual data on various local programs that seem promising.

their willingness to provide it to minority employees, and might even make them willing to lower the pre-employment screens that clearly limit minority employment in many cases.⁴⁷

Providing meaningful private-sector work experience to inner-city minorities early in their working careers (through improved job placement, apprenticeships, and other programs that speed the “school-to-work transition”) might also improve their abilities to pass through these screens at the hiring stage.

Finally, note the very small number of new jobs, especially in central-city areas, that require no major credentials at the hiring stage or no major task performance after hiring. Given the large number of inner-city youth with long durations of nonemployment and poor cognitive skills, and given the current popularity of proposals to push more long-term AFDC recipients into the labor force, there seems to be a clear need for more job creation for very low-skilled workers. Whether this is accomplished through some type of wage subsidy to employers or through direct Public Sector Employment, the need to create more such jobs seems quite clear.⁴⁸

⁴⁷See Holzer et al. (1993) for evidence on a state-level training subsidy to firms that appeared to increase the incidence of training and improve the quality of worker output in small manufacturing companies. The possible beneficial effects of such subsidies on minority hiring presupposes that screens for employee quality at the hiring stage and training for those who are hired are complements rather than substitutes.

⁴⁸For discussions of the advantages and disadvantages of various types of targeted wage subsidies for less-skilled workers, see Burtless (1985), Haveman (1988) and Lehman (1994). Also see Katz (1995) and Gottschalk (1995) for the relative merits of such subsidies and direct Public Service Employment.

APPENDIX: CHARACTERISTICS OF EMPLOYER SURVEY

As noted above, the data presented in this paper are from a survey of 3200 employers in Atlanta, Boston, Detroit, and Los Angeles that was administered over the phone between May 1992 and May 1994.

Survey questions focused on employment characteristics of the overall establishment, such as numbers of recent hires, turnover, and current job vacancies, as well as the last worker hired into the firm and the job filled by that person. These questions include frequency of performance of certain tasks, recruiting and screening methods, other hiring requirements, and some demographics of the worker hired (such as race, gender, age, and education level). The race and/or gender composition of the firm's applicants, customers, and current employees were all noted as well.

The sample was drawn from two sources: (1) employers identified by respondents in household surveys in each city that were being administered concurrently (as part of the Multi-City Study); and (2) listings of firms and phone numbers from Survey Sampling Inc. (SSI), primarily generated from phone directories. In all, about 1000 employers were generated by the first source and the rest by the second.

For the SSI sample, we focused on the last worker hired into jobs that did not require workers with four-year college degrees; and for the household-generated sample we focused on workers hired into the same job categories as were listed by household respondents. In either case, firms had to have hired someone in the relevant category within the past three years in order to pass the screening and be included in the survey.

The SSI sample was drawn as a stratified random sample that oversampled large employers in order to generate a sample of firms distributed across size categories in roughly the same way as are

current employees.¹ The household-based sample is implicitly weighted by employees already. Therefore, both samples are essentially employee-weighted, and therefore can be pooled.² Furthermore, the sample of recently filled jobs in these firms represents an employee-weighted sample of new jobs and workers that reasonably well represents the appropriate universe in each case.³

Response rates for firms that passed the screening averaged about 67 percent. Given that we had some data on all firms generated by SSI, including those that did not respond to our survey, we could check for significant differences in response rates across certain variables—i.e., industry, location, and firm size—that would suggest the presence of sample selection bias. Overall we found little evidence of major differences in response rates across these variables, indicating little selection bias across these observable categories.⁴

Comparisons of the industrial and size distributions of these firms with those listed for the relevant metropolitan areas in the *County Business Patterns* also indicated that the employer samples are quite representative.

¹Firms were sampled across size categories in the following way: 25 percent from firms with 1–19 employees; 50 percent from firms with 20–99; and 25 percent from firms with 100 or more. This distribution is relatively comparable to that observed in the *County Business Patterns* for the relevant metropolitan areas.

²Sample weights for household respondents were used to weight the firms generated by the household surveys. Additional weights were used to adjust for the undersampling of college graduates in the SSI sample.

³A sample of jobs weighted by current employment at an establishment will underweight establishments with many hires due to turnover or net employment growth. At least the first of these is desirable, since high turnover generates no additional net employment. Furthermore, turnover accounts for most of the variance across firms in gross hire rates (Holzer, 1996). Focusing on the last hire in firms will also lead to an oversampling of high-turnover jobs within these firms and to those which are experiencing net employment growth. But the occupational distributions of the new hires do not look greatly different from the distribution of overall employment in these firms or from distributions across occupational categories within the Census.

⁴Response rates in construction and in the public sector were significantly lower and higher, respectively, than were those in other sectors, while no other industry measures were significant. Response rates were also a bit higher in larger firms. See Holzer (1996) for more details on the selection tests.

References

- Becker, Gary. 1971. *The Economics of Discrimination*. Chicago: University of Chicago Press.
- Berman, Eli, John Bound, and Zvi Griliches. 1994. "Changes in the Demand for Skilled Labor within U.S. Manufacturing: Evidence from the Annual Survey of Manufactures." *Quarterly Journal of Economics* 109 (May): 367–398.
- Blau, Francine, and Andrea Beller. 1988. "Trends in Earnings Differentials by Gender, 1971–1981." *Industrial and Labor Relations Review* 41 (July): 513–529.
- Blau, Francine, and Lawrence Kahn. 1994. "Rising Wage Inequality and the U.S. Gender Gap." *American Economic Review* 84 (May): 23–28.
- Bloch, Farrell. 1994. *Antidiscrimination Law and Minority Employment*. Chicago: University of Chicago Press.
- Bobo, Lawrence, and James Klugel. 1991. "Modern American Prejudices: Stereotypes, Social Distance, and Perceptions of Discrimination toward Blacks, Hispanics and Asians." Department of Sociology, University of California–Los Angeles, mimeo.
- Boozer, Michael, Alan Krueger, and Shari Wolkon. 1992. "Race and School Quality since Brown v. Board of Education." *Brookings Papers on Economic Activity: Microeconomics*, Special Issue, pp. 327–338.
- Borjas, George, Richard Freeman, and Lawrence Katz. 1992. "On the Labor Market Effects of Immigration and Trade." In George Borjas and Richard Freeman, eds., *Immigration and the Workforce: Economic Consequences for the United States and Source Areas*. Chicago: University of Chicago Press.
- Bound, John and Richard Freeman. 1992. "What Went Wrong? The Erosion of Relative Earnings and Employment among Young Black Men in the 1980s." *Quarterly Journal of Economics* 107 (February): 201–232.

- Bound, John, and Harry J. Holzer. 1993. "Industrial Shifts, Skills Levels, and the Labor Market for White and Black Males." *Review of Economics and Statistics* 75 (August): 387–396.
- Brown, Charles. 1982. "Federal Antidiscrimination Law: The Mouse That Roared?" In Ronald Ehrenberg, ed., *Research in Labor Economics*, Vol. 6. Greenwich, Conn.: JAI Press.
- Brown, Charles. 1984. "Black/White Earnings Ratios since the Civil Rights Act of 1964: The Importance of Labor Market Dropouts." *Quarterly Journal of Economics* 94 (February): 31–44.
- Burtless, Gary. 1985. "Are Targeted Wage Subsidies Harmful? Evidence from a Wage Voucher Experiment." *Industrial and Labor Relations Review* 39 (October): 105–114.
- Butler, Richard, and James Heckman. 1977. "The Government's Impact on the Labor Market Status of Black Americans: A Critical Review." In Farrell Bloch et al., eds., *Equal Rights and Industrial Relations*. Madison, Wis.: Industrial Relations Research Association.
- Cain, Glen. 1986. "The Economics of Discrimination: A Survey." In Orley Ashenfelter and Richard Layard, eds., *Handbook of Labor Economics*. Amsterdam: North-Holland.
- Card, David, and Alan Krueger. 1992. "School Quality and Black-White Relative Earnings: A Direct Assessment." *Quarterly Journal of Economics* 107 (February): 151–200.
- Cogan, John. 1982. "The Decline in Black Teenage Employment, 1950–1970." *American Economic Review* 72 (September): 621–638.
- Donohue, John, and James Heckman. 1991. "Continuous v. Episodic Change: The Impact of Civil Rights Policy on the Economic Status of Blacks." *Journal of Economic Literature* 21 (December): 1603–1643.
- Donohue, John, and Peter Siegelman. 1991. "The Changing Nature of Employment Discrimination Litigation." *Stanford Law Review* 43 (May): 983–1033.

- Ellwood, David. 1982. "Teenage Unemployment: Permanent Scars or Temporary Blemishes?" In Richard Freeman and David Wise, eds., *The Youth Labor Market Problem: Trends, Causes and Consequences*. Chicago: University of Chicago Press.
- Ellwood, David. 1986. "The Spatial Mismatch Hypothesis: Are Jobs Missing in the Ghetto?" In Richard Freeman and Harry Holzer, eds., *The Black Youth Employment Crisis*. Chicago: University of Chicago Press.
- Ferguson, Ronald. 1993. "New Evidence on the Growing Value of Skill and Consequences for Racial Disparity and Returns to Schooling." John F. Kennedy School of Government, Harvard University, mimeo.
- Fix, Michael, and Raymond Struyk. 1994. *Clear and Convincing Evidence*. Washington, D.C.: Urban Institute Press.
- Freeman, Richard. 1973. "Changes in the Labor Market Status of Blacks, 1948–1972." *Brookings Papers on Economic Activity*, No. 1, pp. 67–132.
- Freeman, Richard. 1981. "Black Economic Progress Since 1964: Who Has Gained and Why?" In Sherwin Rosen, ed., *Studies in Labor Markets*. Chicago: University of Chicago Press.
- Freeman, Richard. 1994. "Crime and the Job Market." National Bureau of Economic Research, Working Paper no. 4910, Cambridge, Mass.
- Freeman, Richard, and Harry Holzer. 1986. *The Black Youth Employment Crisis*. Chicago: University of Chicago Press.
- Gottschalk, Peter. 1995. "Public Service Employment." Paper presented at the Conference on Demand-Side Strategies for Low-Wage Workers, Russell Sage Foundation, New York, June.
- Grissmer, David, Sheila Kirby, Mark Berends, and Stephanie Williamson. 1994. "Student Achievement and the Changing American Family." Rand Corporation, Santa Monica, Calif.

- Gunderson, Morley. 1989. "Male-Female Wage Differentials and Policy Responses." *Journal of Economic Literature* 27 (March): 46–72.
- Hamermesh, Daniel. 1993. *Labor Demand*. Princeton, N.J.: Princeton University Press.
- Hauser, Robert, and Hanam Samuel Phang. 1993. "Trends in High School Dropout Rates among White, Black and Hispanic Youth: 1973–1989." Institute for Research on Poverty, Discussion Paper no. 1007-93, Madison, Wis.
- Haveman, Robert. 1988. *Starting Even: An Equal Opportunity Program to Combat the Nation's New Poverty*. New York: Simon and Schuster.
- Heckman, James and Brook Payner. 1989. "Determining the Impact of Federal Antidiscrimination Policy on the Economic Status of Blacks." *American Economic Review* 79 (March): 138–177.
- Holzer, Harry. 1986. "Reservation Wages and Their Labor Market Effects for White and Black Youth." *Journal of Human Resources* 21 (Spring): 151–177.
- Holzer, Harry. 1987. "Informal Job Search and Black Youth Unemployment." *American Economic Review* 77 (June): 446–452.
- Holzer, Harry. 1991. "The Spatial Mismatch Hypothesis: What Has the Evidence Shown?" *Urban Studies* 28 (no. 1): 105–122.
- Holzer, Harry. 1995a. "The Detroit Labor Market: A View from the Household Side." Department of Economics, Michigan State University.
- Holzer, Harry. 1995b. "Employer Skill Needs and Labor Market Outcomes across Groups." Russell Sage Foundation, Working Paper, New York, N.Y.
- Holzer, Harry. 1996. *What Employers Want: Job Prospects for the Less-Educated*. New York: Russell Sage Foundation.

- Holzer, Harry, Richard Block, Marcus Cheatham, and Jack Knott. 1993. "Are Training Subsidies for Firms Effective? The Michigan Experience." *Industrial and Labor Relations Review* 46 (July): 625–636.
- Holzer, Harry, and Keith Ihlanfeldt. 1995. "Spatial Factors and the Employment of Blacks at the Firm Level." Russell Sage Foundation, Working Paper, New York, N.Y.
- Hughes, Mark, and Julie Sternburg. 1992. *The New Metropolitan Reality: Where the Rubber Meets the Road in Antipoverty Policy*. Urban Institute, Research Paper, Washington, D.C.
- Ihlanfeldt, Keith. 1995. "Information on the Spatial Distribution of Employment Opportunities within the Metropolitan Area." Department of Economics, Georgia State University, mimeo.
- Ihlanfeldt, Keith, and David Sjoquist. 1990. "Job Accessibility and Racial Differences in Youth Employment." *American Economic Review* 80 (June): 267–276.
- Jaeger, David. 1995. "Skill Differences and the Effects of Immigrants on the Wages of Natives." Department of Economics, University of Michigan, mimeo.
- Juhn, Chinhui. 1992. "Decline of Male Labor Market Participation: The Role of Declining Market Opportunities." *Quarterly Journal of Economics* 107 (February): 79–122.
- Juhn, Chinhui, Kevin Murphy, and Brook Pierce. 1993. "Wage Inequality and the Rise in the Returns to Skill." *Journal of Political Economy* 101 (June): 410–442.
- Kain, John. 1992. "The Spatial Mismatch Hypothesis Three Decades Later." In *Housing Policy Debate: Discrimination in the Housing and Mortgage Markets*. Washington, D.C.: Office of Housing Policy Research, Fannie Mae.
- Kasarda, John. 1995. "Industrial Restructuring and the Consequences of Changing Job Locations." In Reynolds Farley, ed., *State of the Union*. New York: Russell Sage Foundation.

- Katz, Lawrence. 1995. "Subsidies for the Hiring of Disadvantaged Workers." Paper presented at the Conference on Demand-Side Strategies for Low-Wage Labor Markets. Russell Sage Foundation, New York, June.
- Katz, Lawrence, and Kevin Murphy. 1992. "Changes in Relative Wages, 1963–1987: Supply and Demand Factors." *Quarterly Journal of Economics* 107 (February): 35–78.
- Killingsworth, Mark. 1990. *The Economics of Comparable Worth*. Kalamazoo, Mich.: W. E. Upjohn Institute for Employment Research.
- Kirschenman, Joleen. 1991. "Gender within Race in the Labor Market." Department of Sociology, University of Chicago, mimeo.
- Kirschenman, Joleen, and Katherine Neckerman. 1991. "We'd Love to Hire Them But..." In Christopher Jencks and Paul Peterson, eds., *The Urban Underclass*, Washington, D.C.: Brookings Institution.
- Lehman, Jeffrey. 1994. "Updating Urban Policy." In Sheldon Danziger, Gary Sandefur and Daniel Weinberg, eds., *Confronting Poverty: Prescriptions for Change*. Cambridge, Mass.: Harvard University Press.
- Leonard, Jonathan. 1984a. "Antidiscrimination or Reverse Discrimination: The Impact of Changing Demographics, Title VII, and Affirmative Action on Productivity." *Journal of Human Resources* 19 (Spring): 145–174.
- Leonard, Jonathan. 1984b. "Employment and Occupational Advance under Affirmative Action." *Review of Economics and Statistics* 68 (August): 377–385.
- Leonard, Jonathan. 1990. "The Impact of Affirmative Action Regulation and Equal Opportunity Law on Black Employment." *Journal of Economic Perspectives* 4 (Fall): 47–63.

- Levy, Frank, and Richard Murnane. 1992. "U.S. Earnings Levels and Earnings Inequality: A Review of Recent Trends and Proposed Explanations." *Journal of Economic Literature* 30 (September): 1333–1381.
- Lynch, Lisa. 1992. "Private-Sector Training and the Earnings of Young Workers." *American Economic Review* 82 (March): 299–312.
- Margo, Robert. 1990. *Race and Schooling in the South, 1880–1950: An Economic History*. Chicago: University of Chicago Press.
- Meyer, Robert, and David Wise. 1982. "High School Preparation and Early Labor Force Experience." In Richard Freeman and David Wise, eds., *The Youth Labor Market Problem: Trends, Causes, and Consequences*. Chicago: University of Chicago Press.
- Moss, Philip, and Chris Tilly. 1992. "Why Black Men Are Doing Worse in the Labor Market: A Review of Supply-Side and Demand-Side Explanations." Social Science Research Council, New York, N.Y., mimeo.
- Moss, Philip, and Chris Tilly. 1995. "Soft Skills and Race." Russell Sage Foundation, Working Paper, New York, N.Y.
- Neal, Derek, and William Johnson. 1994. "The Role of Pre-Market Factors in Black-White Wage Differences." Department of Economics, University of Chicago, mimeo.
- Neumark, David, Roy Bank, and Kyle Van Nort. 1995. "Sex Discrimination in Restaurant Hiring: An Audit Study." National Bureau of Economic Research, Working Paper no. 5024, Cambridge, Mass.
- O'Neill, June. 1990. "The Role of Human Capital in Earnings Differences between White and Black Men." *Journal of Economic Perspectives* 4 (Fall): 25–46.
- Rich, Lauren. 1994. "The Long-Run Impact of Early Nonemployment: A Reexamination." Department of Economics, University of Michigan, mimeo.

- Rivera-Batiz, Francisco. 1992. "Quantitative Literacy and the Likelihood of Employment among Young Adults in the United States." *Journal of Human Resources* 27 (Spring): 313–328.
- Rosenbaum, James, and Susan Popkin. 1991. "Employment and Earnings of Low-Income Blacks Who Move to Middle-Class Suburbs." In Christopher Jencks and Paul Peterson eds., *The Urban Underclass*. Washington, D.C.: Brookings Institution.
- Sachs, Jeffrey, and Howard Shatz. 1994. "Trade and Jobs in U.S. Manufacturing." *Brookings Papers on Economic Activity*, No. 1, pp. 1–84.
- Smith, James, and Finis Welch. 1989. "Black Economic Progress after Myrdal." *Journal of Economic Literature* 27 (June): 519–564.
- Sorensen, Elaine. 1994. *Comparable Worth: Is It a Worthy Policy?* Princeton, N.J.: Princeton University Press.
- Topel, Robert. 1994. "Regional Labor Markets and the Determinants of Wage Inequality." *American Economic Review* 84 (May): 17–22.
- Wilson, William Julius. 1987. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: University of Chicago Press.