BLACK-WHITE WAGE INEQUALITY IN THE 1990s:
A DECADE OF PROGRESS

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Using Current Population Survey data, we find that the gap between the wages of black and white males declined during the 1990s at a rate of about .60 percentage point per year. Wage convergence was most rapid among workers with less than 10 years of potential experience, with declines in the gap averaging 1.40 percentage points per year. Using standard decomposition methods, we find that greater occupational diversity and reductions in unobserved or residual differences are important in explaining this trend. General wage inequality tempered the rate of wage convergence between blacks and whites during the 1990s. (JEL J15, J31)

I. INTRODUCTION

Following the passage of the Civil Rights Act of 1964 and other measures aimed at reducing labor market discrimination during the 1960s, the differential in average weekly wages between black and white men in the United States narrowed substantially. Among male workers aged 18–64, the black-white wage gap fell from 50% in 1967 to 30% in 1974, or by about 1% per year.[1] After 1974, however, the proportional difference in black and white wages remained essentially constant at 30% through the end of the 1980s. Following more than a decade of stasis, the black-white wage gap once again began to

decline during the 1990s, narrowing at an average annual rate of about .60 percentage point per year.

A great deal of past research has focused on why the black-white wage gap did not continue to decline following the initial progress made through the mid-1970s (see, for example, Bound and Freeman [1992] and Juhn et al. [1991; hereafter JMP]). The results point to a number of important factors, including shifts in industry demand, greater occupational crowding, relative deterioration of unobservable skills among blacks, and rising overall male wage inequality; see Altonji and Blank (1999) for a detailed review of this literature. In this article, we investigate the role that each of these factors played in the wage convergence observed in the 1990s.

We begin by documenting the recent progress in black-white wage convergence, placing the 1990s in the context of the past 30 years. Following previous researchers, we then use standard decomposition techniques to examine the role of individual characteristics, the employment structure, and overall male wage inequality in reducing the racial gap in earnings during the decade of the 1990s. We find that greater occupational diversity and reductions in unobserved or

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1. The figures cited in this paragraph are based on calculations presented and explained later in the text.

ABBREVIATIONS

CPS: Current Population Survey
JMP: Juhn et al. (1991)

FIGURE 1
Black-White Weekly Earnings Differential, 1968–1998
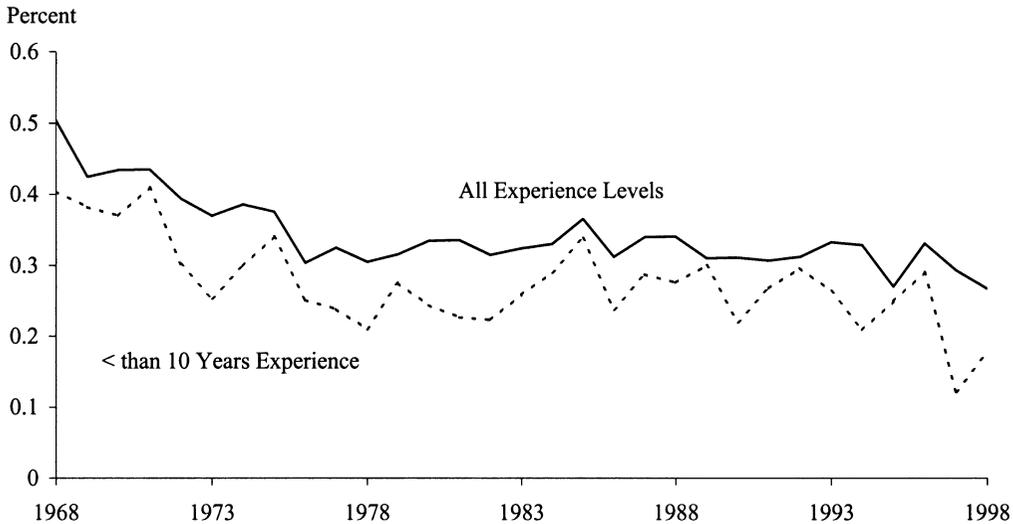
Source: Author's calculations using March CPS, 1969–1999.
Notes: Experience=Potential experience, calculated as min[age − education − 6, age − 18].

residual differences are important in explaining this trend. General wage inequality tempered the rate of wage convergence between blacks and whites during the 1990s.

II. DATA

We use data from the March Current Population Survey (CPS) for the years 1969–1999, as administered by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics. These files provide information on earnings, hours, and related variables for the calendar year prior to the survey date; thus our analyses apply to income years 1968–l998. In the formal decomposition analysis, we focus on three periods: 1968–1979, 1979–1989, and 1989–1998. These years span our sample and generally coincide with three business cycles.

Our sample consists of black and white males ages 18–64 who participated in the labor force at least 39 weeks, worked at least 1 week during the year, and usually worked full-time. Workers who are enrolled in school are excluded from the analysis. Throughout the analysis we focus on two groups: our full sample and men with less than ten years of

potential experience (i.e., min[age − education − 6, age − 18]).[2]

Our empirical analysis focuses on weekly earnings, calculated as the ratio of annual earnings to weeks worked during the year. Weekly earnings are deflated using the personal consumption expenditure deflator from the National Income and Product Accounts. To avoid problems associated with changes in CPS top-coding procedures over the years, our sample excludes individuals in the top and bottom 1% of the weekly earnings distribution. Throughout the article, we refer to the log of deflated average weekly earnings as the wage. All analyses are weighted using the survey weights provided in the CPS.

III. TRENDS IN THE BLACK-WHITE WAGE GAP

Figure 1 shows trends in black-white weekly wage differentials (unadjusted for differences in measured characteristics) between 1968 and 1998 for all workers and workers with ten or fewer years of potential

2. Recent entrants to the labor market arguably are more reflective of current market conditions because they are not hindered by past discrimination or segregation nor helped by their seniority or specific human capital.

experience. Like previous researchers, we find that among workers at all experience levels, the gap in the earnings of blacks and whites decreased sharply from the late 1960s through the mid-1970s, falling from .50 in 1968 to .30 in 1976. Similarly, we find little wage convergence between blacks and whites from the mid-1970s through the end of the 1980s (the period examined most recently by other researchers). During this period the wage gap between black and white males averaged .33, rising to .37 in 1985 and never falling below .31. Since the end of the recession in 1991, however, there have been three observations of the unadjusted wage gap lower than .30 (.27 in 1995, .29 in 1997, and .27 in 1998). These are the smallest weekly wage differentials recorded for black and white males in our sample. Although these are modest reductions for minority workers as a whole, they represent progress in wage convergence following nearly two decades of stagnation.

A similar pattern is observed for the subset of workers with less than ten years of potential experience. Again, following fairly rapid narrowing of the black-white wage gap from the late 1960s through the mid-1970s, the pattern reversed during the 1980s, when the gap in weekly wages actually increased. In contrast, during the 1990s, the wages of younger black workers rose relative to their white counterparts. Following the recession in 1991, there were three instances of historical lows for the weekly wage gap among workers with less than ten years of experience (.21 in 1994, .12 in 1997, and .18 in 1998).

IV. TRENDS IN UNDERLYING DETERMINANTS

A number of factors, including changes in individual characteristics, the sectoral composition of employment, and overall wage inequality, may affect the unadjusted wage differential between blacks and whites. Here we review the recent trends in these determinants.

Changes in Measured Factors

One of the most important individual determinants of wages is education. It also is an area where blacks have made enormous gains, both absolutely and relative to whites, over the past 30 years (Table 1). In 1968, 63% of black males had not completed high school, nearly twice the percentage for whites. By the last year of our sample, 1998, the percentage of blacks without a high school education had fallen to about 15%, about 1.3 times the percentage for whites. The same pattern of improvement for black males is observed for all levels of educational attainment. By 1998, about 40% of blacks received a high school degree, another 30% had some college, and 16% had college degrees. This represents considerable improvement over 1968, when 25% had high school degrees, about 7% had some college, and only 4% had college degrees. Still, even with these improvements, blacks lag behind whites in the acquisition of education.[3] Finally, overall the patterns are similar for blacks with less than ten years of experience, although the distribution of black men is far more evenly weighted across educational groups.

Other key determinants of wages are occupation and industry. Though occupational and industry outcomes potentially reflect both choices and constraints, we simply display the patterns over time without making a judgment about this issue. Table 1 shows the relative distribution of blacks and whites across one-digit occupational categories. As with education we find significant convergence in the occupational distributions of blacks relative to whites over the past 30 years (Table 1). In 1968, a black male was 20% as likely as a white male to be employed as a manager; 30% as likely to be employed in sales; and 40% as likely to work in a professional occupation. By 1998, these percentages had climbed to 50%, 60%, and 70%, respectively. At the same time the share of black males working as farm and nonfarm laborers fell, both absolutely and relative to whites. However, even with such progress, in 1998 black men were more likely to work in occupations requiring less skill and paying lower wages (e.g., clerical and operatives) than whites and less likely to be in occupations reaping the highest returns in the labor market (i.e., professional and managerial). Again, the patterns are similar for black men with less than ten years of experience.

3. These differentials in educational attainment may reflect different preferences and choices, and/or they may reflect premarket differences in access to education; see Altonji and Blank (1999).

TABLE 1
Changes in the Relative Representation of Blacks across Education and Occupation Groups

	1968		1979		1989		1998	
	Percentage	Relative to Whites	Percentage	Relative to Whites	Percentage	Relative to Whites	Percentage	Relative to Whites
Panel A. All Experience Levels								
Education								
Less than high school	63.2	1.7	37.2	1.8	21.6	1.5	14.7	1.2
High school degree	25.6	0.7	39.2	1.0	45.4	1.2	40.3	1.2
Some college	7.4	0.6	14.2	0.8	19.0	1.0	29.1	1.1
College degree	3.8	0.3	9.4	0.4	14.1	0.5	15.9	0.6
Occupation								
Clerical	7.9	1.0	7.1	1.1	8.8	1.7	8.8	1.7
Craftsman	14.1	0.6	19.0	0.8	28.7	1.0	25.2	0.9
Farm laborer	4.3	3.3	2.5	2.2	2.9	1.5	1.0	0.4
Farm manager	0.4	0.4	0	0	0	0	0.0	0.0
Forestry	0.2	1.0	0.2	0.9	0.2	1.1	0.0	0.0
Manager	2.4	0.2	5.7	0.4	8.8	0.4	11.3	0.5
Nonfarm laborer	19.3	4.0	13.6	2.6	5.5	0.4	4.9	2.0
Operative	30.1	1.4	28.4	1.5	18.4	2.0	17.0	1.9
Other services	14.2	2.7	13.7	2.1	14.2	2.0	14.6	1.9
Professional	5.9	0.4	7.7	0.5	8.7	0.5	11.2	0.6
Sales	1.4	0.3	2.0	0.4	3.0	0.5	4.2	0.7
Panel B. Less than Ten Years of Potential Experience								
Education								
Less than high school	40.2	2.0	23.8	2.1	10.8	0.9	12.3	1.2
High school degree	42.8	1.0	45.8	1.2	49.6	1.3	38.1	1.2
Some college	11.1	0.7	17.0	0.8	23.3	1.2	31.2	1.1
College degree	6.0	0.3	13.4	0.5	16.3	0.5	18.5	0
Occupation								
Clerical	11.5	1.2	9.8	1.7	9.5	1.6	9.3	1.6
Craftsman	11.8	0.6	16.1	0.7	24.2	0.9	21.5	0.8
Farm laborer	4.2	2.3	1.9	1.5	3.1	1.1	1.5	0.5
Farm manager	0	0	0	0	0	0	0	0
Forestry	0	0	0.5	1.7	0.2	0.7	0	0
Manager	3.4	0.4	4.9	0.4	7.4	0.5	10.4	0.7
Nonfarm laborer	28.8	1.2	15.2	2.4	6.5	2.0	15.1	1.7
Operative	12.1	2.9	27.5	1.4	17.0	1.8	13.1	1.4
Other services	17.8	3.5	13.1	2.5	16.0	2.0	6.4	2.0
Professional	8.1	0.4	8.4	0.4	10.4	0.6	14.0	0.7
Sales	2.3	0.4	2.5	0.4	4.5	0.6	5.3	0.7

Source: Authors' calculations using March CPS, 1969–1999.

Notes: Experience = potential experience, calculated as min[age − education − 6, age − 18]. "Percentage" is the percent of blacks in each category. "Relative to whites" is the ratio of the percentage of blacks to whites in each category.

In tabulations not shown here, we find similar convergence in the distribution of blacks and whites across two-digit industry classifications.[4]

Trends in Wage Inequality

As JMP point out, another important factor in explaining movements in the black-

4. A complete set of employment proportions by race and industry are available in Couch and Daly (2000).

white wage gap is changes in the level of overall wage inequality. As the authors note, if blacks are disproportionately located in the lower end of the skill distribution (measured or unmeasured) then increasing disparity in the returns to skill will hinder black-white wage convergence. For instance, given that black males have less education than whites and continue to be disproportionately located in lower-paying occupations, they will be penalized by increases in the prices of measured skills (i.e., returns to education)

FIGURE 2
Summary Measures of Male Earnings Distribution, 1968–1998

1968 = 100
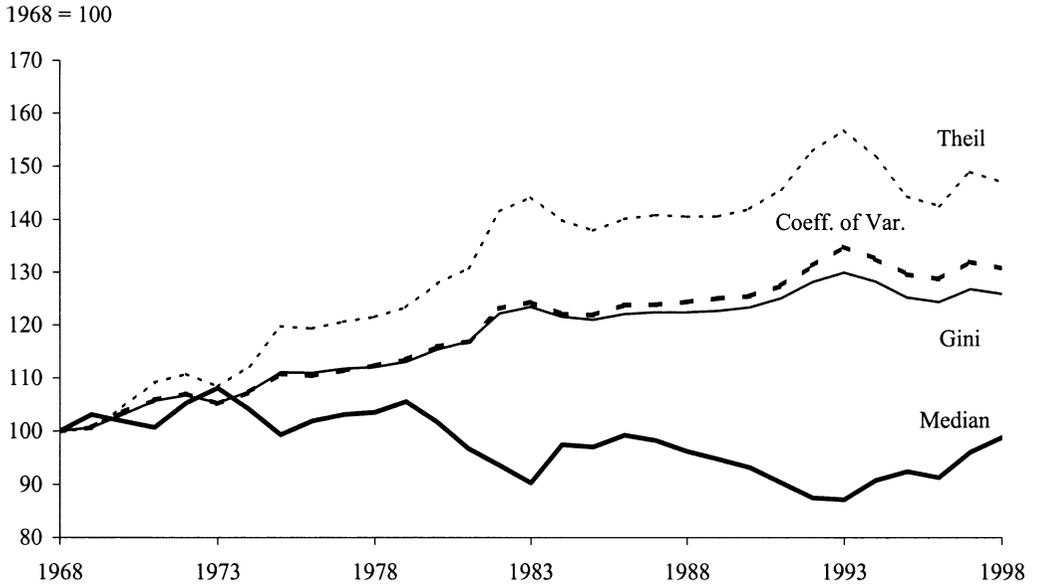
Source: Authors' calculations using March CPS, 1969–1999.

and increases in the returns to particular sectors of the economy. In addition, if labor market discrimination or actual differences in unmeasured skills of blacks are present, then increasing returns to unmeasured skills will put additional downward pressure on the relative wages of blacks.

To review the patterns of male wages during the 1970s and 1980s and to document changes in those patterns in the 1990s, Figure 2 displays trends in the distribution of weekly earnings for men.[5] We display the median, the coefficient of variation, and the Gini and Theil coefficients. As of 1998, the median had not yet returned to the peak achieved in 1973, although growth during the 1990s expansion was rapid. The three measures of dispersion all exhibit nearly monotonic increases between 1967 and 1993, with the net increase ranging from 29% for the Gini coefficient to 55% for the Theil coefficient. However, each declined a bit between 1993 and 1998, indicating growth in yearly male earnings that was more evenly distributed than it had been in past decades.

5. This measure includes individuals whose yearly earnings are zero. For a more complete review of recent trends in male earnings inequality, see Daly and Valletta (2000).

The measures displayed in Figure 2 show that *overall* dispersion increased rapidly but leveled off and even declined somewhat during the 1990s. Figure 3, panels A and B, show a similar pattern for *within-group* wage dispersion; the figure displays relative wage trajectories of college-educated workers and high school graduates at the 10th, 50th, and 90th percentiles of the wage distribution for the 30 years in our sample. Each of the series is indexed to zero in 1968. Looking first at panel A—college graduates—over the past 30 years, workers at the 10th percentile experienced wage reductions, whereas those at the 50th and 90th percentiles experienced net wage increases. It is clear from looking at the figure that the distribution of wages for college graduates has widened, but it is also clear that wages of workers at the 10th percentile of the distribution have recovered sharply since the recession of the early 1990s. Panel B depicts similar information for high school graduates. Wages at the 10th and 50th percentiles have decreased during the period covered by the sample. Since the recession of the early 1990s, the earnings of all groups have been increasing, with the sharpest gains in the last several years experienced by workers at the bottom of the distribution.

FIGURE 3

Panel A. Earnings Dispersion among Male College Graduates, 1968–1998

Change Since 1968
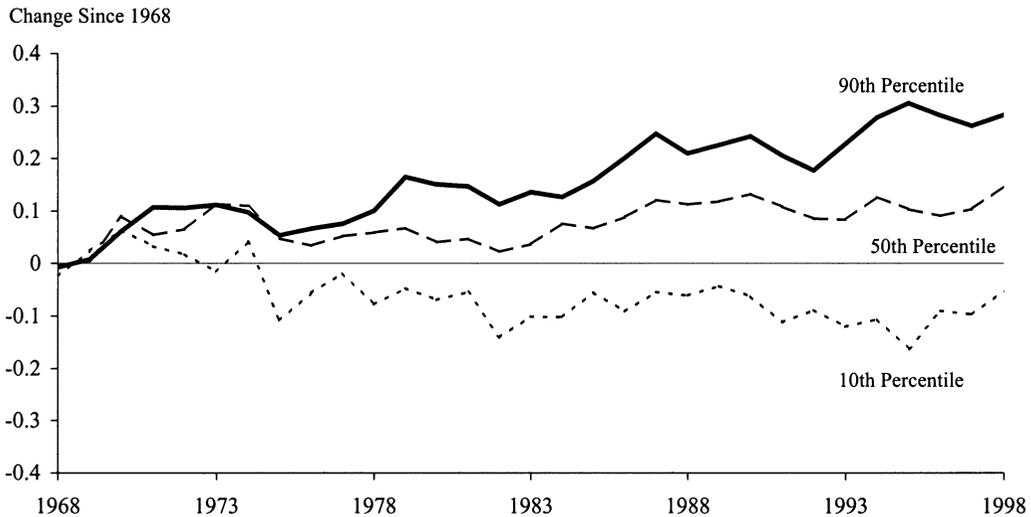
Panel B. Earnings Dispersion among Male High School Graduates, 1968–1998

Change Since 1968
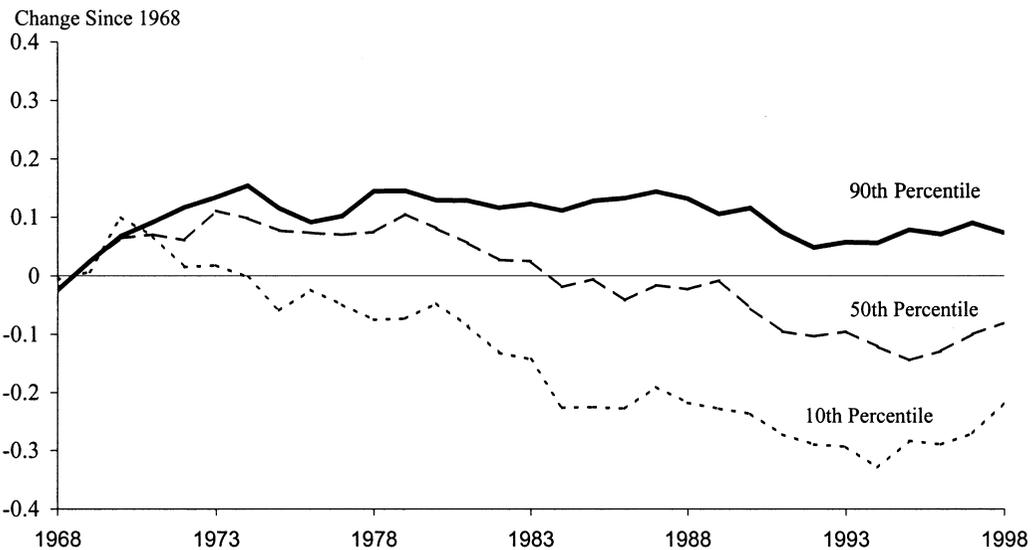
Source: Authors' calculations using March CPS, 1969–1999.

V. REGRESSION DECOMPOSITION ANALYSIS

Decomposition Methodology

To assess the importance of each of the various factors thought to affect the black-white wage gap we use a decomposition technique developed by JMP, which extends the now-standard decomposition technique proposed by Oaxaca (1973). The innovation in the JMP extension is to decompose the "unexplained" or "residual" portion of the wage gap from the Oaxaca decomposition into a price and quantity component. This, in turn, allows one to partition changes in the unadjusted wage gap into portions associated with measured and unmeasured characteristics and returns to these characteristics. This technique has been used by Blau and Kahn

(1992, 1994) to examine gender wage gaps and by Rodgers (1997) to look at differences in black-white wage gaps across cities and suburbs. Our brief description of the model closely follows that of the cited authors. A very detailed discussion of this technique can be found Altonji and Blank (1999).

The decomposition can be described as follows. Suppose we have a white male wage equation for worker i in year t,

$$(1) \qquad Y_{it} = X_{it}B_t + \sigma_t\theta_{it},$$

where Y_{it} is the log weekly wage; X_{it} is a vector of explanatory variables; B_t is a vector of coefficients; θ_{it} is a standardized residual (i.e., with mean 0 and variance 1 for each year); and σ_t is the residual standard deviation of white male wages for that year (i.e., the unexplained level of male wage inequality in year t).[6]

Then, following standard decomposition techniques, the black-white log weekly wage gap for year t can be written as

$$(2) \qquad D_t \equiv Y_{wt} - Y_{bt} = \Delta X_t B_t + \sigma_t\Delta\theta_t,$$

where the w and b subscripts refer to white and black averages, respectively, and a Δ prefix signifies the average white-black difference for the variable immediately following. Equation (2) states that the wage gap can be decomposed into race differences in measured variables (ΔX_t) and race differences in the standardized residual ($\Delta\theta_t$) from the white equation multiplied by the log money value per unit difference in the standardized residual (σ_t).

The difference in the black-white wage differential between two years (0 and 1) can then be decomposed using equation (2) as follows:

$$(3) \quad D_{t'} - D_t$$
$$= (\Delta X_{t'} - \Delta X_t)B_t + \Delta X_{t'}(B_{t'} - B_t)$$
$$+ (\Delta\theta_{t'} - \Delta\theta_t)\sigma_t + \Delta\theta_{t'}(\sigma_{t'} - \sigma_t).$$

The expression decomposes the total change in the black-white wage gap between two years into four components. The first term

in equation (3) reflects the contribution of changes in measured characteristics holding prices fixed. The second term reflects the impact of changing prices for observed variables holding measured characteristics fixed. The third term measures the effect of changing differences in the relative wage positions of blacks and whites after controlling for measured characteristics (i.e., whether blacks rank higher or lower within the white residual distribution).[7] Finally, the fourth term of equation (3) reflects the impact of changes in residual male wage inequality between the two years.[8] This term measures the contribution to the change in the black-white wage gap associated with changes in the distribution of male residual wages, holding blacks' position in that distribution constant. As JMP note, if earnings inequality is increasing within each observable skill category, as it was during the 1980s, this will adversely affect blacks even in the absence of other changes because blacks are already concentrated in the lower part of the earnings distribution.

Empirical Strategy

We implement this decomposition using a model of wage determination that includes controls for age, education, potential experience, region of residence, whether the individual is a private or public sector worker or self-employed, and dummy variables for industry (two-digit) and occupation (one-digit). The inclusion of occupation and industry in these types of models is a subject of considerable debate. We include industry and occupation in our model but separate the effects of education and experience from industry and occupation to allow readers to see clearly the contribution that each variable makes. Education is measured as a set of dummy variables representing no high school degree, high school degree, and

6. The standard formulation would be $Y_{it} = X_{it}B_{it} + \mu_{it}$. JMP begin by expressing μ_{it} as the multiple of its standard deviation σ_{it} and a standardized residual, θ_{it}, equal to μ_{it}/σ_{it}.

7. As JMP point out, changes in the rankings of blacks in the white distribution may reflect changes in unmeasured characteristics of blacks or changes in labor market discrimination against blacks.

8. JMP refer to the third and fourth terms as the "gap" and the "unobservable price effect." The gap shows how much of the change in the total residual is due to blacks moving up or down the distribution of whites for any given set of observables. The unobservable price effect shows how much is due to general changes in wage inequality that affect blacks more than whites because they are disproportionately located in the bottom of the residual distribution.

some college; college graduates are the omitted group. In addition, we include the total amounts of schooling for those with less than a high school degree or some college. Potential experience is entered as a quartic. Region of residence is defined by the census divisions: Northeast, North Central, South, and West; Northeast is the excluded region in our regressions.

Though the first and second terms of equation (3) come easily from a standard regression, the third and fourth terms are obtained more nonparametrically in the following manner. Following JMP we obtain the third term, $(\Delta\theta_{t'} - \Delta\theta_t)\sigma_t$, by assigning to each black male in each year a percentile number corresponding to his position in the white residual wage distribution for that year.[9] We then compute an imputed t' mean black residual based on the black percentile rankings in t' and the distribution of male earnings in t. The difference between the imputed black wage residual in t' and the actual black wage residual in t' allows us to estimate $(\Delta\theta_{t'} - \Delta\theta_t)\sigma_t$. Again, this term measures movement of blacks through the white residual wage distribution between periods. If there is no such movement, this term is zero.

The fourth term is calculated analogously. Once again, we assign percentiles of the white distribution to each black in year t', compute what residual that black would have had in year t' given that position in the white distribution, and subtract that from the actual black t' residual. Because the percentile locations of blacks are held fixed in this calculation, the difference in the two residuals reflects only changes in residual inequality for whites.

We estimate these effects for all years, by comparing a given year t' to the average throughout the sample. We summarize the results across three time intervals: 1968–1979, 1979–1989, and 1989–1998. For each period we estimate the average annual rate of change in each component by estimating a linear spline with break points at 1979 and 1989. We organize the results in two ways, first by the contributions of the measured and unmeasured factors, and second by the contributions of individual characteristics (i.e.,

9. Other useful descriptions of the JMP technique can be found in Blau and Kahn (1992, 1994), Rodgers (1997), and Altonji and Blank (1998).

the first and third terms of the decomposition) and the contributions of overall wage inequality (i.e., the second and fourth terms of the decomposition).

Decomposition Results

Table 2 provides the contribution of each factor to the annual percentage point trend in the black-white weekly earnings gap, as estimated by our decomposition analysis. Panel A reports results for men at all levels of experience; panel B shows results for relatively new entrants to the labor market.

The first line in the table, panel A, labeled "overall trend," shows the estimated trend in the differential, without controlling for education, experience, occupation, and industry, for men of all experience levels. Between 1968 and 1979, the differential between black and white wages declined by an average of 1.2 percentage points per year. During the next decade, the wage gap increased by .24 percentage point per year. During the 1990s, however, the black-white wage differential began to decline again, falling by .59 percentage point per year between 1989 and 1998.

Adding human capital and employment structure variables to this model significantly affects the trends in the wage gap, particularly in the 1970s and 1990s. Looking first at the human capital variables, about 30% of the wage convergence observed between 1968–1979 and 1989–1998 is attributable to changes in education and experience. Decomposing the overall human capital contribution into separate quantity and price effects, we find different effects in different periods. In the first period, changes in the distribution of education and experience played the largest role. During the 1980s, gains among blacks in education and experience were almost completely offset by the wage penalties associated with increasing returns to skill. In the 1990s, the stabilization of between-group income inequality and additional gains in education and experience among blacks worked together to reduce the black-white wage differential during the period.

The patterns for the employment structure variables are similar, with the largest effects occurring in the first and last decades of our sample period. Decomposing the total employment structure effect into the

TABLE 2
Estimated Contribution of Factors to Average Annual Percentage Point Trends in
Black-White Weekly Earnings Differentials, 1968–1998

	1968–1979	1979–1989	1989–1998
Panel A. All Levels of Experience			
Overall trend	1.23 (0.15)	−0.24 (0.29)	0.59 (0.38)
	Due to human capital		
Total	0.38 (0.04)	0.04 (0.08)	0.16 (0.10)
Quantities	0.41 (0.04)	0.18 (0.07)	0.10 (0.09)
Prices	−0.03 (0.03)	−0.15 (0.06)	0.07 (0.08)
Trend net of human capital	0.85	−0.28	0.43
	Due to employment structure		
Total	0.56 (0.06)	−0.11 (0.11)	0.09 (0.14)
Quantities	0.25 (0.04)	0.03 (0.07)	0.28 (0.09)
Prices	0.31 (0.04)	−0.13 (0.08)	−0.18 (0.10)
Trend net of employment structure	0.29	−0.17	0.34
	Due to changes in unobservables		
Total	0.28 (0.13)	−0.17 (.25)	0.34 (0.33)
Quantities	0.55 (0.12)	−0.20 (0.23)	0.44 (0.30)
Prices	−0.27 (0.05)	0.03 (0.10)	−0.11 (0.13)
	Summary accounting of contributions		
Percent due to measured factors	77	30	42
Percent due to unmeasured factors	23	70	58
Sum, race-specific factors	1.21	0.01	0.82
Sum, wage structure	0.02	−0.25	−0.22
Panel B. Less Than Ten Years of Experience			
Overall trend	1.34 (0.26)	−0.66 (0.49)	1.40 (0.65)
	Due to human capital		
Total	0.57 (0.10)	0.17 (0.18)	−0.20 (0.24)
Quantities	0.54 (0.08)	0.33 (0.15)	−0.24 (0.20)
Prices	0.03 (0.03)	−0.16 (0.06)	0.04 (0.08)
Trend net of human capital	0.77	−0.83	1.20
	Due to employment structure		
Total	0.50 (0.08)	−0.35 (0.15)	0.39 (0.20)
Quantities	0.14 (0.06)	−0.20 (0.12)	0.38 (0.16)
Prices	0.36 (0.05)	−0.15 (0.09)	0.01 (0.12)
Trend net of employment structure	0.27	−0.48	0.81
	Due to changes in unobservables		
Total	0.27 (0.22)	−0.47 (0.41)	1.21 (0.54)
Quantities	0.32 (0.22)	−0.54 (0.42)	1.27 (0.56)
Prices	−0.05 (0.07)	0.07 (0.12)	−0.07 (0.17)
	Summary accounting of contributions		
Percent due to measured variables	80	28	14
Percent due to unmeasured factors	20	73	86
Sum, race-specific factors	1.00	−0.41	1.41
Sum, wage structure	0.34	−0.24	−0.02

Source: Authors' calculations using March CPS, 1969–1999.

Notes: The overall trend and all succeeding analysis control for potential experience, region of residence, whether a public sector worker, and whether self-employed. Standard errors are in parentheses. Decompositions may not sum to total due to rounding errors.

quantity and price components shows that equalization in the employment distribution positively affected the relative wages of blacks between 1969–1979 and 1989–1998. In the earliest period, these changes in the employment distribution were boosted by increases in the relative pay of occupations occupied by blacks. In contrast, during the

1990s, the positive effects of more equal employment distribution were partially offset by the fact that blacks continue to be disproportionately located in occupations with falling relative pay.

Even with the inclusion of a full set of measured characteristics, a sizable amount of the black-white wage differential remains unexplained, particularly during the 1980s and 1990s. Breaking this unexplained portion into its price and quantity components reveals a number of interesting results. First, consistent with other researchers, we find that returns to unobserved skills penalized blacks in the 1970s, a period of rising within-group income inequality. This penalty was more than offset by convergence in the distribution of unobservable skills and/or the lessening of labor market discrimination during the period. In contrast, during the 1980s, prices played a limited role, and differences in unobserved skills and/or increases in discrimination widened the black-white wage gap. In the 1990s, the pattern appears to have returned to the earlier decade, with returns to unobservable skills (within-group wage inequality) exacting some penalty, but that being more than offset by convergence in the distributions of unobserved skills for blacks and whites and/or a lessening of labor market discrimination.

Overall, for workers at all experience levels, the portion of wage convergence explained by measured characteristics has declined over time, although it was higher in the 1990s (42%) than in the 1980s (30%). Considering the convergence in the context of changes in race-specific factors (measured and unmeasured characteristics and/or discrimination) and changes in the wage structure, we find that, in general, changes in race-specific factors had a larger impact than changes in the wage structure. That being said, wage inequality did exact a considerable toll on black-white wage convergence during the 1980s and continued to be a factor inhibiting the closure of the gap during the 1990s.

Among workers with less than ten years of labor market experience, the historical pattern of change in the total wage gap is similar to that for all workers. Between 1968 and 1979, the wage gap converged at an average of 1.34 percentage points a year. During the 1980s, the gap widened at an annual rate of .66 percentage point per year. The rate of convergence during the 1990s has been dramatic, at 1.40 percentage points per year. In terms of the factors influencing convergence, much like the larger group of all workers, equalization of the distributions of employment by industry and occupation explains .38 of the 1.40 percentage points per year decline in inequality. The largest factor influencing the reduction in the wage gap, however, is a decline in residual inequality, which would account for a 1.21-percentage-point reduction in the gap since 1990.

VI. SUMMARY

After narrowing sharply following the passage of the Civil Rights Act of 1964, the wage gap between black and white males remained essentially constant—at about 30%—for nearly 20 years. Since 1992, however, the black-white wage gap has narrowed substantially and, as of 1998, was at its lowest level in history.

As was true in earlier decades, we find that the recent convergence in the relative wages of blacks and whites is due to a number of factors, including equalization in the attainment of education and experience as well as in the distribution of employment across industries and occupations. We find that although overall male wage inequality became less of a drag on the relative wages of blacks during the recent decade, it continued to temper the convergence in the black-white wage gap.

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