The Racial Unemployment Gap in Long-Run Perspective

Robert W. Fairlie, William A. Sundstrom

The Racial Unemployment Gap in Long-Run Perspective

By ROBERT W. FAIRLIE AND WILLIAM A. SUNDSTROM*

The persistent gap between the unemployment rates of white and African-American men stands in stark contrast to the narrowing racial gap in earnings during much of the postwar period. While earnings began to converge, most rapidly during the 1960's and 1970's, the ratio of black to white unemployment rates actually grew from rough parity as late as 1940 to approximately 2 : 1 by 1960 and to more than 2 : 1 by 1990. The persistence of high black unemployment rates raises serious questions for the optimists' story of relative black economic progress "since Myrdal," and has been blamed for exacerbating the social dislocations associated with urban poverty (William Wilson, 1987).

The emergence of the racial unemployment gap during the 1940's and 1950's coincided roughly with the Great Migration of blacks out of the rural South. Using a simple counterfactual exercise based on aggregate data, Richard Vedder and Lowell Gallaway (1992) argued that at least half the increase in the racial gap might be accounted for by blacks shifting from low-unemployment to high-unemployment regions and occupations. John Cogan (1982), on the other hand, suggested that the declining demand for labor in Southern agriculture explained virtually all of the reduction in employment of young black men during roughly the same period.

Discussions of trends in black unemployment since the 1960's have often been framed in terms of supply versus demand shifts. Relative shifts in labor demand away from locations and industries in which blacks were concentrated are emphasized in the spatial-mismatch theory of Wilson (1987) and others. Finis Welch (1990), on the other hand, argues

that supply shifts were more important, at least during the 1970's. Finally, John Bound and Richard Freeman (1992) suggest that both adverse demand shifts and changes in supply behavior (including increased criminal activity) account for much of the relative decline in the employment of young black men during the 1980's.

In this paper, we examine trends in unemployment among black and white men from 1880 to 1990 using available Census Public Use Microdata Samples (PUMS). We carefully document the emergence and subsequent widening of the racial gap in unemployment during the 20th century. Using a time-series variation of the standard Blinder-Oaxaca decomposition, we estimate contributions to the changes in the unemployment rate gap from racial differences in characteristics, such as education, region, and industry. The ways in which these variables affect unemployment rates, as revealed through the decompositions, allow us to evaluate the hypotheses set forth in the literature regarding the causes of major changes in the racial gap.

I. Data and Trends

This study uses individual data from each of the available Public Use Microdata Samples of the Census of Population (1880, 1900, 1910, and 1940–1990). PUMS files are not available for the 1890 and 1930 censuses, and the 1920 census did not record employment status. We generated random samples from each PUMS which contain approximately 40,000 men of each race (white and black) where possible.[1]

We excluded from our samples institutional inmates and men who were under age 30 and

[1] The sample sizes are limited for black men in 1880 ($N = 16{,}161$), 1900 ($N = 3{,}027$), 1910 ($N = 11{,}036$), 1940 ($N = 38{,}268$), and 1950 ($N = 13{,}194$), and for white men in 1900 ($N = 26{,}951$).
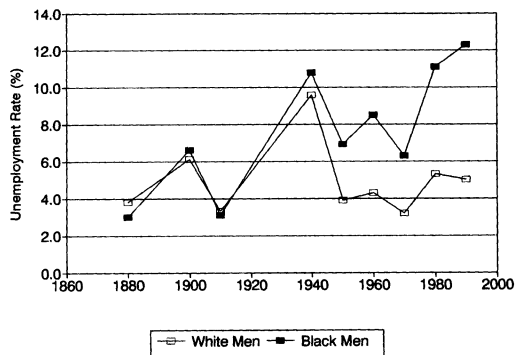
FIGURE 1. UNEMPLOYMENT RATES BY RACE

reported attending school. Individuals who were not in the labor force (NILF) were also removed. Thus, we define the unemployment rate as the percentage of the nonschool, non-institutionalized labor force who were unemployed. In the 1880 and 1900 censuses, the only available question on unemployment referred to months unemployed over the preceding calendar year. The unemployment probability in these years was measured as the proportion of the preceding year out of work.

In Figure 1, we present black and white unemployment rates from 1880 to 1990. At the national level, there was effectively no racial gap as late as 1910. In 1880 and 1910, in fact, the black unemployment rate was slightly below the white rate. By 1940 a fairly small racial gap had opened up, and it had widened significantly by 1960. The racial gap remained large from 1960 to 1980 and widened again from 1980 to 1990.

Although we do not present the results here, the same basic trends appear in data disaggregated by age group and cohort: the gap was small or nonexistent early in the century and widened dramatically after 1940. Disaggregation by region shows that, early in the century, unemployment rates and the size of the racial gap tended to be larger outside the South than elsewhere, but even within regions the gap can be seen to widen after 1940. Racial differences in joblessness, defined as the percentage of the noninstitutional, nonschool population without work, followed a trend similar to that for differences in unemployment.

II. Decomposition Methodology

To identify the causes of the long-run changes in the gap between black and white unemployment rates, we employ the decomposition methodology used by James Smith and Welch (1989) in their study of trends in racial earnings differences from 1940 to 1980. This decomposition is a dynamic generalization of the standard Blinder-Oaxaca method of decomposing the intergroup difference in a dependent variable into the part due to different observable characteristics across groups and the part due to different "prices" of characteristics across groups. We first estimate a linear probability model of the relationship between unemployment, Y, and personal and job characteristics, X, using separate cross sections for each race and time period:

$$(1) \qquad Y_t^i = X_t^i \beta_t^i + e_t^i$$

where t indexes the census year (1880, ... , 1990) and i indexes the race (B, W). Using the coefficient estimates and mean characteristics, the change in the predicted black–white unemployment rate gap between two censuses, $t = 1$ and $t = 2$, is

$$(2) \qquad (\bar{X}_2^B \beta_2^B - \bar{X}_2^W \beta_2^W)$$
$$- (\bar{X}_1^B \beta_1^B - \bar{X}_1^W \beta_1^W).$$

The decomposition of this expression requires first choosing a base year and base race. We use the earlier census year ($t = 1$) as the base year and whites as the base race.[2] Therefore, (2) can be expressed as

$$(3)\,(i) \quad [(\bar{X}_2^B - \bar{X}_2^W) - (\bar{X}_1^B - \bar{X}_1^W)\beta_1^W]$$

$$(ii) \qquad + (\bar{X}_2^B - \bar{X}_1^B)(\beta_1^B - \beta_1^W)$$

$$(iii) \qquad + (\bar{X}_2^B - \bar{X}_2^W)(\beta_2^W - \beta_1^W)$$

$$(iv) \qquad + \bar{X}_2^B[(\beta_2^B - \beta_2^W) - (\beta_1^B - \beta_1^W)].$$

---

[2] Our basic results are robust to using blacks as the base race.

Given the linearity of the decomposition, the separate components can be further decomposed to capture the effects of different subgroups of variables and coefficients.

The components of the decomposition can be interpreted as follows, using the effects of region as an illustration. (i) The "characteristics effect" is positive if blacks, relative to whites, disproportionately move into high-unemployment regions of the country. (ii) The "characteristics–race interaction" is positive if, relative to whites, blacks disproportionately move into regions that have large racial unemployment rate gaps. (iii) The "coefficients–race interaction" is positive if blacks are overrepresented in the regions of the country that have increasing white unemployment rates. This term in the decomposition can be loosely interpreted as the effect of a demand shift. (iv) The "coefficients effect" is positive if the racial unemployment rate gap is increasing for blacks and whites who live in similar regions of the country. We view this component as the "unexplained" portion of the change in the gap because it also captures the effect of omitted variables.

III. Results

Table 1 reports the decomposition of the change in the unemployment gap for four broad time periods: 1880–1910, 1910–1940, 1940–1960, and 1960–1990.[3] The separate contributions of education, region, and industry are reported when available. For our measure of education, we use a dummy variable indicating literacy for the 1880–1910 decomposition and a set of dummy variables indicating levels of formal schooling for the 1940–1960 and 1960–1990 decompositions. The underlying regressions also include controls for age, marital status, and presence of children. The interpretation of the unexplained component (iv) for specific subsets of vari-

---

[3] The decomposition estimates for the broad time periods, 1880–1910, 1940–1960, and 1960–1990, actually represent the sum of the decomposition estimates for 1880–1900 and 1900–1910, for 1940–1950 and 1950–1960, and for 1960–1970, 1970–1980, and 1980–1990, respectively.

TABLE 1—UNEMPLOYMENT-RATE DECOMPOSITIONS

Contributions	Percentage change in unemployment gap			
	1880–1910	1910–1940	1940–1960	1960–1990
(i) Characteristics effect				
Education	−1.003		0.175	−0.367
Region	−0.018	0.039	0.453	−0.061
Industry		0.303	0.059	−0.231
(ii) Characteristics– race interaction				
Education	1.100		−0.017	−0.161
Region	−0.023	0.275	0.738	−0.156
Industry		−0.167	0.366	−0.192
(iii) Coefficients–race interaction				
Education	0.003		0.030	0.370
Region	−0.101	−1.124	0.827	−0.011
Industry		0.365	0.063	−0.009
(iv) Unexplained	0.786	1.790	−0.191	1.738
Total change in black– white gap	0.607	1.552	2.813	1.493

Notes: The data are from the 1880, 1900, 1910, and 1940–1990 Census PUMS files. The samples consist of nonschool, noninstitutionalized men (ages 16–64) in the labor force. See text for a complete description of each component of the decomposition.

ables is problematic, because it is sensitive to the choice of excluded category. Therefore, we only report the total contribution of this component for all of the variables, including the controls.

In 1880, the black unemployment rate was roughly one-half percentage point lower than the white rate. This slight advantage, however, had disappeared by 1910. The results from our decompositions suggest that literacy played an important role in explaining this increase in the black–white unemployment rate gap during this period. The negative estimate of (i) for literacy reflects relative improvements in black literacy rates coupled with lower unemployment rates among the literate. Working in the opposite direction, the racial unemployment gap seems to have been greater for the literate, as evidenced by the positive estimate of (ii). This suggests the possibility that literate blacks faced more discrimination in hiring practices than illiterate blacks, a finding consistent with evidence on wage differentials and occupational segregation (e.g., Gavin Wright, 1986). In contrast to the effects of literacy, regional differences did not play an important role during this period. Overall, the net change

in the gap during this period remains largely unexplained by our analysis variables.

The period 1910–1940 witnessed the emergence of a relatively small unemployment rate gap (equal to 1.2 percentage points in 1940). Migration of blacks out of the rural South to northern urban centers began in earnest during World War I and the 1920's and contributed to the gap as blacks moved into higher-gap regions [positive estimate of (ii)]. The contribution of migration, however, was dwarfed by the effect of the regional demand shift, which was highly favorable to blacks [negative estimate of (iii)]. This is readily explained by the fact that the South, where most blacks were still concentrated, recovered more rapidly from the Depression.

The movement of blacks across industries, especially out of agriculture, and the shift in demand away from the industries in which blacks were employed also contributed to the emergence of the gap. During this period, the effects of our analysis variables basically cancel each other out, and thus other factors which our decomposition technique cannot identify are ultimately responsible for the change between 1910 and 1940.

The racial unemployment rate gap widened by 3 percentage points from 1940 to 1960. Much of this change can be attributed to regional effects. First, the postwar Great Migration contributed substantially to the change in the gap, as is evidenced by the positive estimates of (i) and (ii). Between 1940 and 1960, the percentage of the black workforce residing in the South decreased by 17.2 percentage points, compared to a slight increase for whites (1.2 percentage points). Blacks moved into regions of the country with both higher unemployment and larger racial unemployment rate gaps. Finally, adverse regional demand shifts explain nearly a percentage point of the increase in the racial gap. Mainly due to these regional effects, our decompositions explain virtually all of the changes in the racial gap during this period.

Our results for the post-Depression decades lend some support to the Vedder and Gallaway (1992) account, which attributed much of the widening gap to the shift of black workers into high-unemployment regions and occupations. We find, however, that the effect of blacks moving into large-gap markets was stronger than the effect of moving into high-unemployment markets: the estimates of (ii) were larger than the estimates of (i) for region. In addition, we provide evidence that regional demand shifts adversely affected blacks across both decades. That is, unemployment was increasing in the regions in which blacks happened to be concentrated. We view this finding as consistent with Cogan's (1982) account.

During the last three decades of our sample period (1960–1990) the racial gap expanded by 1.5 percentage points. Our decompositions identify some of the factors that influenced these trends. Educational gains made by blacks worked in the direction of diminishing the racial gap [components (i) and (ii)]. A demand shift away from less-educated workers (iii), however, nearly canceled out the beneficial effects of educational gains. These findings are consistent with recent work on increased wage inequality, which has emphasized the role of relative demand shifts away from the less skilled. On balance, the results indicate that very little of the net increase in the racial unemployment gap after 1960 can be explained by the decompositions; the unexplained component (iv) is large and works in the direction of widening the gap substantially.

IV. Concluding Remarks

Although our analysis sheds considerable light on the *emergence* of the racial unemployment gap between 1940 and 1960, the *persistence* of the gap since 1960 remains an unsolved puzzle. To the extent that unemployment is a disequilibrium phenomenon, one might expect gradual narrowing of the racial gap as black workers pursued employment opportunities in different locations and industries, and as relative wages adjusted. The decompositions suggest that if these forces were at work after 1960, their effect was small relative to unobserved factors that widened the gap. Some potential culprits that are not easily accounted for using the census data include government interventions in the labor market (such as the minimum wage and unemployment insurance), changes in the locus of discrimination away from explicit wage

differentials to biased hiring and layoff decisions, weakened enforcement of antidiscrimination laws, and the effects of crime and family structure on black men residing in impoverished urban areas.

REFERENCES

Bound, John and Freeman, Richard B. "What Went Wrong? The Erosion of Relative Earnings and Employment Among Young Black Men in the 1980s." *Quarterly Journal of Economics*, February 1992, *107*(1), pp. 201–32.

Cogan, John. "The Decline in Black Teenage Employment: 1950–70." *American Economic Review*, September 1982, *72*(4), pp. 621–38.

Smith, James P. and Welch, Finis R. "Black Economic Progress After Myrdal." *Journal of Economic Literature*, June 1989, *27*(2), pp. 519–64.

Vedder, Richard K. and Gallaway, Lowell. "Racial Differences in Unemployment in the United States, 1890–1990." *Journal of Economic History*, September 1992, *52*(3), pp. 696–702.

Welch, Finis. "The Employment of Black Men." *Journal of Labor Economics*, January 1990, *8*(1), pp. S26–S74.

Wilson, William Julius. *The truly disadvantaged*. Chicago: University of Chicago Press, 1987.

Wright, Gavin. *Old South, new South*. New York: Basic Books, 1986.