

Lifting Gates, Lengthening Lives: Did Civil Rights Policies Improve the Health of African American Women in the 1960s and 1970s?

George A. Kaplan, Nalini Ranjit, and Sarah A. Burgard

Based on literally thousands of studies carried out over many decades, it is increasingly accepted that socioeconomic conditions act as important determinants of both individual health and the health of populations (Kaplan et al. 1987; Kaplan and Lynch 1997). Wages, income, wealth, the nature of work, investments in human capital, and the levels of resources and risks in communities are now recognized by many as arguably the most critical determinants of health (Kaplan 2001; Evans, Barer, and Marmor 1994). It seems possible that social and economic policies, in their ability to alter these determinants, might also impact health even if it is not their primary intent. Furthermore there is increasing recognition that historical and contemporary forces which differentially distribute these determinants to racial groups, within and across generations, may underlie many of the pernicious health gaps between racial groups that are found in the United States (Williams and Collins 1995).

While the evidence is compelling in its breadth and depth, for the most part it is based on observational studies of cohorts of individuals or aggregates, and as such it lacks some of the power that comes from experiments where randomization strengthens causal inference. When experiments are not possible, which is often the case, it becomes useful to focus on exogenous policy changes that have been demonstrated or are thought to lead to major changes in those factors which putatively influence the health of individuals and populations. We can then test whether or not health effects follow from these policy changes, as researchers are increasingly doing.

However, it is not a simple matter to find cases where social and economic policies

have had a clear impact on possible determinants of health. Cases that come to mind in the last century or so are child labor laws, Social Security, the introduction of compulsory schooling, the elimination of restrictive covenants on land ownership, programs introduced by agencies such as the Federal Housing Administration that altered patterns of home ownership and housing development, the Earned Income Tax Credit and other measures designed to impact poverty levels, and mechanisms that altered support mechanisms for poor families such as Temporary Assistance for Needy Families (TANF). The list could be much longer, and these policies vary considerably in the extent of their success, the degree to which the changes might *ex ante* influence health, and the availability of health data to test whether or not they did have an impact on specific aspects of disease processes.

One compelling case that may have had an influence on important determinants of health was the Civil Rights Act of 1964. On July 2, 1964, Congress put in place "An Act to enforce the constitutional right to vote, to confer jurisdiction upon the district courts of the United States to provide injunctive relief against discrimination in public accommodations, to authorize the Attorney General to institute suits to protect constitutional rights in public facilities and public education, to extend the Commission on Civil Rights, to prevent discrimination in federally assisted programs, to establish a Commission on Equal Employment Opportunity, and for other purposes." (U.S. Congress, Senate 1964). In its guarantees of voting rights, equal access to public accommodations, public education, federally assisted programs, and work, and in its creation of the Equal Employment Opportunity Commission (EEOC), the Community Relations Service, and the extension of the Commission on Civil Rights, Congress laid the foundation for a potential and dramatic reshaping of the American fabric so heavily entwined in the "American Dilemma" of Myrdal and the racial divide of Du Bois.

The Civil Rights Act of 1964 and the Voting Rights Act of 1965 arguably represent the most important legislation regarding the nexus of race and society since Reconstruction. As political scientist and social psychologist Bernard Grofman (2000) puts it, the Civil Rights Act

transformed the shape of American race relations. Supporters of the Civil Rights Act of 1964 sought, at a minimum, the elimination of segregation of the races in publicly supported schools, hospitals, public transportation, and other public spaces, and an end to open and blatant racial discrimination in employment practices. Judged in those terms, the act is a remarkable success story. If ever any piece of legislation showed the power of the central government to change deeply entrenched patterns of behavior, it is the Civil Rights Act of 1964. Together . . . [they] broke once and for all the Jim Crow legacy of post-Reconstruction South and largely ended the overt and legally sanctioned forms of discrimination against African Americans that had been found throughout the nation. In terms of the law, blacks were no longer second-class citizens. (1)

Thus through its potential impact on education, occupation, income, voting, and other aspects of civil society, as well as its impact on decreasing the marginaliza-

tion of blacks, the Civil Rights Act (and the Voting Rights Act of 1965) could have had substantial health effects, even though that was not the primary intent. Indeed, other measures put in place at the same time which also attempted to create more of a level playing field seem to have improved infant health. Douglas Almond, Kenneth Y. Chay, and Michael Greenstone (2006) describe dramatic improvements in infant mortality in the years following 1964, which was the year that the Hill-Burton act was reformulated as a provision of the Public Health Service Act. Under the provisions of this act, a facility receiving funds was to be made available to all members of the community in which it was located, regardless of race, color, national origin, or creed. As these authors demonstrate, the effects of this improved access on postneonatal infant deaths due to diarrhea and pneumonia were pronounced.

Infants may not have been the only subpopulation to experience health gains in the wake of these legislative changes. African American women faced greatly broadened occupational opportunities which translated into economic and social gains in the late 1960s and through the 1970s, and which brought them closer to parity with white women. These relative socioeconomic gains map onto health improvements over that period. By contrast, black men did not experience the uniformly positive occupational and socioeconomic gains following civil-rights legislation to the same extent as their female counterparts. African American men experienced a mixed pattern of gains and setbacks, initiated by a large-scale move out of agricultural work into blue-collar operative jobs in the 1940s, but countered by rising unemployment relative to white men in the 1960s. This meant that gains in the 1970s resulting from the occupational changes catalyzed in the 1960s had differing effects on racial inequality for men and women. Black women's occupational distribution became more like that of their white counterparts, leading to a decline in income disparity. Income disparity increased among men because the average occupational status of white men rose and pulled away from the average status of black men, for whom a rising fraction had fallen out of the paid labor force (Alexis 1998). Thus, because we look to occupational and socioeconomic gains as the pathways by which civil-rights legislation could potentially improve health, we do not expect to see black men's health improving to the same extent as black women's health.

A review of existing studies on the social and economic changes that occurred during this period, as well as new analyses which show remarkable life-expectancy and mortality gains for black women compared to white women in this period, help us understand some of the potential mechanisms that could account for these gains. While we are confident about the existence of these relative improvements in the health of black women, we will call attention to the comment made by John Donohue and his Nobel Laureate colleague James Heckman (1991) when discussing their work on the reasons for economic gains for blacks during the era of improvements in civil rights. They note that their answers are more similar to the solution to a Sherlock Holmes puzzle than to the coefficients from an econometric model, and so shall ours be.

DATA AND METHODS

In these analyses, we examine socioeconomic trends by race and evaluate the extent to which changes in mortality rates track these socioeconomic trends. Socioeconomic data for blacks and whites of both sexes are evaluated using occupation data from the 1950 and 1960 U.S. Census and the Current Population Survey (CPS) March annual files 1963-1980, both obtained from the Integrated Public Use Microdata Series (IPUMS; Ruggles et al. 2004). We examine the main occupation for individuals thirty-five to sixty-four years of age who were currently in the paid labor force at the time of the respective survey. These data sets provide occupational data for the years 1950 and 1960 and a continuous (annual) data series for the period from 1963 to 1980. Data points for the periods 1951 to 1959 and 1961 to 1962 are obtained by linear interpolation. Slopes of trend lines reflecting the periods 1950 to 1964 and 1965 to 1980 are obtained by regressing percentages in a particular occupational category on calendar year for these two periods; we test for difference in the estimated slopes for the two periods for particular groups of interest and report relevant results of these tests below.

Mortality rates for the years following 1967 by region, race, sex, cause of death, and year are obtained from the Compressed Mortality files (1968 to 1978). For the period preceding 1968, we use tabulated data from annual volumes of the Vital Statistics data published by the National Center for Health Statistics (NCHS). We compare trends in mortality rates or ratios across two periods: 1955 to 1964 (the decade before passage of Civil Rights legislation), and 1965 to 1974 (the decade following passage of Civil Rights legislation). Because, for a variety of demographic, cultural, and political reasons, the Civil Rights Act of 1964 is considered to have had most of its impact in the South, we present some analyses disaggregated by region. A final set of analyses examines trends in age-adjusted cause-specific mortality rates, specifically for mortality due to heart disease, cerebrovascular disease, and neoplasms (primarily lung cancer). Most of the analyses presented are for females, with results for males described in the text. In general, analyses are limited to the working ages (thirty-five to sixty-four), the age group that is considered to have experienced the largest shift in occupational opportunity following Civil Rights legislation (Alexis 1998).

Life expectancy analyses are summarized as years of life expectancy remaining at age thirty-five (e35), and mortality rates (for persons ages thirty-five to sixty-four) are age-standardized to the corresponding region- and age-gender-specific population obtained from the 1968 Compressed Mortality files. Mortality rates by region, as well as those by region and cause, are presented primarily as changes or trends in black-white ratios in mortality. Standard linear regression analyses are used to estimate annual rates of change in e35, ten-year changes in black-white mortality ratios by region, and slopes of black-white mortality ratios by cause.

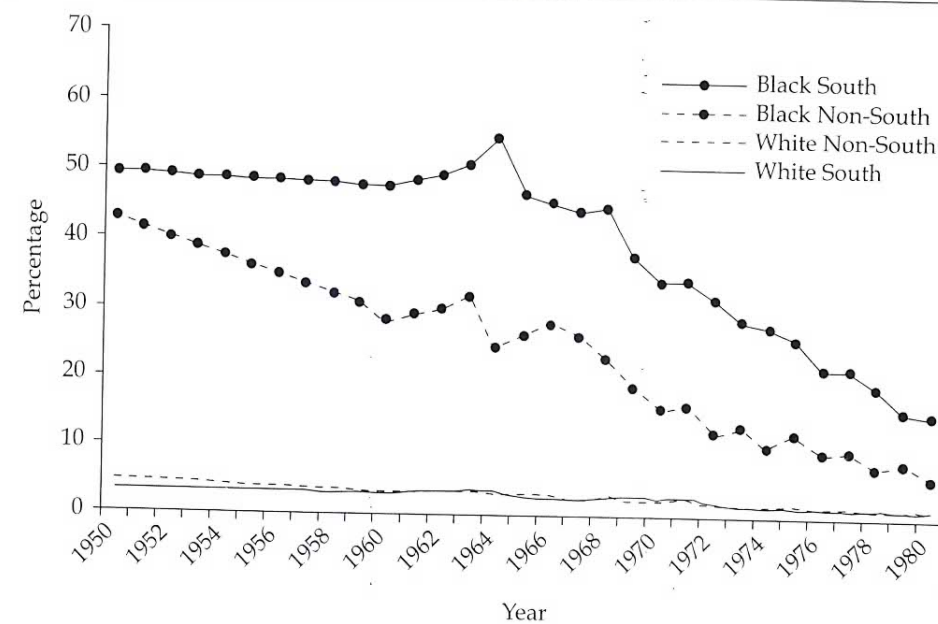
IMPROVED SOCIAL AND ECONOMIC POSITION FOR BLACK WOMEN IN THE POST-CIVIL-RIGHTS ERA

On the eve of the changes catalyzed by civil-rights legislation, there were large differences in the average economic status of blacks and whites. In 1960 the hourly wage ratio between black and white women was about 0.64. This wage variation was due in part to differences in average educational attainment and the concentration of blacks in the low-wage South (Cunningham and Zalokar 1992). However, another major factor was marked racial occupational segregation: black women were concentrated in low-skill and low-wage domestic service jobs and other service jobs, while the majority of working white women held white-collar jobs or did "pink-collar" clerical work (Blau and Beller 1992; King 1993; Zalokar 1990). Female workers have received less attention than male workers in studies of economic progress after civil-rights legislation; however, it was among women that economic status converged more completely between blacks and whites, and for whom occupational segregation and desegregation played the larger role (Cunningham and Zalokar 1992; Sundstrom 2000).

Indeed, the changes that occurred in the 1960s dramatically decreased racial differences in socioeconomic standing between black and white working-age women. Among the most notable changes, between 1950 and 1980 there was a major shift in the kinds of jobs typically held by black women (Conrad 2003; Cunningham and Zalokar 1992). Based on census data, figure 6.1 shows that the percentage of black women in the South reporting private household service work as their occupation declined from nearly 50 percent in 1950 to just over 11 percent in 1980; the percentage for black women in other regions fell from about 43 percent to under 5 percent. The dramatic exodus from private household service work occurred at a fairly consistent rate from 1950 to 1980 for black women outside the South, while among black southern women, the change was delayed until the 1960s. Fewer than 5 percent of white women did private household service work over this period, even in 1950, and the figure fell to about 1 percent nationwide by 1980.

What kind of work did African American women do if they were no longer doing private household service work? One of the notable changes of the 1960s was the increasing proportion of black women employed in white-collar work. Figure 6.2 shows that while there was an increase from 1950 to 1980 in the percentage of white women reporting a white-collar occupation (an increase from 54 percent in the South and 59 percent in the non-South in 1950, to approximately 63 percent in 1980), there was an even more impressive rise among black women, especially after 1964, with progress greatest in regions outside of the South. In 1950, between 10 and 12 percent of black women reported white-collar occupations, while by 1980 the percentage had increased almost four-fold for women outside of the South (difference in slopes outside the South: -1.23,

FIGURE 6.1 / Percentage of Women Thirty-Five to Sixty-Four Years Old Reporting Private-Household Service Work as Their Occupation, by Racial Group, Region, and Year^a



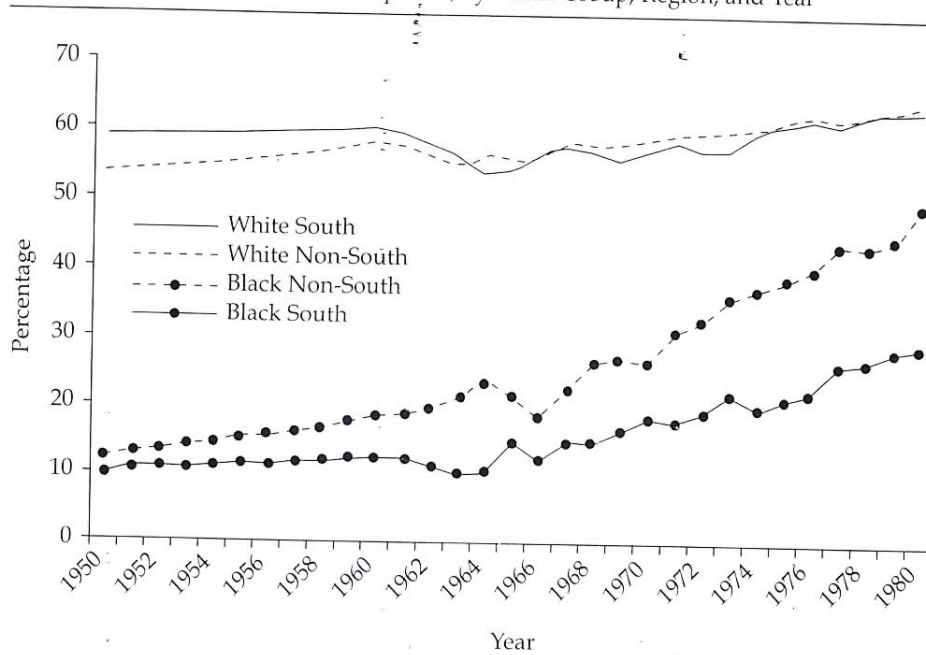
Source: Authors' calculations.

^a IPUMS U.S. Census data using the OCC1950 recode variable for occupation, 1950-1980.

$p < .001$) and about three-fold for women in the South (difference in slopes: -0.996 , $p < .001$).

Racial disparities among men did not change nearly as much during this period. Part of the reason for this was that gains for men had begun in the 1940s with a large-scale exodus from farming and farm labor into blue-collar positions including operative jobs, craft work, or other types of laborer positions (Allen and Farley 1986), and this source of rising occupational status had been largely exhausted by the mid-1960s. Figures 6.3 and 6.4 show the percentage of men ages thirty-five to sixty-four reporting "laborer" and white-collar occupations over the same period. Figure 6.3 shows that while menial work among black men fell in and outside the South, the exodus out of such work was not as dramatic as that seen among female private household service workers. Nonetheless, the percentage of black men in the South in laborer positions did not start to fall until the mid-1960s (difference in slopes: 0.797 , $p < .001$), while a secular decline had started by 1950 for black men outside the South (difference in slopes: 0.065 , $p = 0.465$). Similarly, figure 6.4 shows that there was a steady rise in the percentage of all male workers in white-collar jobs after the mid-1960s, with a consistent gap between whites, black men outside

FIGURE 6.2 / Percentage of Women Thirty-Five to Sixty-Four Years Old Reporting a White-Collar Occupation, by Racial Group, Region, and Year^a



Source: Authors' calculations.

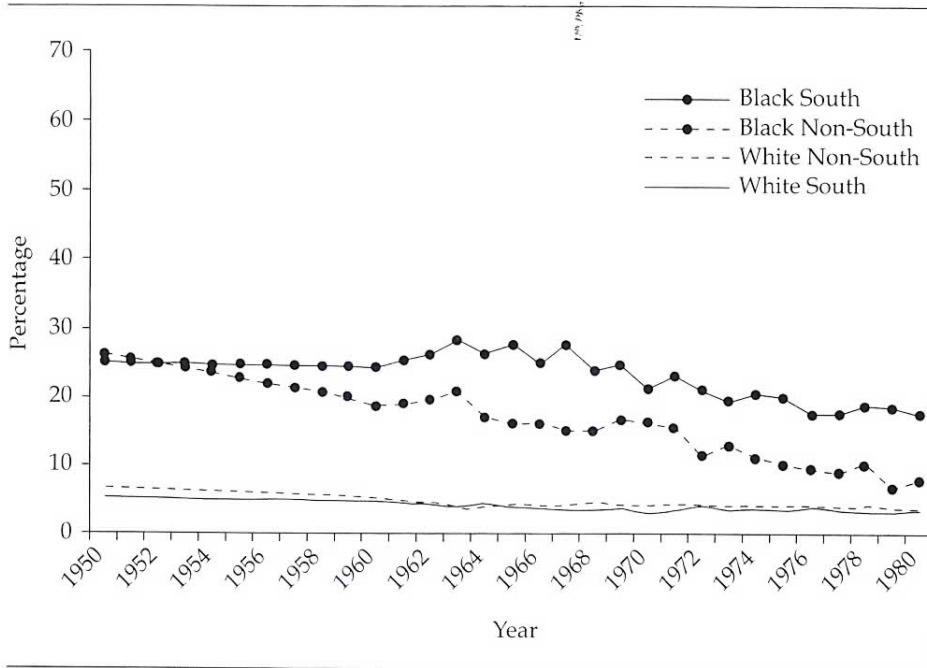
^a IPUMS U.S. Census data using the OCC1950 recode variable for occupation, 1950-1980.

the South, and southern black men. These changes were important for male workers but were not as striking as the shifts in the work done by women, and they did not hold as much promise for reductions in overall racial disparities in socioeconomic standing. Black men made gains in white-collar positions in the 1960s, but the post-1964 period showed even more dramatic gains for black women (Smith 2003), particularly in the South.

During this period of major occupational gains for blacks, and especially for black women, there were also major gains in relative levels of wages and income for black women; for some age ranges, the trends were striking. For example, figure 6.5 (adapted from Allen and Farley 1986) shows the ratio of black to white median income for thirty-five- to forty-four-year-old males and females from 1949 to 1979, based on data from the U.S. Census 1950 to 1980. The figure demonstrates a complete closing of the income gap during this period for women and a far smaller narrowing for men.

Other analyses of decennial census data indicate that between 1960 and 1980 the black-white ratio in women's hourly wages increased from 0.64 to 0.99 (Cunningham and Zalokar 1992), even while wages for all workers were rising. The racial gap in men's wages also declined from the early 1960s to the mid-1970s; however,

FIGURE 6.3 / Percentage of Men Thirty-Five to Sixty-Four Years Old Reporting a "Laborer" Occupation, by Racial Group, Region, and Year^a



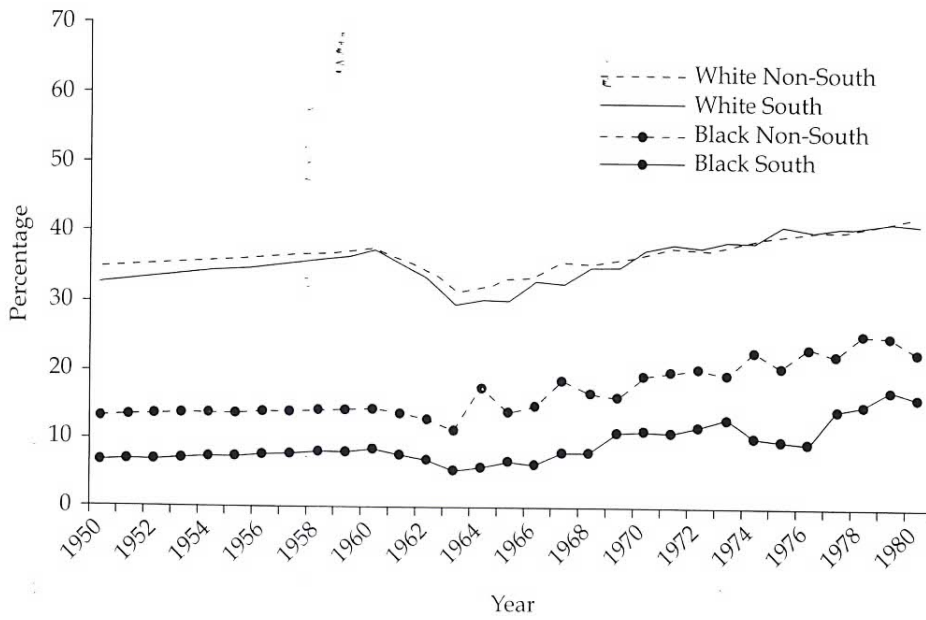
Source: Authors' calculations.

^a IPUMS U.S. Census data using the OCC1950 recode variable for occupation, 1950-1980.

it then reversed and began to increase through the mid-1980s. The largest relative gains in the decade following civil-rights legislation were made by black women: from 1962 to 1973, real wages among white men increased by 17 percent, compared to 50 percent for black women (Smith 2003).

Not only did the types of occupations and income change, but the sectors in which work was being done also changed. There was a dramatic racial shift in the percentage of women employed in public-sector jobs in the immediate post-civil-rights period. Figure 6.6 shows that among thirty-five- to sixty-four-year-old black women, less than one in ten worked for a public employer in 1950. This number rose to about one in three in 1980, with the majority of the increase concentrated in the 1960s and 1970s. Over this same period, white women in the South hovered at just over 20 percent public employment, while whites outside the South rose from about 15 percent in 1950 to just over 20 percent in 1980. This meant that black women were less likely to have a public employer in 1950 and 1960, but they were equally or more likely than white women to be in public employment around 1970, and the gap widened thereafter. For men (not shown here), the changes were more muted, with a somewhat faster in-

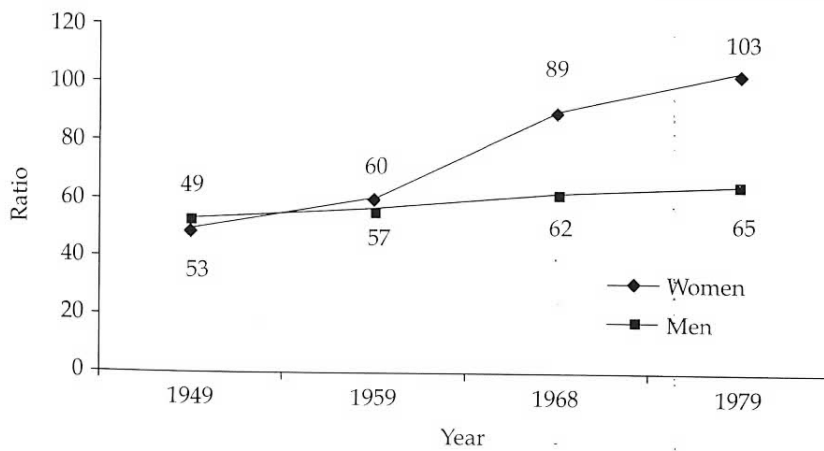
FIGURE 6.4 / Percentage of Men Thirty-Five to Sixty-Four Years Old Reporting a White-Collar Occupation, by Racial Group, Region, and Year^a



Source: Authors' calculations.

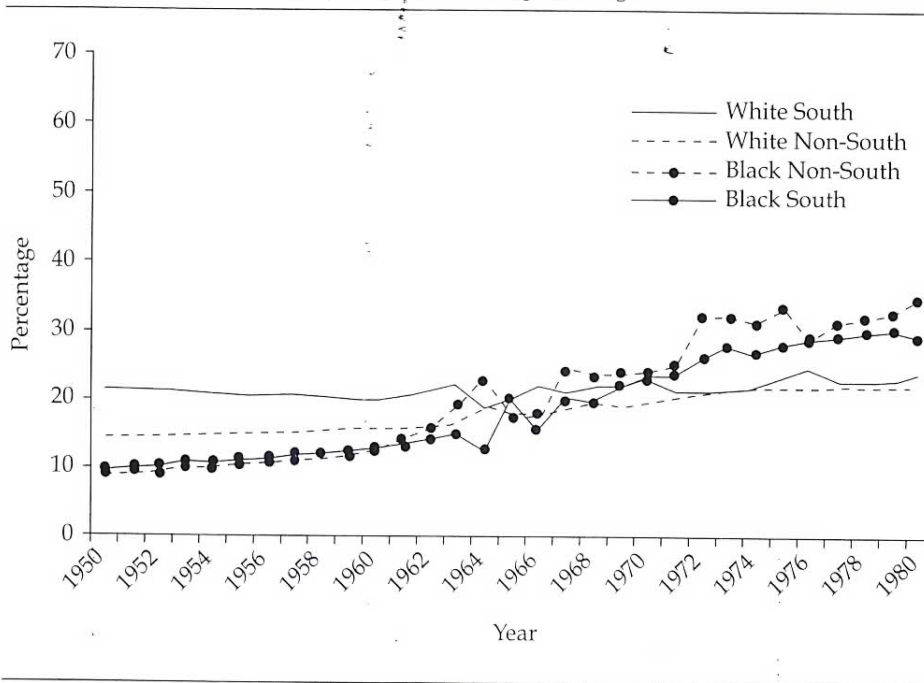
^a IPUMS U.S. Census data using the OCC1950 recode variable for occupation, 1950-1980.

FIGURE 6.5 / Ratio of Black-White Median Income (1983 Dollars) for Men and Women, Age Thirty-Five to Forty-Four (1959 to 1979)



Source: Adapted from Allen & Farley (1986).

FIGURE 6.6 / Percentage of Women Thirty-Five to Sixty-Four Years Old Working for a Public Employer, by Racial Group and Region^a



Source: Authors' calculations.

^a IPUMS U.S. Census data, 1950 to 1980.

crease in public employment for black men and few regional differences. The implications of this rise in public-sector jobs for black women was not all positive: many of these jobs were of low quality relative to professional white-collar positions and were vulnerable to government funding fluctuation (Burbridge 1994). Nonetheless, relative to private household service work, these jobs probably represented a major advance in terms of prestige, wages, and other occupational features.

To summarize, black women experienced large occupational changes during the first decade or so of the civil-rights era, relative to white women and black men. They also experienced substantial increases in employment in the public sector and considerable improvement in economic fortunes consistent with all of these changes. Based on the considerable prior evidence that better socioeconomic position, increased economic security, and improved working conditions are associated with better health, these changes would be expected to translate into better health.

HEALTH TRAJECTORIES IN THE POST-CIVIL-RIGHTS ERA: WERE THERE BENEFITS OF RISING FORTUNES FOR BLACK WOMEN?

Table 6.1 shows the estimated annual rates of change in remaining life expectancy at age thirty-five (e35) by race and sex for the decade preceding the Civil Rights Act (1955 to 1964) and for the decade following passage (1965 to 1974). Rates are estimated from a regression of e35 against period, race, sex, and year, with all possible interactions allowed. We focus on e35 and e65 rather than the commonly used e0 (life expectancy at birth) to highlight improvements in mortality in the working-age population. Life-table measures are presented here as they use a comprehensive metric that summarizes the net effect of age-specific mortality rates.

In the decade prior to and including 1964, both black and white women experienced comparable annual gains in e35: life expectancy increased a little less than a month every year (a gain of between 0.07 and 0.08 years per year). During this period, mortality rates for males of both races were stagnant or declining (between -0.01 and -0.04). Following 1964, all groups experienced significant increases in e35 compared to the prior decade. Importantly, the gains in e35 for black women in this period outstripped the gains by other race and sex groups. In the decade following 1964, the annual increase in e35 among black women nearly tripled, from 0.07 years per year in the pre-civil-rights era to 0.26 years per year in the following decade. In contrast, during the same period, e35 for white women increased from 0.08 years per year to 0.15 years per year. Over a period of one decade, this translates to an additional year added to life expectancy at age thirty-five for black women compared to white women (2.6 years gain for black women versus 1.5 years gain for white women). Not surprisingly, the 0.19 years per year improvement in e35 for black women is significantly higher than the 0.07 years per year improvement for white women (difference = 0.12, $p = 0.02$).

TABLE 6.1 / Annual Rates of Change in Remaining Life Expectancy at Age Thirty-Five and Age Sixty-Five, By Sex, Race, and Era

		Black Women	White Women	Black Men	White Men
Annual rates of change in remaining life expectancy at age thirty-five ^a	1956 to 1965	0.07	0.08	-0.04	-0.01
	1966 to 1975	0.26	0.15	0.07	0.10
Annual rates of change in remaining life expectancy at age sixty-five	1956 to 1965	-0.06	0.07	-0.08	-0.02
	1966 to 1975	0.12	0.14	0.06	0.06

Source: Authors' calculations.

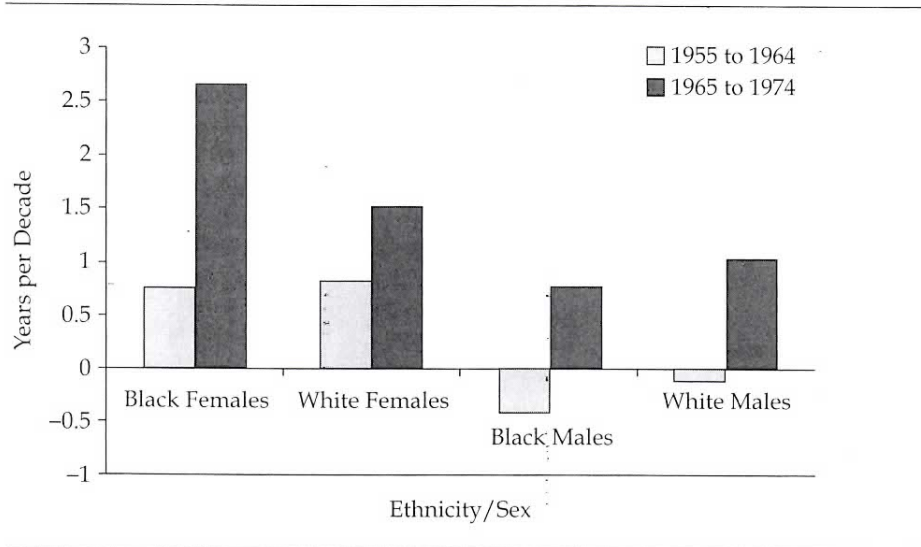
^a Estimates are obtained from regressions of e(x) on year, period, and race-sex group, with all possible interactions between year, race-sex, and period, to estimate differences in slope.

The story is different when we examine remaining life expectancy at age sixty-five (e65). First, prior to 1964, black women ages sixty-five or older were at a significant disadvantage and experiencing a net annual decline in life expectancy (e65 = -0.06 years per year) compared to their white counterparts (e65 = 0.07 years per year). After 1964, however, this trend in e65 reversed and improved to the point where annual gains were comparable to those experienced by white women (0.12 years per year for black women, compared to 0.14 years per year for white women). Moreover, the numbers indicate that almost all the gains in e35 for white women were experienced by women ages sixty-five and older (0.14 out of 0.15). In contrast, for black women, more than half the gains in e35 (0.14 out of 0.26 years per year) were experienced by women ages thirty-five to sixty-five.

In general, the estimates for men suggest that both before and after 1964 gains for women exceeded those for men. Black males experienced much smaller improvements in life expectancy than black females. In general, however, this period saw black males reverse declining trends in life expectancy, and attainment of parity with white males in terms of annual rates of changes, though not in actual life expectancy. In summary, black women experienced larger relative gains in the rate of change of life expectancy following the passage of civil-rights legislation than any other race-sex group, and a substantial fraction of these relative gains were concentrated in the ages from thirty-five to sixty-five.

Figure 6.7 summarize these trends visually. The figure shows the estimated an-

Figure 6.7 / Change (Years per Decade) in Life Expectancy at Age Thirty-Five in the United States: 1955 to 1964 and 1965 to 1974



Source: Authors' calculations.

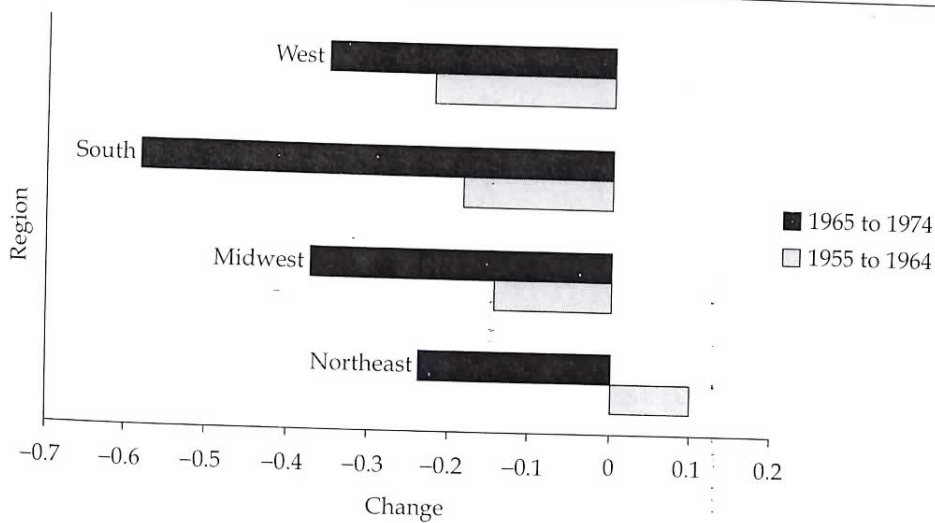
nual rates of change per decade in remaining life expectancy at age thirty-five (e35) by race and sex for the decade preceding the Civil Rights Act (1955 to 1964) and the decade following passage (1965 to 1974). It is evident that black women, alone among all race-sex groups, experienced a fairly pronounced upturn in e35 around 1964. Some evidence of upturn was evident in e65 as well, but the magnitude was much smaller, and it does not appear that this was unique to black women.

Analyses of Regional Differences in Mortality Trends

Because the impact of civil-rights legislation is widely believed to have been stronger in the southern states, an examination of region-specific trends in mortality is instructive. Figures 6.8 and 6.9 compare the rate of decline in black-white ratio for female mortality pre- and post-civil-rights legislation by region.¹ These estimates are of decadal changes in black-white mortality ratios based on age-adjusted mortality rates for women ages thirty-five to sixty-four, where rates were adjusted to the 1968 population.

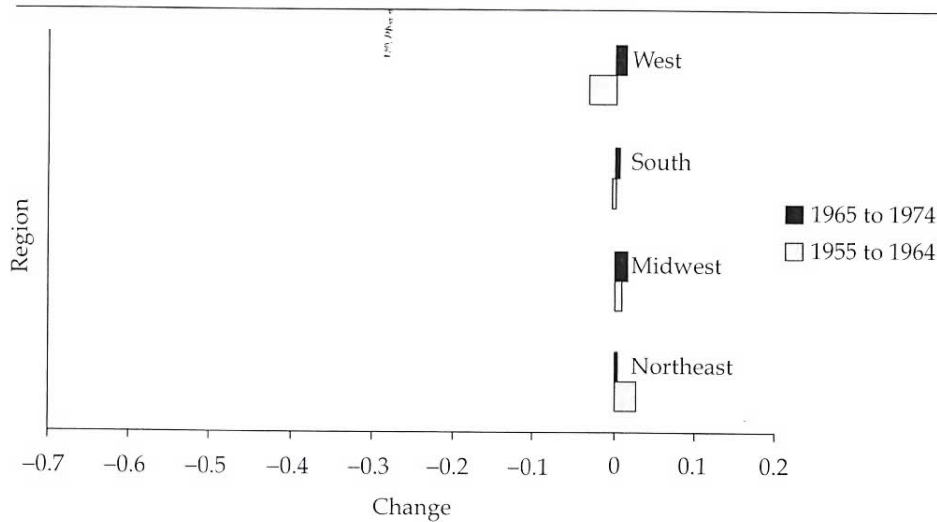
While the black-white ratio for females was converging (negative estimates in figure 6.8 indicate black-white convergence) in three of the four regions even prior to civil-rights legislation, the relative advantage for black women accelerated dra-

FIGURE 6.8 / Change in Black-White Ratio of Female Mortality (Ages Thirty-Five to Sixty-Four): 1955 to 1964 and 1965 to 1974



Source: Authors' calculations.

FIGURE 6.9 / Change in Black-White Ratio of Male Mortality (Ages Thirty-Five to Sixty-Four): 1955 to 1964 and 1965 to 1974



Source: Authors' calculations.

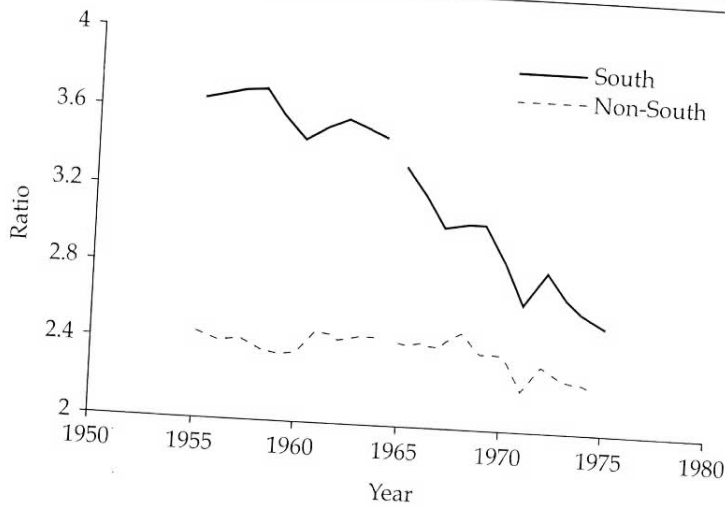
matically in the decade after 1964, with the greatest changes in the South. The pattern for males was very different. In the decade before 1964, mortality rates for blacks relative to whites were either unchanging or worsening in most regions (as indicated by small or positive estimates of change in the ratio), with particularly strong divergence in the Northeast. After 1964, there is some evidence that this diverging black-white trend slowed down in the Northeast, while the trends remained similar in the South and the Midwest. In contrast, patterns of change in mortality ratios over age sixty-five (estimates not shown) for males and females were similar. The black-white mortality ratio was increasing or stayed constant in all regions, both before and after 1964, except in the West, where both periods saw some racial convergence of rates for males and females.

Mortality Trends by Cause of Death

We also examined age-standardized mortality rates for ages thirty-five to sixty-four for black and white women in the South versus other regions, for three major cause-of-death categories: heart disease, stroke, and all neoplasms. These causes taken together accounted for nearly 70 percent of all mortality among women in this age group in 1965.²

For mortality from heart disease (figure 6.10), the black-white mortality ratio for females was declining in the South prior to 1964, while it was relatively flat in the

FIGURE 6.10 / Trends in Ratios of Black-White Mortality from Heart Disease (Ages Thirty-Five to Sixty-Four) for Females, By Region, 1955 to 1974



Source: Authors' calculations.

other regions. The rate of decline in the South accelerates post-1964. Between 1955 and 1964, the ratio declined by 8 percent (from 3.6 to 3.3), while in the decade after 1965, the ratio declined by 24 percent (from 3.3 to 2.5). In other regions, the black-white mortality ratio from heart disease stagnated at about 2.3 for the entire period.

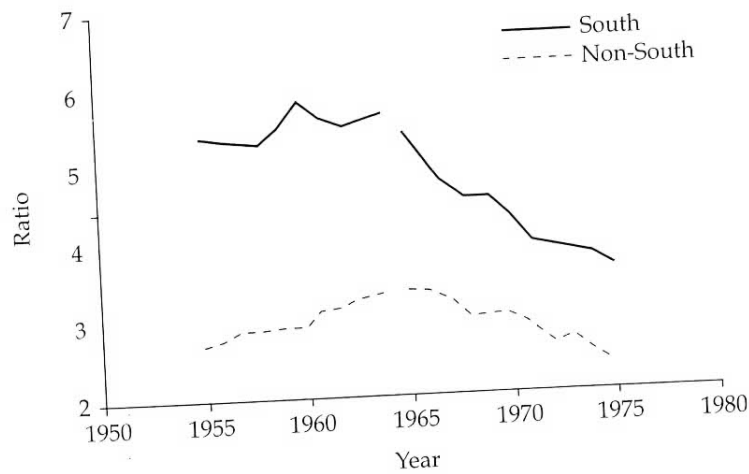
For cerebrovascular disease (see figure 6.11), black-white female mortality ratios were increasing prior to 1964 in all regions. After 1964, there was a sharp acceleration in the rate of decline of the ratio in the South particularly, declining from 5.4 to 3.6 in the space of one decade. Declines in other regions were more muted, declining from 3.4 to 2.4.

In the case of deaths from neoplasms (see figure 6.12), the regional differences in female black-white ratios are much smaller, with some indication of an accelerated decline in the black-white mortality ratio although there is also considerable year-to-year variability in the ratio.

These patterns are confirmed in table 6.2, which presents estimated slopes of the trend in black-white ratios of cause-specific mortality. As is evident, trends of decline in heart-disease and stroke mortality ratios favored the South even before 1964, but following 1964 these differences widened remarkably in favor of the South, particularly in the case of stroke mortality.

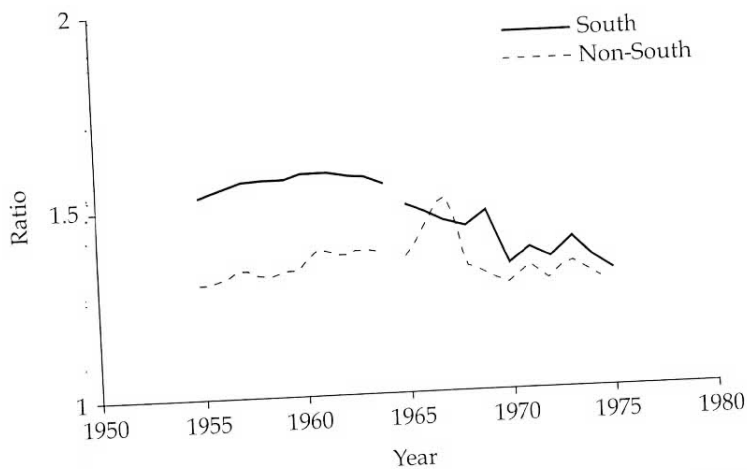
For men (not shown) there were few changes in trends in black-white mortality ratios in the post-civil-rights decade relative to trends in the prior decade. Regionally, in the period preceding civil-rights legislation, trends in heart-disease and stroke mor-

Figure 6.11 / Trends in Ratios of Black-White Mortality from Stroke (Ages Thirty-Five to Sixty-Four) for Females, By Region, 1955 to 1974



Source: Authors' calculations.

Figure 6.12 / Trends in Ratios of Black-White Mortality from Neoplasms (Ages Thirty-Five to Sixty-Four) for Females, By Region, 1955 to 1974



Source: Authors' calculations.

TABLE 6.2 / Slope of Trend in Ratios of Black-to-White Female Mortality, By Region, Era, and Cause of Death

	1955 to 1964			1965 to 1974		
	South	Non-South	South Non-South Difference	South	Non-South	South Non-South Difference
Heart disease ^a	-2.59 (0.73)	0.81 (0.73)	-3.4 (1.03)	-7.57 (0.62)	-2.36 (0.62)	-5.21 (0.88)
Stroke	-9.83 (1.07)	7.13 (1.25)	-3.33 (1.77)	-17.65 (1.07)	3.8 (1.25)	-7.82 (1.51)
Neoplasms	-0.46 (0.3)	0.85 (0.3)	-0.74 (0.42)	-1.65 (0.3)	0.1 (0.3)	-1.19 (0.43)

Source: Authors' calculations.

^a Estimates based on regression of black-white mortality ratios against year, region, cause of death, and all two-way and three-way interactions.

tality ratios favored black males in the South more than those in the North. This is possibly reflecting the increased opportunities provided to black males by the expansion of the textile industry in the South after World War II. Male black-white mortality ratios from neoplasms were increasing both before and after 1964.

CONCLUSION

The results of our analyses indicate that there were important improvements in life expectancy and mortality from specific causes for black women in the decade after the enactment of the Civil Rights Act of 1964 compared to the previous decade. These improvements were concentrated in working-age black women, with black men showing smaller and qualitatively different patterns of improvement. Furthermore, the trends in increased life expectancy and decreased mortality rates were substantially stronger for black women than they were for white women, and during the decade after the enactment of the Civil Rights Act of 1964, the life-expectancy gains for black women were 73 percent greater than for white women. The health of black women improved most, in both relative and absolute terms, in the South compared to other regions. This reflects a strikingly different picture than that found for black and white females over the age of sixty-five or for men of all ages and races. Finally, comparing the trends in rates of death from heart disease and stroke in the decades pre- and post-1964, the most favorable trends are again seen for black women in the South.

For the most part, the improved trends in working-age life expectancy and mortality from vascular disease in black women compared to white women and both black and white men mirror the improved trends in socioeconomic and occupational status for black women compared to these other groups. The regional specificity of these patterns also mirrors these changes.

The similarity between these patterns, the specificity of the health effects, and the timing of the effects certainly add credence to the suggestion that the broad set

of programs and other changes that were created or catalyzed by the Civil Rights Act of 1964 did, in fact, improve the health of black women. However, the consistency, specificity, and timing of these trends are not alone sufficient to make an entirely convincing causal story. We now examine a series of interpretive issues that bear upon our interpretation of these trends.

It is possible that the trends in labor markets as well as regional and cause-specific mortality represent independent secular changes or a continuation of independent existing trends. Turning to labor markets, then, we need to assess the extent to which the gains were triggered by civil-rights legislation as opposed to secular changes in labor markets. One study (Smith and Welch 1977, 1989) argues that evolving historical forces, especially improved education for blacks following desegregation and migration of blacks from the South to the North and from rural to urban areas, drove wage increase for blacks. However, a preponderance of other studies concluded that this increase in economic status was associated with civil-rights legislation. The big gains in relative median income of all blacks and of college-educated blacks of both sexes began in 1966, the year the initial impact of the Civil Rights Act of 1964 could be measured. The EEOC has been described as the single most important explanation for income convergence during this period, even after taking into account growth in gross national product and improvements in black education (Freeman 1976). This position is supported by a number of more recent studies. In a study of the South Carolina textile industry, the authors conclude that the EEOC was a major factor in increasing the demand even for less-educated black workers (Butler, Heckman, and Payner 1989). Most of the relative income gains that occurred during this period took place in the South, the region that was the target of early Title VII legislation (Donohue and Heckman 1991; Heckman 1990). Federal intervention also accounts for a large proportion of the gains in occupational attainment for minorities (DiPrete and Grusky 1990). One estimate is that improvements in school quality accounted for only one-quarter of the gains in relative income made by black men between 1960 and 1980, with the rest attributable to legislative changes (Card and Krueger 1992). Similarly, a sizable fraction of the gains made by black women relative to white men can be explained by a decline in wage discrimination (Carnoy 1996). While there is abundant evidence from these studies that federal legislation increased black incomes; these studies generally focus on black males rather than on black females, and a number of them focus on college-educated blacks. Thus, while they do not directly address the reasons for changes in the economic status of black women, particularly those who were not college-educated, they are certainly consistent with a similar argument for the role of civil-rights legislation in the occupational changes for women and their economic consequences.

What about mortality trends in the period preceding 1965? Between 1954 and 1963, some racial convergence among males was evident, but no such racial convergence was seen in the case of females. Among black women a steady slowing of the rate of decline of mortality was observed in all age groups below age sixty-five (Klebba 1966). Much of the slowing in decline observed during this period was due to an across-the-board increase in mortality from diseases of the heart (which

constituted nearly 40 percent of all deaths to black women in 1963). Black women in particular experienced a large relative increase in mortality from heart disease (41 percent). Thus, it is apparent that in the decade preceding 1964, black women had significantly poorer trends in mortality improvements relative to all other race and sex groups. The reversal of these race- and sex-specific trends in 1964 is thus all the more remarkable.

This coincidence of relative gains in mortality for black women with marked changes in their occupational and income standing is thus not likely to be accidental. Further, although civil-rights legislation was not intended to be sex-specific, it is apparent from our results that the gains in labor-market conditions were stronger for women. Data presented here indicate that black men made weaker occupational and socioeconomic gains in the late 1960s and 1970s than did black women. One potential reason could be employers' weaker latent discriminatory feelings toward black women than toward black men; thus, when the law changed, black women were hired preferentially before black men. In addition, if nonunionization and the related negative sentiment toward blacks were more prevalent for "men's work" than for "women's work," women might advance more quickly after a legal shift. Given the near-complete restriction of black women to domestic service work in the early twentieth century, their move into new higher status occupations represented a dramatic shift in occupational and economic standing. Black women's occupational status gains were more substantial than those that black men experienced in this period. The pathway of black males was initially from agricultural labor into unskilled blue-collar work in the 1940s and 1950s, and then later into more skilled blue-collar positions (Collins 2003). Large shifts into white-collar work were not experienced even by white men over these decades.

Another potential alternative explanation for the gender differences in response to changes in the legislative landscape in 1965 lies in the authorization of Medicaid (Title XIX of the Social Security Act of 1965). Low-income families with dependent children and low-income elderly, blind, or disabled individuals were eligible for Medicaid benefits. These criteria for eligibility, as stipulated, consistently excluded nondisabled adult men. Low-income adult men generally could only become eligible for Medicaid coverage by becoming blind, disabled, or elderly (Satcher et al. 2005). In contrast, eligibility for low-income families with dependent children expanded the access for black women in particular. Health care access for black women probably also expanded as a result of increased public-sector employment. Such improved access may have played some role in reducing working-age mortality.

Next we consider whether the effects are biologically plausible and what the possible biological and behavioral pathways might be between the enactment of civil-rights legislation and improved health. We consider such a discussion to be an important component of evaluating the interpretation of the results of both observational and experimental studies. The finding that pre-1964 versus post-1964 improvements in mortality that favored black women were found for heart trouble and stroke but not for malignancies is instructive. Most malignancies develop

over long periods, in some cases over many decades, before they are clinically evident, and they would not be expected to be responsive to short-term changes. Thus, the existence of noticeable short-term effects for malignancies would cause reason for concern. While it is true that the multiple clinical entities grouped under the categories of heart trouble and stroke represent chronic pathophysiologic processes that also develop over decades, mortality from these causes represents a combination of chronic degenerative, acute triggering, and secondary- and tertiary- care processes, with the latter two potentially responsive to changes over shorter periods. The clearest examples of this are increased rates of heart attacks post-natural disasters and after certain behavioral and psychosocial episodes (Katsouyanni, Kogevinas, and Trichopoulos 1986; Mittleman et al. 1995; Albert et al. 2000; Kaplan and Keil 1993). Unfortunately, while such acute triggers of vascular events are biologically plausible and have been empirically demonstrated, there are no data to our knowledge that would allow us to examine whether there was a decline in such triggers in the decade after 1964 and if such a decline was more prevalent for black women in the South. Speculatively, an extensive literature indicates that the prevalence of stressors is inversely associated with higher socioeconomic position (House 2002), and it is plausible that increased wages and income, better working conditions, and movement into a more supportive occupational sector may have reduced the prevalence of these stressors and their behavioral and physiologic sequelae.

A shared risk factor for mortality from most entities classified as "heart trouble" and "stroke" is cigarette smoking, and quitting smoking can have protective effects on cardiovascular mortality within five years or so. Is there any evidence that patterns of smoking and quitting changed, particularly for black women in the South, over the two decades under consideration? Again the data are sparse, particularly in the earlier period. For example, the National Health Interview Survey only collected national smoking data beginning in 1965. The data that are available post-1964 indicate lower rates of smoking for black women compared to white women, but not more favorable trends for black women. For example, among those ages forty-five and older in 1965, 44.4 percent of white women and 25.1 percent of black women were current smokers (McGinnis, Shopland, and Brown 1987). By 1976, the corresponding numbers were 35 percent and 26.7 percent. If anything, this indicates a worsening trend for black women compared to white women, which is not consistent with the differential mortality trends from heart trouble and stroke.

On the face of it, inspection of trends in hypertension control should be instructive both as an indicator of a disease process related to mortality from heart trouble and stroke as well as an indicator of access to medical care and to effective treatment. Again the data are not easily obtained. The data that do exist do not indicate, unlike the case for birth outcomes reported by Almond, Chay, and Greenstone, that improved medical care is likely to be responsible for what we have observed. A strong case is made that the federally mandated changes which increased access to facilities did improve health care, at least care which was hospital based, for blacks in the South. However the situation for hypertension is less

clear. While there is a large emphasis on hypertension control currently, the state of both epidemiologic and clinical evidence for the importance of control of blood pressure was much less clear during the periods we are considering (Kannel 2000; Kannel, Gordon, and Schwartz 1971). Broad-scale federal efforts to control high blood pressure only began in the early 1970s, and effective therapies with low levels of side effects only became widely available in the mid-1970s (Moser 1986). Thus, it is unlikely that there were major events pre- and post-1964 that led to more effective control of hypertension among black women in the South. The data that do exist show consistently higher rates of hypertension among black women compared to white women. There are almost identical secular trends from the early 1960s to the mid-1970s for those women ages forty to fifty-nine and a substantial convergence of black-white difference in the prevalence of hypertension for women thirty to thirty-nine (Burt et al. 1995). However, as a small proportion of the deaths in the thirty-five- to sixty-four-year-old age group are contributed by those ages thirty to thirty-nine, the decreased prevalence of hypertension is not likely to explain the differential mortality trends. Data of sufficient quality are not available to make any regional comparisons.

What else might account for the relatively accelerated improvement in the health of black women, particularly in the South, in the decade following the passage of the Civil Rights Act of 1964? A number of possibilities suggest themselves, but data limitations and the lack of individual-level microdata do not permit us to examine them in any detail. One can imagine a cascade of material and psychosocial effects, and their interaction, in response to the changes in economic and occupational status. Certainly, the increases in income and wages for black women during this period may have translated into better living situations and more adequate nutrition, as well as less stress associated with housing problems, financial instability, family problems, under-resourced neighborhoods, or other demands. The accelerated movement into public-sector jobs may have led to positions with greater job security, enforcement of work rules, and health and other benefits. It is also possible that moving from domestic service jobs into clerical and professional-technical jobs led to increases in learning opportunities, formation of new peer groups, increased self-esteem, and lowered levels of depression. For those who moved into professional-technical jobs, such as teaching or management of small businesses, there may also have been increased job control. While there is some evidence that some of these factors are associated with better health outcomes (for example, job control), we have not been able to discover data that would allow us to determine if measures of these characteristics moved in a way consistent with the observed secular trends in health.

It is important to stress that these relative improvements in socioeconomic standing and mortality experienced by black women were transient. After the early 1980s, occupational gains stagnated (Fosu 1997) and earnings gains deteriorated (Conrad 2003). Perhaps not surprisingly, the decade of the 1980s was marked by relatively poorer mortality improvements for black women over age thirty-five. For example, between 1980 and 1988, the annual age-adjusted decline in ischemic-heart-disease mortality for the population ages thirty-five and older was as

follows: 3.7 percent for white men, 3.1 percent for black men, 2.9 percent for white women, and 2.2 percent for black women. Remarkably, the rate of this annual decline was also slower in the South (2.9 percent) than in any other region (3.9 percent in the Northeast, 3.2 percent in the Midwest, and 3.1 percent in the West) (MMWR Weekly 1992). These reversals emphasize that the gains for black women, particularly in the South, seen in the period from 1964 to 1975 were episodic. This strengthens the case for their association with civil-rights legislation.

Here we return to Donohue and Heckman's (1991) comment that understanding the role of federal legislation in the employment and wage gains of blacks following the enactment of the Civil Rights Act of 1964 seems more reflective of a puzzle solved by Sherlock Holmes than an econometric paper. We concur, as the paucity of data makes it difficult to definitively assert a causal effect of the Civil Rights Act of 1964, and the similar lack of data on potential pathways that might have translated legislation into improved health makes it difficult to apply a closer interpretive lens to the changes we have observed. In addition, the Civil Rights Act of 1964 did not occur in a vacuum; it reflected many changes that had occurred post-Reconstruction (Filvaroff and Wolfinger 2000; Woodward 1968; Kousser 2000). Of course, this time period was also affected by the Economic Opportunity Act of 1965 that ushered in the War on Poverty and the dozens of programs that sprang from it (Clark 2002). Such a stew of history, politics, and race and class relations makes it difficult, despite the methodologic press, to construct any completely convincing connection between major legislation such as the Civil Rights Act of 1964 and putatively resultant socioeconomic and health changes. In addition, the historic position of black men, the small gains in occupational status that they had achieved earlier, and the continuing press of racism and discrimination against black men in particular may have provided a context that limited the potential impact of civil-rights legislation on the occupational and economic pathways that would lead to improved health. However, in a "Sherlock Holmesian" manner we propose that the patterns of health changes observed post-1964, their timing and consistency with what is known about social and economic determinants of health, and the gender- and region-based patterns of change strongly suggest that the Civil Rights Act of 1964 did have a salutary impact on the health of black women in the United States, especially in the South. These effects were not the focus or the intent of the legislation, but they provide some support for the proposition that social and economic policies are, indeed, health policies.

NOTES

1. Up until 1967, mortality statistics are only available for the race categories *white* and *non-white*; it was only after 1967 that separate tabulations for blacks are available. For national statistics, this is not expected to have much of an impact, as blacks constituted a large proportion of non-white races before this period. For regional statistics, however, this is no longer true. In western states, the non-white category included a signif-

- icant non-black fraction. Race-specific statistics for western states prior to 1968 should accordingly be interpreted with caution.
- For the most part, the pre-civil-rights era corresponds to ICD-7 (1958 to 1967 in the International Statistical Classification of Diseases and Related Health Problems), with some slight overlap with ICD-6 (1949 to 1957), while the post-civil-rights era corresponds to ICD-8 (1968 to 1978), with some overlap with ICD-7. Comparable codes for heart disease, stroke, and neoplasms were obtained across all three ICD code changes. ICD codes for the three cause of death categories were as follows: Heart disease was coded as 400 to 402 and 410 to 443 (ICD-6 and ICD-7), and 390 to 398, 402 to 404, 410 to 429 (ICD-8). Stroke was coded as 330 to 334 (ICD 6 and ICD-7), and 430 to 438 (ICD-8). Neoplasms were coded as 140 to 205 (ICD 6 and ICD 7), and 140 to 208 (ICD-8).

REFERENCES

- Albert, Christine M., Murray A. Mittleman, Claudia U. Chae, I.-Min Lee, Charles H. Hennekens, and Joann E. Manson. 2000. "Triggering of Sudden Death from Cardiac Causes by Vigorous Exertion." *New England Journal of Medicine* 343(19): 1355-61.
- Alexis, Marcus. 1998. "Assessing 50 Years of African-American Economic Status, 1940-1990." *The American Economic Review* 88(2): 368-75.
- Allen, Walter R., and Reynolds Farley. 1986. "The Shifting Social and Economic Tides of Black Americans, 1950-1980." *Annual Review of Sociology* 12: 297-306.
- Almond, Douglas V., Kenneth Y. Chay, Michael Greenstone. 2006. "Civil Rights, the War on Poverty, and Black-White Convergence in Infant Mortality in the Rural South and Mississippi." MIT Department of Economics Working Paper No. 07-04. Massachusetts Institute of Technology, Cambridge, Mass.
- Blau, Francine D., and Andrea H. Beller. 1992. "Black-White Earnings over the 1970s and 1980s: Gender Differences in Trends." *Review of Economics and Statistics* 74(2): 276-86.
- Burbridge, Lynn C. 1994. "The Reliance of African-American Women on Government and Third-Sector Employment." *American Economic Review* 84(2): 103-7.
- Burt, Vicki L., Jeffery A. Cutler, Millicent Higgins, Michael J. Horan, Darwin Labarthe, Paul Whelton, Clarice Brown, and Edward J. Roccella. 1995. "Trends in the Prevalence, Awareness, Treatment, and Control of Hypertension in the Adult U.S. Population: Data from the Health Examination Surveys, 1960-1991." *Hypertension* 26(1): 60-69.
- Butler, Richard J., James J. Heckman, and Brook S. Payner. 1989. "The Impact of the Economy and the State on the Economic Status of Blacks: A Study of South Carolina." In *Markets in History: Economic Studies of the Past*, edited by David W. Galenson. New York: Cambridge University Press.
- Card, David, and Alan Krueger. 1992. "Does School Quality Matter? Returns to Education and the Characteristics of Public Schools in the United States." *Journal of Political Economy* 100(1): 1-40.
- Carnoy, Martin. 1996. *Faded Dreams: The Politics and Economics of Race in America*. New York: Cambridge University Press.
- Clark, Robert F. 2002. *The War on Poverty: History, Selected Programs, and Ongoing Impact*. New Lanham, Md.: University Press of America.

- Collins, William. 2003. "The Labor Market Impact of State-Level Anti-Discrimination Laws, 1940-1960." *Industrial and Labor Relations Review* 56(2): 244-72.
- Conrad, Cecilia A. 2003. "Racial Trends in Labor Market Access and Wages: Women." In *America Becoming: Racial Trends and Their Consequences*, Volume 2, edited by Neil J. Smelser, William Julius Wilson, and Faith Mitchell. Washington: National Academy Press.
- Cunningham, James S., and Nadja Zalokar. 1992. "The Economic Progress of Black Women, 1940-1980: Occupational Distribution and Relative Wages." *Industrial and Labor Relations Review* 45(3): 540-55.
- DiPrete, Thomas A., and David B. Grusky. 1990. "Structure and Trend in the Process of Stratification for American Men and Women." *American Journal of Sociology* 96(1): 107-43.
- Donohue, John J., III, and James Heckman. 1991. "Continuous Versus Episodic Change: The Impact of Civil Rights Policy on the Economic Status of Blacks." *Journal of Economic Literature* 29(4): 1603-43.
- Evans, Robert G., Morris L. Barer, and Theodore E. Marmor, editors. 1994. *Why Are Some People Healthy and Others Not?* Hawthorne, N.Y.: Aldine De Gruyter.
- Filvaroff, David B., and Raymond E. Wolfinger. 2000. "The Origin and Enactment of the Civil Rights Act of 1964." In *Legacies of the 1964 Civil Rights Act*, edited by Bernard Grofman. Charlottesville, Va.: University of Virginia Press.
- Fosu, Augustin Kwasi. 1997. "Occupational Gains of Black Women Since the 1964 Civil Rights Act: Long-Term or Episodic?" *American Economic Review* 87(2): 311-14.
- Freeman, Richard. 1976. *The Over-Educated American*. London: Academic Press.
- Grofman, Bernard, editor. 2000. *Legacies of the 1964 Civil Rights Act*. Charlottesville, Va.: University of Virginia Press.
- Heckman, James. 1990. "The Central Role of the South in Accounting for the Economic Progress of Black Americans." *American Economic Review* 80(2): 242-6.
- House, James S. 2002. "Understanding Social Factors and Inequalities in Health: 20th Century Progress and 21st Century Prospects." *Journal of Health and Social Behavior* 43(2): 125-42.
- Kannel, William B. 2000. "Fifty Years of Framingham Study Contributions to Understanding Hypertension." *Journal of Human Hypertension* 14(2): 83-90.
- Kannel, William B., Tavia Gordon, and Melvin J. Schwartz. 1971. "Systolic Versus Diastolic Pressure and Risk of Coronary Heart Disease, the Framingham Study." *American Journal of Cardiology* 27(4): 335-46.
- Kaplan, George A. 2001. "Economic Policy Is Healthy Policy: Findings from the Study of Income, Socioeconomic Status, and Health." In *Income, Socioeconomic Status and Health: Exploring the Relationships*, edited by James A. Auerbach and Barbara K. Krimgold. Washington: National Policy Association.
- Kaplan, George A., and Julian E. Keil. 1993. "Socioeconomic Factors and Cardiovascular Disease: A Review of the Literature." *Circulation* 88(4): 1973-98.
- Kaplan, George A., and John W. Lynch. 1997. "Whither Studies on the Socioeconomic Foundations of Population Health?" *American Journal of Public Health* 87(9): 1409-11.
- Kaplan, George A., Mary N. Haan, S. Leonard Syme, Meredith Minkler, and Marilyn Winkleby. 1987. "Socioeconomic Status and Health." In *Closing the Gap: The Burden of Unnecessary Illness*, edited by Robert W. Amler and H. Bruce Dull. New York: Oxford University Press.

- Katsouyanni, Klea, Manolis Kogevinas, and Mitrios Trichopoulos. 1986. "Earthquake-Related Stress and Cardiac Mortality." *International Journal of Epidemiology* 15(3): 326-30.
- King, Mary C. 1993. "Black Women's Breakthrough into Clerical Work: An Occupational Tipping Model." *Journal of Economic Issues* 27(4): 1097-1125.
- Klebba, A. Joan. 1966. "Mortality Trends in the United States 1954-1963." (PHS) 1000. NCHS Series 20(2) *Mortality Trends*. PB-281609. PC A04 MF A01. National Center for Health Statistics, Public Health Service Report.
- Kousser, J. Morgan. 2000. "What Light Does the Civil Rights Act of 1875 Shed on the Civil Rights Act of 1964?" In *Legacies of the 1964 Civil Rights Act*, edited by Bernard Grofman. Charlottesville, Va.: University of Virginia Press.
- McGinnis, J. Michael, Donald Shopland, and Clarice Brown. 1987. "Tobacco and Health: Trends in Smoking and Smokeless Tobacco Consumption in the United States 1987." *Annual Review of Public Health* 8: 441-67.
- Mittleman, Murray A., Malcolm Maclure, Jane B. Sherwood, Richard Mulry, Geoffrey H. Tofler, Sue C. Jacobs, Richard Friedman, Herbert Benson, and James E. Muller. 1995. "Triggering of Acute Myocardial Infarction Onset by Episodes of Anger. Determinants of Myocardial Infarction Onset Study Investigators." *Circulation* 92(7): 1720-5.
- MMWR Weekly. 1992. "Trends in Ischemic Heart Disease Mortality—United States, 1980-1988." *MMWR Weekly* 41(30): 548-9, 555-6.
- Moser, Marvin. 1986. "Historical Perspective on the Management of Hypertension." *The American Journal of Medicine* 80(5, Supplement 2): 1-11.
- Ruggles, Steven, Matthew Sobek, Trent Alexander, Catherine A. Fitch, Ronald Goeken, Patricia Kelly Hall, Miriam King, and Chad Ronnander. 2004. *Integrated Public Use Microdata Series: Version 3.0*. Minneapolis, Minn.: Minnesota Population Center.
- Satcher, David, George E. Fryer Jr., Jessica McCann, Adewale Troutman, Steven H. Woolf, and George Rust. 2005. "What If We Were Equal? A Comparison of the Black-White Mortality Gap in 1960 and 2000." *Health Affairs* 24(2): 459-64.
- Smith, James P. 2003. "Race and Ethnicity in the Labor Market: Trends over the Long and Short Term." In *America Becoming: Racial Trends and Their Consequences*, Volume 2, edited by Neil J. Smelser, William Julius Wilson, and Faith Mitchell. Washington: National Academy Press.
- Smith, James P., and Finis R. Welch. 1977. "Black/White Male Earnings and Employment: 1960-1970." In *The Distribution of Economic Well-Being*, edited by F. Thomas Juster. Cambridge, Mass.: National Bureau of Economic Research.
- . 1989. "Black Economic Progress After Myrdal." *Journal of Economic Literature* 27(2): 519-64.
- Sundstrom, William A. 2000. "From Servants to Secretaries: The Occupations of African-American women, 1940-1980." Unpublished paper, Santa Clara University.
- U.S. Congress, Senate. 1964. *H. R. 7152 Civil Rights Act of 1964*. 88th Cong. PL 88-352.
- Williams, David R., and Chiquita Collins. 1995. "U.S. Socioeconomic and Racial Differences in Health: Patterns and Explanations." *Annual Review of Sociology*, 21: 349-86.
- Woodward, C. V. 1968. *The Burden of Southern History*. 2nd edition. Baton Rouge, La.: Louisiana State University.
- Zalokar, Nadja. 1990. *The Economic Status of Black Women: An Exploratory Investigation*. Washington: U.S. Commission on Civil Rights.