

Insights on Southern Poverty

The Newsletter of the UK Center for Poverty Research

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Historical Perspectives on Racial Differences in Schooling

William Collins and Robert A. Margo

Overview

Few public policy issues in the United States receive as much scrutiny as the racial gap in schooling. Black children lag behind their white counterparts in most dimensions of schooling, such as attendance, enrollment, completion of specific grades, and most notably, test scores. These gaps, in turn, have frequently been blamed on racial differences in the quality of schooling, various aspects of family background, as well as biases in tracking and in testing procedures. Economically, these schooling gaps matter because the American labor market rewards educational achievement, and these rewards are growing larger.

This article is a summary of a much longer NBER working paper, "Historical Perspectives on Racial Differences in Schooling in the United States," available at <http://www.nber.org/papers/w9770>. In this paper we attempt to provide a historical perspective on contemporary racial differences in schooling. Our focus on the past is predicated on the belief that policy debates are enriched by historical perspective. At the most basic level, historical perspective tells us whether the issue under study is transitory or permanent. Factors that are alleged to be important at a point in time may turn out to be less important for change over time (or vice versa).

The evidence discussed in the paper draws heavily on recently available public use samples of various historical censuses, as well as other public documents. This evidence is then interpreted in an "analytic narrative" that is conceptually based on a simple model of optimal human capital investment.

Our narrative has three key themes. First, in all of the dimensions of schooling that our data speak to, the long-term pattern is one of substantial racial convergence at the national level, where "long-term" refers to comparisons between the present and the period shortly after the Civil War. Second, the convergence is not a recent phenomenon; in particular, it began long before the civil rights movement of the 1960s.

Third, the South is central to the story. In the immediate aftermath of the Civil War the vast majority (around 90 percent) of the nation's African Americans lived in the South, and the initial racial gap in schooling within the South was enormous. But closing this intra-regional gap was not the only problem, because schooling levels in the South lagged behind levels elsewhere in the country. Further, because most whites did not live in the South, racial convergence at the national level was not solely a matter of closing the racial gap within the South, but also a function of general improvement in educational conditions in the South relative to the rest of the country.

Illiteracy and Educational Attainment

Our paper considers a variety of indicators of schooling in depth, but the data on illiteracy rates, years of schooling, and school attendance serve to illustrate these basic themes. In 1870, the first year for which national data by race on school attendance and literacy were reported, approximately 81 percent of blacks over the age of ten were illiterate, and the racial gap in literacy at the national level stood at 68 percentage points.

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Letter from the Director

James P. Ziliak

On the 50th anniversary of the landmark *Brown vs. Board of Education* decision by the U.S. Supreme Court, this issue of *Insights on Southern Poverty* focuses on the significant role that race has played on the development and continuation of poverty in the South. Specifically, the research highlighted in this issue offers a historical perspective on the evolution and root causes of long-standing black-white gaps prevalent in many measures of socioeconomic well-being in the South, including literacy and educational attainment, infant mortality and access to health care, and historic patterns of landownership and employment.

William Collins and Robert A. Margo of Vanderbilt University begin the issue by examining historical patterns of racial differences in schooling—through measures such as literacy, years of schooling, and school attendance—in the South. They document a long-term trend of substantial racial convergence in educational attainment at the national level in the years following the Civil War, particularly in the South, where the antebellum black-white gap in schooling had been enormous.

Next, Douglas V. Almond of NBER, Kenneth Y. Chay of the University of California-Berkeley, and Michael Greenstone of MIT examine the convergence of black-white infant mortality rates in the South since the mid-1960s, arguing that southern blacks' access to health care—particularly in rural areas—increased significantly as a result of federally mandated desegregation programs during the civil rights era.

Finally, Dwight B. Billings of the University of Kentucky and Kathleen M. Blee of the University of Pittsburgh offer a historical perspective on the role of racial dynamics on poverty as experienced by black and white residents of Clay County, Kentucky, long one of the most distressed counties in Appalachia. Drawing on longitudinal historical analysis of nineteenth-century census data, wills, court records, and other ethnographic materials, Billings and Blee outline the development of black-white patterns of landownership, employment, and family and relationship ties that still shape distinctions of poverty along racial lines in the county today.

2004-2005 University of Kentucky Dissertation Fellowship Winner

Chris Clark, Ph.D. student, Department of Economics, University of Kentucky

Mr. Clark's project, entitled "Public Policy and Youth," analyzes a number of public policy issues and their impacts on adolescents. In particular, he examines the effects of exogenous school grade structure differences on student behavior; subsidized school meal programs; and modifications in the No Child Left Behind Act of 2001 that have changed family and school incentives in evaluating participation in subsidized school meal programs.

**Historical Perspectives on
Racial Differences in Schooling
(continued)**

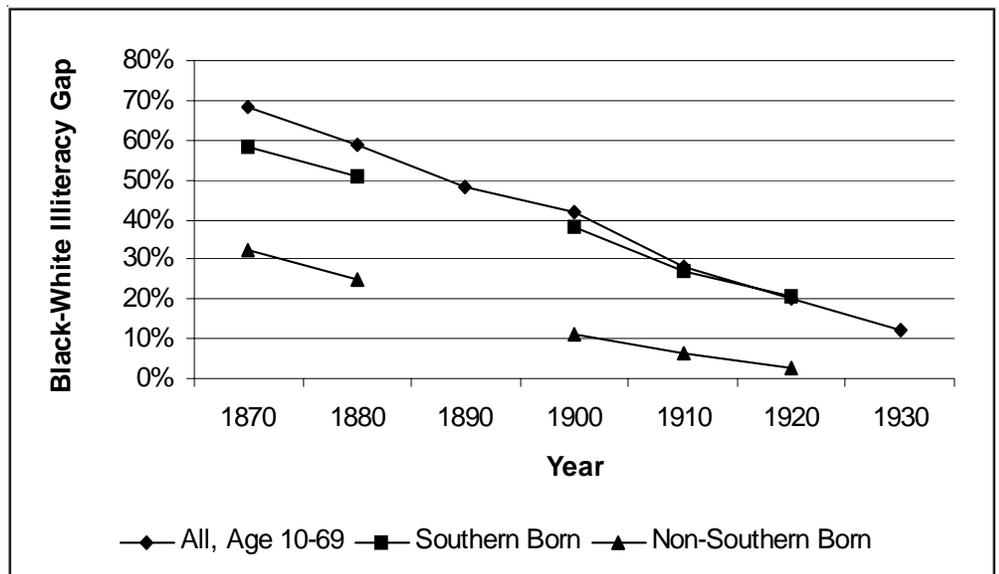
By 1900 the racial gap in literacy had fallen to 42 percentage points, and to 12 percentage points in 1930, the last year such data were collected by the census. Figure 1 illustrates that the narrowing gap in illiteracy between blacks and whites from 1870 to 1930 prevailed for both southern born and non-southern born Americans.

As we discuss in our paper, census illiteracy actually measures the absence, or near absence, of contact with formal schooling. The declines in African American illiteracy were overwhelmingly a cohort phenomenon; that is, the replacement of high illiteracy cohorts by low illiteracy cohorts over time. Gains in literacy within cohorts were small by comparison. Black illiteracy declined because school attendance rates of black children increased sharply over time. These increases in black schooling occurred throughout the country but were especially large in the South.

Data on years of schooling, a more familiar measure, were first collected in 1940. As shown in Figure 2, the black-white difference in mean years of schooling converged over time and regionally, so that the gap in education was relatively the same for blacks and whites born between 1950 and 1954, regardless of their place of birth.

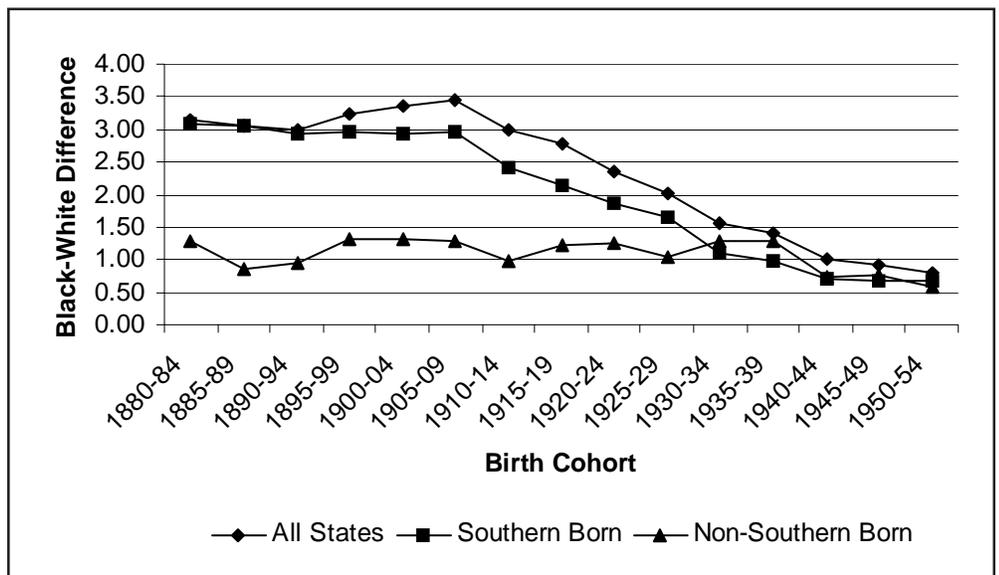
Although the long-run pattern was one of racial convergence for each of the various indicators of schooling we analyzed, the pace of convergence varied over time, and for some indicators there were periods of retrogression. Convergence in literacy and school attendance rates was especially rapid in the first few decades after the Civil War but slowed around the turn of the century. This was the era of Jim Crow's rise and of widespread disenfranchisement of blacks (and poor whites) in the South. One consequence of disenfranchisement was a decline in the relative quality of schools attended by black children in the South. These schools were racially segregated by law and, according to the Supreme Court

Figure 1: Racial Gap in Illiteracy (Black-White), 1870-1930



Notes: Samples include black and white persons, age ten to sixty-nine. Those who cannot write are counted as illiterate, regardless of ability to read (following census convention according to U.S. Dept. of Commerce, 1975 p. 365). Those with birthplace code "U.S., not specified" are not included in the "Southern Born" versus "Non-Southern Born" tabulations. **Sources:** 1870, 1880, 1900, 1910, and 1920 figures are calculated using the IPUMS census data (Ruggles et al. 1997). The figures for 1890 and 1930 are calculated using the published census volumes.

Figure 2: Black-White Difference in Mean Years of Education by Region and Birth Cohort, 1880-1954



Notes: The topcoded level of educational attainment changed over time. In 1940 and 1950, the topcode was for five (or more) years of college; in 1960 and 1970, the topcode was for six (or more) years of college; for 1980, the topcode was for eight (or more) years of college. **Sources:** Figures for the 1880-84 to 1905-09 cohorts are calculated using the 1940 IPUMS; figures for 1910-14 to 1915-19 are calculated using the 1950 IPUMS; figures for 1920-24 to 1925-29 are calculated using the 1960 IPUMS; 1930-34 to 1935-39 are calculated using the 1970 IPUMS; 1940-44 to 1950-54 are calculated using the 1980 IPUMS.

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Historical Perspectives on Racial Differences in Schooling (continued)

decision in *Plessy v. Ferguson*, were supposed to be “equal” to schools attended by white children—but, in reality, they were not. A variety of studies surveyed in the paper show that the failure to enforce the “equal” part of “separate but equal” was an important factor in slowing racial convergence in schooling in the South during the early twentieth century. But of even greater importance was the “intergenerational drag” exerted by the high rates of adult illiteracy inherited from the slave regime. With little or nothing in the way of compulsory schooling laws, school attendance was deeply shaped by parental attitudes and alternative demands on children’s time, including child labor. Econometric analysis of school attendance decisions shows that (controlling for other factors) illiterate parents were far less likely to send their children to school. As adult illiteracy declined, however, this factor became less of a drag on black educational advancement.

Returns to Schooling

The overt racial prejudice and labor market discrimination that existed during the early twentieth century—and not only in the South—might suggest that schooling had little or no economic payoff for blacks. As illustrated in Figure 3, our estimates show that the returns to literacy were higher for whites across all time periods regardless of region. Nonetheless, while our analysis suggests that educational payoff was lower at the margin for blacks than for whites, it was still substantial in absolute terms, especially in the South. The payoff came in the form of higher occupational status and wealth accumulation and in addition, for southern blacks, a greater likelihood of migrating to the “high-wage” North. The effect of schooling on migration notwithstanding, the bulk of African American migration from the rural South during the first half of the twentieth century occurred in spurts, driven by increases in non-farm labor demand during the two World Wars.

Figure 3: The Returns to Literacy, by Race and Region, 1870-1920

	1870	1880	1900	1910	1920
National					
White	16%	13%	17%	17%	19%
Black	11%	7%	12%	14%	12%
South					
White	18%	15%	20%	24%	29%
Black	12%	7%	12%	13%	11%
Non-South					
White	11%	9%	12%	11%	12%
Black	6%	3%	2%	4%	0%

Notes: Each coefficient in the table is from a separate regression of log occupational status on a fourth-order polynomial in age, region dummies (when multiple regions are included), central city and suburban residence dummies, and dummies for inter-regional and international migrants. Unpaid family farm workers are excluded. The occupational status index is based on the median total income in 1960 for men by race, region (Northeast, Midwest, South, West), and three-digit occupation cells. With the exception of the sample of blacks in the non-South, all estimated returns to literacy are statistically significant at the 95 percent confidence level. **Source:** Computed from IPUMS samples (Ruggles et al. 1997).

Our analytical narrative identifies a variety of factors behind the long-run convergence. The initial gap was enormous because blacks emerged from slavery with essentially no formal schooling. As long as the rate of return to schooling was positive—and it was, certainly, for basic literacy—some convergence would have surely taken place. Analysis of school attendance data in 1900 suggests the presence of pure “catch-up,” a willingness of black parents to invest in the human capital of their children above what would be predicted given the historical circumstances. Government, on the other hand, was a fickle partner. In the immediate aftermath of the Civil War, the federal government was instrumental in setting up public—

though racially segregated—schools for black children in the South. With the end of Reconstruction, the federal government largely abandoned the South, and disenfranchisement left black parents with essentially no political voice at the state and local level in the South. While the allocation of school resources turned against blacks, the schools themselves did not vanish—in fact, they improved in quality over time. Private philanthropy played an important role in these improvements as did (later on in the century) court action, social activism, and government intervention.

To access the complete working paper from which this summary is taken, go to <http://www.nber.org/papers/w9770>.

“Black illiteracy declined because school attendance rates of black children increased sharply over time. These increases in black schooling occurred throughout the country but were especially large in the South.”

Conclusion

Our paper documents long-run convergence in conventional, relatively easily measured indicators of schooling, such as attendance, years of schooling, and resources per pupil. In the past, racial differences in these conventional measures were very large, and, arguably because they were so large, of “first-order” importance at the time. Long-term racial convergence in these measures has produced economically significant gains in the relative economic status of African Americans.

But human capital production depends on much that is intangible and arguably less amenable to straightforward policy intervention than the gross racial disparities of the past. The importance of intangible “inputs” shows up, for example, in the stubborn refusal of the racial gap in test scores to disappear even after controlling for a wide array of measurable socioeconomic and school inputs. While it is probable that racial differences in these difficult-to-measure aspects of schooling have also converged over time, we cannot be sure. If they have, we can expect the remaining racial gaps to diminish in the future, although perhaps at a much slower pace than the initial gaps did more than a century ago.

References:

Ruggles, Steven, et al. 1997. *Integrated Public Use Microdata Series*. Minneapolis: Historical Census Projects, University of Minnesota.

William Collins is an associate professor of economics at Vanderbilt University and a faculty research fellow of the National Bureau of Economic Research. Robert A. Margo is a professor of economics and of history at Vanderbilt University and a research associate of the National Bureau of Economic Research.

2004 University of Kentucky Faculty Research Support Program Winners

Christopher R. Bollinger, Department of Economics, “Program Usage and Poverty among Refugees in the South”

Richard C. Fording, Department of Political Science, “Race and Discretion in the Implementation of Welfare Reform: An Analysis of Local Variation in TANF Sanctioning Policies”

Claudia J. Heath, Research Center for Families and Children, “The Effects of Marriage on Economic Well-Being of Families in Kentucky”

2004-2005 Winners of the Young Investigator Development Grants Program

Charles L. Baum, Economics and Finance Department, Middle Tennessee State University, “The Effect of Liberalizing State Vehicle Asset Rules on Food Stamp Program Participation”

Matthew Foulkes, Department of Geography, University of Missouri, “Migration, Residential Mobility, and Housing Instability in Impoverished Rural Mobile Home Parks”

Gary A. Hoover, Department of Economics, Finance, and Legal Studies, University of Alabama, “Examining the Relationship between the Poverty Rate and Economic Conditions in the South”

Deborah Hwa-Froelich, Department of Communication Sciences and Disorders, Saint Louis University, “Communication of Depressed Maternal-Child Dyads”

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Civil Rights and Black-White Convergence in Infant Mortality in the Rural South

Douglas V. Almond, Kenneth Y. Chay, and Michael Greenstone

Overview

In 1964 the infant mortality rate of African Americans was twice as high as that of white Americans. Over the next ten years the fraction of black infants who died within a year of birth fell from 40 per 1,000—a rate comparable to current levels in China or Peru—to 25 per 1,000. The *relative* infant mortality rate (IMR) of blacks also fell significantly in the late 1960s and early 1970s. The ten-year period from 1965 to 1975 marked the only decade of sustained improvement in the ratio of black to white infant mortality in the second half of the twentieth century. While the black-white IMR gap narrowed in all regions of the U.S., the convergence was particularly large in the rural South, where access to hospital care, as measured by the relative fraction of births occurring in hospitals, increased the most.

We argue that the trend shift in black infant mortality rates in the South in the mid-1960s was driven by federally mandated desegregation efforts that increased black infants' access to hospital care. We reached this conclusion based on a case-study of Mississippi that utilizes a unique county-level data set from that state. We chose to focus on Mississippi because it experienced some of the largest changes in both infant health and access to medical care during the 1960s.

Figure 1 reveals that in the beginning of that decade, there were approximately 300-350 black post-neonatal deaths¹ due to diarrhea and pneumonia, while there were fewer than 50 white post-neonatal deaths due to these causes of death. This disparity is particularly striking, because the number of white and black births was roughly equal in these years. As Figure 1 further demonstrates, the number of black infant deaths in this category began to plummet in 1965 and by 1975 had declined to less than 50. In contrast, the number of white

infant deaths remained nearly constant. This dramatic reduction in post-neonatal mortality rates for these two causes of death is especially important, because they accounted for a high fraction of overall black infant mortality. Further, effective treatments for these diseases were well known and widely used but generally were administered in hospitals throughout this period.

The remainder of this article summarizes the steps by which we came to isolate the large health changes depicted in Figure 1. Moreover, it explains why we believe they are due to the desegregation of health care facilities that resulted from Title VI of the 1964 Civil Rights Act and a decision to limit the receipt of Medicare monies to health care facilities that were certified as integrated. Readers interested

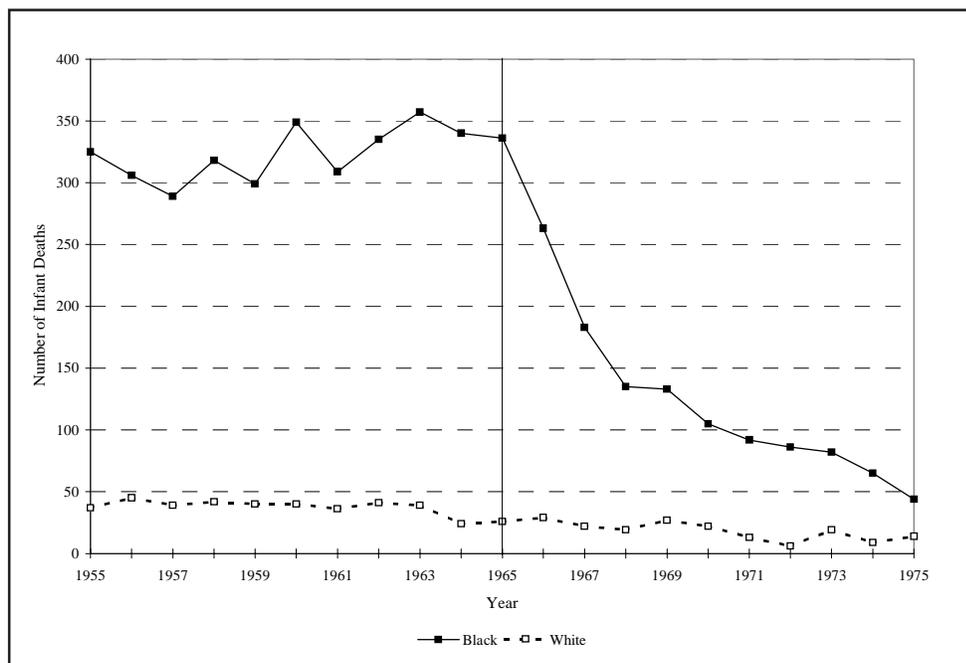
in a more detailed explanation are directed to our paper, “Civil Rights, the War on Poverty, and Black-White Convergence in Infant Mortality in Mississippi,” available at <http://emlab.berkeley.edu/users/kenchay/ftp/binresp/mspaper.pdf>.

To access the complete paper from which this summary is taken, go to <http://emlab.berkeley.edu/users/kenchay/ftp/binresp/mspaper.pdf>.

Post-War Infant Mortality and Black-White Convergence During the Civil Rights Era

Figure 2 shows national trends in nonwhite and white infant mortality rates within a year of birth (per 1,000 live births) for the United States from 1950 to 1990.² It also shows the nonwhite-white infant mortality rate (IMR) ratio. In 1950, about 2.5 percent of white infants and 4.5 percent of black infants died within a year of birth. From 1965 to 1971 the black infant

Figure 1: Number of Post-Neonatal Infant Deaths Due to Diarrhea and Pneumonia by Race, All of Mississippi, 1955-1975



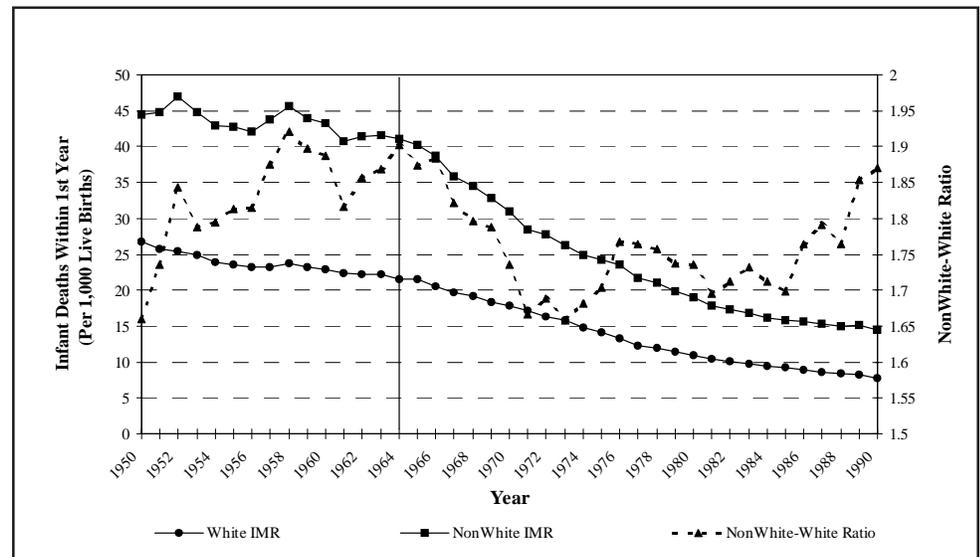
mortality rate and the black-white ratio declined sharply relative to pre-existing trends. While relatively stable from 1961 to 1965, the black infant mortality rate fell 30 percent from 40 per 1,000 live births in 1965 to 28 in 1971. At the same time, the black-white ratio fell from 1.9 to 1.65, the only prolonged convergence in the post-World War II era.

Before 1965 the black-white gap in infant mortality rates was especially large in the rural South, where about 5 percent of all black infants died within a year of birth—a rate two times greater than that of their white counterparts. Further, the black infant mortality rate in the rural South in 1965 was 20 percent higher than the rates in the urban South and Rust Belt (Illinois, Michigan, New York, Ohio, and Pennsylvania) and comparable to the current rate in South Africa.

Trend-break regression models imply that the black infant mortality rate in the rural South was about 22 deaths per 1,000 births lower in 1975 than it would have been if the pre-1965 trends had prevailed. Further, the estimates imply that while the black-white gap in the rural South expanded from 1955 to 1965, the black-white ratio in 1975 was 0.64 points lower than it would have been in the absence of the trend break. This reduction is about two and a half times greater than the convergence that occurred in the nation as a whole.

The patterns described above for infant mortality rates are more pronounced in the post-neonatal period. Before 1965, the black post-neonatal mortality rate in the rural South was 50 percent greater than the black rate in the urban South, over two times greater than the black rate in the urban North, and four times greater than the rate for whites nationally. In the ten years following 1965, the black post-neonatal mortality rate in the rural South was halved, from over 20 to 10 deaths per 1,000 live births, converging with the black rates in the

Figure 2: Trends in Infant Mortality by Race, 1950-1990



Note: Alaska included in 1959 and Hawaii in 1960. Source: Various issues of *Vital Statistics of the United States*.

urban South and North. Finally, estimates from trend-break models for the rural South indicate even larger declines: the black post-neonatal mortality rate was over 15 deaths per 1,000 births lower in 1975 than it would have been in the absence of the trend break. This reduction is twice that of the urban South and four to six times larger than the declines in the rest of the country.

Figure 3 shows trends in black and white post-neonatal mortality rates from 1941 to 1971 for Mississippi, Alabama, Illinois, and New York—states with large African American populations. Before 1965 post-neonatal mortality rates were highest among black infants in Mississippi. In 1965 the black post-neonatal death rate in Mississippi was 26 per 1,000 live births—30 percent greater than the black rate in Alabama, two to two and a half times greater than the black rates in Illinois and New York, and five times the rates for white infants in all four states. However, Mississippi also experienced the sharpest decline in black post-neonatal mortality after 1965,

with the black infant death rate falling over 50 percent from 1965 to 1971.

These stark patterns in post-neonatal mortality were telling, because post-neonatal mortality deaths tend to be caused by negative events after birth, such as infectious disease. Aggressive medical intervention can often prevent these negative events from leading to death relative to the generally more intractable circumstances that may lead to neonatal death. We therefore explore more closely changes in the provision of health care that may have affected such large improvements for black infants.

Federal Intervention

In 1963, the U.S. Supreme Court determined that previous legislation permitting federal funding for “separate but equal” health facilities was unconstitutional. The next year, Title VI of the 1964 Civil Rights Act prohibited discrimination and segregation in institutions receiving federal financial assistance, including all public hospitals. One goal of Title VI was to eliminate racial discrimination in access to medical care, particularly in the South. It soon became evident, however, that this legislation would be ineffective without meaningful enforcement tools.

The 1965 Medicare Act gave Title VI bite. The Act withheld Medicare certification and funding from hospitals

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Civil Rights and Black-White Convergence in Infant Mortality in the Rural South (continued)

that could not provide evidence of integrated facilities and equality of care. Title VI was enforced aggressively and is believed to have resulted in a dramatic integration of southern hospitals that began in the last half of 1966 (Quadagno 1999 and Smith 1999).

The Convergence in Black-White Infant Mortality in Mississippi

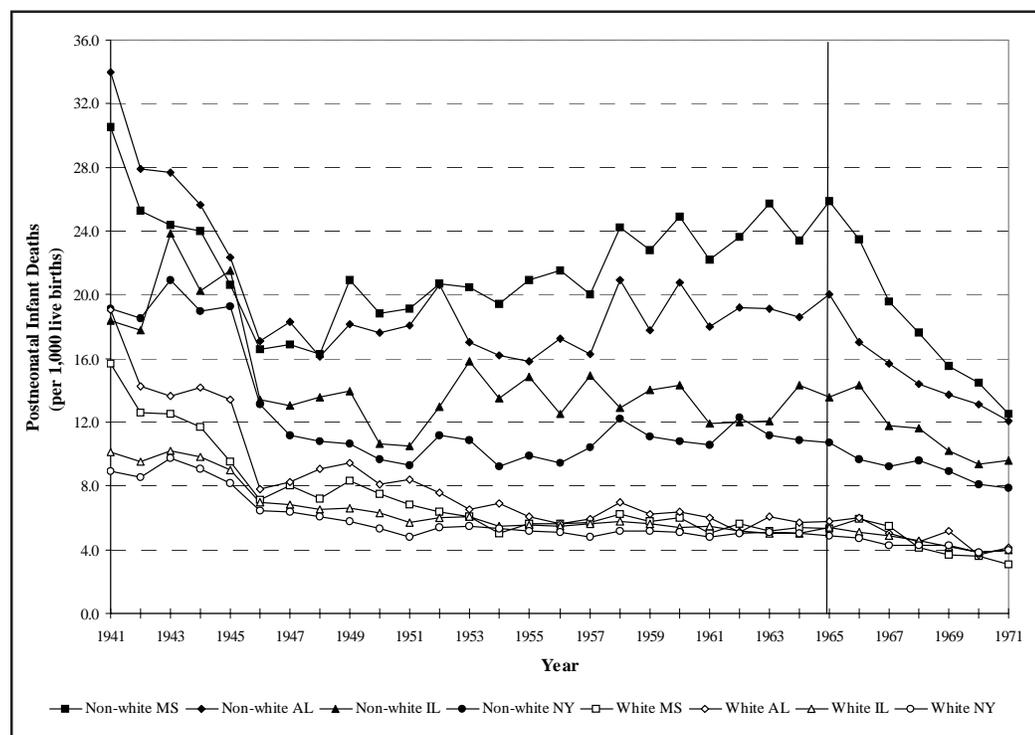
Before the mid-1960s, Mississippi had the highest infant mortality rate in the nation—25 percent higher than the next highest state. Furthermore, black infants born in Mississippi were more than twice as likely to die in their first year after birth as white infants and four to five times more likely to die in the post-neonatal period.

We argue that the sizeable gap in the black-white IMR in Mississippi stemmed from the strictly segregated hospital care in that state until the mid-1960s. Before 1965, the disparity in the number of hospital beds per birth for whites and blacks was stunning. This was especially the case in the Mississippi Delta (an area with a large proportion of low-income and black residents) where the number of hospital beds per black birth was about six times lower than the *black* rate in the rest of the state. Further, the black-white relative access rate for hospital care was about four times lower in the Delta than in the rest of Mississippi and showed no improvement in the years leading up to Title VI.

After 1965, there was a sharp increase in the proportion of black births that occurred in hospitals. For example, black hospital birth rates in the Delta increased from roughly 40 percent in 1965 to 90 percent in 1972. The strong convergence in black hospitalization rates toward the white rate suggests that black access to hospital care was improving at the same time that black infant health registered its largest gains.

In 1965, the black post-neonatal mortality rate in the Mississippi Delta was 20 percent greater than in the rest of the state. However, there was a particularly sharp reduction in black post-neonatal mortality in the Delta from 1965-1968, with the rate falling 35 percent. The initial

Figure 3: Post-neonatal Mortality Rates by Race for Selected States, 1941-1971



disparity and subsequent reduction in deaths from gastrointestinal disease, pneumonia, and influenza was even larger. More disturbingly, from 1959 to 1965, black post-neonatal mortality from these causes in the Delta grew from 9.8 to 14.5 deaths per 1,000 live births—nearly 50 percent greater than the black rate in the rest of the state and ten to fifteen times greater than the white mortality rates. By 1968 diarrhea- and pneumonia-induced post-neonatal death among blacks in the Delta had been more than halved to 6.2 per 1,000 births. This decline accounts for 85 percent of the 1965-1968 post-neonatal mortality reduction for Delta blacks.

We probed the validity of our hypothesis that hospital integration, induced by enforcement of Title VI, led to these substantial improvements in black infant health in Mississippi after 1965 in a number of ways. Perhaps our most convincing test comes from a comparison of Delta counties that did and did not contain at least one hospital that received Medicare certification by February 1969. Of the twenty-four counties in the Mississippi Delta, fifteen contained Medicare-certified hospitals by February 1969, and nine did not.

Figure 4 shows the results of this comparison. Panel A presents trends from 1959 to 1970 in black post-neonatal mortality due to diarrhea and pneumonia in the two sets of Delta counties. If Medicare certification is a valid proxy for whether a hospital had integrated, then there should be larger reductions in black infant mortality after 1965 in counties containing such a hospital.

The patterns are consistent with the hospital integration explanation. In the Delta counties that did not contain hospitals receiving Medicare certification soon after Title VI, the black rate of death due to these two treatable causes was relatively stable from 1959 to 1968, before declining in 1969 and 1970. However, after increasing steadily from 1959 to 1965, the black post-neonatal death rate due to pneumonia and diarrhea fell by 64 percent from 1965 to 1968 in the Delta counties containing Medicare-certified hospitals. From 1965 to 1968, the black mortality rate due to these causes fell by 7.5 per 1,000 births more in “integrating” counties than in “non-integrating” ones. It appears that nearly all of the 1965-1968 reduction in black infant death due to preventable causes in the Delta was concentrated in counties containing hospitals that were in compliance with Title VI.³

While black infant mortality in the Delta counties with “non-complying” hospitals fell in 1969 and 1970, Panel B of Figure 4 provides evidence that black mothers living in these counties may have sought hospital care in counties with integrated hospitals. Panel B demonstrates a clear shift up in the likelihood that black mothers living in “non-integrated” counties gave birth in “integrated” counties in the late 1960s. White mothers residing in the non-integrated Delta counties, however, do not exhibit any change in behavior after 1965. Overall, the findings from Panels A and B are consistent with the hypothesis that hospital integration was a causal factor in reducing black infant mortality rates in Mississippi.

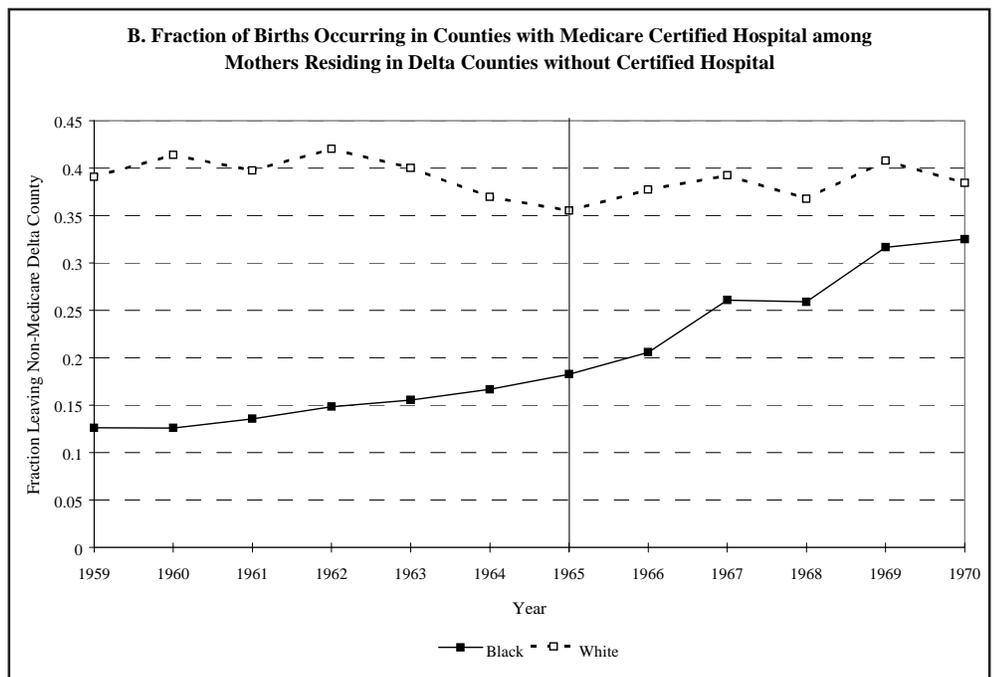
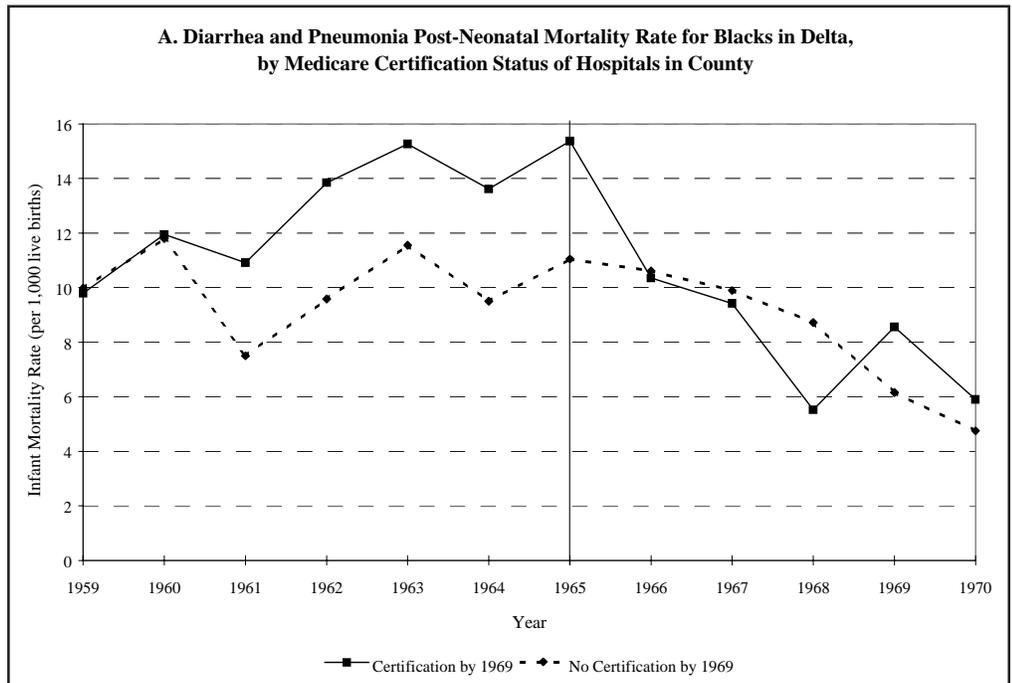
Conclusion

The period between 1965 and 1971 represents the key period for improvements in the relative health of black infants over the past fifty years. Although the black-white infant mortality gap narrowed in all regions of the United States, the convergence was particularly large in the rural South. Further, this convergence was concentrated among post-neonatal causes of death for which effective treatments were well known, widely used, and generally administered in hospitals throughout this period. Overall, the evidence supports the hypothesis that this improvement in black infant health outcomes was caused by the enforcement of Title VI of the 1964 Civil Rights Act.

Future research should seek to understand the sources of the more modest improvements in black infant health in other regions. Although we have not discussed it here, we find some evidence that secular prenatal interventions targeted at the disadvantaged may be relevant in the central cities of the North. This study has also demonstrated that micro-level case studies may be a fruitful method to uncover the factors underlying changes in infant health by race and socioeconomic status.

Douglas V. Almond is an economist at NBER, Kenneth Y. Chay is an associate professor of economics at the University of California at Berkeley, and Michael Greenstone is an associate professor of economics at MIT.

Figure 4: Mortality and Birth Rates for Blacks in the Delta, by Whether Mother’s Residence County Contains a Hospital Receiving Medicare Certification by February 1969



Notes:

1. Infant deaths are those that occur within their first year of life and post-neonatal deaths take place in the period from twenty-eight days to one year after birth.
2. The data are from the Vital Statistics of the United States annual publications. In 1965, black births accounted for 92 percent of all nonwhite births in the U.S. and 99.5 percent of nonwhite births in Mississippi.
3. Results from comparing counties with hos-

pitals certified by February 1967 to counties without hospitals certified before 1970 are very similar.

References:

Quadagno, Jill. “How Medicare Promoted Racial Integration in the Health Care System: Explaining Variation in Social Movement Outcomes.” Mimeo, Florida State University, 1999.
 Smith, David Barton. *Health Care Divided: Race and Healing a Nation*. Ann Arbor: University of Michigan Press, 1999.

Racial Dynamics and Poverty in Appalachia

Dwight B. Billings and Kathleen M. Blee

Overview

With a median income of \$16,271 in 2000, Clay County is one of the poorest counties in Kentucky, along with nearby Owsley and Wolfe Counties. Forty percent of its population lives below the poverty line—more than three times the national average—making it the twenty-second poorest county in the nation. Even in comparison with other Appalachian counties, Clay County's poverty stands out: it is one of ninety-one counties currently designated as "distressed" by the Appalachian Regional Commission. Although poverty in the county has long been widespread, the experience of poverty has been different for Clay County's African American and white residents. These racial differences are rooted in patterns of exploitation and opportunity from the nineteenth century.

This article provides a summary of Chapter 6, "Racial Dynamics and the Creation of Poverty," from our book *The Road to Poverty: The Making of Wealth and Hardship in Appalachia* (Cambridge University Press, 2000). The work draws on longitudinal historical analysis of nineteenth-century census data, wills, court records, and other ethnographic materials for Clay County, Kentucky, as well as pioneering sociological research conducted there from the 1940s to the 1970s by James S. Brown, Harry Schwarzweller, and J.J. Mangalam.

From these materials, comparisons are made between Clay County's African American residents and white residents of Beech Creek—a set of well-studied rural neighborhoods within the county—in order to understand the different historical trajectories that led African Americans and whites into poverty in the county.

The Dynamics of Race

Despite its present-day racial homogeneity (only 1.7 percent African American in 1990), Clay County had significant numbers of both enslaved and

free African Americans in the nineteenth century. Most antebellum African American residents of the county were enslaved: slaves comprised more than three-quarters of the county's African American population between white settlement and the Civil War. Many slaves were employed in the county's important salt-making industry. In 1850, there were 515 enslaved persons in Clay County, constituting nearly 10 percent of the county's total population. Although low in comparison with the state of Kentucky as a whole (in which 21 percent of the population was enslaved), this was the highest rate of slaveholding in the Kentucky mountains.

In 1860, when less than 10 percent of southern Appalachian African Americans were free, almost one-half (43 percent) of African Americans in Clay County were free.

After 1880, however, African Americans in the county decreased both as a percentage of the population and in absolute numbers; by the late nineteenth and early twentieth centuries there was a near disappearance of African Americans from the area.

Migration and Persistence

In 1840, 15 percent of Clay Countians were African American. Fifty years later, this proportion had dropped to 3 percent. What caused such a rapid decline in the county's racial diversity? Some factors were the same that motivated many whites to leave, including a heightened concentration of landownership that made small farming increasingly problematic and the expansion of employment opportunities elsewhere in mining, lumbering, and

industry. Racial violence and racial terrorism also played a role in the exodus of African Americans.

Yet what were the characteristics of those who remained and those who left? And how did patterns of persistence or mobility affect the long-term economic situations of those who remained in Clay County?

A more full discussion of this topic may be found in Chapter 6 of The Road to Poverty: The Making of Wealth and Hardship in Appalachia (Cambridge University Press, 2000).

Table 1 compares rates of persistence of Clay County's African American household heads with those of whites in the Beech Creek neighborhood and compares the rates of persistence of landowners with total persistence at each period and across race.

Both African Americans and whites had fairly low rates of persistence, mirroring the pattern found in other southeastern areas. Only in the case of African Americans from 1860 to 1870 were more than one-half of household heads found a decade later. Nearly half the time, fewer than one-third of them could be found.

With the exception of the period between 1850 and 1860, the rate of persistence of African American household heads was stable. White household heads had more variable persistence rates, including a dramatically low rate of 15 percent from 1880 to 1900. Such a racial difference may indicate that whites were more likely than African Americans to respond to the pull of economic opportunities elsewhere, such as the lumbering and mining booms between 1880 and 1900. The decisions of African American families may have reflected instead the more constant push of economic instability and racial tensions.

Resource Accumulation

In the early decades of the nineteenth century, wealth and the ability to accumulate it were based fundamentally on landownership. In Clay County, racial dynamics structured landownership and etched enduring patterns of wealth and poverty in the county.

Landownership was exceedingly uncommon among African Americans in antebellum Clay County, as it was throughout the South. Only ten African Americans in Clay County owned land in 1860, and seven of these came from just three families. In 1860, 24 percent of African American household heads owned land (22 percent in 1850), compared to 64 percent of white household heads (54 percent in 1850).

As shown in Table 2, together, all free African Americans in Clay County owned only \$6,200 in farmland, or \$35 per capita in 1850; by 1860 this amount had barely increased, to \$9,300, or \$36 per capita. By comparison, whites owned more than twice as much per capita in 1850 (\$82), and four times as much (\$145) ten years later.

There are also striking differences in the value of land owned by whites and African Americans. In 1850, the average African American landowner in Clay County owned \$775 worth of land, compared to \$945, or 22 percent more, for whites. Ten years later, the disparity had increased significantly: African American landowners owned \$880, whereas whites owned \$1,281, or 45 percent more.

The pattern of African American landlessness continued almost unchanged into the postbellum period. In 1870, whites in Clay County still owned more than 400 percent as much real property per capita as African Americans. Moreover, the value of property held by Clay County’s postbellum African Americans was low even by standards of southern states. In 1870, African Americans in the upper South averaged real estate holdings of \$746; in the state of Kentucky, \$684; in Clay County, only \$486.

While virtually all adult males in antebellum Clay County censuses

Table 1: Persistence Rates of African Americans and Whites: All Household Heads and Landowning Household Heads, Clay County, 1850-1910

Race	1850-60	1860-70	1870-80	1880-90	1900-1910
African American					
Total	41%	24%	27%	29%	27%
Owners	38%	60%	48%	n/a	24%
White					
Total	29%	27%	34%	15%	40%
Owners	41%	40%	38%	n/a	41%

Sources: U.S. Bureau of the Census, 1850-1880, 1900-1910.

Table 2: Characteristics of Landowners, by Race, Clay County, 1850-1870

Characteristic	1850		1860		1870	
	African American	White	African American	White	African American	White
Number of landowners	8	37	10	57	21	120
Percentage of household heads owning land	22%	54%	24%	64%	24%	64%
Mean value of land	\$775	\$945	\$880	\$1,281	\$486	\$700
Aggregate value of land	\$6,200	\$34,962	\$9,300	\$73,306	\$10,200	\$86,087
Mean per capita value of land	\$35	\$82	\$36	\$145	\$21	\$92

Sources: U.S. Bureau of the Census, 1850-1870.

reported themselves as farmers, the apparent racial similarity in occupation masked significant differences. According to the 1860 census, 85 percent of African Americans working on farms, compared to 57 percent of whites, worked as shareholders, tenants, or hired laborers—as opposed to owning their own land.

Of the sixty-four African American household heads engaged in agriculture in 1870, only eighteen (28 percent) were owner-operators; the rest were tenants or farm laborers. Nine years later, only 22 percent were owner-operators.

Moreover, the farms of most antebellum African American owner-operators were tiny, typically yielding

fewer than 100 bushels of corn. African American-owned farms in 1870 produced only slightly more than \$200, compared to nearly \$400 for the farms of Beech Creek whites. By 1879, this racial disparity had widened even further: African American-owned farms generated only \$172, compared to \$375 for Beech Creek white-owned farms.

Of those farmers who did not own their own land, permanent tenancy (as opposed to tenancy awaiting inheritance) was more common among African Americans.

Of those who did not farm in antebellum Clay County, African Americans were almost entirely restricted to service occupations: servants, washerwomen, seamstresses, and cake

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bakers. In contrast, some whites in Beech Creek established themselves in retail trade, craft production, and semiprofessions. Very few whites worked as servants.

African American women were much more likely than white women to report paid occupations. In 1860, 42 percent of employed African Americans were women, who held a variety of service and farming occupations. Interestingly, three African American women (but no white women) owned land and other property in 1870, although none of them were listed in the census as a farmer.

Educational opportunities for non-enslaved African Americans in Clay County initially were highly restricted. Only two attended school in 1850. Later, as education was opened to both races, African American household heads gained in educational attainment somewhat proportionally to whites, but fewer than one-third of them, compared to almost one-half of white heads, could read by 1880. Further, as indicated in Table 3, literacy was possessed disproportionately by men during every time period and for both races, although the gender gap was wider among whites than among African Americans.

Household and Family Structure

Between 1850 and 1860, the declining fortunes of salt—and the resultant reduction in demand for slave labor—reduced the number of slaves in Clay County and changed the living situations of those enslaved persons who remained. Still only 3 percent (11) of slaves lived in households in which they were the only slave and another 8 percent (29) lived with one to three other slaves. But a substantially larger number—140, or 40

Table 3: Literacy, by Gender and Race, Clay County, 1850-1910

Year	African American		White	
	Men	Women	Men	Women
1850	6%	0%	39%	27%
1860	33%	11%	57%	23%
1870	29%	19%	69%	47%
1880	30%	16%	57%	34%
1900	66%	56%	84%	70%
1910	75%	64%	86%	77%

Note: The sample includes only those at least fourteen years of age. Sources: U.S. Bureau of the Census, 1850-1880, 1900-1910.

percent—lived in groups of five to ten slaves. Only 23 percent (83) lived with eleven to twenty slaves, and 26 percent (91) in groups larger than 20. The demographic distribution of Clay County slaves suggests that few lived with family members.

The living situations of Clay County's free African Americans were also markedly different from those of whites. Antebellum African American-headed households were far more likely to be female-headed (32 percent in 1850 and 45 percent in 1860) than were households headed by whites (8 percent in 1850 and 6 percent in 1860).

Over 20 percent of all free African Americans in Clay County, but no more than 3 percent of Beech Creek whites, lived in households headed by nonkin in every decade from 1850 to 1870. Thus, African Americans were about eight times as likely as whites to live with nonrelatives. This racial difference reflected the extreme economic marginality of most households headed by free African Americans and their consequent inability to absorb additional

dependents, as well as perhaps their drive not to accept or to avoid economic dependence on others. Before 1880, not a single elderly African American lived in a household headed by a relative, whereas significant numbers of elderly whites did.

If the lives of Clay County's adult population differed radically by race, the lives of its children did not. Children of both races worked as farm laborers, field hands, and servants. In 1870, 26 percent of African American children and 20 percent of white children in Clay County reported paid employment. Yet while virtually all white children lived with at least one parent between 1850 and 1870, nearly one-fourth of the African American children lived with someone else, usually as a servant or laborer in a white, nonkin household.

Conclusion

Several key points arise from this comparison of African American and white Clay Countians in the nineteenth century. First, there are racial differences in the relationship between persistent poverty and outmigration. Specifically, in the nineteenth century, possessing the means of economic security (i.e., landownership) increased the likelihood of persisting in the county among whites but increased the likelihood of leaving during some periods for African

“African Americans were about eight times as likely as whites to live with nonrelatives. This racial difference reflected the extreme economic marginality of most households headed by free African Americans. . . .”

Americans. Further, white persisters tended to increase their property accumulation over time, while African American persisters tended to shrink more deeply into poverty.

Second, resource accumulation in nineteenth century Clay County was in part a function of age and life-cycle stage for whites but not for African Americans. For example, while increased age often led to increased landownership for whites, landlessness was likely to be a lifelong condition for the county's African Americans.

Third, as rural Clay County began to change from a subsistence-farming economy to one based increasingly on waged work, white men were better positioned than African Americans or than women to take advantage of new economic, educational, and occupational opportunities.

Finally, the ability to expand or contract households provided a means of survival for economically marginal rural whites, but not for African Americans in nineteenth-century Clay County.

With its overwhelmingly white population, race appears not to be a factor in the poverty of Central Appalachia today. But as the history of Clay County shows, the racial dimension of poverty is not absent in Appalachia, it is simply more complex. In fact, the transition of Clay County from a racially heterogeneous to a racially homogenous place is due in large part to racial inequities in its economic history.

Dwight B. Billings is a professor of sociology at the University of Kentucky. Kathleen M. Blee is a professor of sociology at the University of Pittsburgh.

Emerging Scholars Program

The UK Center for Poverty Research welcomes nominations and applications for the Emerging Scholars Program. This program offers the opportunity for young scholars in the behavioral and social sciences to visit the UKCPR, interact with faculty in residence, present their research, and become acquainted with the staff and resources of the Center. Eligibility is restricted to those holding a Ph.D., with preference given to those who graduated in the last six years. Transportation, lodging, and meal expenses will be coordinated and covered by UKCPR.

Nominations and applications, along with a brief bio and current CV (or links to the latter in the case of anonymous nominations) should be sent to Mrs. Kathryn Kirkland at kaconr0@uky.edu. We will consider nominations and applications for the Fall 2004 term until Friday, **September 3, 2004**, and for the Winter 2005 term until Friday, **December 3, 2004**.

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Selected Books on Race and the Historical Economic Development of the South

Alston, Lee J., and Joseph P. Ferrie. 1999. *Southern Paternalism and the American Welfare State: Economics, Politics, and Institutions in the South, 1865–1965*. Cambridge: Cambridge University Press.

Billings, Dwight B., and Kathleen M. Blee. 2000. *The Road to Poverty: The Making of Wealth and Hardship in Appalachia*. Cambridge: Cambridge University Press.

Duncan, Cynthia M. 1999. *Worlds Apart: Why Poverty Persists in Rural America*. New Haven: Yale University Press.

Fogel, Robert W., and Stanley L. Engerman. 1974. *Time on the Cross*. Volumes 1 and 2, Boston: Little, Brown, & Company.

Higgs, Robert. 1977. *Competition and Coercion: Blacks in the American Economy, 1865–1914*. New York: Cambridge University Press.

Margo, Robert. 1990. *Race and Schooling in the South, 1880–1950: An Economic History*. Chicago: University of Chicago Press.

Ransom, Roger L., and Richard Sutch. 2001. *One Kind of Freedom: The Economic Consequences of Emancipation*. Second Edition, Cambridge: Cambridge University Press.

Wright, Gavin. 1986. *Old South, New South: Revolutions in the Southern Economy since the Civil War*. New York: Basic Books.

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Professor Berger, who passed away in April 2003, was an internationally recognized scholar in the area of labor economics who made significant contributions to our understanding of the effects of health on labor supply, and of cohort size, education, and training on wages, among other topics. He spent his twenty-two-year academic career at the University of Kentucky.

To honor Professor Berger's contributions to economics, some of the world's leading labor economists will present new research on program evaluation, human capital, and labor market public policy. Selected papers from the conference will be published in a special issue of the *Journal of Labor Economics*. The scheduled speakers include (conference organizers are denoted with an *):

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