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ABSTRACT

Rural minorities lag behind rural Whites and urban minorities on many crucial economic and social measures. This collection of 10 papers examines rural Black, Hispanic, Native American, and Asian and Pacific Islander populations and their economic well-being in the 1980s, an economically difficult decade for rural areas. Results show minimal minority progress as measured by changes in occupation, income, and poverty rates. However, the type and speed of progress were quite different among minority groups and between men and women of the same minority group. Results show considerable diversity among groups in the characteristics associated with poor economic outcomes. These characteristics included unemployment, low English proficiency, concentration in agricultural employment, low educational attainment and skill levels, and geographic isolation. Following an introduction by Linda L. Swanson, the papers are: "Education and Rural Minority Job Opportunities" (David A. McGranahan, Kathleen Kassel); "The Ethnic Dimension of Persistent Poverty in Rural and Small-Town Areas" (Calvin L. Beale); "Rural Child Poverty and the Role of Family Structure" (Linda L. Swanson, Laarni T. Dacquel); "Age and Family Structure, by Race/Ethnicity and Place of Residence, 1980-90" (Carolyn C. Rogers); "Increasing Black-White Separation in the Plantation South, 1970-90" (John B. Cromartie, Calvin L. Beale); "Trends in Occupational Status among Rural Southern Blacks" (Robert M. Gibbs); "Education and the Economic Status of Blacks" (Margaret A. Butler); "Hispanics in Rural America: The Influence of Immigration and Language on Economic Well-Being" (Anne B.W. Effland, Kathleen Kassel); "American Indians: Economic Opportunities and Development" (Deborah M. Tootle); and "Asians and Pacific Islanders in Rural and Small-Town America" (Calvin L. Beale). Appendix contains figures and data tables of socioeconomic indicators. (Individual papers contain references.) (SV)

Racial/Ethnic Minorities in Rural Areas: Progress and Stagnation, 1980-90. By Linda L. Swanson (ed.), Rural Economy Division, Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 731.

Abstract

Rural minorities lag behind rural Whites and urban minorities on many crucial economic and social measures. This report examines rural Black, Hispanic, Native American, and Asian and Pacific Islander populations and their economic well-being in the 1980's, an economically difficult decade for rural areas. Results show minimal minority progress as measured by changes in occupation, income, and poverty rates. However, the type and speed of progress was quite different among minority groups and between men and women of the same minority group. Results showed considerable diversity among groups in the characteristics that were associated with poor economic outcomes.

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Contents

Summary

Rural minorities continue to lag behind rural Whites and urban minorities on many economic and social measures. This report concludes that during 1980-90 (an economically difficult decade for rural areas) Blacks, Hispanics, Native Americans, and Asian and Pacific Islanders in rural areas made minimal progress in lowering poverty rates, raising income, and improving occupation status and education levels. Improvements in the economic and social conditions of minorities in small towns and open country areas is a concern of the U.S. Department of Agriculture in its role as coordinator of Federal rural development activities.

The censuses of 1980 and 1990 reveal that the type and speed of socio-economic progress was quite different not only between rural minorities and both rural Whites and urban minorities, but also between men and women of the same minority group. There was considerable diversity among groups in the characteristics that were associated with poor economic prospects.

Since nearly 90 percent of the nonmetro population is White, the poverty population has a similar racial composition. Although almost three-fourths of the nonmetro poor were White in 1989, the probability of being poor was about three times as great for nonmetro Blacks, Hispanics, and Native Americans as it was for Whites.

More than 500 rural counties have had poverty levels of 20 percent or more in each census from 1960 through 1990. Rural minorities tend to be geographically clustered in rural counties with the poorest economic outlook. In two-thirds of these counties, the high poverty incidence reflects inadequate income among Black, Hispanic, American Indian, or Alaskan native residents. Poverty rates have dropped substantially in counties where most of the poor are Blacks, but much less progress is found in Hispanic and American Indian areas. Poverty increased over the decade for rural children, particularly minorities. The increase in rural child poverty was largely due to the sharp rise in families headed by women, accompanied by an increasingly high poverty rate for these families. In 1989, half of rural Black children, 43 percent of rural Native American children and 38 percent of rural Hispanic children were poor, compared with 16 percent of rural White children.

Minorities, with the exception of many Asian groups, are disadvantaged in rural labor markets. Compared with Whites, they are more likely to have been jobless in the previous year or, if they worked, to have worked part-time or part-year. Minority earnings are lower than average in rural areas and this gap increased between 1979 and 1989. Native American men have extremely high rates of joblessness (21 percent) and little full-time work. Hispanic men are hampered by poor English ability and a concentration in agriculture—much more so than Hispanic women. Black men appear to face pay discrimination not found for other groups or for Black women. All of these problems tended to be more pronounced at the end of the 1980's than at the beginning.

Neither Black men nor Black women in the rural South, where more than 90 percent of all rural Blacks live, enjoyed significant improvement in occupational status during the 1980's, a marked contrast to earlier periods. Blacks were half as likely to work in white-collar jobs as Whites and twice as likely to work in service occupations. Racial differences in educational attainment and industry type explain only part of the occupational structure.

Despite some increases in education among rural minority groups during the 1980's, they remain over-represented among those lacking a high school diploma. They are less likely than other rural workers to have the education necessary to yield stable or increasing earnings. College completion rose only among Hispanic and Native American women, and then only slightly.

Unemployment rates were higher in 1990 than in 1980 for Blacks, especially those with lower levels of education. Due to limited job opportunities at lower skill levels, young adults who did not graduate from high school had the highest unemployment rates.

Concentrated largely in the Southwest, Hispanics had the greatest numerical growth of all minority groups in rural areas in the last decade. Poverty increased for rural Hispanics, a trend partly related to the combined effect of continuing immigration, lack of English language proficiency, and concentration in agricultural employment.

The geographically isolated rural areas in which many American Indians live offer mainly low-wage manufacturing and consumer services jobs. Rapid but uneven economic development on and near reservations in the 1980's has not always led to improvements in labor market opportunities. American Indians continue to be overrepresented in lower paying jobs and face high unemployment.

People of Asian and Pacific Islands origin are the smallest racial minority group in rural and small town areas, but had the most rapid rate of increase, growing by 42 percent from 1980 to 1990. More than a fourth lived in Hawaii. With the exception of those from Indochina, their status in education, occupation, and income was higher than that of the general population.

These conclusions about minority situations are sufficiently clear and distinctive that they will apply throughout the 1990's. This is the most comprehensive information available on rural minorities until results of the next population census become available, well after 2000.

Introduction

Linda L. Swanson

Improvement of economic and social conditions in the poorer small towns and open country areas of the country is a central concern of the U.S. Department of Agriculture. The Department spent over $7 billion specifically for rural development in 1995. Despite general budget cutbacks, spending is expected to increase this year and again in 1997, in programs ranging from telecommunications infrastructure to small business loans to water and sewer projects to Enterprise Communities. Programs run by other Federal departments also have large rural components. Most States now have "rural development councils" to coordinate the myriad State and Federal programs targeted for rural development. Programs to enhance rural economic opportunities and social conditions need to take into account the situations of rural minorities, who make up about 15 percent of the rural population but over 30 percent of the rural poor. In two-thirds of the rural counties that the Economic Research Service has found to have persistent high poverty, the high incidence reflects conditions of a minority population (see p. 26).[1]

This report describes the situations of rural[2] minorities—Blacks, Hispanics, Native Americans, and Asians—as of the 1990 census. Because of their relatively small numbers, particularly the Native Americans and Asians, the decennial census of population is the only information source that provides enough information to assess rural minority conditions. Earlier studies suggest little or no minority progress in the 1980's, at least for rural Blacks, after two decades of progress (Lyson, 1991; Jensen, 1994; USDA, 1993). This is the first comprehensive study of rural minorities to draw on the rich individual-level data of the Public Use Micro Sample (PUMS) files from the 1990 population census. This report will constitute the most complete information available on rural minorities for well after 2000, when the results of the next census become available.

The direction of change in a given indicator is as essential to socioeconomic assessment as the magnitude of the indicator at a given time. Comparisons of 1990 and 1980 conditions are used throughout this report. While the timing of the population census dictated the comparison period, business cycle effects are not a factor since, in both 1980 and 1990, the U.S. economy was feeling the first hints of recession after a prolonged period of economic expansion. Some 1980-90 trends—pervasive rural outmigration, for instance—have clearly reversed (Johnson and Beale, 1995), but the major economic trends, which include declining earnings and rising poverty, particularly for the low-skilled, have not. Available data for Blacks and Hispanics show little change in either household income or poverty (USDA, 1995). The general conclusions about minority situations are sufficiently clear and distinctive that they will apply throughout the 1990's.

Overall Conclusions

The analyses in this report suggest two broad conclusions. First, aside from low levels of education, rural Blacks, Hispanics, and Native Americans each have largely unique sets of socioeconomic disadvantages—disadvantages that may, moreover, differ between men and women. For instance, over half of rural Black children lived in single-parent families in 1990—twice the proportion found for rural Hispanic children. Also, while men in these three minority groups have less work than the rural average for men, Black women spend above-average time at work.

The second conclusion is that by almost any measure, rural minority groups were substantially worse off in

[1] Attention to minorities is a legal as well as logical requirement. According to the Rural Development Policy Act of 1980, the Department of Agriculture's rural development strategy, "shall take into account the need to: (A) improve the economic well-being of all rural residents and alleviate the problems of low income, elderly, minority, and otherwise disadvantaged rural residents; ..."

[2] Rural people in this report are those who live in counties outside the boundaries of metropolitan areas, as defined by the Office of Management and Budget. Thus, rural counties include small cities (under 50,000 pop.), small towns, and open country. See appendix for a complete definition.

1990 than they were in 1980 and, moreover, the disadvantages particular to each group tended to be more pronounced at the end of the decade. Among Hispanics, for example, the proportion who are recent immigrants without English language skills increased. Joblessness among working-age Native American men, already higher than for any other minority in 1980, also showed the greatest increase over the decade. And, while the proportion of children in female-headed families increased for all groups, the increase was particularly acute among Blacks.

Highlights of Findings

This report covers many measures of minority conditions and trends, including education, occupation, age and family structure, earnings, and poverty. The first four chapters assess employment and earnings, poverty, and family structure. These analyses cover Blacks, Hispanics, and, where data permit, Native Americans. The second section focuses on rural Blacks, the largest rural minority group. Since almost all rural Blacks live in the South, two of three chapters in this section deal with issues specific to the South. The last three sections cover other minorities, with a chapter each devoted to Hispanics, Native Americans, and Asian and Pacific Islanders. Appendix tables use PUMS files from the 1980 and 1990 Censuses to show demographic and economic characteristics for each minority group and, for comparison purposes, non-Hispanic Whites and the total United States.

Source of Problems That Lead to Lower Economic Status for Rural Minorities

Results showed considerable diversity among minority groups in the characteristics associated with poor economic outcomes. However, some characteristics common to all minority groups help to explain their lower economic status and slow progress over the decade.

Increases in unemployment affected all groups but Asians, and offset increases in full-time, full-year work among those who worked at all in the previous year. Education did make a difference. Unemployment rates were higher in 1990 than 1980 for all rural Blacks, but particularly for those with lower levels of education. Butler found that among young (age 25-34) rural workers, both Black and White, median earnings declined over the decade only for those without a college degree. McGranahan and Kassel showed that the earnings disadvantage of low education increased over the decade for rural Blacks, Hispanics, and Native Americans. Among rural Southern men, Gibbs found that while Black college graduates lost ground in occupational status to White college graduates over the decade, it was at this level of education that Black and White occupational status was closest.

However, educational differences cannot explain the size of the economic gap for minorities, nor the different experiences of minority men and women. Tootle found that although the greatest increase in education among rural minority groups was for Native Americans, they also showed the greatest decline in median household income. The younger Black workers in Butler's chapter had higher earnings than the older workers, but given the younger workers' higher education, the differential should have been greater. McGranahan and Kassel showed that while differences in education can explain some of the higher minority joblessness, joblessness is higher for minorities than for Whites with the same level of education. They found Black women to be the exception. At each education level, Black women are as likely to have worked in 1989 as non-Hispanic White women. Gibbs also found that among college-educated Blacks, men lost occupational status compared with White men, while Black women neared parity with White women.

Effland and Kassel found that level of English fluency was most important in determining the level of income for rural Hispanics, especially men. However, while rural Hispanics with English language proficiency have education levels close to rural Whites, their poverty is twice as high. And McGranahan and Kassel found that Black men have much lower earnings than expected on the basis of their level of education, time spent at work, and other measured characteristics. This gap was much larger than found for Black women or other minorities. Clearly, lack of education is not solely responsible for the low economic status of rural minorities.

Geographic concentration has often coincided with poor economic outcomes for rural minorities. In the rural South, Cromartie and Beale showed that Blacks have been moving into towns and out of open country areas over the last two decades, while Whites have been moving in the opposite direction. They have linked this small-scale concentration to the need for poorer people, in this case rural Blacks, to be in a population dense enough to support services such as public transportation and subsidized housing. With a lower tax base, the future well-being of the town's residents is less certain. Effland and Kassel described a long-term concentration process that occurs

especially among more recent Hispanic immigrants. Congregating in unincorporated rural settlements, they are the racial/ethnic majority. Brought together by a common language, background, and lack of land ownership, these *colonias* have little in the way of community resources, exacerbating the problems of poverty and limited educational opportunities.

Did Rural Minorities Make Progress During the 1980's?

The measures used in this report show that, with a few exceptions, rural minorities lost ground during the 1980's, as measured by changes in occupation, earnings, household income, and poverty. However, the type and direction of progress was quite different among the minority groups and, often, for men and women of the same minority group. With a few exceptions, each chapter found some areas of minority progress in the 1980's, but persistent gaps between the minority and White populations remained in 1990.

In his chapter on counties with persistent poverty, Beale found more than 500 rural counties where, in each decade between 1960 and 1990, a fifth or more of the population was poor. In two-thirds of these counties, the high poverty rate resulted from inadequate income among Black, Hispanic, or Native American residents. In the persistently poor counties where most of the poor were Black, the extremely high poverty in 1960 had been substantially reduced by 1990. On average, poverty in 1960 for persistently poor counties classified as Hispanic or American Indian was less severe than for those classified as Black, although the pace of progress over the three decades was slower.

The high rate of poverty among rural minorities was found by Swanson and Dacquel to be highest for children and rising quickly. Focusing on Black and Hispanic women with children, they found trends acting to lower overall child poverty—such as increases in the education of women, smaller family sizes, and small declines in the poverty of children in married-couple families—were offset largely by changes in family structure. Particularly among rural Blacks, growth in the already large proportion of children being raised in mother-only families and the sharp rise in poverty among these families was strong enough to elevate the overall child poverty rate.

McGranahan and Kassel found that joblessness increased in the 1980's for rural working-age men of all race/ethnicity groups, but was particularly high for Black and Native American men. Although joblessness declined for working-age women, declines were smaller for minority women than for White women. The likelihood of working full-time, full-year declined for rural Native American and Hispanic men, but increased for Black men, in part because of the higher concentration in the rural South of manufacturing employment.

Gibbs found in the rural South that relative to White men, Black men made little progress moving into occupations that required higher skills and yielded greater earnings. Black women showed small gains in moving into these occupations relative to White women. For the working population under age 40, Black men and Black women both showed small gains, offering hope for future progress.

While the decline in rural men's earnings over the decade affected all race/ethnicity groups, McGranahan and Kassel found that the earnings of minority men at the end of the decade were considerably lower than the earnings of non-Hispanic White men. The level and change in earnings differed by minority group. Black men, who had the lowest earnings level at the beginning of the 1980's, had the smallest decline. For Hispanic and Native American men, the earnings decline was substantial.

Subsequent chapters consider sources of lower socioeconomic status for rural minority groups from a variety of perspectives. Some chapters address the causes of low minority economic and employment levels by examining human capital differences, and find apparent discrimination when human capital differences are held constant. Overall results address issues of rural progress as well as minority progress and how the two are intertwined for rural minorities. This report is the only volume available that covers each minority group's progress in the 1980's with respect to its unique history, location, and characteristics.

About the Data

The PUMS files, used in the majority of chapters, are a sample of individual records that allows considerable latitude in developing socioeconomic measures. In these chapters, we discuss only those findings that have tested significant at the 95-percent confidence level. Census data files summarized at the county level (Summary Tape Files 3 and 4), providing geographic detail but fewer variables by race and ethnicity, are used in three chapters. Some chapters include earlier decades for comparison. More detailed descriptions of the data sets can be found in the explanatory text of the report's appendix.

In growing rural areas, population size and density can increase sufficiently to cause a reclassification of the area from rural to urban. (Between 1980 and 1990, more than 100 nonmetro counties became metro and 17 metro counties became nonmetro.) In county-level data sets, counties that were rural in 1980 can be examined again in 1990 without reclassification affecting measures of 1980-90 change. The 1990 PUMS data file, however, has incorporated reclassification in such a way that residents of counties that were reclassified cannot be distinguished. Thus, in the chapters using PUMS data and in the appendix, the comparison is of residents living in a rural setting in 1980 with those living in a rural setting in 1990.

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Education and Rural Minority Job Opportunities

David A. McGranahan
Kathleen Kassel

Rural[1] minorities—Blacks, Hispanics, and Native Americans—are disadvantaged in rural labor markets. Compared with non-Hispanic Whites, they are more likely to be jobless or, if they work, to work part-time or part-year. Rural minority workers earn less than non-Hispanic Whites, and this gap increased during the 1980's. Low levels of education have increasingly limited the economic opportunities of all three minorities, but only partly account for their low earnings. Other disadvantages differ among the minorities and between men and women. Native American men and women have extremely high rates of joblessness and little full-time work. Limited English ability and concentration in agriculture hamper Hispanic men—much more so than Hispanic women. Black men appear to face pay discrimination not found for other groups or for Black women. All of these problems tended to be more pronounced at the end of the 1980's than at the beginning.

The U.S. economy of the 1980's was an urban, high-education economy. Increasing global competition and rapid technological change contributed to declining wages for less-skilled workers, rising earnings for the better educated, and increasing earnings inequality (Falk and Lyson, 1988; Gorham, 1993; McGranahan and Ghelfi, 1991). New high-tech activities tended to locate in urban areas while older, more low-tech activities, which in previous decades would have shifted to rural areas, tended to go abroad instead. The result was rapidly growing urban economies in the 1980's, but rural economic stagnation. Rural unemployment remained high over the decade, inflation-adjusted earnings fell, and rural workers became increasingly disadvantaged relative to urban workers. This chapter investigates changes in the situation of rural minority workers over rural America's economically troubled 1980's.

There are two basic reasons to expect that rural minorities may have been particularly disadvantaged by the economic transformations of the 1980's. First, job opportunities were especially meager during the decade for rural people with low levels of education (McGranahan and Ghelfi, 1991; Gorham, 1993). The stagnation of rural manufacturing meant that the rural jobs being created were largely confined to the lower-paying consumer and personal services sectors. And, while rural people with limited schooling once enjoyed reasonable opportunities in the cities, especially in low-tech manufacturing (for example, autos, steel), the transformation of urban economies into high-tech and producer services centers severely limited those opportunities during the 1980's. The relatively low education levels of rural minorities suggest that they may have been especially vulnerable in the economic restructuring of the 1980's.

Second, opportunities were quite uneven across the rural landscape. Rural settlements near major urban centers generally grew between 1980 and 1990. Elsewhere, populations were constant or declining, except in regions attractive to vacationers or retirees and areas with significant service centers (see *Rural Conditions and Trends,* 1993). Rural Native Americans, especially, live in areas remote from urban influence. While rural Blacks and Hispanics live in less geographically isolated areas, many live in places of persistent poverty (See Beale's chapter on persistent poverty). These areas are remote by virtue of their poor connections to the broader world and, some argue, cultural isolation (RSS Task Force, 1993). Thus, while high-tech industries in the South have avoided rural areas in general, they are particularly sparse in the rural Black Belt (Falk and Lyson, 1988).

[1] Rural people are those who live in counties outside the boundaries of metropolitan areas, as defined by the Office of Management and Budget. Thus, rural counties include small cities (under 50,000 pop.), small towns, and open country. See appendix for a complete definition.

Rural minorities may also be disadvantaged due to a number of other factors, including poor English language abilities, health disabilities, high proportions of single-parent families, and job discrimination.

Previous research on rural minorities suggests that Blacks and Hispanics generally fared more poorly in the rural labor market than did Whites during the 1980's. Jensen (1991) found that, in contrast to earlier decades, rural Black and Hispanic family incomes declined both absolutely and relative to those of rural Whites during 1979-86. Both Lyson (1991) and Gorham (1993) found that earnings had declined more for rural Black and Hispanic men than for rural White men, but their results for rural women were mixed. These studies did not, however, examine changes in labor force participation, or the reasons for the relative low earnings of rural minorities.

The first part of our analysis examines four measures of labor market status for the working-age population (those 18-64 years old): (1) the proportion who did not work at all in the year prior to the census (also here referred to as jobless); (2) the proportion who worked full-time/full-year; (3) average wage and salary earnings of workers in the previous year; and (4) education completed.[2] We analyze these measures first for the rural population as a whole, then specifically for rural minorities. The second part of our analysis concentrates on earnings and the sources of differences in earnings between rural minorities and the rural population as a whole. Our basic approach, following Duncan (1968), Cain, (1986), and Reimers (1983), is to develop a statistical model to predict earnings of rural workers on the basis of education, hours and weeks worked, work disability, region, and other characteristics, and to determine how much of the differences in earnings between groups is due to differences in these characteristics. To the extent that any earnings disparity cannot be accounted for by differences in the job-related characteristics for which we have measures, other (unmeasured) factors, including community characteristics and job discrimination, may be involved. One weakness of this approach is that it focuses on individual traits and leaves the (possible) influence of community-specific factors analyzed only indirectly (RSS Task Force, 1993).

[2] The census collects data on unemployment, but only for the previous week. Since the measure is highly affected by the time of the year the census is taken, we do not include unemployment as an indicator of labor market status. Unemployment statistics may be found in the appendix to this report.

The method is discussed more fully in the appendix of this chapter.

Finally, because education plays a major role in determining job opportunities and earnings, our study concludes with an analysis of changes in minority education levels during the 1980's. We focus on young adults (age 25-34), as it is primarily through the education of people beginning their careers that the skill levels of the work force are improved.

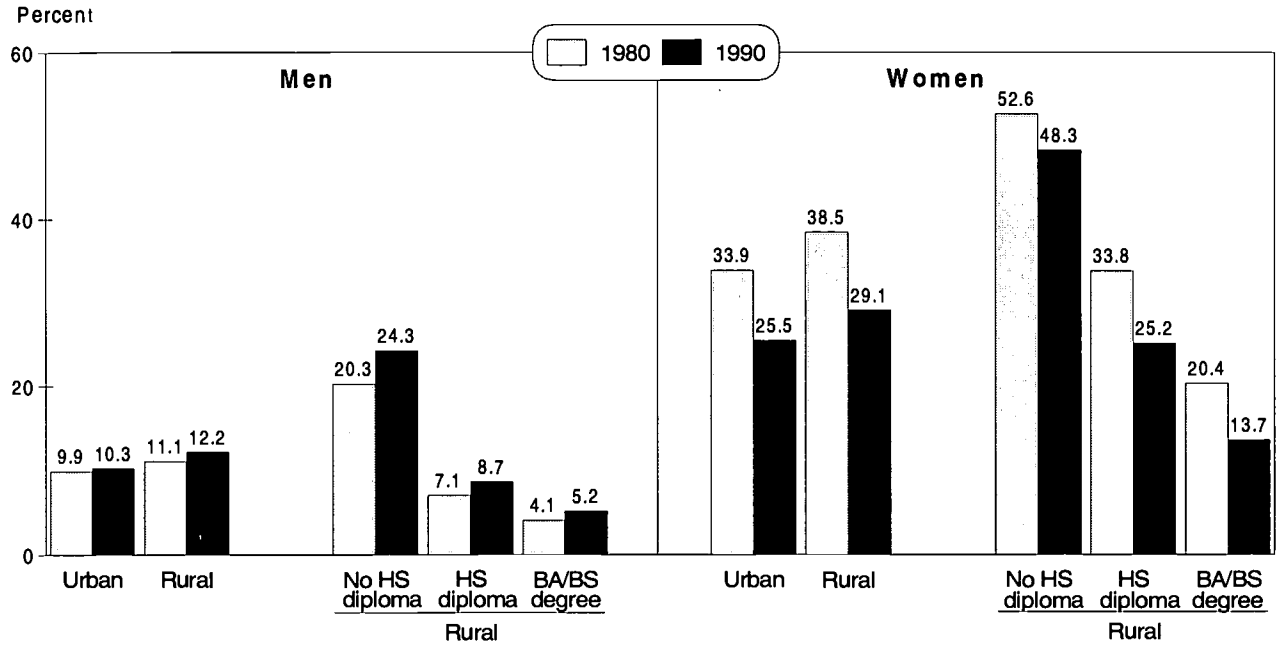
The data for this study come from the Bureau of the Census's Public-Use Microsample B files drawn from the 1980 and 1990 Censuses of Population and Housing. The 1980 file permits the complete identification of metro/nonmetro residence, which we use to measure urban/rural location; the 1990 file leaves residence unidentified for a small percentage of the population (see appendix to report). The territorial delineation of metropolitan changed in 1990 to reflect population changes over the decade, and part of the change we find may reflect this change in delineation. The 1980 delineation was also a new one, however, and reflected population changes that had occurred in the 1970-80 decade. The definitions are thus comparable, in that each represents the residential patterns at the date of the census. In any case, results for the rural population as a whole are quite similar to the findings in McGranahan and Ghelfi (1991) and *Rural Conditions and Trends* (1993), which drew on different data sets, suggesting that the changes in delineation have had little substantive effect on the overall results.

A Review of Rural Labor Market Conditions and Trends in the 1980's

Labor market disparities increased considerably in the 1980's, both between rural and urban areas and across education groups. Two of the three measures of opportunities (joblessness and earnings) suggest that rural men, particularly those with low education, were worse off by the end of the decade. Rural women worked more in 1989 than in 1979, but earnings rose substantially only for those with college educations.

The proportion of rural working-age men who had no work in the previous year increased between 1980 and 1990, especially among those lacking a high school diploma (fig. 1). Nearly one in every four rural men who did not complete high school reported no work for pay in 1989. Although women entered the workforce over the 1980's in both rural and urban

Figure 1
Jobless, age 18-64, by educational attainment, 1980-90



Jobless = Did not work in the previous year, whether or not work was sought. Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

areas, rural women remained less likely to work than urban women.[3] For rural women, as for rural men, education had a strong bearing on the likelihood of working. Nearly half of working-age women without a high school diploma did no work for pay in 1989. In contrast, only one in eight women with a college degree was not in the workforce.

Among wage and salary workers in 1989, about two-thirds of the rural men and half the rural women were fully employed (fig. 2). There is no indication of greater difficulty in finding full employment in 1989 than in 1979, however—except for working-age men lacking a high school diploma. The increases in rural full employment for men and women are somewhat surprising as many have suggested that the restructuring of the economy has generated a rising proportion of part-time and part-year jobs.[4] Among both rural and urban wage and salary earners, men without a high school diploma were the only group with declining full employment.

Average annual earnings rose slightly for urban men but declined for rural men between 1979 and 1989 after correcting for inflation (fig. 3). Changes over the 1980's depended a great deal on education level. While rural men with college degrees earned 6 percent more in 1989 than in 1979, those with less education lost ground over the decade. Men without a high school diploma earned 16 percent less in 1989 than 10 years earlier, in part because fewer were fully employed in 1989 than in 1979.

Rural women's earnings rose by 11 percent over the decade, but only because of more time spent at work and gains in education.[5] For women, as for men, changes in earnings depended considerably on education. The earnings of women without a high school degree fell by about 3 percent, while earnings of college-educated women were 18 percent higher in 1989 than in 1979. This gain for more highly educated women resulted both from higher wage and salary rates and more time spent at work.

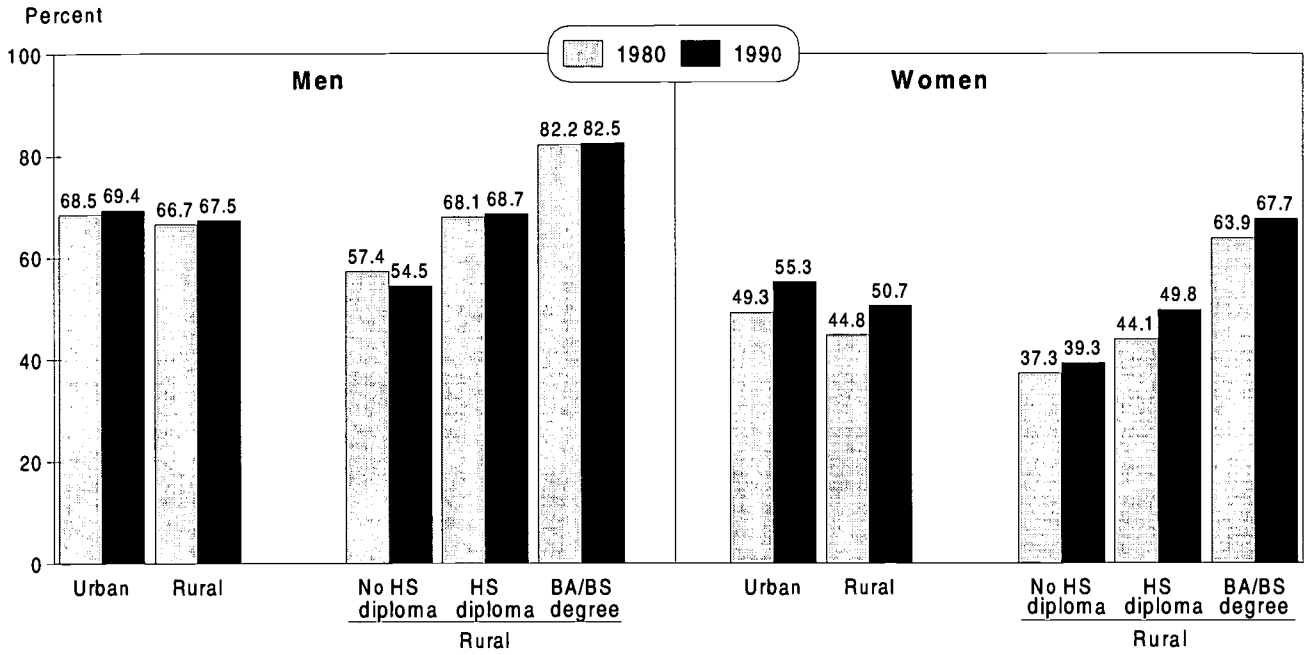
[3] Higher rural birthrates seem to be the major reason. Women with children at home are less likely to work than other women. Rural women with children are just as likely to work as urban women with children (see *Rural Conditions and Trends*, 1993).

[4] Because women work part-time more often than men, women's rising participation in the labor market could have meant that full employment was decreasing overall even as it was rising for men and women separately. But, even for the workforce as a whole, full employment increased.

[5] Our calculations show that, these increases in human resources aside, rural women's average pay actually fell by about 5 percent over the decade.

Figure 2

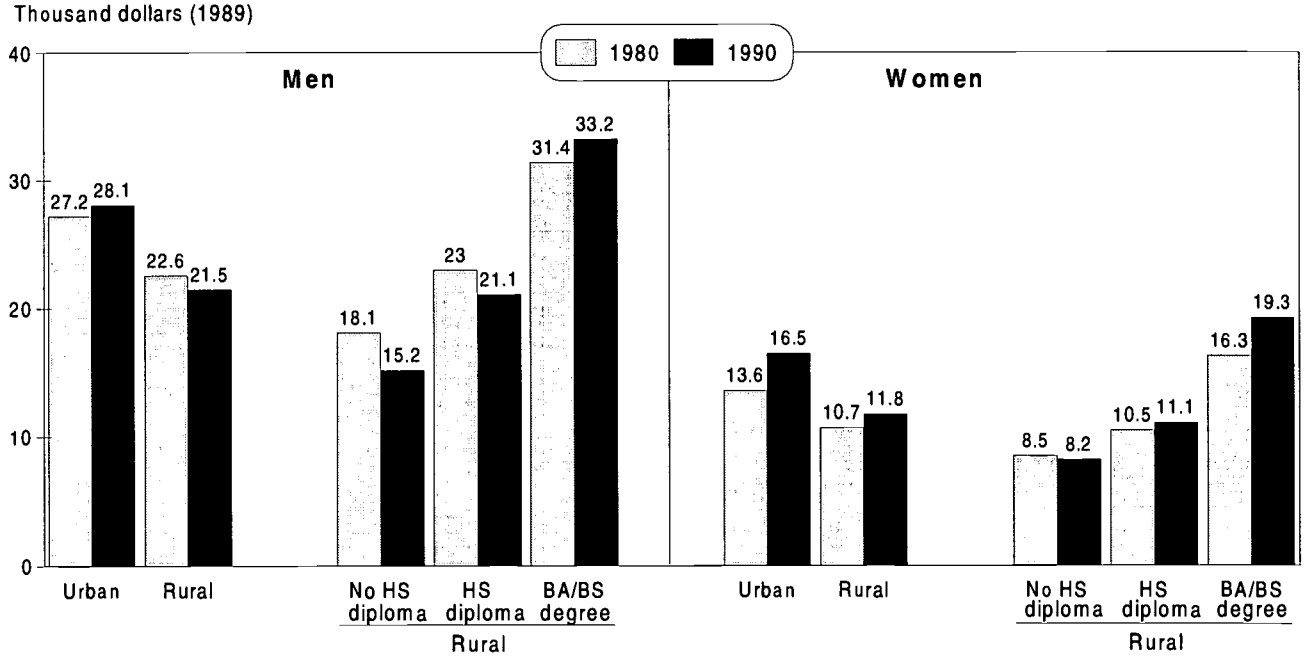
Wage and salary workers fully employed, age 18-64, by educational attainment, 1980-90



Fully employed = Worked full-time (35+ hours per week) full-year (50+ weeks) in the previous year.
Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

Figure 3

Average annual earnings of wage and salary workers, age 18-64, by educational attainment, 1980-90



Earnings = Earnings in the previous year; 1979 earnings converted to 1989 dollars using the Personal Cons. Exp. Index.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

Table 1—Educational attainment by sex, residence[1], and age group, 1980-90

Highest education completed	Men				Women			
	Urban		Rural		Urban		Rural	
	1980	1990	1980	1990	1980	1990	1980	1990
	Percent							
Ages 18-64								
No HS diploma	24.8	19.6	33.1	25.6	24.6	18.5	31.6	23.0
HS diploma	54.2	55.6	54.3	60.4	61.4	61.3	59.2	65.0
BS/BA degree	21.0	24.8	12.6	14.0	14.0	20.2	9.2	12.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ages 25-34								
No HS diploma	14.0	15.7	19.0	20.0	14.8	13.9	19.2	16.8
HS diploma	57.1	58.4	62.1	67.2	63.3	61.2	65.9	69.5
BS/BA degree	28.9	25.9	18.9	12.8	21.9	24.9	14.9	13.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Censuses.

The effect of falling real wages for less-schooled workers has been somewhat mitigated by the rising education levels of the working-age population. People entering working age have more schooling than people retiring. Thus, the proportion of rural working-age (18-64 years old) men and women lacking a high school degree fell from about a third to less than a fourth over the 1980-90 decade (table 1). The proportion of rural working-age men and women who are college graduates rose only slightly during the decade, much less than in urban areas.

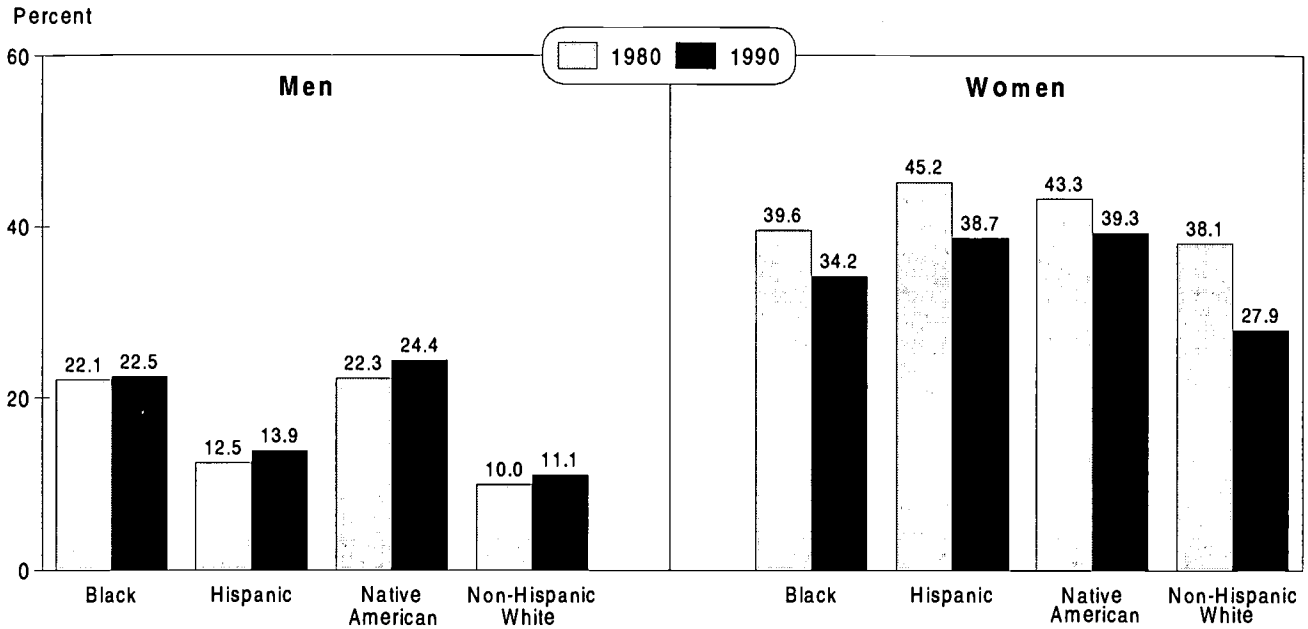
The situation is much less reassuring, however, when we look specifically at young adults (ages 25-34). The share of young adult men with at least a high school diploma fell in both urban and rural areas during the decade. The proportions completing high school were fairly stable, but the proportions completing college declined, especially in rural areas. In 1980, 19 percent of the rural men in this age group had completed college. By 1990, the proportion had fallen to 13 percent, half the urban rate.[6] In contrast, college completion rates for young adult women have remained about the same in rural areas while rising in urban areas. Among rural young adults, women now have higher education levels than men.

Part of the explanation for lagging education levels of rural young adults may be the rural-urban wage gap that developed in the 1980's at high education levels. For young adult men, college-graduate earnings declined by 2 percent in rural areas from 1979-89, while they rose by 10 percent in urban areas. In contrast, young adult college-educated rural women earned 14 percent more by the end of the decade, but the urban increase of more than 25 percent was nearly twice as large. These disparities were associated with considerable net outmigration of better educated young adults from rural areas in the 1980's, and a widening of the rural-urban gap in college completion (McGranahan and Ghelfi, 1991).

In sum, the economic transformations of the 1980's resulted in greater joblessness and lower earnings for rural men, particularly for those with less than a college education. By the end of the decade, more rural women worked, more worked full-time, and their earnings rose. But for women, too, the well educated outpaced the rest. Given the declining opportunities for people with less education and the relatively low education levels of minorities, these patterns suggest a possible growing gap between rural minorities and non-Hispanic Whites.

[6] To some extent these changes may reflect changes in the census measurement of education (see appendix table 1), but similar changes in the Current Population Survey had little effect on educational statistics for the broad categories used here (Siegel and Kominski, 1993). The findings reported here are consistent with an earlier study where this measurement change was not an issue (McGranahan and Ghelfi, 1991).

Figure 4
Rural jobless, age 18-64, by race/ethnicity, 1980-90



Jobless = Did not work in the previous year, whether or not work was sought. Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

Minority Joblessness

Blacks and Native Americans have had consistently high rates of joblessness, with nearly one in four working-age men in these groups absent from the workforce for all of 1989. Among Hispanic men, joblessness was only slightly higher than among non-Hispanic Whites (fig. 4).

Joblessness declined among rural women of all racial/ethnic groups, but less so for minorities. While Black and non-Hispanic White women had similar rates of joblessness in 1979, this was no longer true at the end of the 1980's. About 34 percent of rural Black working-age women did not work in 1989, compared with 28 percent of rural non-Hispanic White women. Hispanic and Native American women, however, had even higher rates of joblessness, at 39 percent.

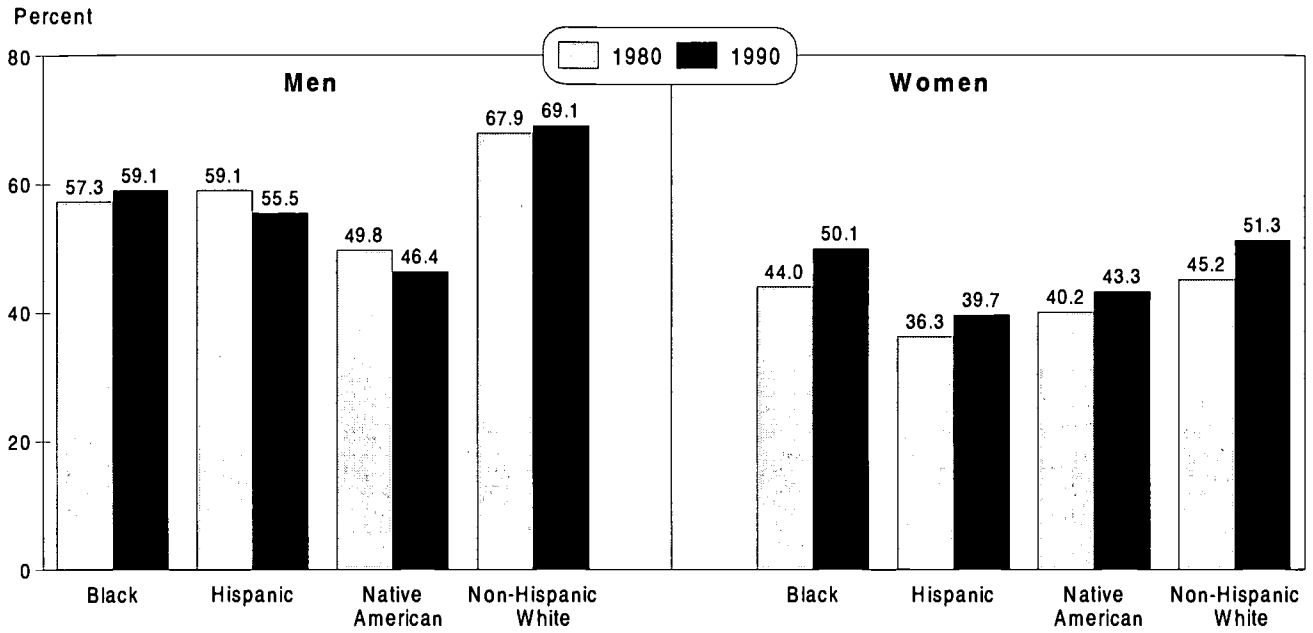
To some extent, differences in joblessness among racial/ethnic groups reflect differences in education, but substantial variation remains, particularly for men,

Table 2—Rural[1] jobless[2], age 18-64, by educational attainment and race/ethnicity, 1990

Race/ethnicity	Men			Women		
	No HS diploma	HS diploma	BS/BA degree	No HS diploma	HS diploma	BS/BA degree
Black	31.5	15.5	8.8	50.0	25.2	11.0
Hispanic	17.7	10.1	8.1	52.1	28.3	15.0
Native American	36.9	17.5	9.4	57.7	29.9	18.5
Non-Hispanic Whites	23.4	8.0	4.9	47.3	24.9	13.6

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
[2] Did not work in the previous year, whether or not work was sought.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

Figure 5
Rural wage and salary workers fully employed, age 18-64, by race/ethnicity, 1980-90



Fully employed = Worked full-time (35+ hours per week) full-year (50+ weeks) in the previous year. Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

within education groups (table 2). Each minority had its own pattern of joblessness for men and women, most evident among those who did not complete high school. Rural Native American men and women had the highest rates of joblessness at all education levels. Nearly 40 percent of rural Native American men and 60 percent of women lacking a high school diploma did no work for pay in 1989.

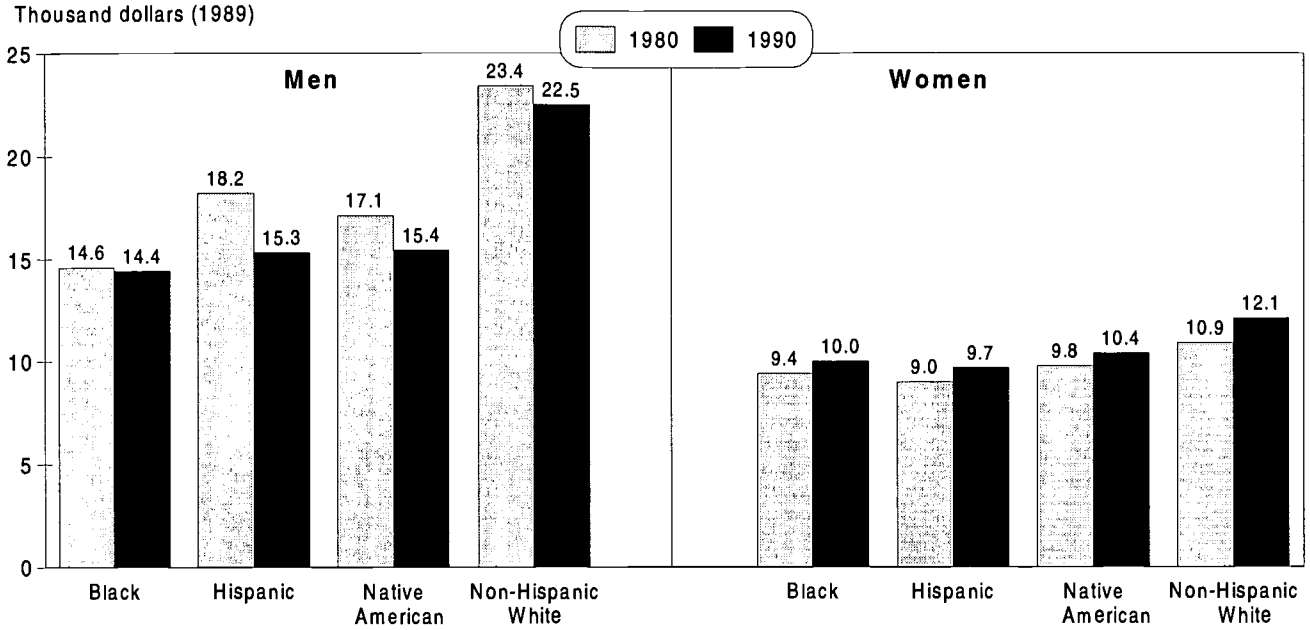
Rural Black men had rates of joblessness that approached those of Native American men at all education levels. In contrast, rural Black women with at least a high school diploma were about as likely to have worked in 1989 as were non-Hispanic Whites. Rural Hispanic men without a high school diploma were much more likely to have worked in 1989 than other rural men at this education level, while Hispanic women had relatively high rates of joblessness. Part of this Black-Hispanic difference may be explained by greater Hispanic adherence to traditional male/female roles and continued Hispanic participation in agriculture, which continues to provide (extremely low-paying) opportunities for workers with low education.

Minority Full Employment

In general, rural minority wage and salary earners have been much less likely to have full-time year-round employment (fully employed) than the rural average (fig. 5). Native American men were particularly unlikely to be fully employed. Only 46 percent worked full-time for all of 1989, 10 percentage points below Black or Hispanic men, and more than 20 points lower than non-Hispanic White men. This represents, moreover, a decline in the percentage fully employed from 1979 for Native American men. This, coupled with the rise in joblessness, makes clear that a lack of jobs is a large and increasing problem for Native American men.

While differences across racial/ethnic groups are less pronounced among rural women, Native American and Hispanic women were less likely to be fully employed than non-Hispanic White women. And while all working rural women were more likely to be full-time/full-year by 1989, the increase in the proportion of Native American women with full-time/full-year employment was the smallest. Rural Native American women also have had the highest unemployment rates and the largest gain in unemployment of all the rural racial/ethnic groups

Figure 6
Average annual earnings of rural wage and salary workers, age 18-64, by race/ethnicity, 1980-90



Earnings = Earnings in the previous year; 1979 earnings converted to 1989 dollars using the Personal Cons. Exp. Index.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

(see report appendix). A lack of jobs is a major problem for Native American women as well as men.

Full-time/full-year employment also declined among rural Hispanic men, from 59 percent in 1979 to 56 percent in 1989. An increasing concentration in agriculture (19 percent in 1989, up from 15 percent in 1979) helps account for this decline. Rural Hispanic women have been the least likely of rural women to work full-time/full-year. Concentration in agriculture is not an explanation for them, however, as only about 7 percent were employed in agriculture at the time of the 1990 Census.[7]

Rural Black men and women were the most likely of all minority wage and salary earners to be fully employed in 1989, and both proportions rose more than the rural average. Both Black men and Black women are more likely than others to work in rural manufacturing, which continues to provide more full-time/full-year employment than other rural sectors. In 1989, 37 percent of Black men and 33 percent of Black women worked in manufacturing, nearly 20 percentage points higher than for Hispanics and Native Americans—and considerably higher than the rural averages of 28 percent for men and 19 percent for women (chapter app. tables 3a, 3b).

Annual Earnings

Inflation-adjusted earnings declined for rural men in all four racial/ethnic groups (fig. 6). While men's earnings in all minority groups were considerably lower than those of non-Hispanic Whites in 1989, evidence of a growing gap in earnings between minority and non-Hispanic White workers is mixed. Declines in earnings were substantial for Hispanics (16 percent) and Native Americans (10 percent), but rural Black men, who had the lowest earnings of all racial/ethnic groups in 1979, also had the smallest decline (1 percent) over the decade.

Rural women's earnings have been much lower than rural men's, but differences across racial/ethnic groups have been relatively small. Earnings rose slightly over the decade for both minority women and non-Hispanic White women, but the gain for the latter was slightly greater, resulting in a small increase in earnings disparity. For all groups, women's earnings

[7] Since the census industry information refers to work done in the week prior to the census (in April), it probably underestimates dependence on agriculture among farmworkers. Even using yearly average employment from another data source, however, only 10 percent of Hispanic women worked in agriculture in 1989.

Table 3—Difference in earnings from rural[1] total by source, wage and salary workers, age 18-64

Source of earnings difference	Black		Hispanic		Native American		Non-Hispanic White	
	1979	1989	1979	1989	1979	1989	1979	1989
				Percent				
Women								
Total difference	-12.0	-15.3	-16.0	-18.5	-8.1	-11.9	1.6	2.2
Difference due to...[2]								
Time at work	-0.2	1.1	-5.7	-6.7	-4.6	-6.7	0.2	0.3
Education	-4.7	-6.7	-7.1	-7.3	-4.8	-5.2	0.7	1.0
Experience	0.6	-0.5	-0.5	-2.3	-1.7	-0.9	0.0	0.1
Language	0.0	0.0	-0.7	-0.4	-0.4	-0.1	0.0	0.0
Region	-2.7	-2.4	2.6	1.5	2.9	1.7	0.1	0.1
Industry	2.0	1.7	-0.7	-1.0	2.0	1.0	-0.2	-0.1
Family	-1.2	-1.0	-0.7	0.0	-0.8	-1.2	0.1	0.1
Other measured sources*	-0.1	0.0	0.0	0.1	-0.3	-0.2	0.0	0.0
Remainder	-5.7	-7.6	-3.1	-2.4	-0.5	-0.2	0.6	0.8
Men								
Total difference	-35.2	-32.9	-19.4	-28.9	-24.2	-28.4	3.8	4.3
Difference due to...								
Time at work	-5.1	-5.7	-2.8	-5.0	-9.6	-11.4	0.7	0.9
Education	-7.5	-8.9	-7.7	-9.6	-5.1	-6.1	0.9	1.1
Experience	0.1	-0.4	-0.1	-1.9	-0.3	-1.7	0.0	0.2
Language	0.1	0.2	-2.2	-3.8	-1.1	-1.0	0.1	0.2
Region	-3.4	-1.8	3.0	1.6	4.3	2.0	0.1	0.0
Industry	-0.9	0.1	-2.3	-2.8	-3.1	-2.6	0.2	0.2
Other measured sources*	-0.5	-0.0	-0.3	0.1	-0.5	-0.5	0.1	0.0
Remainder	-17.9	-16.4	-7.0	-7.7	-8.8	-7.1	1.7	1.7

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
[2] See chapter appendix table 1 for definitions of these factors. *Includes work disability and veteran status.
Source: Compiled by Economic Research Service from Public Use Microdata Samples from 1980 and 1990 Census.

would have fallen except for the increase in full-time/full-year work.

Why Minorities Earn Less

Analyses of earnings differences between rural minorities and the rural workforce as a whole show that education and time at work have been consistently important contributors to these differences (table 3).[8] Moreover, the disadvantage attributable to low education increased over the decade for men and women in all three minority groups. In our model, the relatively low education levels of Black women reduced their earnings by 5 percent compared with the average for all rural women in 1979. By 1989, this gap had risen to 7 percent. Although important, relatively low education and less time at work did not account for all—or, in many cases, even most—of the wage and salary differences between minorities and the rural population as a whole. Much of the difference in earnings could not be explained by the measures included. The overall gap for Black women, to continue the example, was 15 percent in 1989, with nearly half unaccounted for.

[8] For an explanation of the variables used in the regression analyses, see appendix table 1 at the end of this chapter. Appendix table 2 shows the coefficients from the regression results; appendix tables 3a and 3b report the averages of each variable for the different racial/ethnic groups.

Blacks

Relatively low education and Southern residence were major sources of earnings disadvantage for Black women in 1989. They had a greater tendency, however, to work full-time/full-year than other rural women in 1989, which tended to raise their earnings compared with the rural average. A concentration in manufacturing (33 percent in 1990) and government (23 percent)–sectors relatively well-paying for women–also increased their earnings.

About half of the difference in earnings between rural Black women and rural women in general is not accounted for by the characteristics included in the analysis. In 1989, rural Black women earned about 8 percent less (6 percent in 1979) than we would expect on the basis of their educational attainment, region, time at work, work disability, marriage and childbearing, age (experience), and other measures in the study. This gap could be the result of the quality of education, the communities in which many Black women live, racial discrimination, or other factors.

The earnings disadvantage for rural Black men has been much greater than for other minority and gender groups. In both 1979 and 1989, Black men earned about one-third less than the rural average. Low education levels, less than full-time or full-year work, and Southern residence accounted for about half of this gap. But the other half, more than 16 percent in 1989, was unaccounted for by this analysis. This proportion is twice as large as for any other race/gender group.[9]

While recent attention has focused on the urban disadvantages of Blacks, disadvantages for Blacks are actually greater in rural areas (chapter app. table 4). In 1989, urban Black women earned only 4.4 percent less than the urban average and this was almost entirely accounted for by their lower education levels. There was no earnings disadvantage that could be attributed to community, discrimination, or other unmeasured factor. While urban Black men earned 28 percent less than the urban average, this difference was smaller than that found for rural Blacks.

[9] The earnings gap between Black men and the rural average, although substantial, is still smaller than the gender gap. Rural women earned about 45 percent less than rural men in 1989. We could account for less than a third of this difference by the greater time that men spent at work. Together, most of the other characteristics did not favor one sex or another. We could not estimate, however, the extent to which the remaining gap was due to men's greater workforce experience. Our measure of experience is simply age less years spent at school. Age may reasonably reflect labor force experience for men, but it does not yet do so for women.

Moreover, while the urban analysis could not account for 12 percent of the earnings disparity, this too was smaller than the corresponding rural statistic.

Hispanics

Rural Hispanic female wage and salary workers earned over 18 percent less than the rural average in 1989, vs. 16 percent less in 1979. Almost all of the wage difference could be accounted for by less time at work, lower education, and (in 1989) the relative lack of experience of Hispanic women. Despite the fact that 24 percent of rural Hispanic women wage and salary earners were born outside the country and more than 11 percent of Hispanic women reported that they did not speak English well in 1990 (see chapter app. table 3b), a lack of English proficiency has not been a major penalty. Our analysis indicates a loss of earnings to Hispanic women of less than half of 1 percent due to language differences.

A decline in the real earnings of Hispanic men by 16 percent between 1979 and 1989 increased their earnings disadvantage vis-a-vis the rural average from 19 percent to 29 percent. Much of this increase appears to be associated with the increase in immigrants in the Hispanic male population, as the proportion of working-age Hispanic men who were foreign-born increased from 25 percent to 37 percent between 1980 and 1990. About 17 percent of the Hispanic men reported not speaking English well in 1990. The proportion working part-time and/or part-year increased over the decade as did the proportion in agriculture. Education levels rose, but much less than for other groups. About half of the Hispanic male workers did not have a high school diploma in 1990, the highest proportion of all minority/gender groups. These and other measured variables accounted for an earnings disadvantage of 21 percent for Hispanic men, with low education alone accounting for 10 percent.

Unlike Blacks, Hispanics were less disadvantaged in the rural context than in the urban. Urban Hispanic women earned 21 percent less than the urban average and urban Hispanic men 34 percent less, both larger gaps than found in rural areas. Urban Hispanics are much more likely to be immigrants. In 1990, over half of urban Hispanic women and men were born outside the United States; 20 percent of women and 25 percent of men spoke English poorly or not at all. Also, while both urban and rural Hispanics have very low education levels, low education is a much greater disadvantage in urban areas.

Native Americans

Wage and salary earnings of rural Native American women were 12 percent below the rural average in 1989. The gap had been only 8 percent 10 years earlier. Native American women's time at work rose only marginally over the decade, much less than for other groups. Over half the earnings gap for Native American women in 1989 was due to less time spent working. A decline in the proportions working in government or manufacturing also contributed to an expanding earnings gap.

Native American men have been penalized by similar problems. Their earnings gap also widened, from 24 percent in 1979 to 28 percent in 1989. A lack of time at work contributed more than 11 percentage points, twice the corresponding number for Black and Hispanic men. Native American men, like Native American women, were much more likely to work in the public sector (30 percent in 1989) than the rural average (17 percent for men). But, while working in government boosts salaries for women, it generally means lower salaries for men.

If rural Native American women and men were handicapped by residence in remote areas with weak economies and few jobs, their urban counterparts did no better. Although lack of time at work was less of a problem among urban Native Americans, they were more hindered by low education and unmeasured factors. The earnings gap for Native American women was considerably larger in urban areas (17 percent) than in rural areas (12 percent). For Native American men, the urban earnings gap was about as high (29 percent) as the rural gap (28 percent).

In sum, although it never accounted for even half of the earnings disadvantage for any minority, men or women, low education is generally the single most important drawback identified in our analyses. Aside from education, rural minority men and women tend to face quite distinct problems. For Native Americans, the central problem appears to be, increasingly, little work in their local economies. For rural Hispanics, concentration in agriculture and, especially for men, poor ability to speak English have been growing problems. And for Blacks, particularly men, there is a persistently large earnings gap not accounted for by any of the measures used in this analysis. This gap may represent local socioeconomic structures which continue to segment them into lower paying jobs.[10]

Young adults

What about the economic future for rural Blacks, Hispanics, and Native Americans? Changes in economic fortunes often show up among young adults (ages 25-34), when careers gel and families have young children. Analyses of levels and sources of earnings differences limited to young adults indicate, however, that minority young adults are only marginally less disadvantaged in rural labor markets than the minority working-age population as a whole (table 4). As in the working-age population, minority young adult disadvantages tended to be greater at the end of the 1980's than at the beginning. Since, overall, rural earnings declined by 15 percent for young adult men in 1979-89 and increased by only 5 percent for young adult women (despite increases in time at work), even marginally larger disadvantages at the end of the decade reflect a serious erosion in earnings for rural minority young adult men and a loss for minority young adult women.

The results for the rural minority young adults suggest that the central problems facing the minority groups are not substantially reduced in their young adult populations. Young adult Black men have major disadvantages in the job market for reasons untapped by the current analysis. Poor English is an even greater drawback for rural Hispanic young adults than for the Hispanic working-age population. And the lack of time at work is an even greater drawback for rural Native American young adults than for other rural minorities.[11]

Education

Relatively low education levels continue to seriously limit the economic opportunities of all three rural minorities. For the working-age population, low education was a greater penalty in 1990 than in 1980. While this penalty did not increase over the decade among minority young adults, low education was as much a disadvantage for them in 1990 as for their working-age counterparts. The size of a minority

[10] This earnings disadvantage does not appear to be confined to Blacks with low education. Among rural working-age adults with wage and salary earnings, Black men with no high school diploma earned 22 percent less than the rural average for dropouts, and Black men with college degrees earned 23 percent less than the corresponding rural average.

[11] Note that any differences between the young adult population and the working-age population in the magnitude of a drawback may have two sources: (1) a greater influence of the characteristic (for example, education) on earnings in one of the populations; and/or (2) a greater disparity between the minority and rural average in the characteristic being considered.

Table 4—Difference in earnings from rural[1] total by source, wage and salary workers, age 25-34

Source of earnings difference	Black		Hispanic		Native American		Non-Hispanic White	
	1979	1989	1979	1989	1979	1989	1979	1989
	Percent							
Women								
Total difference	-4.5	-15.4	-13.8	-16.5	-0.8	-9.7	0.8	2.6
Difference due to... [1]								
Time at work	4.6	1.5	-3.4	-5.7	-1.9	-8.4	-0.4	0.2
Education	-6.0	-6.6	-8.1	-6.5	-7.2	-5.7	1.0	1.0
Experience	0.9	0.9	1.2	o.s	1.2	1.4	-0.1	-0.2
Language	0.1	0.2	-1.7	-3.2	-0.9	-0.8	0.1	0.2
Region	-2.4	-2.5	2.0	0.9	2.4	1.1	0.1	0.2
Industry	2.4	1.7	-1.1	-1.1	1.7	0.5	-0.3	-0.2
Family	-1.4	-2.4	-1.3	-0.9	-1.9	-2.6	0.2	0.3
Other measured sources*	0.0	0.1	0.0	0.0	-0.5	-0.1	0.0	0.0
Remainder	-2.8	-8.3	-1.3	-0.8	6.2	4.8	0.3	0.9
Men								
Total difference	-30.2	-28.4	-15.7	-22.2	-20.5	-27.0	3.5	4.3
Difference due to...								
Time at work	-5.6	-6.2	-3.9	-6.1	-12.0	-15.8	0.8	1.3
Education	-7.9	-6.7	-8.4	-9.3	-6.3	-6.2	1.0	1.0
Experience	2.8	1.8	2.8	3.0	3.4	2.1	-0.4	-0.3
Language	0.2	0.4	-4.0	-6.1	-1.6	-0.8	0.2	0.4
Region	-2.6	-2.2	2.6	2.0	4.1	2.7	0.0	-0.0
Industry	-0.8	0.4	-2.0	-2.9	-3.0	-2.2	0.2	0.2
Other measured sources*	0.1	-0.4	0.1	0.4	-0.3	-0.3	0.0	0.0
Remainder	-16.5	-15.6	-2.8	-3.5	-4.9	-6.5	1.6	1.7

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
[2] See chapter appendix table 1 for definitions of these factors.
*Includes work disability and veteran status.
Sources: Compiled by Economic Research Service from Public Use Microdata Samples from 1980 and 1990 Census.

earnings disadvantage associated with education depends both on the minority education gap and the influence of education on earnings. The earnings premium for a high school diploma and, especially, a college degree increased considerably between the 1980 and 1990 Censuses. What about the rural minority education levels?

Minority education levels improved in some ways during 1980-90, but deteriorated in others. The proportions of rural working-age men and women with at least a high school diploma rose between 1980 and 1990, especially among minority women, who now have higher levels of education than minority men (table 5). For rural Black and Native American men and women, the gains were larger than for rural non-Hispanic Whites. The gains were smaller for rural Hispanics, due in part to high rates of immigration. Rural minority gains in high school completion were not matched by gains in college completion, however. College completion, an increasingly important credential for higher earnings, did not rise more than a fraction of a point among rural minorities, except for Hispanic and Native

Table 5—Educational attainment by rural[1] residents age 18-64, by race/ethnicity

Race/ethnicity/ year	Men				Women			
	No HS diploma	HS diploma	BS/BA degree	Total	No HS diploma	HS diploma	BS/BA degree	Total
				Percent				
Total								
1980	33.1	54.3	12.6	100.0	31.6	59.2	9.2	100.0
1990	25.6	60.4	14.0	100.0	23.0	65.0	12.0	100.0
Black								
1980	56.3	39.1	4.6	100.0	51.4	42.7	5.9	100.0
1990	45.5	49.8	4.7	100.0	39.8	54.0	6.2	100.0
Hispanic								
1980	55.6	38.6	5.8	100.0	55.1	41.5	3.4	100.0
1990	51.4	42.8	5.8	100.0	47.2	47.1	5.7	100.0
Native American								
1980	46.7	48.6	4.7	100.0	48.2	47.6	4.2	100.0
1990	37.6	57.2	5.2	100.0	36.0	58.4	5.6	100.0
Non-Hispanic White								
1980	30.4	56.2	13.4	100.0	28.8	61.5	9.7	100.0
1990	22.8	62.1	15.1	100.0	20.1	67.0	12.9	100.0

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples from 1980 and 1990 Census.

American women, and even then the increases were marginal. The proportion of rural working-age men who have finished college is about three times higher for non-Hispanic Whites than for any of the three minorities, and this gap increased over the 1980's. Among working-age women, the gap has been somewhat narrower, largely because non-Hispanic White women have lower college completion rates than men.

The picture is even less promising for rural young adults, especially men, of all three minorities. Although the proportion of young Black men with a high school diploma rose, the proportion with a college degree fell from 8 percent to 5 percent (table 6). For both Hispanic and Native American men, high school completion rates were about the same in 1990 as in 1980, but their college completion rates fell—from 9 percent to less than 5 percent among Hispanics and from 5 percent to 4 percent among Native Americans. College completion also declined among rural Black women in this age group.

These losses were not confined to rural minorities, however. The proportion of rural non-Hispanic Whites with college degrees fell between 1980 and 1990, much more sharply for men (from 20 percent to 14 percent) than for women (16 percent to 15 percent). Without these declines, minority earnings disadvantages relative to the population as a whole would have increased even more over the decade.

Conclusion

Rural Blacks, Hispanics, and Native Americans all fare more poorly in the labor market than the rural population as a whole. These minorities have higher rates of joblessness, less full-time/full-year work, and lower earnings for the time they spend at work. And as rural wage earners in general lost ground in the national economy, rural minority men and women fell even further behind the rural average during the 1980's.

Low education is one reason that Blacks, Hispanics, and Native Americans have been increasingly disadvantaged in the rural economy. Workers without a high school diploma and men with just a high school diploma had significantly lower earnings at the end of the 1980's than at the beginning, while college graduates' earnings rose. The relatively high proportions of minorities with low education and the uneven improvement in attainment over the decade

Table 6–Educational attainment by rural[1] young adults age 25-34, by race/ethnicity

Race/ethnicity/ year	Men				Women			
	No HS diploma	HS diploma	BS/BA degree	Total	No HS diploma	HS diploma	BS/BA degree	Total
				Percent				
Total								
1980	19.0	62.1	18.9	100.0	19.2	65.9	14.9	100.0
1990	20.0	67.2	12.8	100.0	16.8	69.5	13.7	100.0
Black								
1980	39.4	52.9	7.7	100.0	33.4	58.5	8.1	100.0
1990	32.1	63.3	4.6	100.0	27.6	65.5	6.9	100.0
Hispanic								
1980	43.7	47.3	9.0	100.0	44.6	50.0	5.4	100.0
1990	46.3	49.1	4.6	100.0	36.9	55.7	7.4	100.0
Native American								
1980	32.6	62.0	5.4	100.0	35.6	58.4	6.0	100.0
1990	33.2	62.5	4.3	100.0	25.0	69.0	6.0	100.0
Non-Hispanic White								
1980	16.1	63.6	20.3	100.0	16.6	67.5	15.9	100.0
1990	17.4	68.8	13.8	100.0	14.4	70.8	14.8	100.0

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples from 1980 and 1990 Census.

have tended to increase the gap between minority wage earners and rural wage earners in general.

For both men and women, differences in education between the three minority groups and the rural population as a whole explained only about a third of the earnings gap. Aside from low education, the major circumstances limiting the opportunities of Blacks, Hispanics, and Native Americans appear to be quite different for each minority. Rural Native American men and women have been more likely to be jobless or have part-time or part-year jobs than other men and women, and this has severely depressed their earnings. Hispanic men are increasingly affected by their lack of English and increasing concentration in agriculture. Almost half of the earnings gaps for both Black women and Black men were not accounted for by measures in the analysis. Black women spent more time working than the rural average, which made up in small part for their lower wage rates.

The economic prospect for rural people is uncertain. Employment in agriculture, mining, and other natural resource-based industries has been declining. Manufacturing employment, subject to increasing international competition, has stagnated, and wages have fallen. While rural areas attractive to tourists or retirees, or adjacent to expanding metropolitan areas have consistently gained jobs, employment growth in other rural areas has been uneven. Only people with relatively high education levels maintained or increased their earnings. For the three major rural minorities—Blacks, Hispanics, and Native Americans—the situation is particularly uncertain. Rural Black men and women are disproportionately involved in manufacturing, which, despite recent declines, still pays them (and many others) higher wages than they can find elsewhere. If competitive pressures persist, some rural Black gains may be lost.

Increasing immigration shaped changes in Hispanic opportunities in the 1980's. If the Mexican economy grows rapidly and is not overwhelmed by workers leaving agriculture, then the situation for Hispanics may improve in the United States. Even with a slowing of immigration, however, Hispanic men's concentration in agriculture severely limits their opportunities. And, aside from casinos, there is little reason to expect that economic activities will be more attracted to remote Native American areas any more in the 1990's than in the 1980's.

Improving educational opportunities is critical for the success of rural Blacks, Hispanics, and Native Americans and, in view of the declining proportion of young adults who have completed college, this is clearly an unsolved problem. But while educational improvements would help minority workers, there is, for each minority, at least one other aspect of their community situation that limits the ability of education gains to be the pathway out of economic disadvantage.

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Appendix

The Method

Ordinary least squares (OLS) estimation of an earnings equation for a given group of workers provides an algebraic approximation of the wage structure facing that group. Equations were estimated for 1980 and 1990 separately for rural male and female wage and salary workers (the self-employed were excluded) with positive earnings in the previous year. Our model relates an individual's earnings last year (the dependent variable) to his or her levels of the explanatory characteristics, defined in Appendix table 1. The OLS-estimated effects (the coefficients) of the worker characteristics on earnings are presented in appendix table 2.

Using these coefficients we are able to decompose differences in earnings between a reference group and the rural total into percentage effects attributable to differences between the group and the total in each of the measured characteristics. For example, southern residence is estimated to reduce earnings by $1,365 for rural women in 1990, all else being equal (app. table 2). In 1990, 93.5 percent of Black women lived in the South, compared with the rural average of 43.8 percent (app. table 3b). Thus, Southern residence reduced rural women's earnings by $598 or 5 percent, and reduced rural Black women's earnings by $1,276 or 11 percent of the rural average. In effect, disproportionate residence in the South penalizes black women by 6 percent relative to the rural total. Using this procedure, percentage effects of all the independent variables were calculated and summed into the subgroups presented in table 1 in the body of the text.

Caveats

Our model differs from most of those cited in two ways: (1) the dependent variable is not transformed into its natural logarithm; and (2) each gender-specific equation is estimated for rural workers as a whole, and not separately for each racial or ethnic group. The following section discusses the reasons for and consequences of these departures.

The dependent variable (earnings) is usually transformed into its natural logarithm for the analysis because the independent variables (measured characteristics) are expected to affect earnings proportionately rather than absolutely. For instance, if residence in the South is expected to lower earnings, the log model assumes that Southern residence reduces earnings by a percentage rather than a fixed amount from what they would otherwise be, given the worker's other characteristics (experience, education, language ability, and so forth).

We used the log-model for our analyses initially, but shifted to the untransformed earnings measure because the log-model yielded results that were not directly comparable with the measures of earnings already presented. For instance, the average of the log of earnings in 1989 for rural women is 8.946 or $7,677, which differs from the actual $11,846 average earnings used in the tables in the body of the text.

Our conclusions, however, were essentially the same for the two approaches, with the exception that the time-at-work measures were much more important in the log model. Largely because it focuses on percentage differences in income (so that a difference of $2,000 to $4,000 is just as important as a difference of $20,000 to $40,000), the log model accentuates earnings differences at the low end of the earnings distribution relative to differences at the high end. Much of the variation at low levels of earnings is due to the amount of time at work, so this measure became more important in the log-model analysis.

Traditional regression analyses of earnings differences between groups often estimate race-specific wage equations, so that the importance of a given characteristic (such as education) for earnings is allowed to differ from group to group. This technique allows that different groups may participate in different labor markets. With this technique, any earnings disparities are decomposed into differences in the levels of measured variables (means) and in the returns to a characteristic (coefficients).

We, however, estimate only overall rural earnings equations for men and women both because, with four ethnic/racial groups, the analysis becomes too complex to present and because our sample did not have enough Native Americans to reasonably estimate specific equations. Thus, our analysis assumes implicitly that all rural men (women) face the same wage structure regardless of race or ethnicity and that differences from the rural average are due to the characteristics (education, age, and so forth) alone.

Appendix table 1—Measures used in regression analyses

Earnings	Total wage and salary earnings in the previous year	
Time at work	Total weeks worked in the previous year (logarithm) Worked full-year--50 weeks or more (0-1) Usual hours worked per week in the previous year (logarithm) Usually worked full-time--35 hours or more per week (0-1)	
Education	1980 - school years completed Less than 12 (0-1) 12 or more (0-1) 13 or more (0-1) 16 or more (0-1) 18 or more (0-1)	1990 - schooling completed No high school diploma (0-1) At least a high school diploma (0-1) Beyond high school (0-1) Bachelor's degree or more (0-1) Master's degree or more (0-1)
Experience	Age minus years of school (eight years of school assumed as minimum) Square of above	
Region	Midwest (0-1) South (0-1) West (0-1) Northeast (residual)	
Family (women only)*	Married (0-1) Any children ever born (0-1) Number of children ever born (logarithm) Any own children at home less than 6 years old (0-1)	
Language	Foreign born (0-1) Language other than English spoken at home (0-1) Does not speak English or does not speak it well (0-1)	
Industry	Agriculture (0-1) Manufacturing (0-1) Government (0-1) Private services (residual)	
Disability	Limited in the kind or amount of work capable of doing (0-1)	
Veteran	Armed Forces veteran (0-1)	
Race/ethnicity	Black (0-1) Native American (0-1) Hispanic (0-1) Non-Hispanic White, Asian (residual)	

*For women, there has clearly been a tradeoff between family and career. For men, the two are more likely to be complementary, and family situation may be an outcome more than a cause of higher earnings.

Compiled by Economic Research Service from Public Use Microdata Sample, 1980 and 1990 Census.

Appendix table 2—Earnings regression equation results: Effects of worker characteristics on wage and salary earnings in previous year[1]

Wage earner attributes	Men		Women	
	1980	1990	1980	1990
	1989 dollars			
Time at work				
Weeks worked (ln)	5,411	4,256	3,159	2,965
Full-year (0-1)	4,340	4,875	3,120	3,274
Usual hours (ln)	4,201	6,520	1,596	3,009
Full-time (0-1)	1,146	1,430	3,518	3,627
Education[2]				
No H.S. diploma				
H.S. diploma	4,051	3,132	1,292	981
Some college	1,695	2,719	1,281	1,945
Bachelor's degree	6,432	7,475	4,255	4,824
Master's or more	3,553	6,638	3,645	5,544
Experience				
Years experience	1,044	967	339	382
Square of years experience	-17	-14	-5	-6
Region				
Midwest (0-1)	798	-1,535	-188	-1,316
South (0-1)	-484	1,548	-515	-1,365
West (0-1)	2,616	130	625	-397
Northeast (residual)				
Family				
Married (0-1)	n.a.	n.a.	-255	29
Any children (0-1)	n.a.	n.a.	-330	-530
Number of children	n.a.	n.a.	-909	-965
Any children under 6 (0-1)	n.a.	n.a.	285	702
Language				
Not born in U.S. (0-1)	-865	-43	-171	-7
Speak poor or no English (0-1)	-2,569	-1,696	-265	-207
Do not speak English at home (0-1)	-449	-798	-118	41
Industry				
Agriculture (0-1)	-4,520	-3,789	-749	-1,114
Manufacturing (0-1)	643	1,591	1,475	1,265
Government (0-1)	-2,975	-2,469	1,480	1,213
Services (residual)				
Work disability (0-1)	-3,424	-3,557	-1,201	-1,051
Veteran (0-1)	908	-11	1,189	1,252
Race/ethnicity				
Black (0-1)	-4,423	-3,905	-675	-990
Hispanic (0-1)	-1,857	-1,979	-376	-371
Native American (0-1)	-2,330	-1,867	-107	-106
Non-Hispanic White, Asian (residual)				
R^2	0.37	0.35	0.41	0.40

[1] For dichotomous (0-1) measures, the statistic is the dollar difference due to being in that category rather than in the residual; for other measures, the statistic is the difference resulting from a percent change in measure.

[2] For each category, the statistic is the average dollar gain over the previous category.

Compiled by Economic Research Service from Public Use Microdata Sample, 1980 and 1990 Census.

Appendix table 3a—Averages[1] of measures used in earnings regression, 1990, men

Wage earner attributes	Total	Black	Hispanic	Native American	Non-Hispanic White
Average earnings ($)	21,537	14,446	15,302	15,416	22,470
Time at work					
Weeks worked (anti-log)	41.3	38.1	38.0	30.9	42.0
Full-year (0-1)	69.1	61.8	57.8	48.5	70.6
Usual hours (anti-log)	41.1	38.2	40.3	40.0	41.5
Full-time (0-1)	90.8	87.7	89.0	89.2	91.2
Education[2]					
No H.S. diploma	100.0	100.0	100.0	100.0	100.0
H.S. diploma	77.7	60.2	50.8	68.8	80.4
Some college	40.2	22.7	24.8	32.4	42.2
Bachelor's degree	14.5	5.4	6.1	6.1	15.6
Master's or more	5.0	1.9	2.3	2.2	5.3
Experience					
Years experience	19.7	19.5	18.4	18.2	19.8
Square of years experience	539	531	484	464	545
Region					
Midwest (0-1)	30.1	4.8	8.6	16.8	33.4
South (0-1)	43.5	92.1	44.5	32.2	40.1
West (0-1)	14.7	1.7	44.6	47.6	13.5
Northeast (residual)					
Family					
Married (0-1)	n.a	n.a	n.a	n.a	n.a
Any children (0-1)	n.a	n.a	n.a	n.a	n.a
Number of children	n.a	n.a	n.a	n.a	n.a
Any children under 6 (0-1)	n.a	n.a	n.a	n.a	n.a
Language					
Not born in U.S. (0-1)	3.0	1.1	36.8	1.0	1.2
Speak poor or no English (0-1)	1.0	0.3	16.7	1.9	0.3
Do not speak English at home	6.5	3.0	78.1	30.6	2.8
Industry					
Agriculture (0-1)	5.1	6.3	18.7	7.4	4.4
Manufacturing (0-1)	28.2	36.8	19.9	17.6	28.2
Government (0-1)	17.3	20.2	15.1	30.0	16.9
Services (residual)					
Work disability (0-1)	6.2	6.4	5.4	9.2	6.2
Veteran (0-1)	27.7	21.4	15.8	25.5	28.9
Race/ethnicity					
Black (0-1)	6.9	100.0	0.9	0.0	0.0
Hispanic (0-1)	3.9	0.5	100.0	1.6	0.0
Native American (0-1)	1.5	0.0	0.6	100.0	0.0
Non-Hispanic whites, Asians (residual)					
Number of observations (1,000)	11,388	789	439	171	9,904

[1] For dichotomous (0-1) measures, the statistic is the percentage in the category.
[2] For each category, the statistic is the percent at that level or higher.
Compiled by Economic Research Service from Public Use Microdata Sample, 1980 and 1990 Census.

Appendix table 3b—Averages[1] of measures used in earnings regression, 1990, women

Wage earner attributes	Total	Black	Hispanic	Native American	Non-Hispanic White
Average earnings ($)	11,846	10,033	9,653	10,441	12,101
Time at work					
Weeks worked (anti-log)	36.0	35.3	31.4	29.7	36.4
Full-year (0-1)	56.2	53.9	44.7	45.1	57.0
Usual hours (anti-log)	33.5	34.3	33.6	33.9	33.5
Full-time (0-1)	71.8	77.3	71.2	74.9	71.3
Education[2]					
No H.S. diploma	100.0	100.0	100.0	100.0	100.0
H.S. diploma	83.2	70.0	63.2	75.1	85.3
Some college	44.4	31.1	32.8	40.7	46.1
Bachelor's degree	14.7	8.4	8.0	7.4	15.6
Master's or more	4.5	2.6	2.4	2.4	4.8
Experience					
Years experience	19.4	18.9	17.5	18.1	19.5
Square of years experience	527	505	446	459	532
Region					
Midwest (0-1)	30.5	4.2	10.5	18.5	34.0
South (0-1)	43.8	93.5	40.4	31.0	39.6
West (0-1)	14.1	1.0	45.8	47.7	13.2
Northeast (residual)					
Family					
Married (0-1)	65.5	42.7	62.0	53.7	67.9
Any children (0-1)	74.3	79.8	73.8	80.4	73.7
Number of children	1.8	2.0	1.9	2.1	1.8
Any children under 6 (0-1)	19.8	22.9	27.8	24.8	19.1
Language					
Not born in U.S. (0-1)	2.6	0.8	24.4	0.9	1.5
Speak poor or no English (0-1)	0.8	0.4	11.2	1.7	0.3
Do not speak English at home	5.9	2.8	72.3	29.5	3.1
Industry					
Agriculture (0-1)	1.8	2.0	6.8	1.9	1.5
Manufacturing (0-1)	18.7	33.0	13.1	13.6	17.6
Government (0-1)	21.1	23.1	22.0	35.8	20.6
Services (residual)					
Work disability (0-1)	4.5	4.9	3.2	6.7	4.5
Veteran (0-1)	1.2	1.8	1.1	1.2	1.2
Race/ethnicity					
Black (0-1)	8.2	100.0	1.0	0.0	0.0
Hispanic (0-1)	3.0	0.4	100.0	2.9	0.0
Native American (0-1)	1.5	0.0	1.5	100.0	0.0
Non-Hispanic White, Asian (residual)					
Number of observations (1,000)	10,286	843	311	156	8,901

[1] For dichotomous (0-1) measures, the statistic is the percentage in the category.
[2] For each category, the statistic is the percent at that level or higher.
Compiled by Economic Research Service from Public Use Microdata Sample, 1980 and 1990 Census.

Appendix table 4—Difference in earnings from urban[1] total by source, wage and salary workers, age 18-64

Source of earnings difference	Black		Hispanic		Native American		Non-Hispanic White	
	1979	1989	1979	1989	1979	1989	1979	1989
				Percent				
Women								
Total difference	0.4	-4.4	-15.9	-20.9	-13.6	-17.2	0.9	2.8
Difference due to...[2]								
Time at work	2.6	2.0	-1.6	-2.2	-4.4	-3.2	-0.3	-0.1
Education	-3.4	-4.7	-7.8	-10.7	-5.2	-7.9	1.0	1.6
Experience	1.2	0.5	0.1	-1.0	-1.0	0.3	-0.2	0.1
Language	0.4	0.4	-4.0	-4.7	0.0	0.2	0.3	0.6
Region	-1.2	-1.7	0.9	1.5	1.3	0.7	0.0	-0.0
Industry	1.0	0.2	0.6	0.2	0.5	0.2	-0.2	-0.1
Family	-1.1	-1.2	-0.5	-0.7	-1.1	-1.5	0.2	0.2
Other measured sources*	-0 1	-0 1	0.0	0.1	-0.4	-0.5	0.0	0.0
Remainder	1.1	0.1	-3.7	-3.4	-3.3	-5.6	0.1	0.4
Men								
Total difference	-26.5	-28.4	-27.3	-34.1	-21.2	-29.2	5.8	8.5
Difference due to...								
Time at work	-4.9	-5.5	-3.3	-4.9	-4.5	-5.6	1.0	1.6
Education	-7.6	-9.3	-10.7	-15.1	-6.4	-8.9	1.6	2.8
Experience	0.7	0.3	0.4	-1.8	-2.2	-1.9	-0.0	0.3
Language	1.0	1.1	-9.6	-10.7	-0.3	0.3	0.9	1.6
Region	-0.8	-1.3	0.1	0.5	0.4	-0.1	0.1	0.1
Industry	-0.9	-1.3	0.1	0.2	-0.9	-0.9	0.2	0.2
Other measured sources*	-0.2	-0.1	-0.3	0.5	-0.7	-0.8	0.1	-0.1
Remainder	-13.8	-12.3	-3.8	-2.5	-6.4	-11.3	2.0	2.0

[1] Urban as used here refers to metro.
[2] See chapter appendix table 1 for definitions of these factors. *Includes work disability and veteran status.
Compiled by Economic Research Service from Public Use Microdata Sample, 1980 and 1990 Census.

The Ethnic Dimension of Persistent Poverty in Rural and Small-Town Areas

Calvin L. Beale

More than 500 rural counties[1] (nearly a fourth of the total) had poverty levels of 20 percent or more in each census from 1960 through 1990. In two-thirds of these cases, the high poverty incidence reflects inadequate income among Black, Hispanic, or American Indian and Alaskan Native residents. Poverty rates have dropped substantially in counties where most of the poor are Blacks, but much less progress has been made in the Hispanic and American Indian areas.

There are many circumstances that can produce poverty-level income. Sometimes the causes are personal, such as poor health or abandonment by a spouse. Other cases result from economic events, such as a factory shutdown. But much poverty is less event-specific and more related to the effect of long-established factors such as the legacy of race discrimination, or low-wage regional and rural economies in which even full-time workers may receive only poverty-level incomes.

Given these varying conditions, periods of poverty-level income are only temporary for many people, ended by a change in personal circumstances or by a new job, whereas for others they may be of long duration, even intergenerational. The contrast between short-term and long-term poverty can also be applied to entire areas. A rural and small-town community may temporarily have a high poverty rate because of a poor year for farm income. Asset levels may remain high, and incomes may recover the next year. On the other hand, in large areas of the country poverty has been chronically high and remains at levels well above those acceptable to society. The purpose of this chapter is to identify such areas because of the stubborn challenge they pose to rural development, and to assess the manner and extent to which the financial plight of minorities lies behind such chronic area-wide poverty.

County-level poverty data are available for the last four censuses and enable us to note rural counties that had high poverty rates in each census from 1960 to 1990. A high incidence of poverty is defined here as 20 percent or more of a county's population living in households with poverty-level income.

Measuring the number and percentage of people in "poverty" has become one of the most widely used statistical procedures of our time. Its premise has been rather simple, based on a 1955 USDA food consumption survey which found that families of three or more persons spent about one-third of their income on food. Poverty-level income, therefore, was defined as a level less than three times the cost of the cheapest adequate food plan for a family of three or more persons. Income slightly higher than three times food costs was used for one- and two-person households. With relatively minor changes in the concept since its first use in the 1960's, annual adjustments of the poverty income thresholds are made to reflect changes in the cost of living. No allowances for regional variation in the cost of living are available.

For the 1990 Census, poverty incomes were defined as those of less than $6,451 (in 1989) for a person under age 65 living alone, less than $8,343 for a two-person household with the head under 65, and less than $12,575 for a family of four persons, including two children under 18 years. The concept measures income after receipt of cash transfer payments such as Social Security, public assistance, earned income tax credit, retirement or disability income, or child support. It excludes, however, the value of such programs as public housing, food stamps, or Medicare and Medicaid. For working age people, the resulting data understate the number who

[1] Rural people are those who live in counties outside the boundaries of metropolitan areas, as defined by the Office of Management and Budget. Thus, rural counties include small cities (under 50,000 pop.), small towns, and open country. See appendix for a complete definition.

would be defined as poor if poverty were measured only by their own earnings. But, the data overstate the incidence of poverty that would be found if the value of all ameliorative programs was accounted for.

Poverty has typically been more common in rural and small-town areas than in cities and suburbs. Among the 2,383 rural counties (nonmetro as defined in 1983), 540 had poverty levels of 20 percent or more in each of the last four censuses. These counties represent nearly a fourth of all rural counties. The national incidence of poverty was 13.1 percent in the 1990 Census, slightly up from 12.4 percent in 1980. For rural areas, the poverty rate had risen faster, from 15.4 percent in 1980 to 16.8 percent in 1990. Poverty in the rural counties of persistently high poverty was 28.7 percent in 1990; twice that of all other rural counties (14.3 percent).

Persistent-poverty counties are largely in the coastal plain and highlands regions of the South, along or near the Rio Grande from its source to its mouth, and in portions of both the Texas plains and the northern plains (fig. 1). Such county-wide areas of persistent poverty are not found in the Northeast or the Pacific Coast, and are rare in the Corn Belt. In demographic and cultural terms, the great majority of the persistent poverty counties fall within four types. They are counties in which the high overall poverty rate results primarily from low income among either Blacks, Hispanics, American Indians and Alaskan Natives, or the White population of the Southern Highlands. In two-thirds of all counties with persistent high poverty, the high incidence reflects conditions in a minority population.

Areas of High Black Poverty

In 255 of the persistent-poverty counties, Blacks either are a majority of the poor, or it is only their high incidence of poverty that produces an overall county rate of 20 percent or more. These counties stretch across the heart of the old agricultural South, once mostly dependent on cotton, and Blacks make up 67.5 percent of their 1.5 million poor persons.

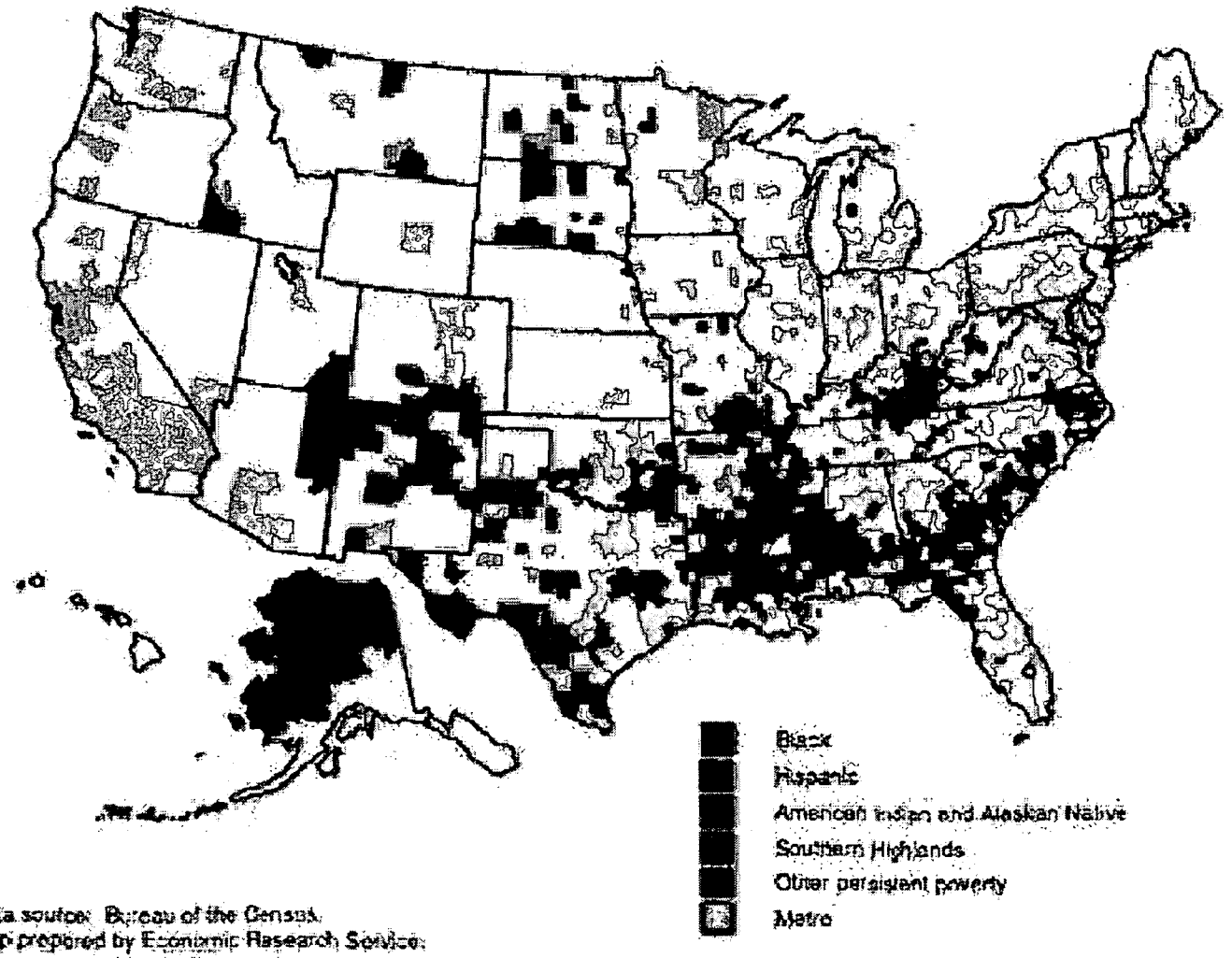
Poverty was endemic among rural Blacks in the past, when they were largely small-scale tenant farmers. Comparatively few Blacks today are still involved in agriculture, however, either as farmers or laborers. In the entire United States, a monthly average of only 11,000 Blacks were reported as working solely or primarily as farmers in 1993, along with 59,000 hired farmworkers. But, although there have been major gains in rural education, nonfarm employment, public assistance, and general access to public life for Blacks, the level of Black poverty is still over 50 percent in more than 100 Black persistent high-poverty counties and under 30 percent in only 2.

The areas of persistent high poverty in which the poverty of Blacks is dominant have several features typically associated with low income, such as early childbearing, low availability of year-round full-time work, and low education (table 1). Compared with other rural counties, they have an especially high percentage of children under 18 who do not live in married-couple families (31 percent), a situation frequently leading to low income and welfare dependence. Whereas just 9 percent of all rural households have no motor vehicle (car, van, or truck), 29 percent of all Black households in persistent poverty areas have no motor vehicle. Such an exceptional lack presumably stems from poverty, but also clearly is a hindrance to employment and escape from poverty, given the typical lack of public transportation in rural and small-town places.

A striking feature in many areas characterized by Black poverty is the great difference between poverty rates for Blacks and Whites. The Black persistent high-poverty counties in Alabama, Arkansas, Louisiana, and Mississippi had average 1990 Census poverty rates of 51.4 percent for Blacks, compared with 15.4 percent for Whites. That disparity reflects social and economic conditions that are still radically different for the two racial groups. On the more industrialized east coast, in the Carolinas and Virginia, the Black poverty counties had an average rate of 37.0 percent for Blacks (with all counties under 50 percent) and 11.6 percent for Whites. In these areas and elsewhere (such as the Alabama Black Belt and parts of the Mississippi Delta), the White poverty rate was even below that for Whites in counties without persistent high poverty.

In counties where Whites are consistently a minority of the total population, such as the Black Belt, one might argue that their low poverty rate is achieved only in the context of an elite population historically possessing a disproportionate share of the resources and positions that provide a good income. Their success may not be extendable to the rest of the population. In the South Atlantic States, however, the relatively low incidence of poverty among Whites, who are usually a majority of the population, coupled with the progress already made in reducing Black poverty below levels in the Mid-South, lends more optimism about the underlying strength of that regional economy and its future prospects for rural Blacks.

Figure 1
Nonmetro persistent poverty counties



Data source: Bureau of the Census.
Map prepared by Economic Research Service.

Table 1—Characteristics of rural[1] counties with persistent poverty

Item	Persistent poverty county classification						
	Black	Hispanic	Indian and Alaskan native	Southern Highlands	Other persistent poverty	Total persistent poverty	Other rural counties
				Thousand			
Population	5,356	941	558	1,781	828	9,464	45,414
Persons in poverty*	1,479	299	191	514	230	2,714	6,506
				Percent			
In poverty, by year							
1990	27.6	31.8	34.2	28.8	27.8	28.7	14.3
1980	27.2	26.9	29.2	26.4	24.7	26.9	13.2
1970	38.7	34.1	35.8	38.7	34.3	37.7	16.6
1960	59.8	47.1	48.2	59.1	52.5	57.3	29.7
In poverty, by race:							
White	14.7	NA	15.3	28.5	23.3	20.6	12.8
Black	46.3	--	--	--	54.2	46.6	32.5
Indian	27.5	--	50.9	--	--	45.1	33.5
Hispanic	--	43.6	--	--	--	42.2	28.4
Population per 100 workers	259	274	312	286	271	269	227
				Thousand			
Children ever born to women age 15-24	443	455	538	419	439	444	335
				Percent			
Male workers with year-round full-time work	42.1	40.2	35.2	35.6	39.0	40.0	47.2
Population 16-64 with work disability	11.7	9.4	9.8	16.2	13.7	12.4	9.5
Education--age 25 & over:							
Not H.S. graduate	41.1	42.8	36.4	47.7	42.9	42.5	28.5
College graduate	10.9	11.1	10.9	7.9	9.0	10.2	13.5
Children under 18 not living with married couple	31.0	18.9	26.0	17.5	22.5	26.1	17.4
Households with no motor vehicle	14.9	10.1	16.7	12.6	11.9	13.8	7.9
White	6.8	--	7.2	12.4	9.3	8.8	7.0
Black	29.3	--	--	--	32.7	29.4	24.3
Indian	13.1	--	29.9	--	--	23.9	14.6
Hispanic	--	13.8	--	--	--	13.6	10.1
Persons in households with income below 75 percent of poverty level	19.6	22.3	26.2	20.4	19.1	20.4	9.4

[1] Rural is defined as those areas outside metropolitan areas and is equivalent to nonmetropolitan.

Data are for 1990, unless otherwise indicated.

-- = Population base less than 50,000

NA = Not available

*Numbers do not total due to rounding

Source: Compiled by Economic Research Service from Census of Population, U.S. Bureau of the Census.

Areas of High Hispanic Poverty

Hispanic persistent high-poverty areas are numerous in Texas and New Mexico, with some occurrence in Colorado. There are 73 such counties, and within them 76 percent of all poor persons are Hispanic. Many of these counties are on or near the Rio Grande, along its entire length, where Mexican settlements already existed when the United States acquired the land. The Rio Grande counties on or near the Mexican border in Texas have many immigrants in the population, but those elsewhere have relatively few.

Other areas of high Hispanic poverty reflect the extensive migration of Mexican-Americans to Texas High Plains counties as farmworkers over the last two generations, following the introduction of irrigated agriculture. Over time, many of these people and their children have remained in the Plains, with movement into other occupations. And their proportion of the population is rapidly growing. In the 13 High Plains counties of Texas that are persistently high in poverty, Hispanics rose from just 6 percent of the total population in 1950 to 40 percent in 1990. Thus susceptibility of the Hispanic population to poverty has become central in determining the overall poverty rate of the Plains counties, whereas it was only a negligible factor in the past.

Hispanic poverty counties as a group do not show the worst degree of any of the socioeconomic measures conducive to high poverty. They are, however, well above rural or urban areas as a whole in the ratio of population to workers, lack of full-time year-round work for men, adults who did not complete high school, youth who have dropped out of school, and the extent of early childbearing.

Among all persistent-poverty counties, those in the Southern Great Plains are the areas where poor families are most likely to work in agriculture, other than in some scattered counties in the Midwest. In 1980, 29 percent of all employed Hispanics in these counties (and 40 percent of men) worked in agriculture, at a time when only 7 percent of rural workers did so nationally. The vast majority of Hispanics in agriculture (91 percent) are hired farmworkers rather than operators, subject to the seasonality of work and low wages that characterize such jobs. In the Hispanic poverty counties of Texas, there has been a lack of congruence between the amount of poverty and per capita county income. Because of a higher than average degree of income concentration, poverty has been more widespread than would be expected from per capita income levels.

Areas of High Poverty Among American Indians and Alaskan Natives

In 35 counties and Alaskan county equivalents, high overall poverty stemmed from the chronically low income levels of Native Americans–Indians and Alaskan Natives. Outside of Alaska, all of these counties contained Indian reservations, except in Oklahoma where the counties encompassed former reservations and Indian nations. In the Alaskan areas, the residents are principally Eskimos.

The Indian and Alaskan Native counties are the least populous of the persistent-poverty types, with just 558,000 total population. They are distinctive in several ways affecting the incidence of poverty and their development potential. They have the highest overall poverty rate of any of the county types (34.2 percent), with rates for the Indians and Alaskan Natives themselves averaging 51 percent. Most seriously, over three-fourths of the poor households in these counties have severe impoverishment, with incomes less than 75 percent of the official poverty level. Twenty-six percent of the entire population of these areas lived in severe income poverty even after counting all forms of cash assistance.

With limited work availability and below-average labor force participation, workers in the Native American counties have a much higher ratio of population per worker than do other rural areas. In 1990, there were 312 persons of all ages per 100 employed people in the Native American counties, compared with 227 per 100 in rural counties that do not have persistent high poverty and 206 in urban areas. Furthermore, among all men who had some employment in 1989, only 35 percent had full-time year-round work in the Indian and Alaskan areas, compared with 50 percent among U.S. men as a whole.

The age composition of the poor is also different in Native American persistent-poverty counties. Whereas in the Black and Southern Highlands poverty areas, there are two children under 18 in poor households for every poor older person 60 years and over, in the Native American areas poor children outnumber poor older people by four to one. In part, this reflects the young average age of Native Americans in general, derived both from above-average family size and from their lower life expectancy. The high proportion of children among Native American poor is also produced by the

comparatively high rate of childbearing among women under age 25 (which adds more members to youthful families whose earnings are still low), and by the lower percentage of Indians who live alone in old age.

Southern Highlands Areas

A fourth large bloc of rural counties with chronic high poverty is in the Southern Highlands, mostly in the Cumberland Plateau and Highland Rim country of the Southern Appalachians, but also in parts of the Ozark Plateau and the Ouachita Mountains. In these areas the poverty is in the White population, thus lacking an ethnic minority aspect. The residents, however, share some of the poverty-induced or poverty-related characteristics of the minority poverty areas, such as low education, high ratio of population to workers, insufficient full-time jobs, and above-average early childbearing. The Southern Highlands were materially poor at an early date and became regarded as isolated and culturally distinctive. It has not been uncommon for persons from these areas who went elsewhere–such as to the cities of the Midwest–to feel themselves subject to discrimination if they were readily identifiable by language, accent, or other attributes. Cincinnati, OH, even has an ordinance prohibiting discrimination against people from Appalachia. Thus, they have been subject, to a certain degree, to some of the same barriers imposed on ethnic minorities. But the poverty of the Southern Highlands areas will not be discussed further here because of its lack of an ethnic context.

Other Persistent-Poverty Areas

Only an eighth of the persistent-poverty counties fall outside the four identified types. Many are counties that do not quite fit one of the types. Most have high Black, Hispanic, or Indian poverty rates, but are in areas where White households also have poverty rates of over 20 percent and comprise a majority of the poor. Others are heavily White counties that adjoin Southern Highlands areas, or are Midwestern corn or wheat belt counties of marginal productivity. The "other persistent poverty" group shows the same social and economic disadvantages as the rest of the groups, but not generally to an extreme degree. These counties show the lowest incidence of severe poverty (19.1 percent) and they have the highest percentage of older people among those in poverty (20.6 percent).

Change Since 1960

The greatest progress in reducing poverty levels in minority-dominated high-poverty counties has come in the Black areas, whose overall poverty rate dropped by more than half, from 59.8 percent in 1960 to 27.2 percent in 1980. This is a major achievement, but there was no additional improvement from 1980 to 1990, when the rate in the Black poverty counties rose slightly from 27.2 to 27.6 percent.

Some of the improvement from 1960 to 1980 resulted from extensive outmovement of Blacks from most of the counties, thus lowering the proportion of the population that had been most subject to very low incomes. Such change was a rational response to perceived better opportunities elsewhere, usually in metropolitan areas.

Black outmigration continued in the 1980's from most Black persistent high-poverty counties. But this factor was offset by some deterioration of economic conditions and by the further spread of family patterns, such as childbearing among unmarried young women, that are highly conducive to low income.

Much less improvement has occurred since 1960 in the Hispanic and American Indian areas. These areas had slightly less than half of their population in poverty in 1960 (47.1 and 48.2 percent), but still had rates of over 30 percent in 1990 (31.8 and 34.2 percent). In both Hispanic and Indian persistent poverty areas, the proportion of minorities has been steadily rising, partly from minority growth and partly from outmovement of non-Hispanic Whites. In just 10 years from 1980 to 1990, the average percentage of American Indians in the Indian persistent-poverty counties (exclusive of Alaska) rose from 34.9 to 40.4 percent; in Hispanic areas, the rise in Hispanics was from 46.0 to 49.4 percent. (A minor portion of the increase in the Indian proportion results from the increased propensity by people of mixed ancestry to identify themselves as Indian now, but such persons are likely to have lower poverty rates than the Indian average.) Similar changes occurred in the 1970's.

Altogether, the counties with high persistent poverty had 29.2 percent of the U.S. rural-county poor population in 1990, a smaller figure than 32.4 percent in 1960. Thus, it must be stressed that these counties do not dominate the total rural poverty problem. They are, however, the areas where poverty is most entrenched at levels well above the norm.

Other research has shown that most people who ever experience poverty do not do so permanently. Likewise, most poor rural residents do not live in counties that have high area-wide poverty decade after decade. But the 2.7 million poor people who

live in areas of persistently high poverty are in communities where the chronic high poverty itself becomes a serious impediment to progress. It limits the tax base and imposes a poverty of services. The lagging education of the labor force makes it difficult to attract new jobs beyond those of low skills and modest wages. And the distinctive racial and/or cultural context of most persistent-poverty areas makes it clear that their problems cannot be addressed without reference to the factors that have contributed to the enduring existence of poverty.

Rural Child Poverty and the Role of Family Structure

Linda L. Swanson and Laarni T. Dacquel

The percentage of children living in poverty rose between 1980 and 1990. This was true for Black, White, and Hispanic children, urban and rural[1] children. The only group for whom the increase was small was urban White children. For Black children, the rate of poverty continues to be higher for those living in rural areas than for those living in urban areas. The rising education of mothers, declining family size, and a small decrease in the poverty of children living in married-couple families have not been enough to offset the forces acting to increase the incidence of poverty among rural children. Particularly for rural Blacks, the sharp rise in families headed by women, accompanied by an increasingly high poverty rate for these families, has been the strongest force in increasing poverty among rural children.

The increase in poverty among rural minority children (under age 18) between 1980 and 1990 widened the already substantial difference between urban and rural poverty for minority children. In 1989, half of all rural Black children, 43 percent of rural Native American children, and 38 percent of rural Hispanic children were poor. (Poor children are those whose family income falls below the official poverty threshold for a family of that size and type. A family of two adults and two minor children, for example, had a poverty threshold in 1989 of $12,575.)

Within minority groups, child poverty was more prevalent than adult poverty and rose even when adult poverty was stable (table 1). Poverty is a debilitating force, particularly for children. Garfinkel and McLanahan (1986) found that the low income of mother-only families explained much of their children's lower educational performance. A study of rural poverty and the Food Stamp Program found that the rural poor in particular were far more likely to experience depressed biochemical nutrient levels and growth stunting among their children, as well as higher rates of low birthweight and infant mortality (Public Voice, 1987).

The gap between urban and rural poverty rates has narrowed, but the poverty rate for rural children is still higher than that for urban children (Swanson, 1994). More rural than urban children were being raised in married-couple families in 1990 (80 percent vs. 75 percent), but the rural "family structure advantage" was smaller in 1990 than 1980. The proportion of children being raised in households headed by women rose faster in rural than urban areas, particularly for Black children (Swanson and Dacquel, 1991).

Table 1—Poverty rate by race/ethnicity, age, and residence[1], 1979-89

Race/ethnicity and age	Urban		Rural	
	1979	1989	1979	1989
	Percent			
Black:				
Total	27.6	27.5	38.7	40.0
< 18 years old	36.0	38.1	45.5	49.8
Hispanic:				
Total	22.7	24.1	27.2	32.0
< 18 years old	28.9	31.1	31.8	38.3
Native American:				
Total	22.0	24.0	33.9	37.7
< 18 years old	28.0	33.3	38.2	43.4
Non-Hispanic White:				
Total	7.4	7.4	12.5	13.2
< 18 years old	8.7	9.0	14.4	16.1

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.

Source: Computed by ERS from Public Use Microdata Samples, 1980 and 1990 Censuses.

[1] Rural people are defined here as those who live in counties outside the boundaries of metropolitan areas (nonmetropolitan), as defined by the Office of Management and Budget at the time of the census.

In 1989, 13.2 percent of children in married-couple families were poor in rural areas compared with 8 percent in urban areas. In families headed by women, the urban/rural poverty difference is greater: 57.4 percent for rural children versus 47.7 percent for urban children. Lichter and Eggebeen (1992) found that among rural poor children, an increasing share (54 percent in 1989) of those living in families headed by women were deeply poor. In contrast, a decreasing share (32 percent in 1989) of those in married-couple families was deeply poor.

Rates of poverty for rural children were consistently higher than for urban children in the same race/ethnicity group, and rural Black children had the highest poverty rate of all (table 1). Twenty-seven percent of rural Black children living in married-couple families were poor in 1989, compared with 13.4 percent in urban areas. Well over half (58.5 percent) of Black children living in families headed by women lived in poverty in urban areas, a highly publicized and frightening statistic. Yet, in rural areas, nearly three-fourths (72.7 percent) of Black children in families headed by women lived in poverty (Bureau of the Census, 1993).

Forces Competing To Increase and Reduce Child Poverty

Recent research has examined the competing forces acting to increase or decrease the child poverty rate (Bianchi, 1993; Gottschalk and Danziger, 1993). Acting to decrease child poverty were (1) rising education of parents, (2) rising proportion of mothers who worked, and (3) decreasing number of children per family. Acting to increase child poverty were (1) sluggish economic growth in the last two decades; (2) rising earnings inequality among men (falling earnings for the less educated); (3) rising number of children raised in households headed by a woman, whose earnings potential is lower than a man's; and (4) the below-average income growth experienced by families with children, due to factors (2) and (3). Bianchi also notes that the increase in the number of mother-only families was driven by never-married mothers, who are most likely to be poor, and that this trend was stronger for Blacks than Whites.

We compare the poverty of minority children in rural areas with that of other rural children as well as to minority children living in urban areas, with respect to the poverty-affecting factors of family structure, presence of children, and education of mothers. The first and largest part of our analysis includes only children living with their mother and father or with their mother alone. Although the percentage of children who live with their father alone is growing, in 1990 the percentage was still small (table 2).

Children living in the households of grandparents or other relatives are also a large share of the child population, particularly for rural Black children (20 percent), so we include an analysis of the family structure in which they live, their rate of poverty, and how their situation changed between 1980 and 1990. Of rural Black children living with grandparents, 80 percent were part of a subfamily, indicating that one or both parents was in the household as well.

Shifts in Family Structure

Poverty is clearly related to family structure, although the direction of cause and effect is not certain (Swanson and Dacquel, 1992). Child poverty is rising, children in single-parent families have higher poverty rates than children in married-couple families, and the proportion of children living in single-parent families is increasing. Eggebeen and Lichter estimate that, if children in 1988 had the same family structure as children in 1960, the poverty rate would have been a third lower (1991). The same study found that changing family structure accounted for nearly half of the increase in child poverty between 1980 and 1988.

American attitudes toward childbearing outside marriage have shifted over time, with younger and better educated cohorts most tolerant of nonmarital childbearing (Pagnini and Rindfuss, 1993). About half of young children (under age 6) in the United States will spend some time in a single-parent family, most because of divorce (Martin and Bumpass, 1989). Most of those will remain in a mother-only family for the rest of their childhood (Bumpass and Sweet, 1989).

Differences in family structure by race and urban/rural residence are not new. Families headed by women were more common among Blacks and in urban areas at the turn of the century, and the residential difference was greater for Blacks. In 1910, women headed 18 percent of rural Black families, compared with 33 percent in urban areas. For Whites, the comparable figures were 7 percent in rural areas and 11 percent in urban areas (Morgan and others, 1993).

The authors of the above study, using 1910 Census data, argue that contemporary racial differences in

Table 2—Living arrangements of children by race/ethnicity and residence[1], 1990

Relationship of child to head of household by race/ethnicity	Urban	Rural
	Percent	
Black	100.0	100.0
Parent(s) head of household	82.0	79.3
Married couple	36.9	39.6
Father only	3.9	3.7
Mother only	41.3	36.0
Other relative head of household	18.0	20.7
Grandparent		
Grandparent only	2.9	3.9
In subfamily with parent	11.3	13.2
Other relative		
Other relative only	2.4	2.4
In subfamily with parent	1.4	1.2
Total Black children (1,000)	7,466	1,516
Hispanic	100.0	100.0
Parent(s) head of household	88.9	91.4
Married couple	63.8	71.3
Father only	5.1	4.1
Mother only	20.1	16.0
Other relative head of household	11.1	8.6
Grandparent		
Grandparent only	.8	1.0
In subfamily with parent	6.1	5.3
Other relative		
Other relative only	2.2	1.6
In subfamily with parent	2.0	.7
Total Hispanic children (1,000)	6,616	768
Non-Hispanic White	100.0	100.0
Parent(s) head of household	95.7	95.9
Married couple	81.4	82.0
Father only	2.6	3.0
Mother only	11.6	10.9
Other relative head of household	4.3	4.1
Grandparent		
Grandparent only	.6	.8
In subfamily with parent	2.9	2.5
Other relative		
Other relative only	.5	.6
In subfamily with parent	.3	.2
Total White children (1,000)	31,514	11,465

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.

Source: Computed by ERS from Public Use Microdata Samples, 1980 and 1990 Censuses.

family structure may be rooted in traditional West African patterns where strong kin ties and obligations rival conjugal ones. Thus, to characterize the high proportion of mother-only families among Blacks solely as a breakdown in family structure is to ignore the African legacy of emphasis on kin networks rather than nuclear families. In the United States today, however, without small communities of kin networks to provide financial or child-care support, mother-only families are vulnerable to poverty.

The shift toward women heading families ("families" refers to family households) without a spouse was greater in rural than in urban areas, particularly for Black women. The majority of rural Black women heading a family were part of a married couple in 1980, but by 1990 the majority headed the family on their own (table 3)

Although the percentage of Hispanic women heading a family as part of a married couple declined over the decade, the decline was less than half that for Black women, widening the difference in family structure between the two groups. The decline in the

Data and Methods

To assess the factors increasing and decreasing poverty among rural minority children in 1980-90, we pattern our analysis after Gottschalk and Danziger (1993). They charted 1968-86 change in the poverty-affecting factors of family structure, presence of children, and education of mothers for Black and White women under age 55 who headed households either as part of a married couple or alone.

Our sample is similarly defined, using data drawn from the 1980 and 1990 Census Public Use Microdata files. Mothers' education, family size, and family structure are as of 1980 and 1990, and the family's poverty status is from the previous year, 1979 and 1989. We include both urban and rural categories and compare non-Hispanic Whites, non-Hispanic Blacks, and Hispanics. (We shorten the terms non-Hispanic White and non-Hispanic Black to White and Black, respectively, for the sake of simplicity.) The data sample was not large enough to support an analysis of Asian or American Indian women.

The separate Hispanic category allowed us to look at change among Hispanic families, and to hold constant the composition of the White and Black groups. Hispanic women under age 55 who head households alone or with their husband increased from 2.7 million in 1980 to 3.7 million in 1990.

Table 3—Distribution of women age 15-54 heading family households by race/ethnicity, presence of children, family structure, and residence[1], 1980-90

Race/ethnicity, presence of children, and family structure	Urban		Rural	
	1980	1990	1980	1990
		Percent		
Black				
With children--				
No spouse present	38.1	41.8	29.6	40.0
Spouse present	38.4	29.4	49.1	35.3
No children	23.5	28.8	21.3	24.8
Total Black women (1,000)	3,674	4,152	724	723
Hispanic				
With children--				
No spouse present	18.9	22.5	12.5	17.1
Spouse present	59.5	53.7	68.7	61.8
No children	21.6	23.8	18.8	21.1
Total Hispanic women (1,000)	2,372	3,380	313	351
White				
With children--				
No spouse present	10.0	12.3	7.8	11.3
Spouse present	56.5	50.3	61.6	54.7
No children	33.6	37.5	30.6	34.0
Total White women (1,000)	24,569	26,009	9,332	8,634

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
Source: Computed by ERS from Public Use Microdata Samples, 1980 and 1990 Censuses.

percentage of Hispanic women in families with a husband was similar in urban and rural areas, maintaining the size of the Hispanic urban/rural gap. As with both Black and White women, Hispanic wives in married couples remained more prevalent in rural areas (table 3).

For Whites, urban and rural increases in women heading families without a spouse were essentially equivalent and similar in magnitude to that of Hispanics (table 3). White women with children were most likely of the three race/ethnicity groups to be part of a married couple.

In the 1980's, the increase in the proportion of families with children headed by women alone was greatest among Black women in rural areas. By 1990, 53 percent of rural Black women living with children of their own headed the family without a spouse, up from 38 percent in 1980 (fig. 1). The urban shift was smaller, from 50 percent in 1980 to 59 percent in 1990, cutting the urban/rural gap in half. By 1990, the majority of urban and rural Black women raising children of their own were heading the family without a spouse.

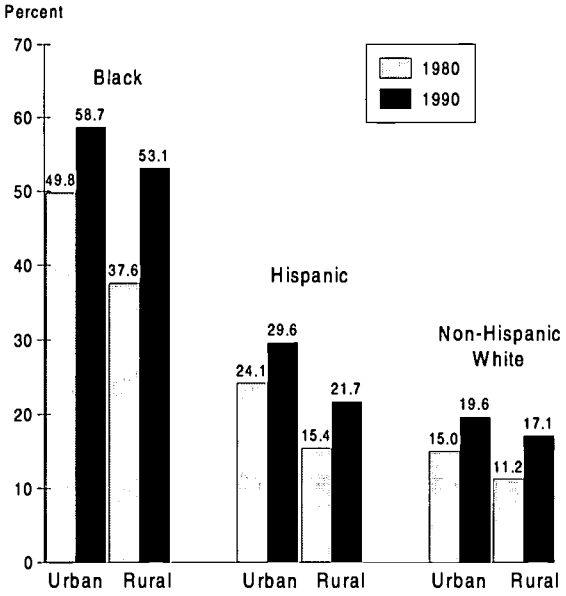
For Hispanics, increases in the proportion of women heading families with children were smaller than for Blacks (fig. 1). Among the three race/ethnicity groups, White women with children were least likely to be heading a household without a spouse. Changes for both White and Hispanic women were similar in urban and rural areas.

Education and Its Relationship to Family Size and Structure

The education of women in all three race/ethnicity groups rose during the 1980's. This was in part because the least well educated women, those who were older, moved out of our sample of women under

Figure 1

Share heading own household among women with children by race/ethnicity and residence, 1980-90



*Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.

Source: Compiled by Economic Research Service.

age 55 and in part because women of all ages became better educated. The greatest gains were among Black and White women in urban areas, while rural Hispanic women gained the least (table 4). For all race/ethnicity and family structure groups, urban education remained above rural levels. Black and White women's education rose more quickly in urban areas, widening the urban/rural education gap.

By 1990, there was a correlation between Black women having education beyond high school and having both children and a spouse. Among rural Black women with a spouse and children, the proportion having 13 or more years of education nearly doubled between 1980 and 1990 (table 4). While the proportion with higher education also doubled among rural Black women who headed a household without a spouse, the absolute difference between the two family structure types widened.

The increase in the proportion of rural Hispanic women with higher education was similar to that for rural Black women, but Hispanic women differed less by family structure. By 1990, Hispanic women heading a household without a spouse had a slightly higher proportion with more than a high school education than did those with a spouse, a pattern opposite that among Black women (table 4).

Improvement in education for rural White women was greater than for rural Black or Hispanic women. Thus, the education gap in rural areas between White and minority women widened over the decade.

The average number of children per family declined in 1980-90 for all race/ethnicity groups, education groups, and family structure groups. In both 1980 and 1990, the number of children per family was smaller when the mother had more education. However, the greatest decrease in the average number of children per family for rural Black and Hispanic women in both family structure types was among those with less than a high school education. The reduction in average family size diminished with higher education, resulting in more equality in family size across education levels, particularly for minority women heading families without a spouse. By contrast, the decrease in average number of children for rural White women was small and had little relationship to education level (table 4).

Rural Child Poverty and Family Size and Structure

Decreasing family size is reflected in the decline in the absolute number of children for all race/ethnicity groups (table 5). Dividing the children by family structure, however, shows that the total number of children has declined only in married-couple families. In spite of smaller family sizes, the shift in the proportion of children in families headed by women increased the number of children in this family structure for all race/ethnicity groups.

The proportion of rural Black children in families headed by women fell short of a majority in 1990, although more than half of the rural Black women with children headed their own family by that time. This is due to the fact that Black married-couple families in rural areas have more children per family than do those headed by women alone (table 5).

Child poverty rates increased over the decade for every race/ethnicity and residential group except urban White children. For Black and Hispanic children, the increase in poverty was greater in rural than urban areas.

Table 4—Education and mean number of children of rural[1] women age 15-54 with children by race/ethnicity and family structure, 1980-90

Race/ethnicity by years of schooling	1980				1990			
	No spouse present		Spouse present		No spouse present		Spouse present	
	Percent share	Mean number of children	Percent share	Mean number of children	Percent share	Mean number of childrenf	Percent share	Mean number of children
Black:								
Less than 12 years	54.2	2.66	44.5	2.74	38.4	2.22	27.5	2.29
12 years	34.6	2.13	38.9	2.33	39.0	2.03	40.0	2.04
13 or more years	11.2	2.00	16.6	2.03	22.6	1.90	32.5	1.96
Total (1,000)	214		355		290		255	
Hispanic:								
Less than 12 years	57.9	2.54	54.6	2.82	46.7	2.23	46.8	2.42
12 years	28.9	1.96	32.9	2.13	26.7	2.04	29.4	2.07
13 or more years	13.2	1.79	12.5	2.10	26.7	1.91	23.9	2.00
Total (1,000)	38		216		60		218	
White:								
Less than 12 years	30.1	1.97	23.0	2.09	20.7	1.84	14.1	1.97
12 years	46.3	1.81	51.1	1.97	38.1	1.72	41.8	1.90
13 or more years	23.6	1.75	25.9	1.94	41.2	1.67	44.1	1.93
Total (1,000)	728		5,753		975		4,725	

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
Source: Computed by ERS from Public Use Microdata Samples, 1980 and 1990 Censuses.

It becomes clear when the children are divided by family type that the increase in child poverty is attributable to the increase in the proportion of children in families headed by women. Not only are the poverty rates for these children vastly higher than for those living in a married-couple family, but the rates of poverty for children in families headed by women (except urban Hispanics) rose significantly over the decade, particularly for Blacks. Bianchi's observation (1993) that much of the recent increase in single mothers was never-married mothers, a group at great risk of being poor, and that the trend was stronger for Blacks than Whites, provides one explanation for the rise in these already high levels of poverty.

For rural children in married-couple families, poverty rates declined among Blacks and held steady among Whites. Among rural Hispanic children in married-couple families, the poverty rate increased (table 5).

The proportion of rural Black and Hispanic children in large families declined substantially between 1980 and 1990 (table 5). By 1990 less than a fourth of Black and Hispanic children lived with three or more siblings, regardless of family type. In just 10 years the most common number of siblings for rural Black and Hispanic children had shifted downward from three or more children to one. The decline in number of siblings for Hispanic children in married-couple families was somewhat smaller, with two siblings nearly as prevalent as one (table 5).

The shift toward a smaller number of children per family helped hold the rate of poverty steady among children in married-couple families and ameliorated the rise in poverty among children in families headed by women. Not only are poverty rates lower among children with fewer siblings, but children with fewer siblings experienced lower increases in poverty rates from 1980 to 1990 (table 5).

Table 5—Distribution and poverty of rural[1] children living with mother by family type and number of siblings, 1980-90

Race/ethnicity, family type, and number of siblings	1980		1990	
	Distribution	Poverty rate	Distribution	Poverty rate
		Percent		
Black	100.0		100.0	
Mother only	33.7	72.2	47.5	76.1
No siblings	4.5	47.6	9.1	56.9
One sibling	8.6	57.9	14.7	66.9
Two siblings	7.7	78.7	12.3	85.5
Three or more siblings	12.9	86.3	11.5	93.0
Mother with spouse	66.3	29.7	52.5	24.7
No siblings	7.8	14.7	9.6	11.1
One sibling	16.8	18.6	18.1	15.2
Two siblings	16.7	28.1	13.1	25.0
Three or more siblings	25.0	42.9	11.6	50.4
Total children (1,000)	1,406		1,126	
Hispanic	100.0		100.0	
Mother only	13.4	63.7	18.0	69.7
No siblings	2.5	47.1	3.6	50.0
One sibling	3.5	50.0	5.6	62.2
Two siblings	2.8	63.2	4.4	75.9
Three or more siblings	4.6	83.9	4.4	89.7
Mother with spouse	86.6	25.9	82.0	30.7
No siblings	10.0	11.8	12.3	14.8
One sibling	22.6	15.0	25.5	23.2
Two siblings	20.4	21.0	24.2	31.9
Three or more siblings	33.6	40.4	20.0	48.5
Total children (1,000)	678		660	
White	100.0		100.0	
Mother only	9.1	44.2	11.7	50.2
No siblings	2.3	28.9	3.6	36.6
One sibling	3.4	38.6	4.5	45.1
Two siblings	2.0	51.8	2.5	65.0
Three or more siblings	1.4	70.7	1.1	80.7
Mother with spouse	90.9	10.6	88.3	10.6
No siblings	16.9	5.9	17.6	5.8
One sibling	35.3	7.4	37.2	8.0
Two siblings	23.5	11.8	22.7	13.1
Three or more siblings	15.2	21.3	10.8	22.3
Total children (1,000)	10,575		12,715	

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
Source: Computed by ERS from Public Use Microdata Samples, 1980 and 1990 Censuses.

Table 6—Distribution and poverty rate of rural[1] children living with relatives[2] by race/ethnicity and family structure, 1980-90

Race/ethnicity and family structure	1980		1990	
	Total	Poverty rate	Total	Poverty rate
	Percent			
Black	100.0	50.4	100.0	52.1
Woman without a spouse	56.5	63.1	63.2	61.5
Married couple	43.5	33.8	36.8	36.0
Total children (1,000)	331		293	
Hispanic:	100.0	34.3	100.0	37.1
Woman without a spouse	30.7	51.4	35.4	52.8
Married couple	69.3	26.7	64.6	28.5
Total children (1,000)	45		60	
White:	100.0	21.1	100.0	20.3
Woman without a spouse	29.4	32.1	34.2	31.9
Married couple	70.6	16.6	65.8	14.3
Total children (1,000)	445		429	

[1] Rural is defined as those areas ouside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
[2] Excludes own children (natural, step, and adopted).
Source: Computed by ERS from Public Use Microdata Samples, 1980 and 1990 Censuses.

Among rural Black children in married-couple families, the poverty rate for those with fewer than three siblings declined. At the same time, the proportion of children with fewer siblings increased. Poverty rose among children with three or more siblings, but the proportion of children in that category declined.

Although rural Hispanic children also shifted toward fewer siblings, 53 percent had two or more siblings in 1990. Poverty rates rose for rural Hispanic children in married-couple families regardless of how many siblings they had. With the majority of children in the higher-poverty, larger families, poverty for rural Hispanic children in married-couple families rose by five percentage points (table 5).

Children Living in the Household of a Relative

A fifth of rural Black children live in the households of relatives other than their parents ("related" children). The percentage of children in this situation is lower for other race/ethnicity groups.

For this analysis we include related children who live in a household headed by a woman without a spouse or by a married couple. The woman of the household can be of any age.

Overall, the number of children living in the households of relatives rose over the decade while the number living in parental households declined. The number of Hispanic children living with relatives increased in both urban and rural areas, while the number of Black and White related children increased only in urban areas.

The majority of rural Black related children lived in a family headed solely by a woman in 1980, and the proportion had increased by 1990 (table 6). In contrast, the majority of Hispanic and White related children lived in married-couple families, though the proportions shrank between 1980 and 1990.

Poverty for Related Children

Among related children, poverty was higher for those in families headed by women (table 6), as was the case for own children. However, the level of poverty is lower for related children in these families than for own children. The gap between related-child and own-child poverty in families headed by women widened between 1980 and 1990. Poverty decreased for children living in a household headed by relatives and increased for children living in a household headed by their mother. Living with relatives often serves as a way for young unmarried mothers to stay out of poverty. The number of subfamilies living with relatives rose over the decade (Swanson and Dacquel, 1993), perhaps indicating, along with the rising poverty of single mothers heading households, increasing hardship for unmarried mothers on their own.

For White and Black related children in married-couple families, poverty was higher than for children whose own married parents headed the household. This may be due to the older ages of the married couples who have taken in related children, reducing the chance that the couple earns two incomes and increasing the likelihood that they are in retirement.

Conclusion

Fewer families had children in 1990 than in 1980, a factor that helped to keep increases in minority poverty rates low. Once the population is split into segments with and without children, however, we can see high and rising poverty for minority children and their families, particularly in rural areas.

Rising education among Black and Hispanic women, small declines in the poverty rates of children in married-couple families, and the declining number of children per family, especially among the least educated, have not been enough to offset the forces acting to increase the poverty rate for children. Particularly for rural Blacks, the sharp rise in families headed by women with children, accompanied by an increase in the already high poverty rate of such families, has greatly increased child poverty. Thus, growing proportions of rural minority children are disadvantaged, undermining the prospect of progress for rural minorities.

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Age and Family Structure, by Race/Ethnicity and Place of Residence

Carolyn C. Rogers

The median age of the U.S. population increased substantially from 30.0 years in 1980 to 32.9 years in 1990, with an older age structure among the rural population. During the 1980's, the proportion of the population under 18 years of age declined and the share of those age 65 years and older increased for all racial/ethnic groups. Minority populations have remained younger than the White population due to higher levels of childbearing. Household and family size, being closely associated with the decline in childbearing and in the average number of children under age 18, declined between 1980 and 1990 in both urban and rural areas. Minorities have larger families and households than do Whites. A lower proportion of households, for all race/ethnic groups, were married-couple families in 1990 than in 1980.

The aging of the U.S. population and changes in marriage, divorce, and childbearing patterns over the past several decades in both urban and rural areas[1] have resulted in changes in family circumstances. Changes in the age distribution of the population and in family circumstances have important consequences for the dependent populations of children and the elderly. Children are especially vulnerable to adverse social and economic conditions because most children depend mainly on their parents for financial support and day-to-day care. The elderly depend on fixed retirement incomes. As elderly persons age, some may experience difficulty in performing activities of daily living and may require social and financial assistance from family members or others. Changes in age and family structure of minorities will affect the social and economic well-being of racial and ethnic subpopulations.

This chapter examines recent changes in age structure and household/family composition from 1980 to 1990 for minority populations, by place of residence and region of the country. The central question is: To what extent are patterns of change in age and family structure characteristic of the broader population evident among minority populations, specifically those in rural areas? Rural Blacks and Hispanics are compared with rural Whites and with urban populations. Median age and dependency ratios—the number of children and elderly per 100 persons of working age (18-64)—are used to examine the age structure of race/ethnic subpopulations. Household and family size, along with measures of household composition and relationships within households, are used to examine household changes in the 1980's. Changes in proportions of the population living in married-couple families and mother-only families are also examined by race and ethnicity. Analysis of age structure and household and family changes by race and ethnicity are based on data from the 1980 and 1990 decennial Censuses.

Age Structure

Two basic trends in age structure occurred during 1980-90. First, the proportion of the population under 18 years of age declined for all race or ethnic groups. Second, the proportion of the population age 65 years and older increased across all subgroups. The dependency ratio declined in both urban and rural areas by about 3.5 percentage points between 1980 and 1990. The decline in the child dependency ratio, reflecting childbearing declines in the period, was partially offset by a rise in the elderly ratio.

Median Age and Percentage Distribution by Age

The median age of the U.S. population increased substantially from 30.0 years in 1980 to 32.9 years in 1990 (table 1). In 1990, the rural population had an older age structure (median age of 33.8 years) than the urban population (32.6 years). This illustrates both the aging of the population and a divergence in urban-rural age structure since 1980, when the median

[1] Rural people are defined here to be those who live in counties outside the boundaries of metropolitan areas, as defined by the Office of Management and Budget at the time of the census. See appendix for a complete definition.

Table 1—Age distribution of urban and rural[1] populations, by race and ethnicity

Year/Population group	Median age	Under 18	18-24	25-44	45-64	65 or older
1980:	*Years*			*Percent*		
U.S. total	30.0	28.1	13.3	27.7	19.6	11.3
White	31.3	26.6	12.9	27.7	20.6	12.2
Black	24.9	35.5	14.8	26.1	15.8	7.9
Hispanic	23.2	38.5	15.3	27.9	13.4	4.9
Urban total	29.9	27.7	13.5	28.4	19.7	10.7
White	31.3	26.0	13.1	28.4	20.8	11.7
Black	25.1	35.0	14.8	27.1	15.9	7.2
Hispanic	23.3	38.2	15.4	28.3	13.4	4.7
Rural total	30.1	29.4	12.6	25.6	19.5	13.0
White	31.2	28.2	12.3	25.9	20.1	13.5
Black	23.9	37.2	14.7	22.1	15.3	10.7
Hispanic	22.0	41.0	14.8	24.7	13.3	6.2
1990:						
U.S. total	32.9	25.6	10.8	32.5	18.6	12.6
White	34.4	23.9	10.2	32.3	19.7	13.9
Black	28.1	32.0	12.4	32.0	15.3	8.4
Hispanic	25.5	34.7	14.2	32.9	13.0	5.2
Urban total	32.6	25.3	10.9	33.4	18.5	11.9
White	34.2	23.3	10.4	33.3	19.5	13.4
Black	28.2	31.7	12.3	32.6	15.5	7.9
Hispanic	25.6	34.4	14.4	33.2	13.0	5.1
Rural total	33.8	26.6	10.1	29.3	19.3	14.7
White	35.0	25.5	9.7	29.2	20.1	15.5
Black	27.4	33.5	12.5	28.9	14.3	10.8
Hispanic	24.4	37.9	13.1	29.9	13.0	6.1

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan.

Source: Compiled by Economic Research Service from U.S. Bureau of the Census. 1980 Census of Population, General Population Characteristics, U.S. Summary, and 1990 Census of Population, General Population Characteristics, United States. Note: Since these numbers are calculated from the full decennial census, they are treated as the "real" population and need no tests of statistical significance.

age was 30 years in both places. The median age moved upward for Blacks and Hispanics from 1980 to 1990, although both groups had a younger population than Whites, resulting from their higher levels of childbearing.

Rural areas had a slightly higher concentration of children than urban areas (table 1). Although Blacks and Hispanics followed the same pattern of decline in the proportion of children as Whites, substantially higher proportions of their populations were under age 18. The higher childbearing rates among minorities, combined with their younger age structure, will increase the share of the minority population from 25 percent in 1990 to 38 percent by 2050 (O'Hare, 1992).

The proportion of the population age 65 and older increased across all subgroups, although minorities have a smaller proportion of elderly persons. The increase among the elderly is more pronounced for Whites. Blacks share a similar pattern with Whites in proportion of the elderly by place of residence since the same factors–outmigration of young adults from rural areas and inmigration of retirees from urban

areas--have influenced their age structures (Siegel, 1993).

Elderly

The rural elderly population has grown dramatically since 1950 as a result of aging-in-place, outmigration of young persons from agricultural and mining areas, and inmigration of elderly persons from urban areas (Siegel, 1993). The rural population's share of the elderly increased more between 1980 and 1990 than the urban population's share of the elderly. Rural areas, regardless of race or ethnicity, had a larger share of elderly persons—about 2.5 percentage points higher—than urban areas. The younger age structure of minorities is reflected in the lower proportions of minorities that are elderly. In rural areas, 16 percent of Whites were elderly in 1990, compared with 11 percent of Blacks, and 6 percent of Hispanics. The very low percentage of Hispanic elderly persons results from both higher childbearing and recent immigration experience among Hispanics.

The minority elderly population increased in urban areas between 1980 and 1990, but on a smaller scale than elderly Whites. In rural areas, all of the increase in the proportion of older persons was in the White population. The elderly population is projected to continue to increase, and by 2025, when most of the baby boom generation will have reached age 65, 20 percent of the population will be elderly (Morrison, 1991; and Spencer, 1989). The Black elderly population will increase more rapidly than the total Black population in the next quarter century, with a moderate rise in the proportion of elderly among the Black population. A sharper rise is expected in the proportion of elderly Hispanics, from 5 percent to 8 percent (Siegel, 1993). The racial and ethnic mix of the older population will have important implications for the demand for health and social services.

Children

The Black and Hispanic populations are younger than the White population, the result of higher levels of childbearing. In 1990, children under age 18 were 26 percent of the rural White population, compared with 34 percent of rural Blacks, and 38 percent of rural Hispanics. The proportion of children was higher in rural areas than in urban areas for all racial/ethnic groups. The higher proportion of children in rural areas is associated with a somewhat greater proportion of married-couple families residing in rural areas. The high percentage of Hispanic children in rural areas reflects, in part, the disproportionate share of Mexicans in the rural Hispanic population, who have the highest childbearing of all Hispanic groups (Bean and Tienda, 1987). The child population in the year 2000 will contain a larger share of minority youth due to higher Black and Hispanic childbearing rates and substantial immigration of Hispanics and Caribbean Blacks to the United States (Zill and Rogers, 1988). The growing racial and ethnic diversity of the child population affects not only the composition of the current school-age population but that of the future work force and eventually the older population (O'Hare, 1992).

Dependency Ratios

The dependency ratio–the number of children and elderly persons per 100 persons of working age (18 to 64)–is a useful measure of the age structure of the population. The dependency ratio declined by about 3 percentage points in both urban and rural areas between 1980 and 1990 (table 2). A decline in the child dependency ratio (the ratio of children to working age adults) was offset by an increase in the elderly ratio. The elderly dependency ratio increased slightly more in rural areas, reflecting both retirement inmigration and the outmigration of young adults. The elderly dependency ratio in rural areas increased from 22.6 in 1980 to 25.1 in 1990; in urban areas, the ratio was 17.4 in 1980 and 19.0 in 1990.

In 1990, the overall rural dependency ratio (70.5) was about 11 percentage points higher than the urban ratio (59.2). This residential difference reflects both the greater concentration of children and elderly in rural areas, and the disproportionate share of young adults in urban areas. The dependency ratio is projected to decline through 2010, which largely reflects a decline in the child dependency ratio. After 2010, an increase in the elderly dependency ratio is projected to raise the overall dependency ratio (Spencer, 1989). Child and elderly dependency measures tend to vary in opposite directions. If the public financial and social outlays of providing for a child or an elderly person are the same, then there is only a small difference in the public outlays by age composition. Since rural areas have a higher dependency ratio, they have greater public support outlays than urban areas.

Minorities

Racial/ethnic minorities have higher dependency ratios than Whites; the rural dependency ratio was 69.4 for Whites in 1990, compared with 79.5 for Blacks, and 78.8 for Hispanics. Higher dependency ratios for Blacks and Hispanics resulted from higher child dependency ratios. Lower elderly dependency

Table 2—Dependency ratios for urban and rural[1] populations, by race and ethnicity

Population group	1980			1990		
	Total	Child	Elderly	Total	Child	Elderly
			Ratio			
U.S. total	65.1	46.5	18.6	61.6	41.3	20.3
White	63.3	43.4	19.9	60.8	38.3	22.4
Black	76.5	62.6	13.9	67.6	53.6	14.0
Hispanic	76.6	68.0	8.6	66.4	57.7	8.6
Urban total	62.4	45.0	17.4	59.2	40.2	19.0
White	60.5	41.7	18.8	58.1	36.9	21.2
Black	73.2	60.7	12.5	65.5	52.4	13.1
Hispanic	74.9	66.8	8.2	65.2	56.8	8.4
Rural total	73.5	50.9	22.6	70.5	45.4	25.1
White	71.5	48.3	23.1	69.4	43.1	26.3
Black	92.0	71.5	20.5	79.5	60.1	19.4
Hispanic	89.3	77.6	11.7	78.8	67.8	11.0

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan.

Source: Compiled by Economic Research Service from U.S. Bureau of the Census. 1980 Census of Population, General Population Characteristics, U.S. Summary, and 1990 Census of Population, General Population Characteristics, United States. Note: Since these numbers are calculated from the full decennial census, they are treated as the "real" population and need no tests of statistical significance.

ratios are found among minorities. Minority dependency ratios declined more between 1980 and 1990 than did the White ratio. The decline in the Black dependency ratio was large, especially in rural areas, where it dropped from 92.0 in 1980 to 79.5 in 1990. The decline in the Black dependency ratio primarily reflects the decline in the child dependency ratio among Blacks, a decline also more pronounced in rural areas. Some convergence in age structure may have occurred by race.

The elderly dependency ratio for Blacks in the 1980's remained essentially the same, slightly up in urban areas and down in rural areas. On the other hand, the elderly ratio for the White population increased, especially in rural areas. Although the Hispanic population has aged over time, a very low proportion of Hispanic persons are age 65 and older. The elderly dependency ratio for Hispanics remained unchanged in urban areas and decreased slightly in rural areas between 1980 and 1990. These racial/ethnic differences in dependency ratios illustrate salient differences in the age structure of U.S. minorities as well as patterns of population change during 1980-90. The minority elderly represented 14 percent of the population age 65 and older in 1992, but by 2010 their share will grow to 20 percent, with Asians and Hispanics the fastest growing segments (O'Hare, 1992).

For total and child dependency ratios, the White population was below the U.S. index (or average), and minorities above the index, indicating the older age structure of the White population. Alternatively, White elderly dependency ratios were above the average and minority ratios well below the average. In rural areas, the elderly ratios diverged by race and ethnicity in the 1980's. In urban areas, total and child dependency ratios converged between 1980 and 1990; however, no racial/ethnic convergence occurred in elderly ratios. While the overall dependency ratio implies some convergence across race/ethnic groups and urban-rural areas, the underlying dynamics of change in the child and elderly populations indicate that age structure actually diverged from 1980 to 1990. In the 1980's, urban and rural areas diverged in age structure, and minority age structure also differed from that of Whites.

Regional Differences

The distribution of racial and ethnic minority groups varies widely by urban-rural residence and region of the country. Rural areas, except in the South, have substantially lower proportions of minorities. Black and Hispanic populations are predominantly urban,

Table 3—Median age of urban and rural[1] populations, by race/ethnicity and region, 1990

Population group	Northeast	Midwest	South	West
		Median age (years)		
U.S. total	34.2	32.9	32.7	31.8
White	35.5	33.9	34.5	33.6
Black	29.3	27.9	27.8	28.1
Hispanic	27.1	24.0	26.5	24.5
Urban total	34.2	32.5	32.4	31.6
White	35.6	33.5	34.1	33.5
Black	29.3	28.0	27.8	28.2
Hispanic	27.1	24.2	26.7	24.5
Rural total	34.1	34.3	33.8	32.9
White	34.4	34.7	35.6	34.4
Black	26.6	26.4	27.6	26.6
Hispanic	25.5	22.1	24.6	24.7

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan.

Source: Compiled by Economic Research Service from U.S. Bureau of the Census. 1980 Census of Population, General Population Characteristics, U.S. Summary, and 1990 Census of Population, General Population Characteristics, United States. Note: Since these numbers are calculated from the full decennial census, they are treated as the "real" population and need no tests of statistical significance.

concentrated mostly in central cities. Blacks are concentrated in the South; about three-fourths of Hispanics are concentrated in the West and South, with a very low proportion of either minority residing in the Midwest. A high proportion of Blacks resides in the rural South (18 percent of all residents in the rural South), comparable with the urban proportion of Blacks (19 percent of the urban population in the South). In the rural West, nearly 12 percent of residents are Hispanic, which is lower than the average for the region (19 percent).

Median age is highest in the Northeast (34.2 years) and lowest in the West (31.8 years), partially reflecting the high concentration of Hispanics in the West (table 3). In both the Northeast and Midwest, minorities in rural areas had a younger median age than those in urban areas. In the South, Hispanics in rural areas had a lower median age than those in urban areas; however, the median age for southern Blacks was the same in urban and rural areas. In the West, rural Blacks had a lower median age than urban Blacks, while the median age was the same for urban and rural Hispanics. In regions with a high concentration of a minority group, the median age of that minority does not differ by urban-rural residence. This is seen in the South, where Blacks are concentrated, and in the West, with a high proportion of Hispanics.

Dependency ratios reveal differences in age structure by region and urban-rural residence (table 4). The Midwest has the highest dependency ratio (64.4), reflecting that region's older population structure. Minority dependency ratios are higher than White ratios in the South, where the Black population is concentrated, resulting from higher childbearing and child dependency ratios. The high Black dependency ratio in the rural South is boosted further by very high child dependency ratios. In the West, minority dependency ratios are higher than White ratios in urban areas, but only Hispanic dependency ratios are higher than White ratios in rural areas. In the rural West, Hispanic dependency ratios are high because of high childbearing and high child dependency ratios, whereas the elderly ratios are still relatively low. The concentration of minorities in a region will affect that region's dependency ratio.

Elderly dependency ratios in rural areas are lower for minorities than for Whites; only in the rural South does the Black elderly ratio (20.3) begin to approach that of Whites (26.3). Due to regional concentrations and spatially determined resources such as education, health, and employment, some areas may have a much heavier burden of support than others.

In sum, the two countervailing trends in age structure–a decline in the percentage of children under age 18 and an increase in the elderly

Table 4—Dependency ratios for urban and rural[1] populations, by region, race, and ethnicity, 1990

Population group	Urban			Rural		
	Total	Child	Elderly	Total	Child	Elderly
			Ratio			
U.S. total	59.2	40.2	19.0	70.5	45.4	25.1
Northeast total	58.6	36.9	21.7	64.5	40.8	23.7
White	58.6	34.3	24.3	65.0	40.7	24.2
Black	60.5	47.5	13.1	45.0	37.1	7.9
Hispanic	59.0	50.6	8.5	55.0	47.8	7.2
Midwest total	60.9	41.8	19.1	73.8	46.3	27.5
White	59.3	39.0	20.4	73.9	45.8	28.1
Black	71.0	56.8	14.2	59.9	46.7	13.3
Hispanic	70.0	63.1	6.8	84.1	75.3	8.8
South total	59.2	40.6	18.6	69.5	44.7	24.8
White	57.5	36.7	20.8	66.7	40.5	26.3
Black	66.5	53.5	13.0	82.2	61.9	20.3
Hispanic	65.7	54.8	10.9	78.9	67.1	11.8
West total	58.3	41.5	16.7	71.8	49.6	22.2
White	57.3	37.9	19.4	71.0	46.9	24.1
Black	60.7	49.7	11.0	52.2	43.3	8.8
Hispanic	66.6	59.6	7.0	79.5	68.6	10.9

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan.

Source: Compiled by Economic Research Service from U.S. Bureau of the Census. 1980 Census of Population, General Population Characteristics, U.S. Summary, and 1990 Census of Population, General Population Characteristics, United States. Note: Since these numbers are calculated from the full decennial census, they are treated as the "real" population and need no tests of statistical significance.

population–have different implications for society. One might expect the changing age structure to have favorable consequences for children and problematic ones for the elderly (Preston, 1984). Fewer children implies less competition for resources in the home and for social services, such as public schooling. On the other hand, a growing elderly population increases pressure on resources such as medical care facilities, nursing homes, and Social Security funds. The U.S. population during the first half of the 21st century will have a very large share of elderly persons and a high and rising median age, associated with continuing low childbearing and low mortality (Siegel, 1993).

Family Structure

With changes in family composition and childbearing patterns, families now include, on average, fewer persons than in the past. Substantial differences in family size are evident for Blacks and Whites, although patterns of change over time have been identical by race (Farley and Allen, 1989). Changes in birth rates of Blacks parallel those of Whites, although Black rates remain higher. Hispanic family size has decreased since 1960, due primarily to declines in childbearing and the number of children (Bean and Tienda, 1987).

Household and Family Size

Both household and family size[2] declined between 1980 and 1990 in urban and rural areas. In 1990, average household size was 2.5 persons for Whites, 2.9 for Blacks, and 3.5 for Hispanics (table 5). Average family size in 1990, regardless of residence, was 3.1 for Whites, 3.5 for Blacks, and 3.9 for

[2] A household consists of all the persons who occupy a housing unit. A family is a group of two or more (one of whom is the householder) related by birth, marriage, or adoption, and residing together.

Table 5—Characteristics of urban and rural[1] families and households, by race and ethnicity

Year/Population group	Family household	Married family	Female householder	Nonfamily household	Persons per Household	Persons per Family
1980:		*Percent of all households*			*Number*	
U.S. total	73.3	60.2	10.5	26.7	2.75	3.27
White	73.1	62.6	8.2	26.9	2.67	3.19
Black	72.3	40.5	27.3	27.7	3.07	3.72
Hispanic	78.6	58.6	15.7	21.4	3.48	3.92
Urban total	72.2	58.4	11.1	27.8	2.73	3.27
White	72.2	61.2	8.6	27.8	2.66	3.18
Black	71.5	39.2	27.8	28.5	3.01	3.65
Hispanic	78.5	57.8	16.2	21.5	3.47	3.91
Rural total	76.4	65.4	8.6	23.6	2.79	3.27
White	76.6	67.2	7.2	23.4	2.73	3.19
Black	75.9	46.8	24.7	24.1	3.35	4.01
Hispanic	78.9	63.7	11.5	21.1	3.54	3.99
1990:						
U.S. total	70.2	55.1	11.6	29.8	2.63	3.16
White	69.5	57.7	8.9	30.5	2.54	3.06
Black	70.0	34.2	30.6	30.0	2.87	3.48
Hispanic	79.8	54.9	17.7	20.2	3.53	3.88
Urban total	69.3	53.8	12.1	30.7	2.64	3.18
White	68.5	56.4	9.1	31.5	2.53	3.07
Black	69.5	33.5	30.7	30.5	2.85	3.45
Hispanic	79.7	54.3	18.1	20.3	3.55	3.89
Rural total	73.0	59.9	10.0	27.0	2.62	3.11
White	72.8	61.8	8.2	27.2	2.56	3.04
Black	73.2	38.0	30.1	26.8	3.00	3.60
Hispanic	80.4	60.8	13.9	19.6	3.39	3.80

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan.

Source: Compiled by Economic Research Service from U.S. Bureau of the Census. 1980 Census of Population, General Population Characteristics, U.S. Summary, and 1990 Census of Population, General Population Characteristics, United States. Note: Since these numbers are calculated from the full decennial census, they are treated as the "real" population and need no tests of statistical significance.

Hispanics. Both Whites and Blacks experienced declines in household and family size between 1980 and 1990. As declines were larger for the Black population, the racial gap contracted. Much of the decline in household and family size is due to decreased childbearing and a drop in the average number of children and other household members under age 18 (Hernandez, 1993). Large families usually reduce the amount of time and resources parents can devote to each child. Smaller family size implies improved educational, occupational, and economic opportunities for children.

Minorities tend to have larger families and households than Whites, with Hispanics having the largest families. About 12 percent of Hispanic households in 1991 had 6 or more members, compared with 3 percent of non-Hispanic households (U.S. Bureau of the Census, 1991). Within 25 to 35 years, White, Black, and Hispanic children are expected to have nearly identical and comparatively

small family sizes, with an average of fewer than two children per family (Hernandez, 1993). Well-recognized trends contributing to smaller households and families are fewer children per family, more single-parent families, and larger numbers of persons living alone.

Household Composition

The composition of households has changed such that they typically include fewer persons than 10 or 20 years ago. Married-couple families represented a lower proportion of households in 1990 than in 1980 for all race/ethnic groups (table 5). Rural households are more likely to consist of married-couple families than are urban households. Blacks had the lowest proportion of married-couple families and the greatest decline in this proportion over time. About 38 percent of rural Black households were married-couple families in 1990, down about 9 percentage points from 1980. In comparison, 62 percent of rural White households were married-couple families in 1990, down about 5 percentage points from 1980, and 61 percent of rural Hispanic households were married-couple families, down 3 percentage points from 1980. Hispanic households are more likely to contain families than are non-Hispanic households. The decline in the proportion of married-couple families since 1980 has been accompanied by an increase in the proportion of families maintained by persons with no spouse present. Minorities are subject to the same forces affecting family structure as Whites, namely, increased divorce and separation.

The rapid increase during the 1970's in the number of family households maintained by a woman alone continued at a much slower pace in the 1980's (Hernandez, 1993). Female householders (or mother-only families) were a higher proportion of households in 1990 than in 1980 for all race/ethnic groups. Black families are more likely than White or Hispanic families to be headed by single females; in 1990, about 31 percent of Black households were female householders, more than three times the White rate (9 percent). In 1980, the proportion of female householders was higher among Blacks and Whites in urban areas than in rural areas, but by 1990, the gap had narrowed considerably for both races. However, no residential convergence was seen in the proportion of Hispanic households that were female householders. High rates of marital separation and divorce and increased numbers of births to never-married women contributed to the increased frequency of women maintaining families alone. In general, all race/ethnic groups in both urban and rural areas were characterized by smaller families, increases in mother-only families, and declines in married-couple families.

Regional Differences

A higher proportion of family households is evident in the rural South than in other regions. Rural households are more likely than urban households to be family households and married-couple families across all regions (table 6). The same race and ethnic differences in families and households observed earlier are found within regions. The West has the highest number of persons per family in both urban areas (3.26) and rural areas (3.18), due primarily to the high concentration of ethnic groups, such as American Indians and Hispanics, with traditionally large families. The higher concentration of female householders in the rural South reflects the high concentration of Blacks and their greater likelihood of being in such households.

Children

During the 1980's, the number of children under age 18 increased from 47 million to nearly 49 million (4-percent increase) in urban areas, but declined from nearly 17 million to 15 million (11-percent decrease) in rural areas. The proportion of children who were own children (sons and daughters, including stepchildren and adopted children) of the householder declined in urban areas, but remained the same in rural areas. In 1990, 93 percent of White children were own children of the householder, compared with 78 percent of Black children and 88 percent of Hispanic children. In rural areas, the proportion of White own children remained unchanged, while the proportion declined slightly for Blacks and Hispanics. Rural children, regardless of race/ethnicity, are more likely to reside in married-couple families than are urban children. However, the proportion of own children in married-couple families declined in the 1980's, and was more pronounced for rural children–a decline of 5.5 percent (fig. 1). Similar racial and ethnic patterns in children's relationship to the householder are seen by urban-rural residence. While the proportion of children in married-couple families declined since 1980, children living with other relatives or nonrelatives increased.

As the share of children in married-couple families decreased, the proportion of own children living with their mother only increased in the 1980's in urban and especially rural areas (fig. 1). The proportion of children living with female householders has risen among all race and ethnic groups (fig. 2). In rural

Table 6—Characteristics of urban and rural[1] households, by region, race, and ethnicity, 1990

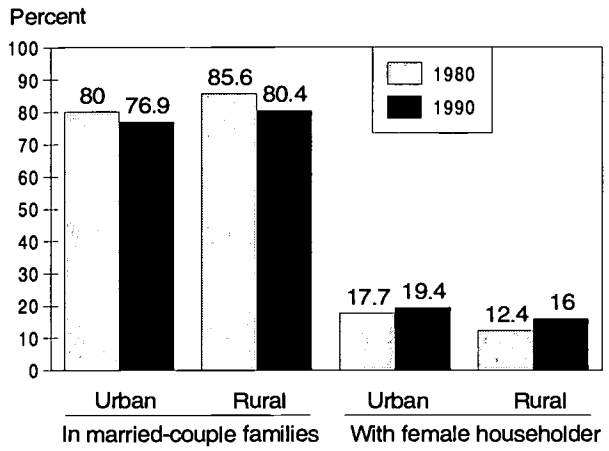
Population group	Family household	Married family	Female householder	Nonfamily household	Persons per Household	Persons per Family
	Percent of all households				*Number*	
U.S. total	70.2	55.1	11.6	29.8	2.63	3.16
Urban:						
Northeast total	69.0	52.7	12.7	31.0	2.62	3.18
White	68.5	55.8	9.6	31.5	2.54	3.10
Black	68.4	31.2	31.6	31.6	2.86	3.47
Hispanic	77.0	42.6	27.4	23.0	3.24	3.62
Midwest total	69.5	54.3	12.0	30.5	2.61	3.16
White	69.3	57.5	9.0	30.7	2.55	3.09
Black	68.7	30.2	33.3	31.3	2.83	3.46
Hispanic	78.7	55.0	16.3	21.3	3.48	3.89
South total	70.2	54.5	12.4	29.8	2.60	3.13
White	69.6	58.2	8.6	30.4	2.50	3.01
Black	70.9	35.8	30.0	29.1	2.88	3.46
Hispanic	79.6	58.8	15.0	20.4	3.40	3.80
West total	68.3	53.2	11.0	31.7	2.72	3.26
White	66.2	53.5	9.2	33.8	2.54	3.08
Black	67.1	35.2	26.2	32.9	2.75	3.34
Hispanic	81.3	56.6	16.3	18.7	3.82	4.09
Rural:						
Northeast total	71.1	58.8	9.2	28.9	2.58	3.07
White	71.2	59.0	9.0	28.8	2.58	3.06
Black	66.9	41.2	21.0	33.1	2.74	3.33
Hispanic	73.3	52.1	16.5	26.7	2.96	3.39
Midwest total	72.1	61.4	8.0	27.9	2.58	3.09
White	72.1	61.9	7.6	27.9	2.57	3.07
Black	67.0	37.4	25.0	33.0	2.74	3.39
Hispanic	77.8	58.9	13.2	22.2	3.27	3.70
South total	74.4	59.3	12.0	25.6	2.63	3.11
White	74.3	63.2	8.4	25.7	2.54	3.00
Black	73.6	37.9	30.7	26.4	3.02	3.62
Hispanic	81.8	63.5	13.1	18.2	3.49	3.89
West total	72.1	59.6	9.1	27.9	2.69	3.18
White	71.2	60.2	8.0	28.8	2.59	3.08
Black	70.1	47.9	17.1	29.9	2.84	3.40
Hispanic	80.0	59.2	14.6	20.0	3.36	3.75

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan.

Source: Compiled by Economic Research Service from U.S. Bureau of the Census. 1980 Census of Population, General Population Characteristics, U.S. Summary, and 1990 Census of Population, General Population Characteristics, United States.

Figure 1

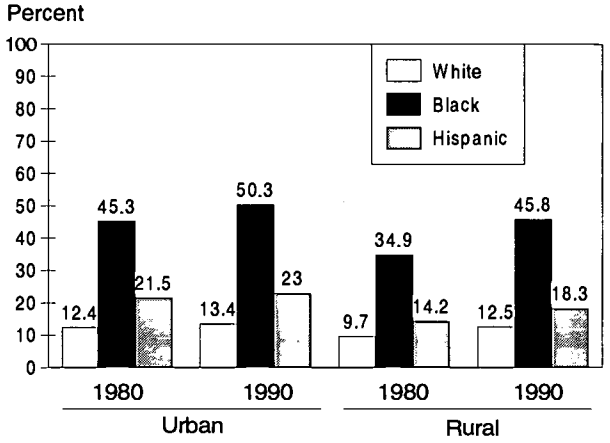
Own children living in married-couple families and with female householders



*Own children are sons and daughters, including stepchildren and adopted children, of the householder.

Figure 2

Percentage of own children with female householder, by race



*Own children are sons and daughters, including stepchildren and adopted children, of the householder.

areas, the proportion of White children and Hispanic children in such living arrangements increased more modestly than that for Black children. A higher proportion of Black children live in mother-only families; rural Blacks experienced the most substantial increase in the share of children living with a female householder, from 35 percent in 1980 to 46 percent in 1990 (fig. 2). The more marked increases in the proportion of rural own children living in mother-only families for all race/ethnic groups suggests that children's living arrangements may be converging by place of residence. Children in single-parent families tend to receive less care and parental attention compared with children in married-couple families, to have more school-related, health, and behavioral problems, to have lower family incomes, to complete fewer years of schooling, and to earn less as adults (Hernandez, 1993).

The Elderly

The size of the elderly population increased during 1980-90, more rapidly in urban areas (27 percent) than in rural areas (11 percent). In contrast to the household relationships of children, those of the elderly remained relatively unchanged over the decade. The proportion of family householders[3] among the elderly in rural areas remained about 35 to 36 percent. The rural elderly were somewhat more likely to be family householders or spouses of the householder than were the urban elderly. Minority elders were more likely than Whites to live with other relatives and less likely to be with a spouse. Changing family structure and shifts in social support networks will affect the well-being and living arrangements of the elderly. As the elderly population becomes more racially and ethnically diverse, the demand for health care and other forms of assistance may shift from the family to more institutional support systems.

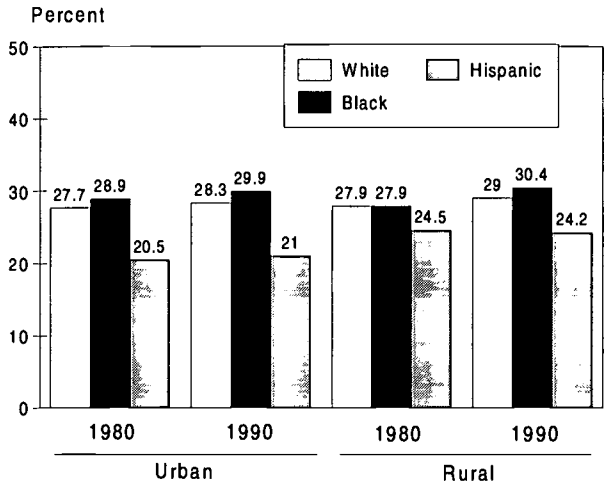
The share of elderly persons living alone increased for Blacks and Whites during 1980-90 (fig. 3), with a slightly greater increase in rural areas. For example, 28 percent of rural Black elders lived alone in 1980, increasing to slightly over 30 percent in 1990; rural White elders living alone increased from 28 to 29 percent during the 1980's. Hispanics, a very small segment of the elderly population, experienced no change in the proportion living alone in either urban or rural areas. Elderly persons who live alone are more likely to experience health problems and poverty (Commonwealth Fund Commission on Elderly Living Alone, 1987) and may have greater needs for certain social and health care services.

Summary and Conclusions

To what extent are patterns of change in age and family structure characteristic of the broader population evident among minority populations,

[3] A family household is a household maintained by a family and any unrelated persons who may be residing there. The family householder is the person in whose name the housing unit is maintained.

Figure 3
Percentage of persons 65 and older living alone, by race



specifically those in rural areas? The age structure of minority populations has traditionally been younger than that of the White population, due to higher levels of childbearing. During 1980-90, the proportion of the population under age 18 declined for all race/ethnic groups, and the proportion age 65 and older increased. The median age of the U.S. population increased substantially from 30.0 years in 1980 to 32.9 years in 1990, with an older age structure in rural areas. This residential difference reflects both the greater concentration of children and elderly in rural areas and the disproportionate share of young adults in urban areas. Blacks and Hispanics followed the same general pattern of change as the White population, though the level and rate of change differed.

Changes in patterns of marriage, divorce, and childbearing have affected the structure of households and families. Household and family size, being closely related to declines in childbearing and in the average number of children under age 18, declined between 1980 and 1990 in both urban and rural areas. Despite the decline in the size of households and families, minorities continue to have larger families and households than Whites. A lower proportion of households in 1990 were married-couple families for all race/ethnic groups. The shift in the living arrangements of own children from married-couple families to female householders was more pronounced in rural than urban areas during the 1980's. This suggests that some convergence in children's living arrangements may be occurring by place of residence.

Traditional support structures within families have changed, and the demand for care of both children and the elderly has increased. The increased incidence of mother-only families and working mothers has promoted awareness of the difficulties in caring and providing adequately for children. The family environment and financial resources available to children will affect both their educational attainment and future productivity in the work force. With the elderly's proportion in the population increasing, and their greater risk of acute and chronic health conditions, the need for health care and long-term care will increase. Care for the elderly will increasingly be sought outside the family setting, because traditional caregivers–adult daughters–are now more likely to be employed in the work force.

The future of America's children will depend on the capacity of families to meet their needs. The family settings in which children grow up will continue to pose enduring problems for social legislation that addresses inadequacies in prenatal care, child care, and parenting (Morrison, 1991). Furthermore, the increasing share of minorities among the child population will have important implications for local communities in the provision of goods and services associated with children. Given the large proportion of minority children who currently live in poverty or come from disadvantaged homes, O'Hare (1992) asserts that policymakers will need to pay greater attention to the needs of America's minority children to ensure the Nation a trained and competitive work force in the future.

The older population is becoming more racially and ethnically diverse, which will affect the demand for social and health services as well as policies to provide long-term care. Minorities entering old age are likely to have inadequate financial resources in terms of pensions and Social Security due to their checkered work histories--periods of unemployment or not being in the labor force--and type of employment with low or nonexistent pensions. Rural development planning should consider the different needs in areas that have "aged in place" compared with areas that have attracted elderly migrants through rural amenities and low living costs. The combination of a burgeoning elderly population, a relatively small working-age population, and continuing low childbearing means that only a relatively small number of persons of working age will be available to provide the services and funds the elderly need–health and social services, and adequate housing.

The changing age structure of the U.S. population might be expected to have positive consequences for children and negative ones for the elderly. Fewer children implies less competition for resources in the home and for social services such as public schooling. However, an increasing elderly population would put greater pressure on resources such as Social Security funds as well as medical care facilities and nursing homes, which are less prevalent in rural areas.

The concentration of children and elderly persons in rural areas will be important to consider in local policies and rural development planning. The total dependency rates will change little in the decades to come because of the opposing trends of the two dependent age groups. A major policy issue associated with the shifting balance in the numbers of elders and children is the relative allocation of public resources to the two groups of dependents–this issue is intensified by their disproportionate needs, differences in political power, and the necessarily limited resources available. The primary public service provided for children is education and for the elderly, health care. For some rural communities, the trade-off comes down to decisions to adequately serve either children or the elderly, but not both. Due to the increasing racial and ethnic diversity of the population, informed policies, programs, and even commercial products targeted at today's dependents may need to be reassessed to see if they will meet the needs of tomorrow's dependent populations.

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Increasing Black-White Separation in the Plantation South, 1970-90

John B. Cromartie and Calvin L. Beale

In former plantation regions throughout the rural South during 1970-90, Black populations grew in cities and towns while White populations grew outside these places. Before 1970, rural Blacks were more likely than Whites to reside in the open countryside, but this is no longer true. If present trends continue, over 40 percent of the Black population in these regions will live in cities and towns by 2000, compared with less than 25 percent of the White population. Such growing residential separation resembles the process that created urban ghettos in the Nation's largest cities, and in most cases signals growing economic disadvantages for the rural Black population.

Blacks are this Nation's largest rural minority, numbering 4.5 million in 1990.[1] Over 90 percent of rural Blacks live in the South, mostly in the Coastal Plain and lower Piedmont (fig. 1). Following three decades of large-scale outmigration and population decline, the Black population within the rural South has been growing slowly since 1970. While overall racial composition remained fairly stable over time, with the Black percentage decreasing only slightly from 38 to 36 percent between 1970 and 1990, the geography of Black and White population growth within the rural South was quite distinct. The Black population grew within towns and cities while the White population grew mostly outside such places, reversing previous settlement patterns. By 1990, 48 percent of the area's Black population resided in incorporated places, compared with only 38 percent of the White population.

Blacks know firsthand how residential location contributes to economic well-being. Overcoming formidable social and economic barriers, many Black families and individuals have improved their status by choosing new neighborhoods, towns, cities, and regions of the country. The growth of the Black middle class since the 1960's goes hand in hand with their suburbanization. However, the continued poverty of large numbers of Blacks, both rural and urban, is inextricably bound up with their residential isolation.

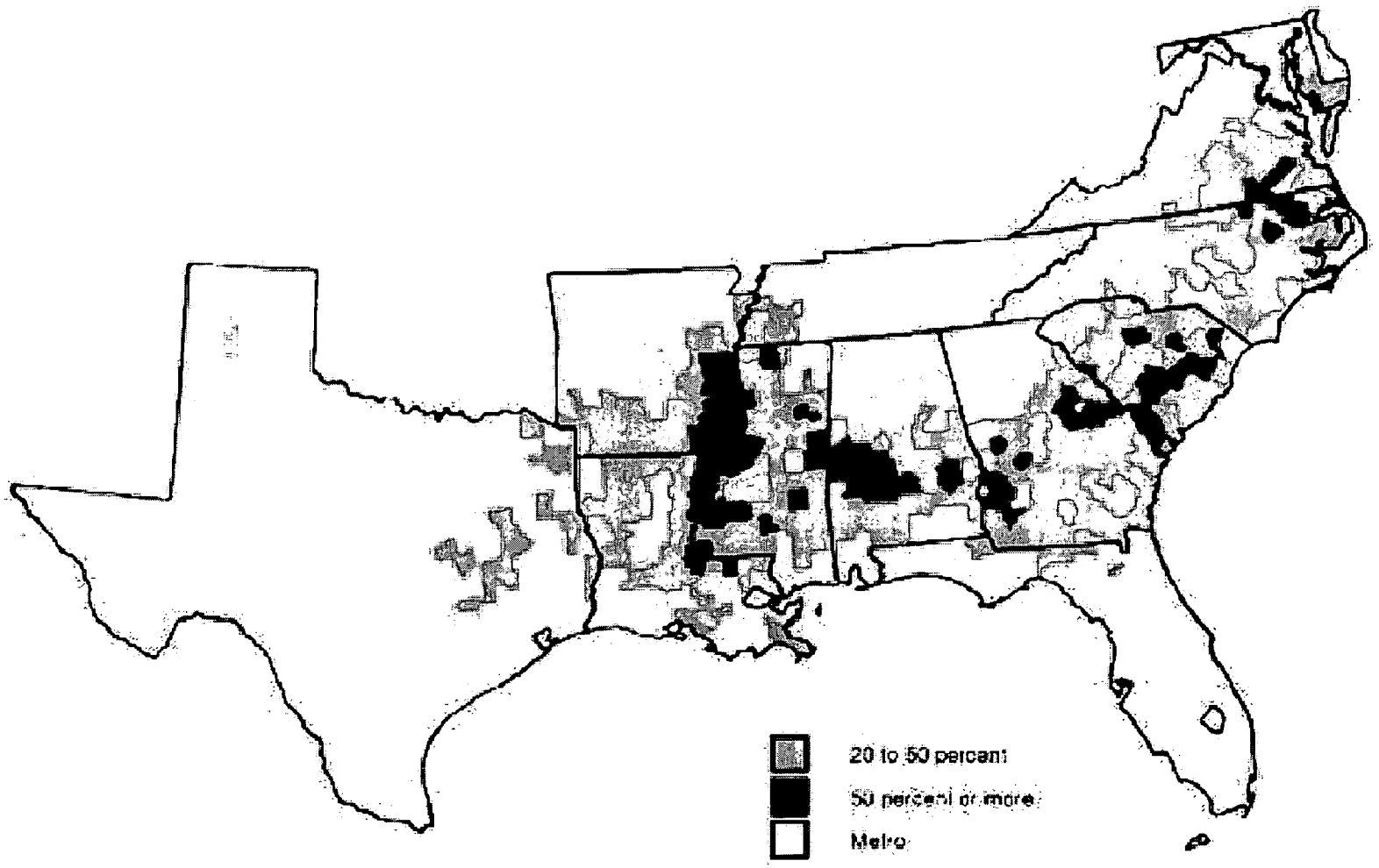
For Blacks, the relationship between residential separation and economic well-being has always been negative. Other minority groups have thrived within "immigrant enclaves" that allow groups to pool resources and access a ready market for specialized goods and services. Perhaps because of the overt, legal racial barriers that were overcome at great cost, perhaps because Blacks have been part of this country from the beginning and were not "immigrants" to northern cities during the industrial era, the struggle has always been for assimilation within the American economy rather than for development of their own enclaves. Signs of continued and increasing residential separation, whether in neighborhoods of large cities or in rural areas, are necessarily viewed with concern. Changing residential patterns, so closely linked with Black economic status, demand the close attention of demographers and policymakers.

This study documents changing residential patterns in the municipalities and surrounding countryside of southern rural counties during the 1970's and 1980's. The purpose is to measure the change in racial composition caused by differences in Black and White population growth and to determine whether separation increased or decreased as a result. First, we examine population and racial composition change by size-of-place categories (including a separate category for populations living outside incorporated places) and measure the effect of population change on racial separation at the size-of-place level. Second, we examine the variability of racial composition change within the region's incorporated places.

[1] Rural people are those who live in counties outside the boundaries of metropolitan areas, as defined by the Office of Management and Budget. Thus, rural counties include small cities (under 50,000 pop.), small towns, and open country. See appendix for a complete definition.

Figure 1

Plantation South: nonmetro counties with 20 percent or more Black population, 1990



Data source: Bureau of the Census.
Map prepared by Economic Research Service.

Data and Definitions

Data for this analysis come from the 1970, 1980, and 1990 Censuses. Population data by race for all incorporated places were extracted from 100-percent-count data tapes and combined with similar data for counties in order to derive counts by race for areas outside incorporated places. To calculate a county's "nonplace" population, incorporated place counts were summed and subtracted from the county total. In cases where incorporated places straddle county boundaries, weights for the Black and White populations were derived based on their distribution in each part of the place in 1980. Similar county-level breakdowns were not available for 1970 and 1990, so the 1980 weights were used. To be included, a place had to be officially incorporated at all three time points. Thus, persons living in places that were either recently incorporated or recently disincorporated are included among the "nonplace" population of counties, along with persons living in unincorporated villages and hamlets, suburban fringes of incorporated places, and open countryside.

The 1,451 municipalities included in the study are classified into one of five groups according to their size at the beginning of each decade (table 1). Thus, the number of places in each category shifts even though the total stays the same. The first two categories consist of cities and towns, that is, places with populations of 2,500 or more. Places with less than 2,500 people are termed villages.

In this study, the Black population includes all Blacks, Hispanic and non-Hispanic, to have a consistent definition across decades. The region under study contains very few Hispanic Blacks, less than 2 percent of the total. The White population includes all non-Black racial groups. Although other minorities make up only a fraction of the total non-Black population in this region, a few counties contain significant Asian or Native American populations.

Table 1—Number of incorporated places by size of place, Plantation South, 1970-90

Size of place	1970	1980	1990
		Number	
10,000 or more	85	94	91
2,500-9,999	266	284	268
1,000-2,499	296	287	301
500-999	298	312	277
Fewer than 500	506	474	514
Total	1,451	1,451	1,451

Source: Compiled by Economic Research Service from U.S. Bureau of the Census.

While continued residential separation facing Blacks in the Nation's largest cities has been extensively documented, fewer studies have focused on racial composition change within rural areas. Two studies analyzing population change in rural counties showed that Black and White population trends began to diverge in the 1970's (Lichter, Fuguitt, and Heaton, 1985; Lichter and Heaton, 1986). During the 1950's and 1960's, the locus of population growth for both groups was cities and towns (municipalities with 2,500 people or more), indicating a process of concentration. During the 1970's, as part of a nationwide deconcentration of population, the rural White population grew by 22 percent in villages (municipalities with fewer than 2,500 people) and the outlying countryside, compared with 7-percent growth in cities and towns. However, the Black population continued to concentrate, growing by 17 percent in urban places compared with only 2 percent in villages and open countryside (Lichter, Fuguitt, and Heaton, 1985, p. 491). The 1970's was the first decade of large differences in Black and White growth rates in rural municipalities, with Black growth rates twice as high as those for Whites.

Aiken (1985; 1987; 1990) has documented the concentration of Blacks into countryside hamlets, the margins of municipalities, and predominantly Black towns from 1950 through 1980. Fieldwork conducted in the Mississippi Delta and elsewhere shows that Black concentration in recent decades stands in marked contrast to the dispersed pattern of settlement associated with earlier tenant farming. Redistribution of the Black population during 1950-80 altered the commercial and residential structure of small municipalities and increased racial separation within incorporated places.

Different interpretations have been made concerning the effect of racial population trends in the rural South. Aiken's analysis of increasing separation in the Mississippi Delta is similar to the findings of urban "hyper-segregation" in recent years. Cities and towns with declining retail structures, the concentration of the poor in public housing, economic isolation, predominantly Black towns with no employment base, and the perception of towns as ghettos are common features in this part of the rural South.

In their analysis of all southern rural counties from 1950 to 1980, Lichter and Heaton (1986) draw somewhat less pessimistic conclusions. They note that the pace of racial change was not as rapid as in large cities and suburbs and that Black communities were more demographically stable in rural areas, that is, populations were not rapidly replacing themselves as often occurred in urban neighborhoods. Also, during the 1970's, racial composition changed in the context of overall population growth rather than decline. "Thus, racial change in the South has evolved along a considerably different path than that now found in major U.S. metro cities, where increases in the percentage Black have occurred with White population losses" (1986, p. 352).

This study builds on previous research by considering all southern rural areas with significant Black populations and by including 1980-90 data. We are interested in the following questions: (1) Did Black concentration and White deconcentration continue in the 1980's? (2) Did residential separation increase or decrease as a result of different Black and White population growth? (3) To what extent did the Black percentage of the population increase in municipalities, and how did this vary over time and by place?

Historical and Geographical Setting

Since the end of World War II, the residential geography of this country's Black population has changed significantly. In addition to the well-documented, large-scale migration from the rural South to the urban North and West, a similar shift from smaller to larger places occurred within the rural South among Blacks who chose to remain or who returned to the region over the years. Unlike the large-scale interregional migration, which ended and even reversed after 1970, the process of Black intraregional concentration continued through the 1970's (Aiken, 1990; Lichter, Fuguitt, and Heaton, 1985; Lichter and Heaton, 1986).

Although much has been made of the historical Black population decline in the rural South, a significant number still live there. Population decline was precipitous for several decades before 1970, with the Black population in the rural South (as defined in 1984) dropping from 8 million in 1900 to 4.2 million in 1970. The population declined as Blacks left southern agricultural labor; outmigration, mechanization, and farm consolidation led to the near demise of the Black farm economy (Aiken, 1985; Banks, 1986; Beale, 1966; Moland, 1981). The number of Black farm operators dropped from 560,000 in 1950 to 100,000 in 1970 (Beale, 1971). During the 1960's alone, the Black farm population in the South declined by 64 percent (Beale, 1973).

Regional outmigration associated with agricultural displacement subsided after 1970, and the rural South's Black population began to grow slowly; in 1990, the population was close to 4.5 million. A small but steady return migration to rural areas from outside the South contributed to this growth (Cromartie and Stack, 1989). However, unlike the White population, which shifted away from towns and cities into the countryside–a new pattern of deconcentration–Blacks within the region continued to concentrate in the cities and towns.

The purpose of this research is to analyze recent shifts in racial composition within rural counties containing significant Black populations. Rural counties with the highest concentration of Blacks, including the 78 that remain majority Black (fig. 1), are in areas that until World War II were distinguished by an all-encompassing plantation-type economy. The plantation system, which depended on the low-cost mobilization of Black farm laborers, did not disappear with emancipation in 1863 but was maintained by various noncash arrangements of share tenancy known as "sharecropping." Although the system suffered from declining cotton prices, boll weevil infestation, and outmigration of Black labor beginning in the 1910's, it ended only after World War II with the wholesale mechanization of cotton and other crop production.

Our study selected rural counties with populations that were 20 percent or more Black in 1990. These counties form an almost contiguous region from the Eastern Shore of Maryland to east Texas. Except in Texas and Florida, all but a handful of the South's rural Coastal Plain counties are included.[2] Most of the Piedmont counties with high Black percentages lie along the Fall Line, the border between the Coastal Plain and Piedmont. Because of the legacy left by

[2] Four rural counties that have populations higher than 20 percent Black are not included: Alexander and Pulaski, IL; Geary, KS; and Pemiscot, MO. Although Alexander, Pulaski, and Pemiscot Counties are linked historically and geographically to the Mississippi Delta region, they are not located in the South (as defined by the Census Bureau) and thus are excluded, along with Geary, from this analysis.

Table 2—Black population by region and subregion, 1970-90

Region	Population			Distribution		
	1970	1980	1990	1970	1980	1990
	Number			*Percent*		
U.S. total	22,674,586	26,482,349	29,986,060	100.0	100.0	100.0
Non-South	10,610,328	12,443,567	14,157,172	46.8	47.0	47.2
Urban[1]	10,303,646	12,094,098	13,714,782	45.4	45.7	45.7
Rural	306,682	349,469	442,390	1.4	1.3	1.5
South	12,064,258	14,038,782	15,828,888	53.2	53.0	52.8
Urban	7,821,878	9,618,443	11,348,070	34.5	36.3	37.8
Rural	4,242,380	4,420,339	4,480,818	18.7	16.7	14.9
Nonplantation	996,815	993,015	1,012,160	4.4	3.7	3.4
Plantation	3,245,565	3,427,324	3,468,658	14.3	12.9	11.6

[1]Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from U.S. Bureau of the Census.

Table 3—Black and White population change by region and subregion, 1970-90

Region	Black population change		White population change		Share Black		
	1970-80	1980-90	1970-80	1980-90	1970	1980	1990
			Percent				
U.S. total	16.8	13.2	10.8	9.3	11.2	11.7	12.1
Non-South	17.3	13.8	6.9	7.5	7.6	8.2	8.7
Urban[1]	17.4	13.4	5.3	8.6	9.1	10.0	10.4
Rural	14.0	26.6	12.8	3.3	1.1	1.2	1.4
South	16.4	12.8	20.9	13.5	19.2	18.6	18.5
Urban	23.0	18.0	21.4	17.2	18.6	18.7	18.8
Rural	4.2	1.4	19.8	5.7	20.6	18.4	17.8
Nonplantation	-0.4	1.9	22.8	6.9	8.2	6.7	6.4
Plantation	5.6	1.2	13.2	2.8	38.5	36.8	36.5

[1]Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from U.S. Bureau of the Census.

the now nearly extinct plantation system, we refer to the area under study as the Plantation South.[3]

The Plantation South's Black population has remained fairly stable at just under 3.5 million, growing only slightly over 20 years (table 2). Because of more rapid growth in other regions, most notably the urban South, the population in the Plantation South has declined from 14.3 percent of the total U.S. Black population in 1970 to 11.6 percent in 1990.

Both Black and White populations grew much more slowly in 1980-90 than in 1970-80 (table 3). Population growth rates in the 1980's for rural Whites in both the South and non-South were about one-quarter the 1970's rates. Black population growth in the Plantation South fell from 5.6 percent in the 1970's to 1.2 percent in the 1980's. Because of faster White growth during both decades, the proportion of Blacks declined slightly for the South as a whole and for the Plantation subregion. However,

[3] Another popular label for this region, the "Black Belt," is somewhat misleading because it takes its name from a physiographic region in east-central Mississippi and western Alabama, named for the color of its soil.

Table 4—Population change by race and size of place, Plantation South, 1970-90

Size of place	Black population change		White population change		Share Black		
	1970-80	1980-90	1970-80	1980-90	1970	1980	1990
				Percent			
Total	5.6	1.1	13.2	2.6	38.6	37.0	36.7
10,000 or more	17.0	13.5	0.9	-5.0	34.8	38.3	42.5
2,500-9,999	15.7	9.3	5.1	-8.3	37.8	40.1	44.4
1,000-2,499	19.4	5.5	5.6	-7.4	35.7	38.6	41.7
500-999	17.9	-2.2	6.3	-8.8	33.0	35.4	37.0
Less than 500	24.5	-8.5	9.7	-9.6	28.8	31.5	31.8
Place total	17.1	9.3	3.6	-6.9	35.6	38.5	42.4
Outside places	-1.9	-5.2	20.9	9.2	40.9	35.9	32.7

Source: Compiled by Economic Research Service from U.S. Bureau of the Census.

the modest decline in overall percentage Black is not indicative of more significant racial composition shifts within the subregion.

Racial Composition Shifts Within the Plantation South

The extent of intraregional racial composition shifts may be analyzed by comparing population changes within and outside incorporated places. Despite extremely low overall growth in the 1980's, patterns of change for Blacks and Whites within the Plantation South continued to be quite distinct (table 4). As in the 1970's, the Black population grew much faster than the White population in the region's incorporated towns and cities, a trend that has increased the Black percentage of these places. The Black population continued to decrease outside incorporated places, while the White population continued to gain in these areas, although at a much reduced rate from the 1970's.

White population grew during the 1970's in all size-of-place categories but followed a systematic pattern of deconcentration. That is, growth was smallest among larger cities, increased down the size-of-place hierarchy, and was largest for the nonplace population. During the 1980's, the White population declined within municipalities at all size levels, but continued to grow outside places.

Black population growth during the 1970's was uniformly high in incorporated places, averaging 17 percent, in marked contrast with the 1.9-percent decline outside municipalities. A pattern of concentration up the size-of-place hierarchy appeared for the first time during the 1980's. Cities of 10,000 persons or more grew fastest while the Black population in towns under 1,000 decreased. Overall, the municipal Black population increased by 9 percent while the Black population outside places decreased by 5 percent.

Black population growth rates exceeded White rates in all municipal size-of-place categories in both decades. Outside municipalities, White growth was positive and Black growth was negative in both decades. This differing population growth altered racial composition. The population residing outside incorporated places, which in 1970 was 41 percent Black, declined to 33 percent Black in 1990. At the same time, the population in the region's largest cities increased from 35 to 43 percent Black.

During the 1970's, the Black share of population grew within the context of overall municipal growth. White growth at all size levels, because it was positive, kept increases in Black percentages from being higher than they were. During the 1980's, Black growth combined with White decline to increase the Black percentage in places of 1,000 persons or more. In places less than 1,000 persons, Black population declines offset the effects of White decline. Outside of places, Black decline and White growth contributed to Black percentage decreases in both decades, although White growth contributed the most, especially during the 1970's.

Effects of Population Change on Racial Separation

Have different growth rates by size of place increased or decreased racial separation in the Plantation South? In 1970, a higher percentage of Whites than Blacks lived in municipalities of all sizes (table 5). The largest difference occurred among cities with 10,000 or more people, which contained 19 percent of the White population and 16 percent of the Black population. By 1980, the distributions had switched in the three highest size categories; that is, a higher percentage of Blacks lived in places with more than 1,000 people–and the gaps widened during the 1980's.

The process is similar outside municipalities. A higher percentage of Blacks than Whites lived outside of places (61 versus 55 percent) in 1970. As a result of continuing redistribution trends, the Black distribution outside places dropped to 53 percent in 1990, while the White distribution rose to 63 percent. The difference in percentages outside places, having converged and then diverged, was almost twice as large in 1990 as in 1970.

The convergence of distributions followed by divergence is shown in our measure of separation (table 5). The index of dissimilarity, a commonly used separation measure, shows the percentage of one group (Black or White) that would have to change size categories in order to achieve similar distributions. Between 1970 and 1980, Black concentration and White deconcentration combined to reduce separation among size-of-place categories. Whites were more concentrated than Blacks in 1970. But by 1990 this had reversed, so that Black concentration and White deconcentration served to increase separation. The dissimilarity index was nearly three times as high in 1990 as in 1980.

Figure 2 depicts the population distribution reversals that have taken place in the Plantation South and the growing Black and White gap. The same percentages as in table 5 are shown except the five municipal categories have been aggregated into two categories–places above 2,500 people (cities and towns) and places below 2,500 people (villages). The population outside places is kept as a separate category. Sometime during the mid-1970's, one-third of both Blacks and Whites lived in cities and towns. Since then, population distributions have diverged and the gap in 1990 was much larger than in 1970. Distributions did not change as much for the populations living in villages–close to 10 percent of both races live in these towns and villages–but a reversal to a higher Black percentage took place around 1980.

A majority of both groups were still living outside municipalities in 1990. However, if present trends continue, less than half the Black population but more than two-thirds of the White population will live outside incorporated places by 2000. Over 40 percent of the Black population in the Plantation South will

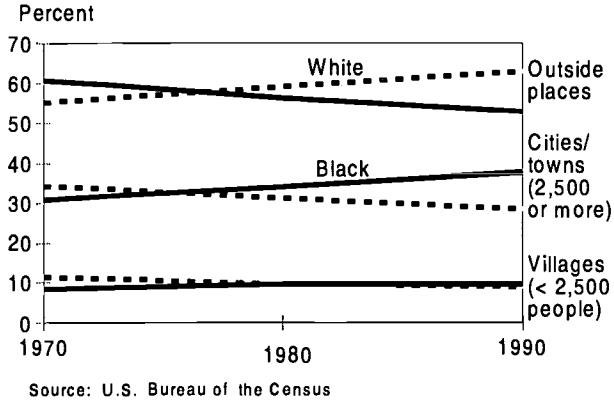
Table 5—Black and White population distribution by size of place, Plantation South, 1970-90

Size of place	1970			1980			1990		
	Black	White	Difference	Black	White	Difference	Black	White	Difference
	Percent		*Percentage points*	*Percent*		*Percentage points*	*Percent*		*Percentage points*
10,000 or more	16.3	19.2	-2.9	18.1	17.1	1.0	20.3	15.9	4.4
2,500-9,999	14.5	15.0	-0.5	15.9	14.0	1.9	17.2	12.5	4.7
1,000-2,499	5.2	5.9	-0.7	5.9	5.5	0.4	6.2	5.0	1.2
500-999	2.1	2.7	-0.6	2.3	2.5	-0.2	2.2	2.2	0.0
Less than 500	1.2	2.8	-1.6	1.5	1.7	-0.2	1.3	1.8	-0.5
Outside places	60.6	55.2	5.4	56.3	59.0	-2.7	52.7	62.8	-10.1
		1970			1980			1990	
Index of dissimilarity[1]		5.8			3.2			10.4	

[1] The index of dissimilarity is the percentage of one group (Black, White) that would have to change residence in order to achieve similar distributions among the size-of-place categories.

Source: Compiled by Economic Research Service from U.S. Bureau of the Census.

Figure 2
Black and White population distribution in the Plantation South, 1970-90



Source: U.S. Bureau of the Census

live in cities and towns by 2000, while less than 25 percent of the White population will live in such places.

Patterns of Racial Change in Incorporated Places

How have these population trends affected the racial makeup of the region's municipalities? During the 1970's, the Black share of population increased in 64 percent of the 1,451 incorporated places in the Plantation South; the number of such places grew slightly during the 1980's to 67 percent. Places where the Black composition increased were not clustered but were distributed uniformly throughout the region, with some exceptions. Fewer places in Maryland and Virginia increased their Black share during the 1980's (55 percent) than in Mississippi and Texas (75 percent). North and South Carolina also had Black percentage increases in more than 70 percent of municipalities.

The average increase in percentage Black was relatively small, around 6 percent in both decades. But in some municipalities, the increases were substantial enough to cause a switch to majority Black status. Between 1970 and 1990, 197 municipalities became majority Black, increasing the total from 261 (18 percent of the total) to 458 (32 percent). Between 1970 and 1990, 177 municipalities increased in percentage Black by more than 15 percent, with 63 becoming predominantly Black.

The number of municipalities experiencing Black percentage increases varied little between the 1970's and 1980's despite tremendous changes in overall municipal growth patterns. During the 1970's, 87 percent of incorporated places in the Plantation South grew in total population; only 50 percent of places grew during the 1980's.

Increases in percentage Black may occur in three ways–faster Black than White growth, Black growth and White decline, or slower Black than White decline. In both decades, the most common pattern was Black growth and White decline, but this pattern was much more predominant in the 1980's (table 6). Black growth greater than White growth was nearly as common a pattern (as Black growth, White decline) in the 1970's, but the percentage of places in this category declined precipitously in the 1980's. At the same time, the percentage of places experiencing slower Black than White decline increased significantly. Thus, during the 1980's, Black concentration in the Plantation South resulted from patterns of "White flight" and overall population decline; these are demographic processes similar to those affecting ghetto formation in urban cities.

During both decades, roughly one-third of incorporated places decreased in percentage Black (table 6). Among these places, slower White than Black decline increased dramatically, becoming by far the most predominant pattern during the 1980's. Places with either faster White than Black growth or White growth and Black decline dropped to less than 10 percent of all places.

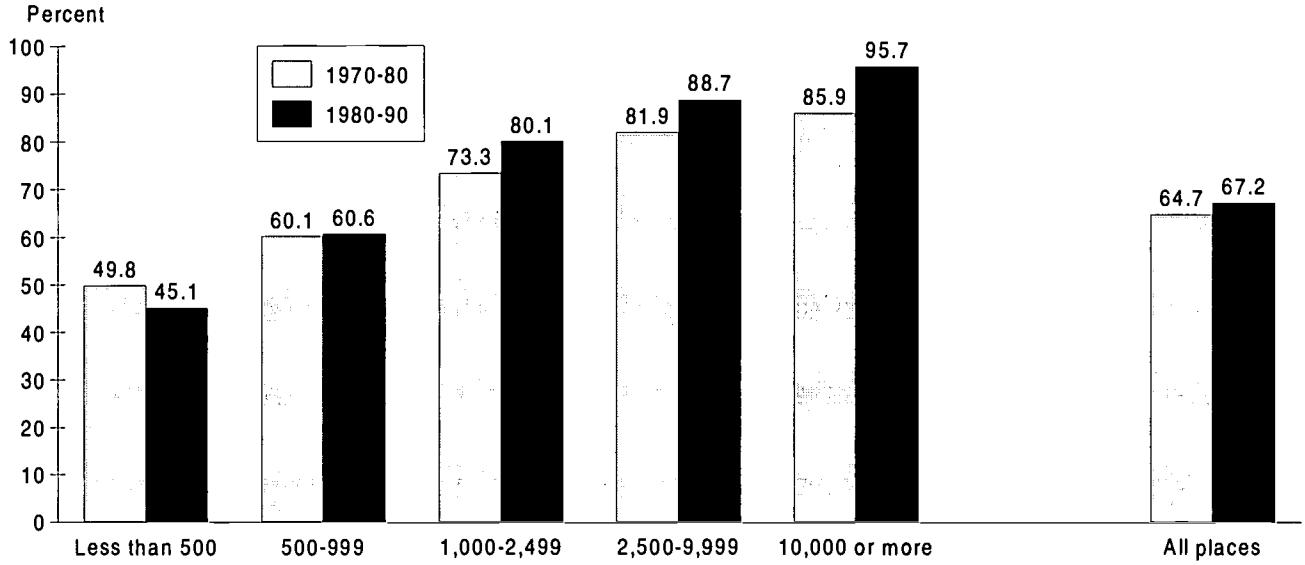
Table 6—Distribution of incorporated places by change in percentage Black and racial growth patterns, Plantation South, 1970-90

Type of change	1970-80	1980-90
	Percent	
Increase in percentage Black	64.8	67.1
Faster Black than White growth	27.2	9.4
Black growth, White decline	30.9	37.4
Slower Black than White decline	6.7	20.3
Decrease in percentage Black	35.2	32.9
Faster White than Black growth	8.9	2.7
White growth, Black decline	14.6	6.5
Slower White than Black decline	11.7	23.7

Source: Compiled by Economic Research Service from U.S. Bureau of the Census.

Figure 3

Percentage of places with an increasing Black composition, 1970-80 and 1980-90, by size at beginning of decade



Source: U.S. Bureau of the Census.

A strong relationship exists between the size-of-place hierarchy and increasing Black composition (fig. 3). The share of incorporated places with Black percentage increases ranged from 45 percent among the smallest villages to 96 percent among the largest cities during the 1980's. This pattern was only slightly less pronounced during the 1970's. The percentage of places with an increasing Black composition topped 80 percent in all size-of-place categories above 1,000 during the 1980's. Larger towns and cities usually provide better chances for jobs, more housing choices, and greater access to education and social services than do smaller towns. These functions appear to be more important in determining Black than White residential choices. Opportunities for Blacks in the Plantation South are continuing to concentrate in larger municipalities.

Is there a "tipping point" in terms of racial composition above which Black percentage increase occurs with greater frequency? Figure 4 indicates a relationship between initial percentage Black and increasing Black composition, especially during the 1980's, but with no obvious "tipping point." In general, the higher the percentage Black, the more likely that a place had Black composition increase, although this relationship did not hold above the 50-percent mark during the 1970's. During the 1980's, the relationship was evident up to 70 percent. The process of Black concentration seems to be reinforcing previously evolving residential patterns, with predominantly Black places more likely to increase in percentage Black than places with lower concentrations of Blacks.

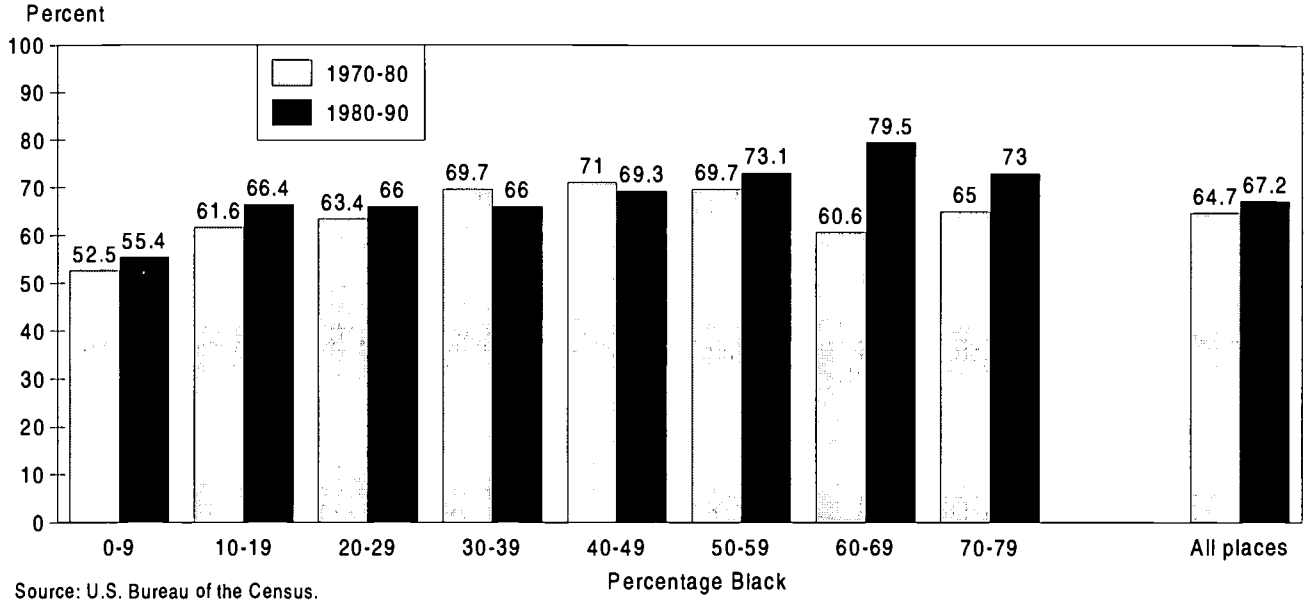
Conclusions

Both by choice and from lack of alternatives, Black southerners for generations have made settlement choices that differ considerably from those of their White neighbors. In the period of heaviest Black outmigration, 1940-70, Blacks within the region both fled and were displaced from dispersed patterns of settlement associated with tenant and/or small-scale farming and began moving into cities and towns. Our analysis of population change within the Plantation South since 1970 shows that Black concentration continued during both the 1970's and the 1980's, combining with White deconcentration to significantly shift the racial composition of incorporated places and the surrounding countryside.

In 1970, a higher percentage of Whites than Blacks lived in cities and towns. Black concentration and White deconcentration led to identical distributions sometime during the late 1970's; since that time, distributions have diverged, so that the two

Figure 4

Percentage of places with an increasing Black composition, 1970-80 and 1980-90, by percentage Black at beginning of decade



Source: U.S. Bureau of the Census.

populations have become increasingly separated along the size-of-place hierarchy. If present trends continue to the end of the century, over 40 percent of the Black population in the Plantation South will share cities and towns with less than 25 percent of the White population.

Separation increasing at the municipal level does not necessarily imply that the same is occurring at the neighborhood level. Traditional economic and social arrangements have always resulted in separate residential areas in the rural South. Within cities and towns where the Black population is increasing relative to Whites, neighborhood sharing may occur for a period as Black families move into formerly all-White neighborhoods (Aiken, 1990). But this situation is strictly temporary, eventually giving way to all-Black neighborhoods.

In most cases, increasing separation at the geographic scale measured in this chapter signals growing economic disadvantages for the rural Black population more hurtful in the long run than continued neighborhood separation. Many municipalities that have become predominantly Black are thought to have experienced declines in their status as retail trade centers, especially those that once served dispersed farm populations. Many have become pockets of poverty with high unemployment, and many residents depend on government programs for housing and income assistance. Based on demographic evidence, Aiken's case-study depiction of rural municipalities as emerging ghettos appears to be apt, and is not confined to the Mississippi Delta, where most of his work was done.

During the 1970's, patterns of racial change were driven by population growth, whereas the opposite was generally true during the 1980's. Thus, the findings of Lichter and Heaton (1986), that the processes underlying Black composition change in the rural South during the 1970's were considerably different than in urban centers, were not true during the 1980's. "White flight" from rural municipalities was already a common pattern in the 1970's, but it became the dominant pattern in the 1980's, with over one-third of places experiencing Black growth and White decline. Another 20 percent experienced declines of both races during the 1980's, compared with 7 percent during the 1970's. Clearly, the underlying demographic context of increases in Black and White separation in the rural South has become more akin to ghetto-forming processes.

However, not all places in the Plantation South that are increasing in Black composition are emerging ghettos. During the 1980's, Black composition increased in two-thirds of all places and in 96 percent

of cities above 10,000. A number of these places increased in population and did well economically within a changing rural economy. Blacks have taken advantage of increasing job opportunities in the service and government sectors in the larger towns and cities of the region. Moreover, Black composition increases in municipalities often translated into increased political control and decisionmaking power over matters affecting the well-being of the Black population. The large increases in Black elected officials in the region in recent years show significant progress in the sharing of political power that comes with Black concentration. Whether increased political gains translate into Black economic gains depends very much on the future economic health of the region's municipalities.

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Trends in Occupational Status Among Rural Southern Blacks

Robert M. Gibbs

Neither Black men nor Black women in the rural[1] South enjoyed significant improvement in occupational status during the 1980's, in marked contrast to earlier periods. Blacks were half as likely to work in white-collar jobs as Whites and twice as likely to work in service occupations. Differences between rural and urban Blacks became nearly as great as those between rural southern Blacks and Whites. Racial differences in educational attainment and industry mix explain only part of the occupational structure. Young Black and White workers are no more alike in their occupations than are older Black and White workers.

The occupational status of Black men and women in the United States has improved dramatically since the end of World War II. Much of the credit goes to the Great Migration of rural southern Blacks to nonsouthern cities, where better public school systems and expanding white-collar employment pushed Black workers up the job ladder. Yet even Blacks who stayed in rural areas moved into occupations with higher earnings or social prestige. The emergence of a new industrial order coupled with Federal antidiscriminatory policies opened up more and more jobs requiring high skill and education levels, while educational attainment for rural southern Blacks was rising (Jaynes and Williams, 1989).

Although rural Blacks moved rapidly into higher status jobs between 1950 and 1980, convergence in Black and White occupational distributions was much slower. This slow convergence is unsurprising, since Whites were moving up the job ladder as well, and with an enormous headstart. Federal and State civilian antidiscrimination policies, where they existed, were relatively weak until the mid-1960's (Leonard, 1990).

This chapter examines recent conditions and trends in the occupational status of Black men and women in the rural South, home to over 90 percent of all rural Blacks. Historically, occupational dissimilarity between Black and White workers has reflected Black people's lack of access to the economic and social mainstream. Today, as racial wage discrimination has diminished, occupational segregation has emerged as a key source of racial and gender disparity in the workplace. This segregation not only contributes to current economic differences, but also directs Blacks and Whites toward very different futures as technological innovation leads to ever-changing skill requirements on the job.

What was particularly troubling in the 1980's was that occupational convergence continued to lag convergence in measures of human capital, such as high school completion and college enrollment rates. The slowdown in rural employment and earnings growth during the 1980's raises concern that the postwar improvement in minority status may have ended. Industrial restructuring in the Nation as a whole left the rural South with an even greater share of low-skill routine jobs than it possessed in the 1970's, a burden borne disproportionately by Blacks. King (1992) reports a sizable drop in occupational convergence nationally between 1980 and 1988. There has been no previous attempt to examine recent trends in rural areas.

Analysis of the rural South reveals a marked slowdown in Blacks' occupational movement during the 1980's. Neither Black men nor Black women gained significant ground relative to Whites, in contrast to the rapid upward mobility of the 1960's and 1970's. The proportion of Black workers employed in managerial and professional occupations, a touchstone of progress, remained unchanged. Blacks in the rural South were doubly disadvantaged, by location as well as by race; in general, urban Black workers improved their occupational status faster, both in absolute terms and relative to Whites.

[1] Rural people are defined here to be those who live in counties outside the boundaries of metropolitan areas, as defined by the Office of Management and Budget at the time of the census. See appendix for a complete definition.

Occupational change continued, of course, even if upward mobility did not. An examination of detailed occupational changes finds dramatic shifts out of private household services and into sales for rural Black women, and considerable reshuffling among various service occupations for men. Black workers' lack of movement into managerial and professional occupations overall masked changes in specific occupational groups, such as a sharp drop in the percentage of Blacks in teaching and a rise in the percentage who were managers.

The second half of the chapter examines the roles of education and industry mix in the level of regional occupational inequality. Only a portion of racial occupational inequality was explained by differences in educational attainment. Black and White college graduates were quite similar, but high school dropouts were not. Moreover, occupational differences within industries varied significantly, but generally resembled differences overall, indicating that sectoral inequality was not a primary source of racial occupational differences. Finally, comparisons of younger Black and White workers with the total labor force suggest that the former were not "closing the gap," but rather were just as dissimilar as older cohorts.

Measuring Occupational Status

Commonly used measures of occupational segregation give different results depending upon how finely disaggregated the categories are. I therefore analyzed occupational inequality and change using three alternate schemes, although the story that emerges from them is consistent. The broadest scheme aggregates categories into "blue-collar," "white-collar," "service," and "resource" categories to examine large-scale occupational changes. These categories are further divided into major occupational groups, which correspond roughly to the 1-digit level of the Standard Occupational Classification system. The third scheme comprises combinations of 2-digit-level occupations below the major groups. Combinations are selected to isolate job groups with historically large concentrations of Black workers. A complete list of occupations by scheme is located in the appendix to this chapter.

Occupational inequality and change are measured with the index of dissimilarity, which measures the proportion of one group that would need to switch occupation to match the distribution of a second group. While easily calculated and interpreted, the index is sensitive to the relative sizes of race or sex groups in the population as well as to the level of occupational aggregation used (Fossett, Galle, and Kelly, 1986). The index of dissimilarity also makes no allowance for occupational status. A lower value (greater similarity) need not mean higher status for the disadvantaged group, although this distinction is rarely important for racial occupational differences.

While there is no single best definition of status, most observers agree that the average education and earnings levels associated with an occupation reflect its prestige. Based on these criteria, major occupation groups are ranked in the following order, with their abbreviations as used in this text: (1) administrative, managerial, and professional occupations (managerial and professional); (2) technical, sales, and administrative support occupations (technical and support); (3) craft, repair, and precision occupations (craft); (4) transportation and moving occupations (transport); (5) machine operator, assembling, and inspection occupations (operator); (6) service occupations (service); (7) farming, forestry, and fishing (resource); (8) helper, handler, and laborer occupations (laborer).

The Occupational Status of Rural Blacks: A Basic Assessment

In recent years, some characteristics associated with higher occupational status have improved markedly among rural southern Blacks. Average educational attainment, for instance, has risen more rapidly since 1970 for this group than for Whites or for Blacks living in cities. Unlike their urban (or at least, suburban) counterparts, however, rural southern Blacks work in a relatively low-skill economy with a particularly strong legacy of racial segregation. Industry groups such as nondurable manufacturing, mining, agriculture, and forestry, which depend disproportionately on workers with low education levels, employ a larger proportion of the labor force in the rural South than in any other region in the Nation.

A comparison of White and Black rural southern occupational distributions in 1990 confirms that Blacks remain disproportionately in mid- and low-skill jobs within a relatively low-skill region (table 1). Nearly half of employed Whites work in white-collar occupations, alongside one-fourth of employed Blacks. Half of the Black workforce is engaged in blue-collar occupations, and Blacks are twice as likely as Whites to work in service jobs.

Table 1—Distribution of employed persons by race and occupation, rural[1] South, 1990

Occupation	Black	White
	Percent	
White-collar	24.2	48.1
Managerial and professional	9.8	20.5
Technical and support	14.4	27.6
Blue-collar	48.3	35.8
Craft	10.2	15.0
Operator	22.3	10.5
Transport	7.1	5.7
Laborer	8.7	4.6
Service	22.7	11.2
Resource	4.9	4.8
Index of dissimilarity, 1990[2]	28.8	
Index of dissimilarity, 1980	29.4	

[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.
[2] The index of dissimilarity indicates the percentage of Blacks that would need to switch occupations to match the distribution of Whites.
Source: Compiled by Economic Research Service from PUMS files, 1980 and 1990 Census.

Only in resource occupations do Blacks and Whites work in similar proportions. A comparison of occupational distributions in 1980 and 1990 using the index of dissimilarity confirms unusually slow racial convergence compared with national trends between 1960 and 1980.

These earlier trends seem especially dramatic in retrospect. Albelda (1986), for example, reports an 11-point drop in the index of dissimilarity comparing Whites and non-Whites during 1960-70 and a 10-point drop during 1970-80. King (1992), using a more disaggregated occupation scheme, finds smaller but still substantial change; the index fell 10 points for Black and White men, 26 points for Black and White women in 1960-80.[2] Her calculations for 1980-88, however, show an index change of less than 2 points. A comparison of the index of dissimilarity for 1980 (29.4) and that for 1990 (28.8) confirms that the rural South has shared in the slowdown in Blacks' relative improvement in status (table 1).

As King's numbers suggest, historically strong gender segregation, combined with a rapid influx of women into the labor force, engendered faster convergence for women in earlier periods. Yet in the 1980's, rural southern women of both races moved into white-collar jobs at about the same rate as did rural southern men. Furthermore, for the first time since 1960, racial differences among women increased slightly according to the dissimilarity index (from 30.4 in 1980 to 31.9 in 1990). Black men's relative status improved during the 1980's, but more slowly than before, with the index decreasing less than 1 point (29.1 to 28.4).

While Black men and women in the rural South experienced similarly small changes in relative status, their occupational patterns remained highly distinct. In 1990, Black women were roughly twice as likely to work in white-collar and service jobs as Black men, who were about twice as likely to work in blue-collar jobs and several times more likely to be resource workers than were Black women. Within these broad groupings, gender differences were even sharper. For example, 25 percent of all employed Black women (71 percent of all blue-collar Black women) were operators, but Black blue-collar men were evenly distributed across major categories. Gender difference was much greater for Blacks than for Whites (41.1 compared with 29.9).[3]

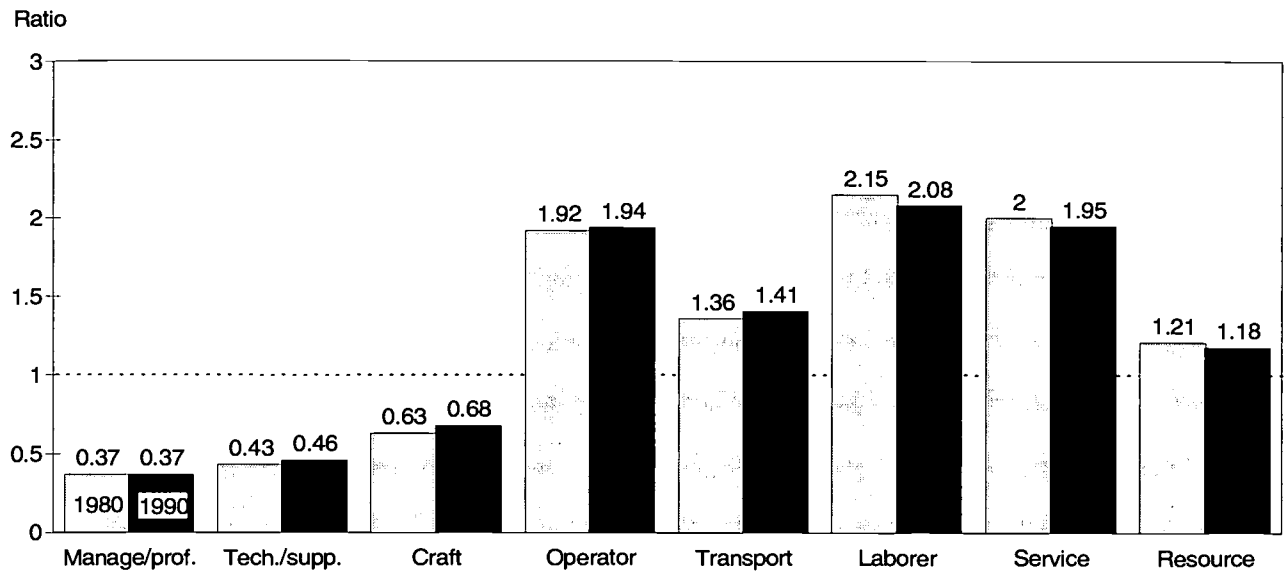
The index of dissimilarity describes only overall differences and can conceal underlying occupational differentiation. Racial differences in particular occupations over the decade are summarized by occupational employment probabilities (figs. 1 and 2). The relative probability for each major occupational group is the ratio of the proportion of all Black men/women to the proportion of all White men/women employed in that group. A value of one, for example, indicates that Blacks and Whites are equally likely to work in that occupational group. Values less than one mean that the average Black male/female worker is less likely to be employed in that occupation than the average White male/female worker, and vice versa. When comparing the relative probabilities over time, movement toward racial convergence is shown by a smaller absolute difference between one and the employment probability ratio in 1990 than in 1980.

[2] Index values in Albelda's studies fell from 41.2 in 1960 to 21.0 in 1980. King's index values are higher due to greater occupational disaggregation: men's values dropped from 43.8 to 33.6, while women's values dropped from 55.6 to 29.9 over the period.

[3] Although racial segregation is the focus of this chapter, the numbers presented here indicate that the gender gap in occupational attainment historically has been just as important (and obstinate). Furthermore, note that gender, not race, accounts for most of the occupational differentiation between White men and Black women.

Figure 1

Employment probability ratios among men in rural South, 1980-90



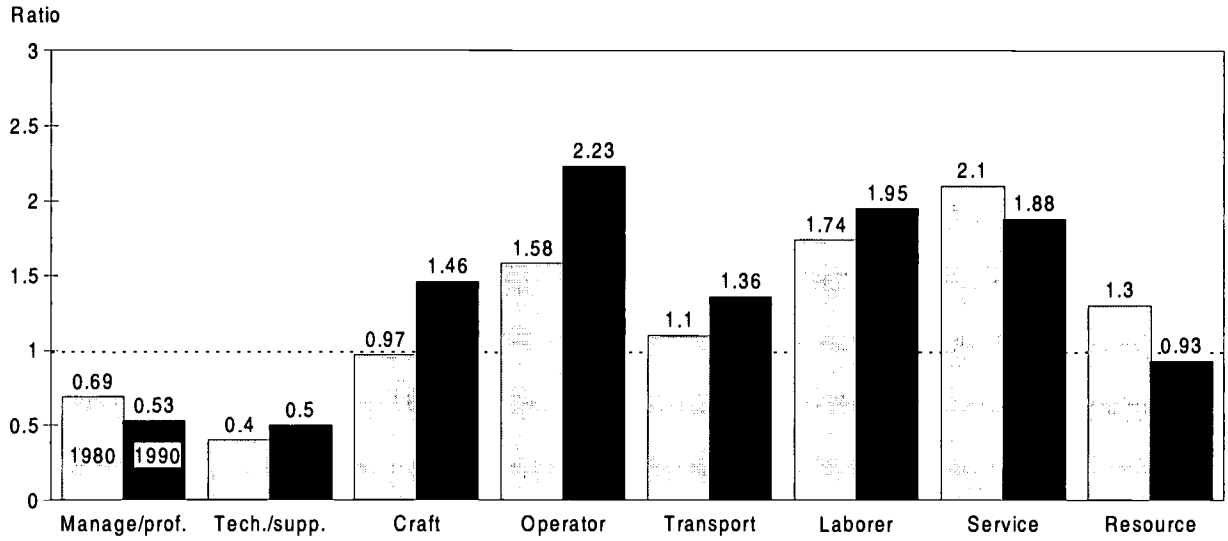
Numbers represent the ratio of the proportion of all Black men to the proportion of all White men employed in that group.
Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from PUMS files, 1980 and 1990 Census.

Black and White men in the rural South were least alike in white-collar occupations, where Blacks were less than half as likely to be employed, and in laborer occupations, where Blacks were exactly twice as likely to be employed (fig. 1). Only in resource and craft occupations did men approach comparable probabilities. The relative employment probabilities for men show no significant change, either toward or away from convergence, in any of the eight analyzed groups during the 1980's. Black and White workers as a whole, however, redistributed themselves slightly into technical/support and service occupations and out of resource occupations.

Over three-fourths of all employed rural southern Black women held jobs in three major occupational groups: technical and support, service, and operators. The first two groups have witnessed significant movement toward Black-White parity (fig. 2). Inequality has risen in all other groups except resource occupations, however, and has led to significant racial divergence in managerial-professional and craft occupations. Black women are the single demographic group not leaving traditional blue-collar jobs, despite previously rapid gains in earnings, education, and labor force participation (Farley, 1984). The primary source of growing blue-collar disparity between Black and White women is the declining significance of operator jobs for White women (11 percent of the workforce in 1990, compared with 25 percent of Black women). Likewise, the drop in the relative employment probability for Black women in managerial and professional occupations (from 0.69 to 0.53) is due less to a small decline for Blacks than to a 5-percentage-point increase for Whites.

Rural southern Black men and women, then, saw little change in their overall occupational status during the 1980's–a slight improvement at best for Black men relative to White men, and an equally small deterioration for Black women relative to White women. For men, the lack of change reflects little movement across major occupational groups. For women, however, the index of dissimilarity masks significant changes in relative employment probabilities that tend to cancel one another. Black women's shift into technical and support occupations and out of service occupations may reflect higher educational attainment, the movement to larger towns and small cities within rural areas, and the continued declining significance of domestic employment. These factors failed to increase Black women's representation in managerial and professional occupations, or to pull them out of operator occupations.

Figure 2
Employment probability ratios among women in rural South, 1980-90



Numbers represent the ratio of the proportion of all Black men to the proportion of all White men employed in that group.
Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from PUMS files, 1980 and 1990 Census.

Comparison of Rural and Urban Black Workers

Over the past 40 years, national attention focused increasingly (and now predominately) on the economic prospects of urban Blacks, particularly those in large central cities. Yet with the rural economic slowdown of the 1980's, the question arises whether rural Blacks suffer a renewed "double jeopardy" of race and rural status. This question is approached two ways. First, given the differences in rural and urban industry mix, are rural Blacks worse off than urban? Second, given the historical differences in race relations between rural and urban areas, is the occupational status of rural Blacks relative to Whites better or worse than that of urban Blacks?

As expected, urban Blacks are more likely than rural Blacks to be employed in white-collar jobs (tables 2 and 3)–urban Blacks are as likely as rural southern Whites to be white-collar workers. In fact, urban Black women are even less likely to be blue-collar workers than are rural southern White women, partly a result of the decentralization of manufacturing in urban areas. Differences between urban and rural service employment depend on gender. Urban (rather than rural) Black men, but rural (rather than urban) Black women, are more likely to be found in service occupations.

Not only did urban Black workers enjoy a more favorable occupational distribution in 1990, but their status improved more rapidly both in absolute terms and relative to Whites. Urban workers became more likely to work in white-collar jobs, generally at the expense of both blue-collar and service jobs. (The share of urban Black men's jobs in services rose, however.) Black men in cities were becoming managers and professionals more rapidly than were rural Black men.

Rural Blacks did not keep up either with rural Whites or urban Blacks, whether compared by a "snapshot" or by changes over time. In both 1980 and 1990, urban Blacks and Whites were more alike than their rural counterparts, at least at the level of major occupational groups. The index of dissimilarity fell for men and women in urban areas during the 1980's, in contrast with no change or small increases for rural workers. Urban and rural indexes for women exhibit particularly striking contrasts; by 1990, the index comparing rural Black and White women was more than twice the magnitude of the index comparing urban Black and White women.

The regional disadvantage of rural southern Blacks is also apparent when comparing urban and rural occupational distributions by race and gender. Rural-urban differences in 1990 were greater for Blacks, especially Black women, while White women

Table 2—Distribution of employed persons by race, gender, and occupation, rural[1] South

Occupation	Men		Women	
	Black	White	Black	White
	Percent			
1990:				
White-collar	14.7	35.2	33.2	64.9
Managerial and professional	6.7	17.9	12.7	23.9
Technical and support	8.0	19.3	20.5	41.0
Blue-collar	62.6	50.3	34.7	17.2
Craft	16.6	24.5	4.1	2.8
Operator	19.2	9.9	25.2	11.3
Transport	13.1	9.3	1.5	1.1
Laborer	13.7	6.6	3.9	2.0
Service	14.2	7.3	30.7	16.3
Resource	8.7	7.4	1.4	1.5
Index of dissimilarity	28.4		31.9	
1980:				
White-collar	12.9	32.4	29.6	59.9
Managerial and professional	6.5	17.4	13.2	19.0
Technical and support	6.4	15.0	16.4	40.9
Blue-collar	64.1	52.5	33.8	22.6
Craft	16.1	25.6	2.9	3.0
Operator	20.0	10.4	25.1	15.9
Transport	12.9	9.5	1.1	1.0
Laborer	15.1	7.0	4.7	2.7
Service	12.4	6.2	34.6	16.0
Resource	10.8	8.9	2.0	1.5
Index of dissimilarity	29.1		30.4	

[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from PUMS files, 1980 and 1990 Census.

showed the greatest rural-urban similarities (table 3). Moreover, the gap between urban and rural Blacks widened in the 1980's, so that by the end of the decade, the occupational distribution of rural southern Black women was as unlike that of urban Black women as that of rural southern White women (30.8 and 31.9), the result mainly of urban white-collar employment growth. In summary, the racial gap for rural southern Black workers was larger than for urban Blacks. The regional gap for them was larger than for rural Whites. And by both measures, rural Blacks lost ground.

Table 3—Distribution of employed Blacks by gender and occupation, urban[1] United States

Occupation	Black men		Black women	
	1990	1980	1990	1980
	Percent			
White-collar	36.9	29.6	64.0	56.1
Managerial and professional	16.0	13.0	22.4	17.4
Technical and support	20.9	16.6	41.6	38.7
Blue-collar	41.9	50.8	11.6	15.3
Craft	14.2	15.6	2.1	2.2
Operator	8.9	13.5	6.5	9.7
Transport	10.1	11.1	1.1	.8
Laborer	8.7	10.6	1.9	2.6
Service	19.4	17.8	24.2	28.4
Resource	1.8	1.8	.2	.3
Index of dissimilarity, urban Blacks and Whites	22.2	24.9	14.3	17.9
Index of dissimilarity, urban and rural Blacks	27.5	22.2	30.8	26.5
Index of dissimilarity, urban and rural Whites	20.1	19.0	12.9	13.7

[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from PUMS files, 1980 and 1990 Census.

Detailed Occupational Trends for Black Women

Both White and Black women continued a general movement into white-collar occupations during the 1980's. Service jobs employed a declining share of Black women workers and blue-collar jobs employed an increasing share. Because Black women were already "overrepresented" in these groups, Black and White women became more alike with respect to service occupations, less alike with respect to blue-collar occupations. But this description applies only to differences across, not within, broad categories. In some cases, racial clustering within detailed occupational categories persisted in the face of general convergence. In others, the trend toward greater racial similarity in a major occupational group is largely explained by changes in one subgroup.

In 1980, 47 percent of Black women service workers in the rural South were employed as household and commercial cleaners; by 1990, that proportion had dropped to 35 percent (table 4). The share of White women service workers in cleaning jobs remained stable at about 17 percent. If cleaning occupations

Table 4—Distribution of employed women in selected occupations, rural[1] South

Occupation	1990		1980	
	Black	White	Black	White
	Percent			
Managerial and professional	100.0	100.0	100.0	100.0
Managers	24.6	35.0	14.8	32.4
Teachers	47.0	34.1	64.0	39.8
Other	28.4	30.9	21.2	27.8
Technical and support	100.0	100.0	100.0	100.0
Technicians	13.0	8.2	12.3	6.7
Cashiers	24.8	11.7	15.7	9.9
Administrative support	49.4	59.6	60.3	64.4
Other	12.8	20.5	11.7	19.0
Service	100.0	100.0	100.0	100.0
Household services	12.9	4.3	24.3	5.8
Commercial cleaners	22.5	12.7	22.6	10.2
Cooks	19.4	14.7	18.1	14.9
Nurses' aides	22.2	17.8	15.3	17.4
Other	23.0	50.5	19.7	51.7
Operator	100.0	100.0	100.0	100.0
Textile/apparel/ furniture	51.4	48.8	68.3	71.4
Other	48.6	51.2	31.7	28.6

[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from PUMS files, 1980 and 1990 Census.

Table 5—Changes in share and share ratio of selected occupation groups for Black women in rural[1] South, 1980-90

Occupation	1	2	3	4
Managerial and professional	---	---	---	X
Managers	X	---	---	---
Teachers	---	X	---	---
Technical and support	X	---	---	---
Cashiers	---	---	X	---
Administrative support	---	---	---	X
Operator	---	---	X	---
Textile/apparel/furniture	---	---	---	X
Craft	---	---	X	---
Laborer	---	---	---	X
Service	---	X	---	---
Cleaners	---	X	---	---
Nurses	---	---	X	---
Resource	---	X	---	---

[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.
Group 1: increasing employment share and increasing racial similarity.
Group 2: decreasing employment share and increasing racial similarity.
Group 3: increasing employment share and decreasing racial similarity.
Group 4: decreasing employment share and decreasing racial similarity.
Source: Compiled by Economic Research Service from PUMS files, 1980 and 1990 Census.

are excluded from the services group, relative employment probabilities look quite different. Black and White women were equally likely to work in noncleaning services in 1980. Furthermore, the share of women in noncleaning service jobs increased at about the same rate for both races, so that parity was maintained in 1990. Thus, the historical concentration of Black women in cleaning occupations explains most of the difference in service employment.

Just as Black women's movement from service jobs is a movement from cleaning occupations, their movement into the technical and support group is largely concentrated in sales jobs, particularly in cashiering. Black women's growing employment in sales accounts for 75 percent of their total share change in technical and support jobs (White women's share in this group was unchanged). Of this growth, about half can be traced to the large share increase in cashiering, from 16 percent of all technical and support jobs in 1980 to 25 percent in 1990. Excluding cashiers, the relative employment probability for Black women in technical and support occupations would have fallen from 43 percent in 1980 to 38 percent in 1990.

Within the blue-collar group, most rural southern women of both races are operators, assemblers, and inspectors. And within that category, the largest share work in textile, apparel, and furniture-manufacturing jobs. Slightly more than two-thirds of all women in operator occupations (1 in 6 employed Black women) worked in this group in 1980, although the share fell precipitously to one-half in 1990. The drop in textile, apparel, and furniture jobs explains most of White women's declining share as operators and, therefore, as blue-collar workers. A nearly identical drop among Black women, however, did not lead to a decrease in the percentage working as operators, but rather was matched by an increasing share in other operator occupations. In this case, Whites and Blacks shifted out of the same occupation, at the same rate, but into different

occupations. As a result, relative employment probabilities in operator occupations jumped significantly.

Changes in occupational similarity between Black and White women reflect complex underlying patterns of employment share growth and decline. The specific employment share pattern may lead us to view convergence or divergence quite differently, depending upon the occupation's status. We may look more favorably, for example, upon diverging trends in a low-status occupation in which both races are losing employment share than in one in which the share of employed Black women is rising. Table 5 summarizes underlying patterns of change for detailed occupational categories. Occupations are classified according to whether their share of Black women's employment rose between 1980 and 1990 and whether the share change made Black and White women's employment more similar.

Occupations in which employment shares are converging due to increasing Black employment shares (group 1) include technical/support and managerial occupations. Service and resource occupations (in group 2) show convergence through decreasing shares, reflecting the continuation of Black women's longstanding withdrawal from domestic and farm employment. Groups 3 and 4, indicating racial divergence, include many blue-collar occupations. Nurses' aides, cashiering, craft occupations, and operator occupations, all in group 3, are increasingly becoming jobs for Black women. Unlike previous trends, rural Black women lost ground in the 1980's in managerial and professional occupations overall (group 4), as the proportion of Black women in teaching jobs fell sharply. Their share in other managerial and professional jobs did not rise enough to balance out the loss.

Detailed Occupational Trends for Black Men

An analysis of change for Black men reveals few of the large shifts evident for women (table 6). Yet the picture of stagnant male occupational status that emerges when major occupational groups are considered is only partially correct. For example, while Black men were no more likely to be in the managerial and professional category in 1990 than in 1980, the share of Black men employed as managers rose sharply, mirroring a drop in teaching. Since median earnings are higher in these jobs, the shift from professional to managerial occupations should improve Black men's economic well-being.

Like Black women, Black men dropped rapidly out of cleaning occupations, from 56 to 40 percent of all service jobs, although the share employed as cooks and in protective services rose sharply. White men experienced similar, but less pronounced, shifts within service occupations, indicating that many of the employment patterns engendered by the new service economy are not race-specific.

The underlying patterns of change for Black men (table 7) resemble those of Black women in managerial and professional jobs. The share of Black men as managers increased, and approached the share of White men (group 1); at the same time, the share in teaching jobs fell as racial convergence occurred (group 2). Although technical and support occupations also fall into group 1, increasing racial similarity is driven largely by share growth in noncashiering sales work.

Table 6—Distribution of employed men in selected occupations, rural[1] South

Occupation	1990		1980	
	Black	White	Black	White
	Percent			
Managerial and professional	100.0	100.0	100.0	100.0
Managers	48.4	55.1	41.1	56.6
Teachers	21.3	9.9	29.8	9.7
Other	30.3	35.0	29.1	33.7
Technical and support	100.0	100.0	100.0	100.0
Technicians	17.0	15.5	12.9	13.7
Administrative support	52.3	27.2	57.8	32.3
Other	30.7	57.3	29.3	54.0
Service	100.0	100.0	100.0	100.0
Cleaners	39.6	31.2	56.1	36.8
Cooks	17.5	11.3	9.8	8.8
Protective services	20.0	36.9	12.2	33.5
Other	22.9	20.6	21.9	20.9
Transport	100.0	100.0	100.0	100.0
Truck drivers	55.4	58.8	54.6	51.4
Heavy equipment operators	22.2	9.5	18.9	7.1
Other	22.4	31.7	26.5	41.5

[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.

Source: Compiled by Economic Research Service from PUMS files, 1980 and 1990 Census.

Until the 1960's, most rural southern Black men were employed in group 2 occupations, especially in resource and laborer jobs. Although these occupations are considered low-status, their passing is not entirely beneficial. For young Black workers with limited skills, resource and laborer jobs often represented the only alternative to unemployment in rural areas.

Other job groups exhibit gradual racial divergence through employment share gains (group 3). Share gains in transport occupations may dampen the economic outlook for Black men because they pay lower wages and offer fewer opportunities for advancement. However, they may also be welcomed by workers who need entry-level jobs and face limited alternatives.

The Role of Education in Occupation Trends

Despite continued improvements in average educational attainment, Blacks in the rural South exhibit disproportionately high dropout rates and low college completion rates. The drop in college enrollment among Black men observed since the late 1970's has been associated with stagnant measures of well-being during the 1980's. The slowdown in occupational convergence, however, may result from changes in the returns to education as well as changes in attainment.

Racial differences in employment among college graduates are much smaller than among the entire labor force (table 8). Black male college graduates neared parity with White males in white-collar employment in 1990 and, unlike Black women, also exhibited increasing similarity in blue-collar jobs. The dissimilarity index declined more for women than for men, but the decline comes from a substantial drop in the percentage of Black women in managerial and professional jobs, in favor of technical and support jobs. Increasing similarity, then, does not always lead to higher status for the disadvantaged group.

When the index of dissimilarity values for all employed Blacks and Whites are compared with the index values for college graduates (28.4 and 8.5 for men, 31.9 and 6.4 for women), occupational difference appears to be explained largely by racial differences in educational attainment. Index comparisons of dropouts and the overall labor force, however, suggest a different conclusion. Black high school dropouts in the rural South experienced greater occupational convergence than college graduates in the 1980's. Yet the level of difference for dropouts remained much more like that of all Blacks and Whites. When the Black labor force is adjusted to account for racial differences in college graduation and high school dropout rates, the index of dissimilarity falls to 21.7 for men, 24.6 for women. Thus, educational attainment is an important but not deciding factor in occupational difference between Black and White rural southerners.

Table 7—Changes in share and share ratio of selected occupational groups for Black men in rural[1] South, 1980-90

Occupation	1	2	3	4
Managerial and professional[2]	---	---	---	---
Managers	X	---	---	---
Teachers	---	X	---	---
Technical and support	X	---	---	---
Craft	X	---	---	---
Transport	---	---	X	---
Laborer	---	X	---	---
Service	X	---	---	---
Cleaners	---	X	---	---
Cooks	---	---	X	---
Protective services	---	---	X	---
Resource	---	X	---	---

Group 1: increasing employment share and increasing racial similarity.
Group 2: decreasing employment share and increasing racial similarity.
Group 3: increasing employment share and decreasing racial similarity.
Group 4: decreasing employment share and decreasing racial similarity.
[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.
[2] No appreciable change in employment share.
Source: Compiled by Economic Research Service from PUMS files, 1980 and 1990 Census.

The Role of Industry Employment in Occupation Trends

Industry mix is a key determinant of occupational distribution. Regional demand for different kinds of labor, and therefore the availability of different kinds of jobs, is driven by the production technologies of the industries in that region. Historically, industries varied in the degree to which they practiced racial hiring discrimination and occupational segregation. Occupational inequality, then, may be largely a manifestation of industrial inequality. (In a region as

Table 8—Distribution of college graduates and high school dropouts by occupation in rural[1] South, 1990 and 1980

Occupation/education	Men				Women			
	1990		1980		1990		1980	
	Black	White	Black	White	Black	White	Black	White
	Percent							
College graduates:								
White-collar	79.1	82.5	75.5	81.8	89.4	94.9	92.2	94.4
Managerial and professional	62.8	62.4	64.6	65.0	71.4	76.7	81.6	77.1
Technical and support	16.3	20.1	10.9	16.8	18.0	18.2	10.6	17.3
Blue-collar	14.4	10.2	17.6	10.9	4.2	1.4	3.2	2.5
Service	6.1	3.0	4.3	2.1	6.4	3.0	4.3	2.6
Resource	.5	4.4	2.5	5.3	0	.8	.3	.5
Index of dissimilarity	8.5		9.0		6.4		7.6	
High school dropouts:								
White-collar	6.0	13.4	5.7	14.6	12.6	33.8	10.7	31.5
Blue-collar	65.2	66.8	65.5	65.4	38.9	33.8	34.8	40.0
Service	14.5	8.4	13.3	7.8	46.4	30.0	51.0	26.0
Resource	14.4	11.5	15.7	12.3	2.2	2.5	3.5	2.4
Index of dissimilarity	20.4		22.9		21.7		27.0	

[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from PUMS files, 1980 and 1990 Census.

large as the rural South, some industrial inequality will occur because of the uneven distribution of racial groups and economic activities.) If so, then prospects for higher occupational status hinge on the growth of industries that offer a relatively high percentage of high-status jobs and maintain open employment policies.

Although the rural South lost a smaller proportion of its manufacturing jobs than other regions did in the 1980's, the service sector (not to be confused with service occupations) made significant employment inroads here as well. A comparison of dissimilarity in the service and manufacturing sectors shows that rural southern employment in services exhibits greater occupational inequality than employment in either durable or nondurable manufacturing (table 9).

Women in nonprotective services were especially dissimilar, largely because of Black women's continued concentration in cleaning occupations, coupled with White women's concentration in technical and support occupations. The largest changes in dissimilarity for men during the 1980's occurred in nonprotective services. Women experienced a sharp drop in dissimilarity in retail trade, a change in keeping with the growing share of Black women employed in cashiering jobs.

Occupational inequality varies widely by industry, with very similar occupational structures for Black and White men in agriculture, forestry, and fishing, and for Black and White women in retail trade. The index of dissimilarity for most industries, however, falls within the same range as the overall index value. Occupational differences, then, do not appear to be significantly explained by differences in the distribution of employment across industries.

Looking Ahead: Occupation Trends Among Younger Workers

Long-term changes in the occupational status of Black workers often manifest themselves first among the younger, but experienced, segment of the labor

Table 9—Index of dissimilarity for Blacks and Whites by selected industry group, rural[1] South, 1980-90

Industry group	1990		1980		Difference, 1980-90[2]	
	Men	Women	Men	Women	Men	Women
					Percentage points	
Agriculture, fishing, forestry	6.5	---[3]	7.4	---	-.9	---
Construction	22.0	---	22.4	---	-.4	---
Nondurable manufacturing	23.8	19.8	25.7	14.0	-1.9	5.8
Durable manufacturing	27.9	25.6	26.4	22.2	1.5	3.4
Retail trade	34.4	15.2	30.5	27.1	3.9	-11.9
Protective services	36.2	26.5	35.2	23.2	1.0	3.3
Other services	28.3	48.4	35.8	51.3	-7.5	-2.9

[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.
[2] 1990 index of dissimilarity minus 1980 index.
[3] Results are not reported where the employment share for the industry group is less than 5 percent of total employment for Black women.
Source: Compiled by Economic Research Service from PUMS files, 1980 and 1990 Census.

force. Black workers less than 40 years old are more likely to have benefited from civil rights legislation and affirmative action and are better educated than the preceding generation. They also make up the great majority of new Black job entrants, so their distribution should reflect the general upscaling of occupations over time. Thus, the story goes that, as older workers retire, the advantages younger workers enjoy will act with increasing strength on the labor market as a whole.

Regardless of gender, however, Black workers under 40 are just as different from their White counterparts as are Black workers over 40 (table 10). Furthermore, younger Blacks are distributed across occupations very much like Blacks overall. A smaller share of younger Black workers in services is balanced by slightly larger shares in white- and blue-collar employment. Finally, these patterns changed very little during the 1980's, suggesting that the slowdown in occupational convergence is unrelated to age.

Conclusions

The overall progress in occupational status among rural southern Blacks during the 1980's fell far short of the gains of the 1960's and 1970's. Racial disparities, however, were not the only factor stalling economic progress. All rural workers, not just Blacks, were unable to keep up with the rising status of urban workers, although the urban-rural gap was more pronounced for Blacks. Black men in the rural South improved their occupational status as quickly (or as slowly) as White men. Rural southern Black women's status slipped slightly during the 1980's, but largely as a result of White women's progress.

One in four employed rural southern Black women is a machine operator, assembler, or inspector, a cause for concern in a time when many semi-skilled manufacturing jobs are disappearing. Along with this, Black women's lack of movement into managerial and professional jobs, and the stagnation in real hourly compensation, indicates that they, as

Table 10—Distribution of employed persons age 25-40, by occupation, rural[1] South, 1990

Occupation	Men		Women	
	Black	White	Black	White
	Percent			
White-collar	15.2	33.3	35.6	67.2
Blue-collar	62.9	55.1	38.7	17.5
Service	11.5	6.0	24.6	14.0
Resource	6.5	5.7	1.3	1.3
Index of dissimilarity, Black-White 1990	31.3		30.6	
Index of dissimilarity, young Blacks-all Blacks, 1990	5.6		6.3	
Index of dissimilarity, Black-White 1980	29.5		30.2	

[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from PUMS files, 1980 and 1990 Census.

well as Black men, will have difficulty maintaining their gains in both earnings and employment.

Other trends argue for a somewhat more optimistic view of rural Black workers' situation. First, many highly skilled rural Blacks moved to urban areas during the 1980's to take advantage of strong occupational upscaling there, just as they did earlier in the century. The differences this time may be that a larger share of rural outmigrants in the 1980's were well educated, and that the rural South enjoyed little concurrent upscaling. Thus, rural places suffered more than did rural people. Second, recent data point to renewed population and employment growth in rural areas, including the South, in the 1990's. Periods of widespread growth in the past were marked by an urban-to-rural diffusion of relatively high-skill jobs. The 1980's may have been an interlude in a long-term pattern of increasing occupational status for rural southern Blacks.

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Appendix

Major and Detailed Occupation Groups

White-collar

MANAGERIAL AND PROFESSIONAL (Managerial and professional specialty). Managers, schoolteachers, other professionals.

TECHNICAL AND SUPPORT (Technical, sales, and administrative support). Technicians, cashiers, other sales, administrative support.

Blue-collar

CRAFT (Precision production, craft, and repair). Precision food production, other crafts.

OPERATOR (Machine operators, assemblers, and inspectors). Textile, apparel, and furnishings machine operators; other machine operators and tenders; fabricators and assemblers.

TRANSPORT (Transportation and material moving). Truck drivers, heavy equipment operators, other transport/material moving workers.

LABORER (Handlers, equipment cleaners, helpers, laborers). Freight, stock, and material handlers; other laborers.

Service

Cleaning services, protective service, cooks, nurses' aides, other services.

Resource (Farm, forestry, and fishing)

Farm operators, farm laborers, other resource workers.

Education and the Economic Status of Blacks

Margaret A. Butler

The median earnings of both Blacks and Whites with less than 4 years of college declined from 1979 to 1989 in both urban and rural[1] areas. Although earnings remained virtually unchanged for young adults with a college degree, urban Whites were the only group to realize a slight increase in their median earnings. Unemployment rates were higher in 1990 than in 1980 for all Blacks, but especially for those with lower levels of education. Partly due to limited job opportunities, young adult Blacks who did not graduate from high school had the highest unemployment rates in both urban and rural areas.

Over the past 50 years, the social and economic status of Blacks has changed significantly. Blacks achieved their greatest economic gains in the 1940's and 1960's. Black gains in earnings and occupation from 1939 to 1969 resulted from South-to-North migration and concurrent movement from agricultural to nonagricultural employment, job creation, and economic growth (Jaynes and Williams, 1989).

The civil rights movement, the proximity of Blacks to industrial centers, and rapid economic growth in the 1960's enabled many Blacks to enter mainstream America. However, some Blacks lived in areas relatively untouched by national changes, some lacked the family support networks to provide assistance, and some were not presented with better job opportunities (Jaynes and Williams, 1989).

The problems faced today by Blacks who are isolated from social and economic progress are complex (Wilson, 1987). Persistent racial discrimination and the economy's stagnation during the 1970's and 1980's has impeded the economic progress of Blacks. Opportunities for upward mobility have been reduced for all Americans in the lower economic strata, but especially for those who are Black. Some Blacks have attained higher status occupations, but many remain disadvantaged (see Gibbs' chapter on occupational change among Blacks).

In this chapter, I look at national changes in the educational attainment of Blacks and Whites between 1970 and 1990. Using the 1980 and 1990 Census Public Use Microdata Samples, I also analyze the effects of education on economic status, especially of Blacks age 25 to 34. This group, in both 1980 and 1990, came of age after the civil rights movement and the establishment of affirmative action programs and should have visibly benefited from the lowering of barriers. Their levels of educational attainment should have improved the overall educational attainment for Blacks. As McGranahan and Kassel state in an earlier chapter, "it is primarily through the education of people beginning their careers that the skill levels of the work force are improved."

Changes in Educational Attainment, 1970 to 1990

Despite historical barriers, Blacks have continued to cling to their belief in education as a means of changing the condition of their lives and the lives of their children (Billingsly, 1993). Blacks have made steady, but sometimes slow, gains in educational attainment. Although the Black-White gap in the percentage of high school graduates is closing at the national level, the rate at which Whites complete college is about twice that of Blacks. In 1970, only 31 percent of all Blacks age 25 and older had completed high school and only 4 percent had completed 4 or more years of college; the comparable rates for Whites were 55 percent and 11 percent (Commerce, 1983). By 1990, 63 percent of Blacks had a high school diploma (78 percent of Whites) and 11 percent (22 percent of Whites) had graduated from college with a 4-year degree or more, more than doubling the completion rates in 20 years (Commerce, 1993). If this pattern continues, the Black-White gap in the proportion of college graduates will not close until the year 2030.

[1] Rural people are defined here to be those who live in counties outside the boundaries of metropolitan areas, as defined by the Office of Management and Budget at the time of the census. See appendix for a complete definition.

Table 1—Educational attainment of adults age 25-64, 1980-90

Age/level of education	1980				1990			
	Black		White		Black		White	
	Urban[1]	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Age:	*Thousand*							
25 to 34	3,414	657	22,989	7,436	4,152	672	25,721	6,780
35 to 44	2,245	417	16,025	5,488	3,337	548	22,996	6,653
45 to 54	1,844	379	14,506	4,951	2,144	350	15,867	4,919
55 to 64	1,498	364	14,010	5,113	1,633	293	13,307	4,494
	Percent							
Age 25-34	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not high school graduate	22.7	36.2	11.7	16.9	20.6	29.4	11.2	16.2
High school graduate	40.7	42.5	36.7	44.8	30.7	42.3	28.7	40.9
Some college	24.0	13.4	24.1	20.4	34.2	22.1	32.0	28.6
College, 4 years or more	12.7	7.9	27.5	17.9	14.5	6.1	28.0	14.4
Age 35-44	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not high school graduate	34.8	57.2	18.2	26.1	21.6	36.7	9.8	14.4
High school graduate	38.6	29.8	39.9	45.9	29.3	36.3	26.2	36.0
Some college	16.3	7.2	18.7	14.1	32.0	18.8	32.0	29.3
College, 4 years or more	10.4	5.8	23.2	13.9	17.1	8.2	31.9	20.2
Age 45-54	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not high school graduate	52.1	72.9	27.8	38.3	33.5	55.7	16.3	24.2
High school graduate	28.5	16.6	39.4	40.7	30.6	26.9	31.3	39.3
Some college	11.6	4.7	15.1	10.8	23.1	11.1	26.7	21.9
College, 4 years or more	7.9	5.8	17.7	10.2	12.8	6.3	25.7	14.7
Age 55-64	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not high school graduate	66.0	83.2	36.6	48.6	50.7	71.8	26.2	35.8
High school graduate	20.9	9.1	37.5	33.5	24.5	17.0	33.8	37.0
Some college	7.5	3.0	13.2	10.1	15.1	6.5	21.2	16.1
College, 4 years or more	5.6	4.7	12.7	7.8	9.7	4.8	18.8	11.1

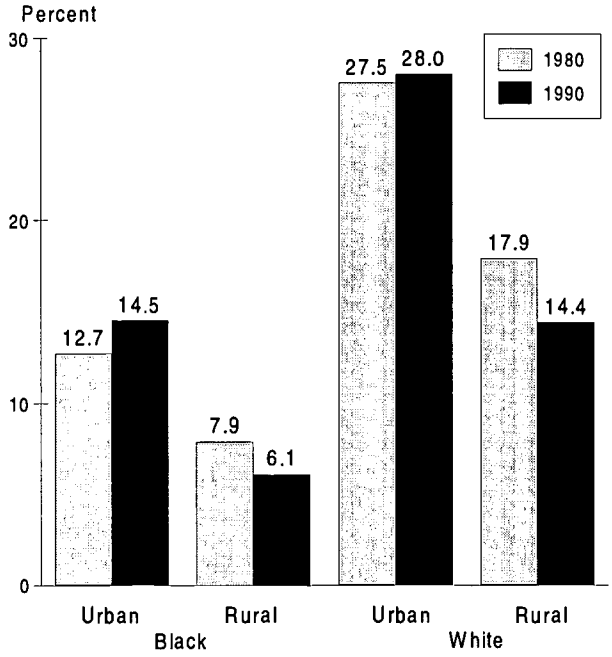
[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990.

Effects of Residence and Race on Educational Attainment

Rural Blacks age 25 to 34 had the least educational attainment in both 1980 and 1990 when compared with urban Blacks and both urban and rural Whites (table 1). They had the lowest proportion of college graduates (6.1 percent, down nearly 2 percentage points from 1980), and the highest proportion of young adults who had not completed high school (figs. 1, 2). Both urban and rural Blacks were more likely to have completed high school in 1990 than in 1980, although the gains were greater for rural than urban Blacks.

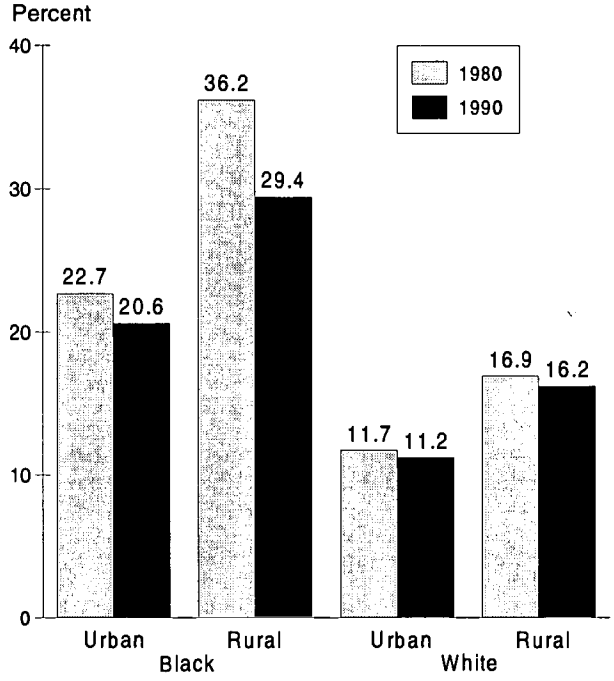
By comparison, 28 percent of urban Whites age 25 to 34 had completed college and only 11.2 percent lacked a high school diploma in 1990. Among rural Whites, 14.4 percent had completed college and 16.2 percent were without a high school diploma in 1990. For urban Whites, educational attainment at the high school and college levels showed very little change from 1980. The percentage of rural Whites who did not complete high school in 1990 decreased slightly

Figure 1
Adults age 25-34 who completed 4 or more years of college, 1980-90



Source: Compiled by Economic Research Service from 1980 and 1990 Public Use Microdata Sample.

Figure 2
Adults age 25-34 who did not graduate from high school, 1980-90



Source: Compiled by Economic Research Service from 1980 and 1990 Public Use Microdata Sample.

from the 1980 rate. But like rural Blacks, rural Whites had a lower proportion of young adults completing college in 1990 than in 1980.

Thus, in 1990, regardless of race, living in a rural area depressed educational attainment beyond high school. But rural Whites still had college completion rates double those of rural Blacks. For Blacks and Whites alike, the lower levels of education in rural areas are a result of both lower educational attainment among rural "natives" and the net outmigration of rural college graduates seeking better opportunities in urban areas (Fratoe, 1980; Swanson and McGranahan, 1989).

Black and White Young Adults in 1990 Break Better Education Pattern

Age is an important factor in evaluating rates of educational attainment. Older adults tend to be less educated while younger adults, particularly those age 25 to 34, have become better educated with each successive cohort over the last three decades. However in 1990, both Blacks and Whites age 25 to 34 ("young adults") had lower levels of college attainment than those age 35 to 44, regardless of residence. Among Black young adults, high school graduation rates were greater but college completion rates were lower than the rates for the cohort age 35 to 44. Both high school graduation and college completion rates for White young adults were lower than the rates for the older cohort (table 1). Young adults today may be taking longer to finish college, partially as a result of the need to be employed full time, which leads to part-time college attendance.

The two events that influenced educational attainment for the cohort age 35 to 44 in 1990 affected racial/gender groups differently. As a result of the Vietnam War, many in this cohort stayed in college to avoid the draft and those who were veterans went to college under the GI Bill. Although Black education benefited from the Vietnam War, the civil rights movement also led to higher educational attainment. The educational improvement attributable to Vietnam War veterans was stronger for men, and the civil rights movement benefited all Blacks and White women.

The higher rate of college attainment for the cohort age 35 to 44 in 1990 may not have been achieved had

circumstances been different, and the decline in college attainment for young adults may be less than appears by comparison with the 35-44 cohort. The decline is partly attributable to a recent shift from grants to college loans. Grants as a percentage of all financial aid declined from 80 percent in 1975/76 to 46 percent in 1985/86, while loans increased from 17 percent to 50 percent, making college more expensive for students (Jaynes and Williams, 1989). The skyrocketing costs of college tuition along with the sluggish economy during the 1970's and 1980's reduced opportunities for upward mobility. Finally, minority students are less likely to borrow money to pay for their education (Jaynes and Williams, 1989).

Young adults in urban areas completed college at higher rates than their parents (using those age 45 to 54 as a parental cohort); those (who remained) in rural areas did not. Both Black and White men drove college completion rates higher during the 1980's. By 1990, this trend had reversed itself for Blacks in both urban and rural areas. White men in urban areas still had college completion rates higher than white women in urban areas.

White women age 35 and older in both urban and rural areas had college completion rates that were lower than or equal to the rates of White men. Black rural women, except for those age 55 to 64, were more likely to have completed college than Black rural men.

Increasing Economic Status of Blacks Over Time

The sustained and rapid growth of the Nation's economy during World War II and for 25 years thereafter was extremely important to gains in the economic status of Blacks. This growth provided employment options, upgraded occupations, and improved earnings.

Blacks had historically been confined to the least desirable jobs because of poor education and job market discrimination. Fifty years ago, Black men worked on farms as laborers or in factories as machine operators, and Black women were domestic servants or farm laborers. The combination of wartime industrial jobs and the mechanization of cotton production helped Black men move from farm labor to blue-collar jobs and a few white-collar positions (Jaynes and Williams, 1989). At the same time, Black women moved from domestic service and farm labor into factories, offices, and some professional and managerial positions. Highly educated Blacks were confined to teaching positions or employed in segregated professional services.

In the 1960's, Blacks moved up the occupational hierarchy rapidly, with the highly educated breaking into previously "closed" managerial and professional occupations (Freeman, 1976). After 1973, the economy slowed, as did the economic advancement of Blacks (Jaynes and Williams, 1989).

Recent changes in the economy have not favored Blacks. Foreign competition has eliminated jobs in industries and regions where many Blacks had found jobs at good wages. The movement of higher paying industrial jobs from the areas that once attracted Blacks has left them stranded. Since 1980, the relative economic position of Blacks has deteriorated. Blacks lacking skills, experience, and seniority saw their economic position decline the most.

Lack of Education Decreases Labor Force Participation and Increases Unemployment

Historically, labor force participation rates have been higher for Whites than Blacks, men than women, Black women than White women, and urban residents than rural residents. Some of these differences no longer exist.

A generation ago, a low-skilled person had ample opportunity to obtain a blue-collar job with a wage adequate to support a family (Levy and Michel, 1991). For young adults trying to enter the labor market today, education is more of a necessity than ever. Labor force participation is positively related to levels of educational attainment, and unemployment is usually lower in higher education groups.

Only 69 percent of rural and 62 percent of urban Black young adults without a high school diploma were in the labor force in 1990 (table 2). The comparable rates for White young adults were 72 percent and 73 percent.

Labor force participation rates among Black women did not change between 1980 and 1990 partly because Black women have always had to work. Both urban and rural White women, on the other hand, had higher labor force participation rates in 1990 than in 1980, partly due to the fact that within the past two decades there has been a continuous increase in the number of White women entering or re-entering the work force. As labor force participation rates were increasing among White women, rates for White men in both urban and rural areas declined between 1980 and

Table 2—Labor force status of adults age 25-34 without a high school education, 1980-90

Labor force status	1980				1990			
	Black		White		Black		White	
	Urban[1]	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Total persons, 25-34 (1,000)	773	236	2,694	1,255	854	198	2,885	1,097
Share in the labor force (percent)	64.7	70.3	68.9	67.2	62.1	68.7	73.1	71.5
Unemployment rate (percent)	19.4	13.3	11.0	12.6	24.9	19.9	11.5	12.0
Men, 25-34 (1,000)	339	119	1,290	616	391	93	1,567	600
Share in the labor force (percent)	80.2	83.2	90.9	89.0	74.4	80.6	88.5	87.2
Unemployment rate (percent)	18.4	12.1	11.1	11.7	22.7	17.3	10.5	11.5
Women, 25-34 (1,000)	434	117	1,40,4	639	463	105	1,318	497
Share in the labor force (percent)	52.5	57.3	48.6	46.2	51.6	58.1	54.8	52.5
Unemployment rate (percent)	20.6	14.9	11.0	14.2	27.6	23.0	13.4	13.0

[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990.

1990. As they did for Black women, labor force participation rates for rural Black men remained the same between 1980 and 1990. The largest decrease in labor force participation between 1980 and 1990 was among Black men in urban areas. Three out of four Black men in urban areas participated in the labor force in 1990 compared with four out of five in 1980.

Low labor force participation and high unemployment among young adults who did not complete high school was partially a result of the decline in blue-collar employment. Both Whites and Blacks in rural areas had similar unemployment rates in 1980 (table 2). Urban Blacks' unemployment rates were roughly one and a half times greater than urban Whites'. Since the early 1970's, unemployment rates for Blacks have remained at double-digit levels and during the 1980's the unemployment gap between Blacks and Whites grew. By 1990, urban Blacks (25-34 without a high school education) had unemployment rates that were twice those of their urban White counterparts; unemployment rates for Blacks in rural areas were roughly one and a half times greater.

Firms opening facilities in rural areas seem to favor sites with minimal Black populations (Hacker, 1992). This is especially true of foreign-owned corporations, which have become an increasing source of American employment. Toyota, for example, located an assembly plant in Harlan, Kentucky, in which 95 percent of the residents are White and Honda settled in rural Ohio, where the White population exceeded 97 percent (Hacker, 1992).

Young Blacks and Whites who continued their education beyond high school were less likely to be unemployed. But at all levels of educational attainment, unemployment rates for Blacks are still higher than those of Whites, particularly in urban areas. Most construction work, an important source of work for urban Blacks, now takes place in the suburbs or beyond. One of the obstacles to workforce equity stems from the difficulties Blacks have in finding housing or being able to afford housing in areas where jobs open up.

More Education Leads to Upgraded Occupations

Blacks have made occupational progress, but the extent is hard to measure because there is not a consensus as to which jobs are the better ones. The greatest shift of Blacks into more desirable jobs took place before 1980 (O'Hare, 1991). Blacks are still more likely than Whites to be in the least desirable or lowest paying occupations.

Regardless of residence, even after completing 4 or more years of college, employed Blacks are still less likely than Whites to be in managerial positions. Among Blacks, women were more likely than men to

Table 3—Occupation of employed adults age 25-34 without a high school education, 1980-90

Occupation	1980				1990			
	Black		White		Black		White	
	Urban[1]	Rural	Urban	Rural	Urban	Rural	Urban	Rural
	Thousand							
Total employed	402	145	1,653	739	398	111	1,868	693
Men	221	87	1,044	485	224	63	1,242	465
Women	181	57	609	254	174	48	626	228
	Percent							
Men:								
Managerial and professional	3.9	1.7	5.1	3.5	4.9	1.6	4.4	2.8
Technical, sales, and support	9.2	3.6	9.1	5.8	12.5	4.8	10.7	6.9
Services	15.6	6.6	8.5	5.4	23.2	11.1	11.3	5.2
Precision production	18.8	15.5	31.3	30.7	16.5	15.9	32.4	31.2
Operators, fabricators, and laborers	49.4	56.4	43.0	45.4	39.3	57.1	35.8	42.4
Farming, forestry, and fishing	3.2	16.3	3.0	9.3	3.6	9.5	5.4	10.5
Women:								
Managerial and professional	5.3	3.3	6.6	4.7	5.7	2.1	7.5	4.8
Technical, sales, and support	23.6	7.6	28.9	19.7	28.7	10.4	32.4	24.1
Services	39.3	33.0	26.8	26.8	43.7	39.6	31.6	31.6
Precision production	3.8	3.0	4.3	4.3	2.9	4.2	4.3	5.3
Operators, fabricators, and laborers	27.4	49.7	32.0	42.1	18.4	41.7	22.0	31.1
Farming, forestry, and fishing	0.6	3.3	1.0	2.4	0.6	2.1	2.1	3.1

[1] Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990.

hold managerial jobs both in 1980 and 1990. During the 1980's, when the economy shifted to services, middle-income manufacturing jobs were replaced by a few high-paying jobs and many low-paying jobs in the service sector (Levy and Michel, 1991).

Although Blacks apparently do not reap the same occupational rewards from education as Whites, Blacks who lacked higher education were at the greatest occupational disadvantage in 1990. Over half of employed rural Black men who lacked a high school education worked as operators, fabricators, and laborers (table 3). This was also the largest job category for urban Black men, at 39 percent. Nearly half of all employed Black men who were age 25 to 34 in 1980 worked as operators, fabricators, and laborers (table 3). Jobs in this category were more prevalent in rural than urban areas for both races in both 1980 and 1990, although urban blacks in 1980 were much more likely than those in 1990 to hold jobs in this category. However, such a preponderance of operator/laborer jobs among rural Blacks, both men and women, shows that Blacks are much more likely than Whites to hold blue-collar, manual jobs in rural areas.

Changes in the occupational distribution between 1980 and 1990 for uneducated men also affected women. Both Black and White women age 25 to 34 in 1990 were more likely than those in 1980 to be in sales and service occupations and less likely to be operators/fabricators. Half of both rural Black and White women, nearly three-fourths of urban Black women, and nearly two-thirds of urban White women were employed in sales and services in 1990 (table 3). These are the types of low-skilled, low-paying jobs that are increasingly available to persons lacking skills in both urban and rural areas.

Equal Education Does Not Guarantee Equal Earnings

The earnings of Blacks have always lagged behind those of Whites. Blacks had less favorable labor market characteristics as a result of fewer years of schooling; they were more likely than Whites to live in the South, where wages have historically been

Table 4—Median earnings of full-time, full-year workers, 1979-89[1]

Level of education	1979				1989			
	Black		White		Black		White	
	Urban[2]	Rural	Urban	Rural	Urban	Rural	Urban	Rural
	Thousand dollars							
Age 25-34:								
Not high school graduate	16	12	19	17	14	12	17	15
High school graduate	18	15	22	20	17	13	20	18
Some college	20	17	25	22	19	15	23	19
College, 4 years or more	25	20	30	25	25	18	31	25
Age 35-44:								
Not high school graduate	17	13	23	19	17	12	20	17
High school graduate	20	16	27	23	20	15	24	20
Some college	24	19	32	25	24	18	29	23
College, 4 years or more	33	23	43	34	32	25	40	30
Age 45-54:								
Not high school graduate	17	13	24	20	18	13	21	18
High school graduate	20	15	27	23	22	15	25	20
Some college	25	20	32	25	26	19	30	24
College, 4 years or more	33	26	47	36	35	25	47	35
Age 55-64:								
Not high school graduate	18	12	23	18	18	12	21	17
High school graduate	21	15	25	22	21	15	24	20
Some college	24	14	30	24	25	21	30	23
College, 4 years or more	32	27	43	35	34	24	46	35

[1] 1979 earnings converted to 1989 dollars using the Personal Consumption Expenditure Index.
[2] Urban and rural are equivalent to metropolitan and nonmetropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990.

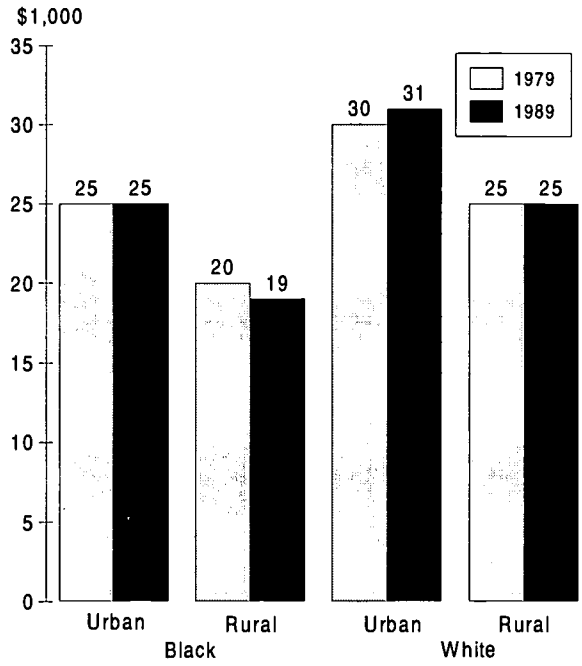
much lower than in all other regions; and their rates of return for labor market characteristics have generally been inferior to those of Whites (Farley and Allen, 1989).

Despite improvements in Blacks' labor market characteristics, they still do not reap the same financial rewards from education as Whites (Swinton, 1992). At each level of educational attainment in 1990, 1989 median earnings for year-round, full-time workers age 25 to 64 were higher for Whites than for Blacks (table 4). Earnings, which are reported for the previous year, include wage and salary income and self-employment income. Among college graduates, both rural and urban Blacks age 25-34 had median earnings of $6,000 less than their White counterparts. This disparity in earnings among college graduates was narrower in 1979. This inequality in 1979 and 1989 earnings among young adults also existed for all other age groups (table 4).

Regardless of residence, the value of a college education did not increase during the 1980's for Blacks or Whites. The median earnings of college-educated adults age 25 to 34 did not change significantly between 1979 and 1989 (fig. 3). Both the shift from manufacturing to services and the slow overall growth in the economy contributed to the stagnant earnings of young adults in the 1980's.

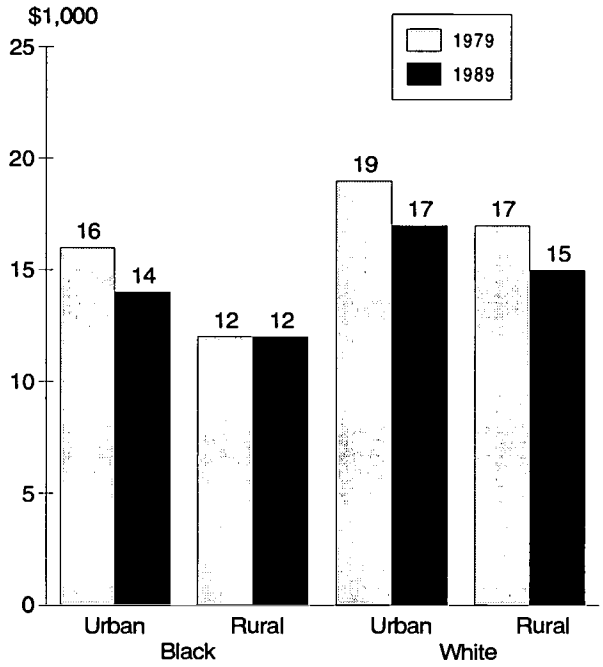
As the earnings of young adults with a college education remained constant during the 1980's, the median earnings of young adults who did not graduate from high school took a downward turn

Figure 3
Median earnings of adults ages 25-34 who completed 4 or more years of college



Source: Compiled by Economic Research Service from 1980 and 1990 Public Use Microdata Sample.

Figure 4
Median earnings of adults age 25-34 who did not graduate from high school



Source: Compiled by Economic Research Service from 1980 and 1990 Public Use Microdata Sample.

between 1979 and 1989 (fig. 4). Only the median earnings of rural Blacks remained unchanged, at $12,000.

College-educated adults age 25 to 34 in 1980 improved their earnings in the 1980's. Regardless of residence, the earnings of both Black and White young adults increased between 1979 and 1989 (fig. 5). The largest increase in earnings was among urban Whites. The earnings of urban Blacks increased by $7,000, and rural Blacks saw their earnings increase by $5,000. These amounts are small when averaged over the decade, but the increase is far better than what young adults would have received without a college education.

The earnings of young adults age 25 to 34 in 1980 who did not graduate from high school remained unchanged during the 1980's. Rural Blacks had annual earnings of only $12,000 in both 1979 and 1989 (fig. 6). Although both urban and rural Whites earned significantly more than their Black counterparts, the greatest earnings inequality was among Blacks.

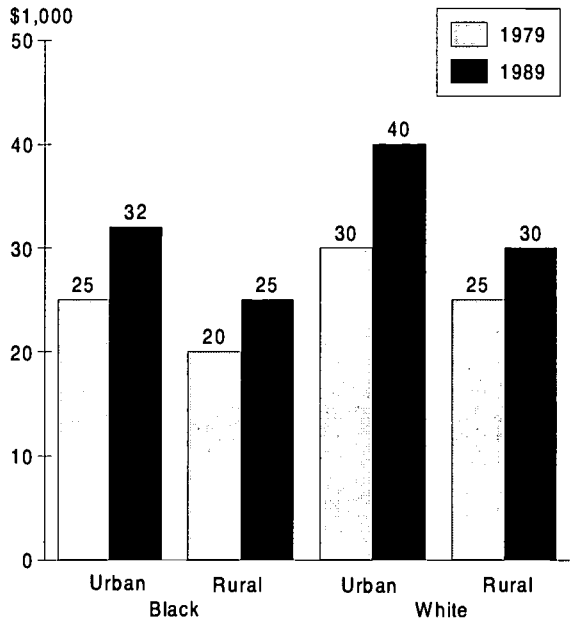
Regardless of education and age, rural Blacks earned less than urban Blacks. Rural young Blacks who were not high school graduates earned only 71 percent of what urban Blacks earned in 1989, down from 75 percent in 1979. The lower earnings of Blacks in rural areas reflect limited job opportunities and lower pay rates than in urban areas (Lyson, 1991).

Conclusion

The slow but steady gains that Blacks have made in educational attainment, along with the creation of jobs and the civil rights movement of the 1960's, increased opportunities for upward mobility. Education has always led to more desirable occupations and greater incomes, but before 1980, low-skilled workers could obtain manufacturing jobs that paid middle-class wages. When the economy shifted from manufacturing to services in the 1980's, Blacks, who are much more dependent on blue-collar jobs than Whites, were the hardest hit. Manufacturing jobs started going overseas, relocating, or disappearing altogether. As industries relocated to either the suburbs or predominantly rural White areas, both urban and rural Blacks lost out.

Figure 5

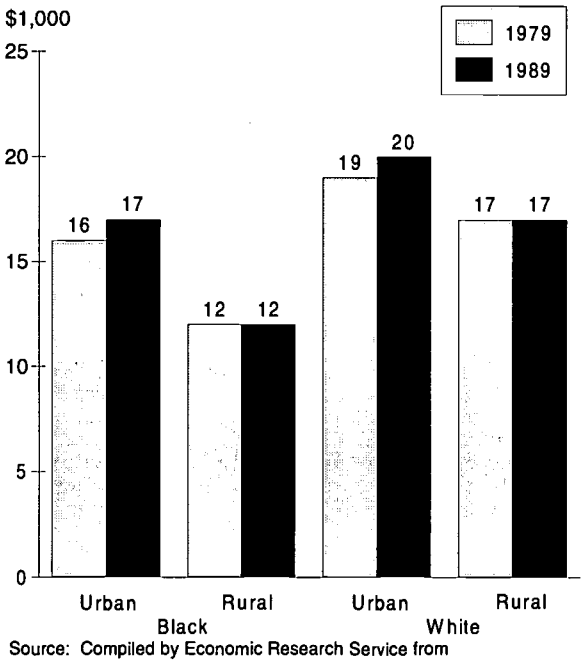
Median earnings over time of the cohort who were age 25-34 in 1980, 4 or more years of college



Source: Compiled by Economic Research Service from 1980 and 1990 Public Use Microdata Sample.

Figure 6

Median earnings over time of the cohort who were age 25-34 in 1980, no high school diploma



Source: Compiled by Economic Research Service from 1980 and 1990 Public Use Microdata Sample.

Blacks age 25 to 34 are at a great disadvantage. At a time when education is essential to occupational improvement, young Blacks, both men and women, in 1990 had lower levels of college attainment than those age 35 to 44 in both urban and rural areas.

Those who have not completed high school are at an even greater disadvantage. Black unemployment rates have remained at double-digit levels for nearly two decades, peaking at 20 percent in 1974. For uneducated Blacks age 25-34, the unemployment rate was 30 percent or greater, partially a result of limited job opportunities in both urban and rural areas.

Blacks with low skills were consigned to the operators, fabricators and laborers category (men) and to services (women). As Blacks gained more education, they were more likely to have access to more desirable jobs and better pay.

Blacks earned less than Whites at all levels of educational attainment, implying that discrimination persists and that the quality of education afforded Blacks and Whites is not equal. Rural Blacks earned less than urban Blacks, though there is not an adequate measure of rural/urban difference in cost of living to assess relative standards of living those earnings afford.

The employment future for Blacks in both urban and rural areas does not look promising. In both urban and rural areas, the quality of education for Blacks needs to improve and their education levels need to increase. At the same time, no amount of education will improve the economic status of Blacks if jobs are few. Both urban and rural areas need to find better ways of attracting and retaining industries that will provide jobs that pay wages adequate for a decent standard of living.

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Hispanics in Rural America

The Influence of Immigration and Language on Economic Well-Being

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Kathleen Kassel

Of all minority groups in the 1980's, Hispanics had the greatest numerical growth in rural[1] areas and in the United States as a whole. Although only a small percentage (8.5 percent) of all Hispanics lived in rural counties, those who did were concentrated in the Southwest. Such concentration made them an important minority, and in some cases a majority, in rural counties of that region. The poverty rate among rural Hispanics rose from 27.2 percent in 1980 to 32.1 percent in 1990, the largest increase for any rural group and larger than for urban Hispanics. Part of the increase in poverty for rural Hispanics appears to have been related to the effects of continuing immigration, lack of proficiency in speaking English, and concentrated employment in agriculture.

Identifying Rural Hispanics

The term "Hispanic" represents an extraordinarily diverse category of people. The 1990 census counted respondents of any race as Hispanics if they identified themselves as part of any of the following groups: Mexican, Mexican-American, Chicano, Puerto Rican, Cuban, Argentinean, Colombian, Costa Rican, Dominican, Ecuadorian, Guatemalan, Honduran, Nicaraguan, Peruvian, Salvadoran; from other Spanish-speaking countries of the Caribbean or Central or South America; or from Spain (Schick and Schick, 1991).

According to census results, the Hispanic population in the United States increased 50 percent between 1980 and 1990, compared with an increase of only 7 percent in the rest of the population. Immigration and relatively high rates of childbearing accounted for much of that increase, as well as improved methods to avoid and compensate for chronic undercounting of the Hispanic population (Schick and Schick, 1991). The Immigration Reform and Control Act (IRCA) of 1986 may also have improved counting by legalizing large numbers of Hispanics who, as undocumented immigrants, would have been difficult to reach in earlier censuses.

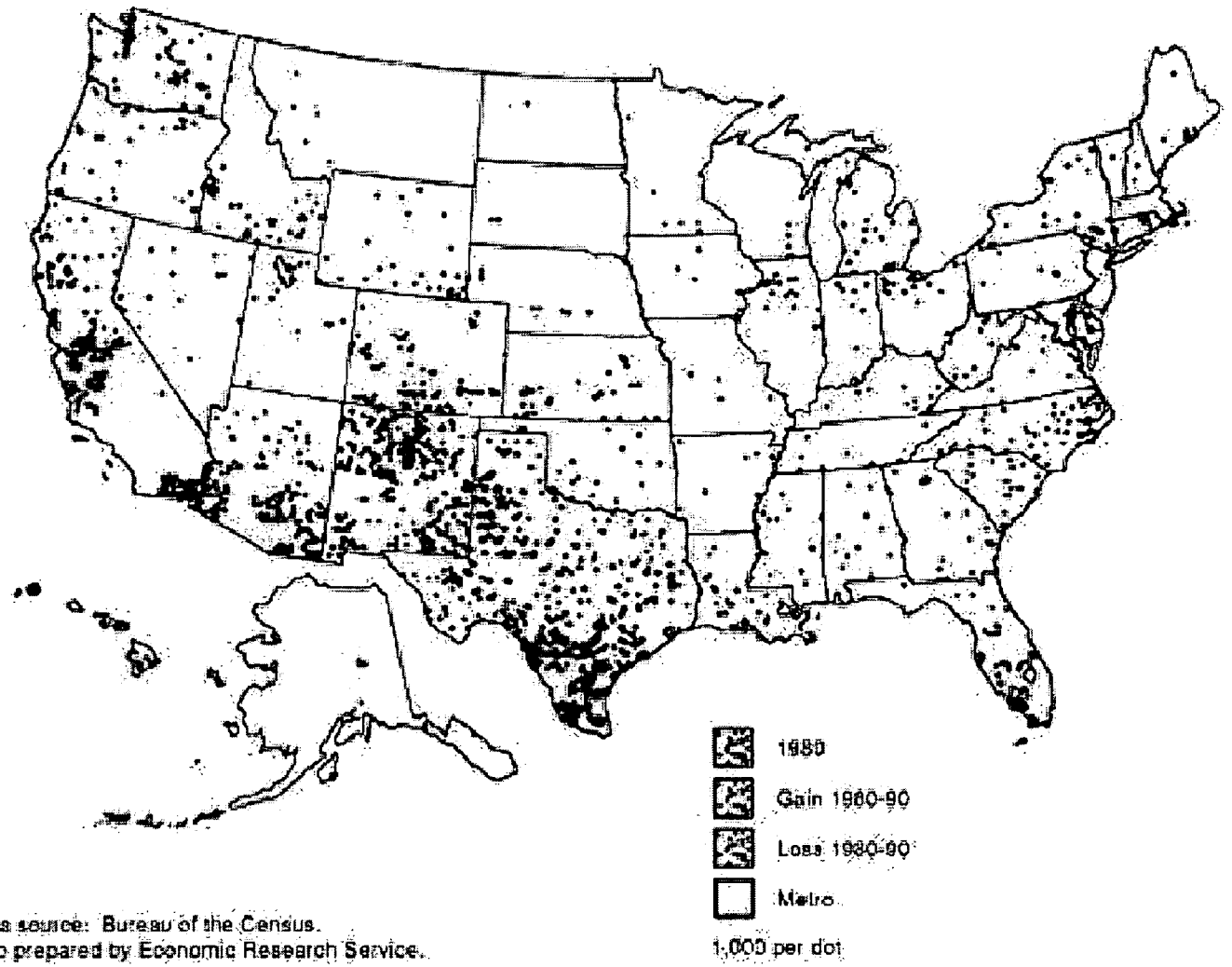
Hispanics made up only 3.7 percent of the U.S. rural population in 1990 and only 8.5 percent (1,864,353) of Hispanics in the United States lived in rural counties. Hispanics, in fact, were more heavily concentrated in urban counties than were non-Hispanics and were particularly clustered in central cities. Rural Hispanics, however, were heavily concentrated in the Southwest, making them an important rural minority group in that region.

Geographical Distribution

Rural Hispanics were scattered across the United States, but were most concentrated in the Southwestern States of Texas, New Mexico, Arizona, California, and Colorado (fig. 1). That region's 19th-century Mexican antecedents, and the long, relatively unguarded border with Mexico, have perpetuated settlement. The agricultural character of the Southwest and the agricultural backgrounds of many immigrants have added to the concentration of

[1] Rural people are defined here to be those who live in counties outside the boundaries of metropolitan areas, as defined by the office of Management and Budget at the time of the census, and urban refers to people within metropolitan counties. See appendix for a complete definition. An additional 4 percent of the rural Hispanic population live in open country and nonsuburban towns of less than 2,500 people within urban counties. The largest concentration of these Hispanics live in the agricultural valleys of California, where the large size of counties leads to the inclusion of sizable amounts of low-density territory within some counties with large urban centers. Our discussion of the rural *colonias* of California touches on some of the problems of rural Hispanics in urban counties, but we have not included them in most of our analysis in the interest of consistency with other chapters in this report.

Figure 1
Hispanics in nonmetro counties, 1980-90



Data source: Bureau of the Census.
Map prepared by Economic Research Service.

rural Hispanics in this region, although agriculture no longer employs most of them.

Hispanic settlement in rural Florida and the Northeast largely reflects historical immigration patterns of Cubans and Puerto Ricans, although many Mexicans have also settled in Florida, drawn by agricultural employment. Settlement in the West, Midwest, Great Lakes region, and Southeast is generally related to agricultural employment patterns, although Hispanics permanently settled in those areas may no longer be employed on farms.

The number of rural counties with more than 50 percent Hispanic population rose from 32 in 1980 to 38 in 1990 (fig. 2). Texas contained the largest number of these counties and gained the greatest number (21 in 1980 to 26 in 1990). Texas also contained the rural county with the largest percentage Hispanic population, Starr County (96.9 percent in 1980 and 97.5 percent in 1990). Two other Texas counties, Maverick and Jim Hogg, had Hispanic populations over 90 percent in both 1980 and 1990.

Recent growth of the rural Hispanic population has not altered settlement patterns appreciably, although settlement has expanded into counties surrounding previous areas of concentration, particularly in California and Oregon (fig. 1). The widespread legalization of undocumented Hispanic immigrants following passage of IRCA in 1986 may be adding to the effect by encouraging new settlement away from border areas (Mines and others, 1992; Cross and others, 1993).

Colonias

Following the 19th-century annexation of Mexican territory, non-Hispanic or Anglo farmers acquired large amounts of ranchland from Mexican owners, often by contesting Mexican land titles. As a result, many Mexicans became agricultural laborers rather than landholders, particularly in California and Texas. Former Mexicans in New Mexico and Colorado retained their land to a much greater extent and have sustained more independent, self-sufficient communities. A concentration of landless Mexican-Americans in California and Texas, however, in economically dependent, unincorporated settlements known as *colonias* has sustained poverty through lack of access to government services, poor educational facilities, and limited employment. Those conditions are aggravated through continual new immigration to these settlements (Rochin and de la Torre, 1991; Saenz and Ballejos, 1993; Rural Sociological Society, 1993).

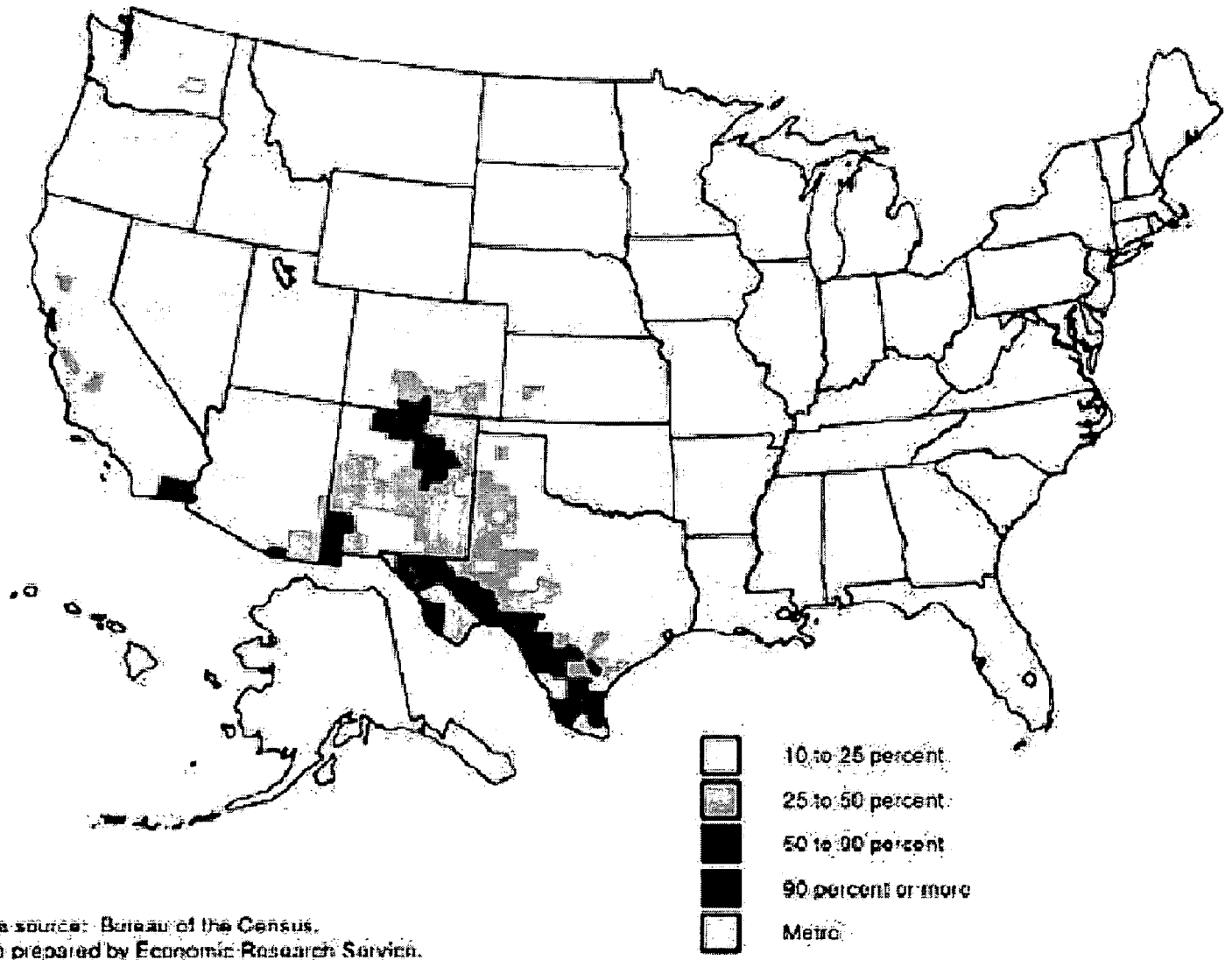
Although border *colonias* have existed in the Southwest since the early 20th century, new *colonias* have come into being as increasing Hispanic settlement transforms older rural towns. Unlike barrios, in which Hispanics live as ethnic minorities, *colonias* are rural towns in which Hispanics have become the majority. But rather than becoming enclaves of opportunity for Hispanics to control their own businesses and government, they have become increasingly dependent on outside resources for supplies and employment. In California, these settlements are characterized by their dependence on seasonal farmwork for income and their consequent community poverty. Without internal community resources, education and infrastructure have suffered, further impoverishing the communities and limiting the opportunities for their residents (Rochin, 1995; Rochin and Castillo, 1995; Allensworth and Rochin, 1995).

Nationalities Within Rural Hispanic Population

A substantial majority of rural Hispanics were of Mexican origin (76.9 percent) in 1990. Four percent were Puerto Rican, 1.2 percent Cuban, and the remaining 17.9 percent "other Hispanics." While "other Hispanics" in urban counties were largely Central and South American immigrants, in rural areas they were primarily "Hispanos," who are descendants of the original Spanish settlers of the Southwest. They are a population of fourth- and fifth-generation Mexican-Americans who "entered" the United States by virtue of an international treaty and continue to live on ancestral lands or in long-settled Hispanic communities (Marin and Marin, 1991; Bean and Tienda, 1987).

Important differences in measures of economic and social well-being appear among these groups, making generalizations about rural Hispanics problematic. Moreover, small counts and questions about the way in which Hispanics identify themselves within census categories complicate the interpretation of these differences. Historical immigration and migration patterns among Cubans and Puerto Ricans have led few to settle in rural areas. Aggregate data drawn from such small numbers may give an unreliable description of the characteristics of these two nationality groups. Data on rural "other Hispanics" may be affected by younger Hispanos choosing to identify themselves as Mexican-American because of the Chicano civil rights movement, leaving the "other Hispanic" category to an older generation (Tienda, 1981). Because of these difficulties, and because these groups make up less than 25 percent of the total rural Hispanic population, most of the analysis in this

Figure 2
Hispanics in nonmetro counties, 1990



Data source: Bureau of the Census.
Map prepared by Economic Research Service.

Table 1—Poverty rates by race/ethnicity, 1980-90

Item	1990	1980
	Percent	
Rural[1]		
Hispanic	32.1	27.2
Mexican-American	34.1	28.6
Non-Hispanic White	13.2	12.5
Black	40.1	38.6
Native American	37.7	33.9
Urban		
Hispanic	24.1	22.8
Mexican-American	24.9	22.2

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

Table 2—Rural[1] Mexican-American immigration, language ability, and employment in agriculture, 1980-90

Item	1990	1980
	Percent	
Immigrant	11.3	8.6
Speak English (age 5+)		
At home	23.4	22.1
Well, very well	60.2	61.1
Not well, not at all	16.5	16.8
Employed in agriculture (age 16-64)	16.1	15.7

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

chapter will consider only the rural Mexican and Mexican-American population. We will refer to this group as Mexican-American, although a number of Hispanics in this category are not American citizens.[2]

Factors Affecting the Economic Well-Being of Rural Mexican-Americans

As for other rural minorities, poverty is a pervasive problem for rural Hispanics. The poverty rate among rural Mexican-Americans rose nearly 5 percentage points from 28.6 percent in 1980 to 34.1 percent in 1990, the largest percentage increase for any rural race/ethnicity group and larger than for urban Mexican-Americans (table 1).

Immigration, English Language Proficiency, and Concentration in Agriculture

Three characteristics of rural Mexican-Americans distinguish this minority from most other rural minorities and affect their economic well-being: continuing new immigration, use of Spanish as a first language, and concentrated employment in agriculture (table 2). The percentage of rural Mexican-Americans who were recent immigrants (those who have been in the United States less than 10 years) rose from 8.6 percent in 1980 to 11.3 percent by 1990. Employment of rural Mexican-American men in agriculture increased from 19.5 percent in 1980 to 21.5 percent in 1990.

The effects of these distinguishing characteristics on the economic well-being of rural Mexican-Americans were interrelated. Immigration and English language ability seemed the most important factors, but their effects were related to such economic disadvantages as poor education, concentration in low-paying industries (particularly agriculture), and low per capita income resulting from extended family households and low female labor force participation.

Educational Achievement

Rural residents with low educational attainment faced a particularly difficult employment picture in the 1980's, since most new jobs in rural areas for those

[2] It could be argued that at 17.9 percent of the rural Hispanic population, "other Hispanics" should be included in this chapter's analysis. Compared with rural Mexican-Americans, rural "other Hispanics" are better educated, more likely to speak English as a first language, less likely to be employed in agriculture, have fewer children, live in smaller households, and are less likely to live in poverty. Most of these measures, including higher median age (28 compared with 23), higher median household income ($18,692 compared with $17,328), lower mean persons per household (3.2 compared with 3.7), lower mean number of children per female age 35-44 (2.4 compared with 2.9), higher per capita income ($7,632 compared with $5,840), greater high school completion rate (63.5 percent compared with 34.1 percent), may be related to the generational difference noted in the text. In any case, when viewed in light of the lower percentage of recent immigrants (7.2 percent compared with 11.3 percent) and the higher percentage speaking English as a first language (47.1 percent compared with 23.4 percent) among "other Hispanics," these data support the thesis of this chapter--that immigration and English language ability affect the economic well-being of rural Hispanics. Therefore, in order to avoid potential errors in interpreting this data and to simplify our presentation, we have chosen to concentrate on Mexican-origin Hispanics.

Table 3—Highest education level completed by sex and race/ethnicity, 1990

Age/ education	Men				Women			
	Rural			Urban	Rural			Urban
	Mexican-American	Non-Hispanic White	Black	Mexican-American	Mexican-American	Non-Hispanic White	Black	Mexican-American
	Percent							
1990								
Age 25-34:								
Less than high school	50.3	17.4	32.1	50.8	41.5	14.3	27.7	45.9
High school diploma	45.7	68.8	63.3	41.9	53.0	70.8	65.4	46.6
BA/BS degree or more	3.9	13.8	4.6	7.2	5.5	14.8	6.9	7.5
Age 35-44:								
Less than high school	50.7	14.8	39.6	51.1	48.8	13.3	35.5	48.5
High school diploma	41.4	63.4	53.3	39.3	44.6	67.9	55.9	44.6
BA/BS degree or more	7.8	21.8	7.1	9.6	6.6	18.8	8.7	6.9
Age 45-54:								
Less than high school	65.0	24.7	59.2	59.0	67.6	22.8	53.5	61.2
High school diploma	29.4	57.9	35.4	33.0	29.3	65.0	39.7	34.4
BA/BS degree or more	5.5	17.5	5.4	8.0	3.1	12.1	6.9	4.4
1980								
Age 25-34:								
Less than high school	48.6	16.2	39.4	48.7	50.9	16.6	33.4	48.2
High school diploma	44.1	63.6	52.9	43.0	45.1	67.5	58.5	46.2
BA/BS degree or more	7.3	20.3	7.7	8.4	4.0	15.9	8.1	5.6
Age 35-44:								
Less than high school	66.7	25.8	57.8	58.0	68.3	25.3	56.8	61.6
High school diploma	29.4	57.0	36.8	35.1	29.7	63.7	37.4	34.7
BA/BS degree or more	3.9	17.2	5.4	7.0	1.9	10.9	5.8	3.8
Age 45-54:								
Less than high school	78.8	40.0	76.1	67.9	79.1	35.8	70.6	73.4
High school diploma	16.9	47.1	19.8	27.1	19.6	56.5	22.5	24.0
BA/BS degree or more	4.3	12.9	4.1	5.0	1.3	7.7	6.9	2.6

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

with low education levels were in lower paid industries (McGranahan and Ghelfi, 1991; Jensen, 1991; McGranahan, 1988; see also "Education and Rural Minority Job Opportunities," by McGranahan and Kassel in this volume). Education levels for rural Mexicans were quite low in 1990 compared with rural non-Hispanic Whites and rural Blacks, particularly for men and especially for high school completion among the youngest adults (table 3). Only urban Mexicans showed lower high school completion rates in the youngest adult age group. Moreover, high school and college completion rates for Mexican men, both urban and rural, have not improved since 1980 and for some age groups have fallen lower than in 1980. Increasing immigration, which is disproportionately composed of younger, poorly educated men, may account for these falling levels of education.

Although high school completion rates improved for Mexican-American women, rural Mexican-American women's educational levels remained well behind those for both rural Black and rural non-Hispanic White women.

Table 4—Distribution of employed persons age 16-64 by industry, sex, and race/ethnicity, 1980-90

Industry	Men				Women			
	Rural[1]			Urban	Rural			Urban
	Mexican-American	Non-Hispanic White	Black	Mexican-American	Mexican-American	Non-Hispanic White	Black	Mexican-American
	Percent							
1990								
Agriculture, forestry and fisheries	21.5	9.0	7.8	9.3	8.7	2.8	2.5	4.0
Mining	5 4	2.7	1.2	0.6	0.5	0.3	0.1	0.1
Construction	12.6	12.6	11.8	14.4	0.8	1.4	0.6	1.0
Manufacturing	18.4	24.3	34.6	22.5	13.1	16.0	30.6	19.2
Food and kindred products	6.0	2.0	4.1	2.8	5.3	1.3	3.6	2.6
Other nondurable goods	2.8	6.5	11.2	5.4	4.1	7.6	17.7	7.6
Durable goods	9 7	15.8	19.3	14.3	3.7	7.2	9.3	9.1
Services	13.5	19.7	16.0	19.6	42.8	46.9	42.0	43.2
Other industries	28.6	31.7	28.7	33.6	34.3	32.6	24.1	32.5
	Thousand							
Total	414	12,730	922	3,374	302	11,380	1,032	2,488
	Percent							
1980								
Agriculture, forestry and fisheries	19.5	10.5	10.1	7.5	10.4	3.1	4.3	4.7
Mining	8.2	4.0	1.7	1.0	0.5	0.4	0.2	0.2
Construction	12.8	12.4	11.9	12.5	0.7	1.2	0.7	0.7
Manufacturing	19.9	25.8	37.0	29.6	19.2	20.1	31.2	26.5
Food and kindred products	4.5	2.3	4.0	3.6	5.8	1.7	3.7	3.3
Other nondurable goods	4.1	6.8	13.1	6.2	8.2	10.1	18.7	10.5
Durable goods	11.3	16.7	19.9	19.8	5.2	8.4	8.8	12.7
Services	13.0	16.8	15.2	17.4	38.5	42.4	43.8	38.6
Other industries	26.4	30.5	24.2	32.1	30.6	32.7	19.8	29.3
	Thousand							
Total	321	13,402	974	1,944	229	10,975	994	1,460

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

Concentration in Agriculture

Mexican-Americans in rural areas are more heavily concentrated in farm and related agricultural industries than are non-Hispanics (table 4). That concentration increased for rural Mexican-American men from 19.5 percent in 1980 to 21.5 percent in 1990. Reasons for concentration in agriculture include poor English language skills and family/community connections with other agricultural workers, both situations compounded by rising immigration. Such concentration often leads to pockets of widespread poverty, since farm and agricultural jobs are generally seasonal and are among the lowest paid (table 5).

Employment in Other Industries

Agricultural employment, however, cannot account for the full measure of rural Mexican-American poverty. Although the largest concentration of rural Mexican-American men remained in agriculture in 1990 (21.5 percent), manufacturing (18.4 percent), services (13.5 percent), and construction (12.6 percent) also employed sizable percentages (table 4). Manufacturing employment, however, among the higher paying occupations, decreased slightly for Mexican-Americans, from 19.9 percent in 1980 to 18.5 percent in 1990. At the same time, although employment rates in services and construction remained stable or increased, the poverty rate among

Table 5—Poverty rates by industry for employed persons age 16-64 by sex and race/ethnicity, 1980-90

Industry	Men				Women			
	Rural[1]			Urban	Rural			Urban
	Mexican-American	Non-Hispanic White	Black	Mexican-American	Mexican-American	Non-Hispanic White	Black	Mexican-American
	Percent							
1990								
Agriculture, forestry and fisheries	35.2	15.0	37.2	29.5	42.4	15.7	53.7	34.3
Mining	23.3	8.5	15.3	14.2	28.6	5.1	6.7	2.7
Construction	27.4	11.2	24.5	21.2	21.7	10.1	20.9	15.6
Manufacturing	19.8	6.0	15.2	13.5	24.6	9.3	24.9	17.2
Food and kindred products	27.5	6.0	19.9	15.9	23.0	11.8	32.6	20.3
Other nondurable goods	13.0	5.0	12.3	13.9	29.3	10.5	24.4	21.0
Durable goods	17 0	6.4	16.0	12.9	21.6	7.7	22.8	13.2
Services	25.0	8.9	22.7	17.7	23.8	9.1	32.8	17.7
Other industries	19.9	7 8	21.7	14.8	24.7	13.5	33.1	19 0
Total employed	28.6	10.1	26.3	20.4	29.0	12.2	38.4	22.0
1980								
Agriculture, forestry and fisheries	34.1	17.6	43.1	25.4	36.0	16.9	51.6	26.7
Mining	11.3	6.6	12.0	9.2	0.0	5.0	22.2	12.1
Construction	22.8	9.3	24.8	16.4	12.5	9.4	38.0	16.7
Manufacturing	15.6	5.5	16.6	12.5	19.1	8.5	23.0	15.8
Food and kindred products	23.4	6.4	18.6	14.1	17.2	11.6	33.3	20.3
Other nondurable goods	15.9	4,5	13.3	13.7	21.9	9.1	21.1	19.4
Durable goods	12.4	5.7	18.4	11.9	16.8	7.2	22.7	11.6
Services	19.3	7.5	21.4	15.5	18.7	8.4	29.5	15.9
Other industries	13.9	6.6	21.0	12.7	17.9	10.5	29.7	15.5
Total employed	22.9	9.4	28.1	18.2	23.9	11.1	35.7	20.5

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

Mexican-Americans employed in those industries rose much more than among Mexican-Americans in agriculture. The increases in poverty rates among those employed in these occupations rose at much greater rates, in most cases, than for rural non-Hispanic Whites, rural Blacks, and urban Mexican-Americans (table 5).

While labor force participation rates remained stable for rural Mexican-American men, unemployment increased from 7.9 percent in 1980 to 10.9 percent in 1990 (table 6). Unemployment decreased for rural non-Hispanic White men and increased less than 1 percent for urban Mexican-Americans.

Unemployment also increased among women of all race/ethnicity and residence groups except rural non-Hispanic Whites. Women of all groups experienced an increase in labor force participation (table 6). Rural Mexican-American women increased participation in the labor force, but also were increasingly unemployed. Urban Mexican-Americans and rural Blacks increased labor force participation by a similar percentage and saw equal increases in unemployment, both very close to the increase for rural Mexican-American women.

Also increasing poverty among rural Mexican-Americans was the increasing poverty rate for rural Mexican-American women in the labor force (table 5). Although more of these women began

Table 6—Labor force participation and unemployment rates for civilian persons age 18-65 by sex and race/ethnicity, 1980-90

Item	Men				Women			
	Rural[1]			Urban	Rural[1]			Urban
	Mexican-American	Non-Hispanic White	Black	Mexican-American	Mexican-American	Non-Hispanic White	Black	Mexican-American
	Rates							
1990:								
Labor force participation	86.8	85.8	77.6	88.8	55.9	66.5	65.6	61.8
Unemployment	10.9	5.8	12.9	9.1	13.9	5.8	13.6	11.1
1980:								
Labor force participation	86.7	86.9	77.2	89.1	48.1	56.1	59 0	55 5
Unemployment	7.9	6.4	10.1	8.3	11.7	6.5	12.0	9.5

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

working over the decade, their poverty rates increased even more than for rural Mexican-American men. Poverty among working women increased in most industries for rural non-Hispanic Whites, rural Blacks, and urban Mexican-Americans as well.

Family and Household Patterns

Per capita income for rural Mexican-Americans in 1990 was little more than half that of rural non-Hispanic Whites, even though median household income was almost three-fourths that of rural non-Hispanic Whites (table 7). Continuing low labor force participation and high rates of childbearing among rural Mexican-American women combine to reduce the number of earners relative to household size, although labor force participation increased in the 1980's and the mean number of children for women age 35 to 44 fell.

Rural Mexican-American household size has remained high because of the prevalence of extended family households, which are often the result of immigration of adult siblings and cousins and their families. Sharing a household can be advantageous by applying pooled income from several earners to household costs. Poverty rates indicate extended family households fared much better than nonfamily households and single-parent households among rural Mexican-Americans, although not better than nuclear married-couple households. Nuclear married-couple households may not have become extended family households because their relatively high incomes made pooling resources unnecessary.

Poverty rates for all types of rural Mexican-American households increased over the 1980's, however, while average household size remained the same. Although larger households may account for greater poverty among rural Mexican-Americans compared with rural non-Hispanic Whites, they do not account for increasing poverty over the decade.

Interaction of Immigration and English Language Proficiency

Both continuing immigration and difficulty in speaking English sustain the economic disadvantages of poor education and low-paying jobs, which in turn lead to continued poverty among rural Mexican-Americans. English language ability seems the most important predictor for economic success, but immigration plays a role, apparently because of its effect on English language proficiency. Over 50 percent of immigrant Mexican-Americans were poor English speakers, compared with 11.6 percent of nonimmigrant Mexican-Americans.

A review of the measures describing conditions among rural Mexican-Americans in 1990 illustrates the effects of immigration and English language ability on poverty and suggests their interrelatedness (table 8). Many more immigrants than nonimmigrants lacked a high school diploma; poor English speakers were nearly twice as likely to have less than a high school education as those who spoke English well and more than three times as likely as those who spoke English as a first language. Both immigrant rural Mexican-Americans and rural

Table 7—Family and household characteristics by race/ethnicity, 1980-90

Item	Rural[1]			Urban
	Mexican-American	Non-Hispanic White	Black	Mexican-American
1990				
Median household income	$17,328	$24,200	$12,927	$24,700
Average household size	3.7	2.5	3.0	4.0
Per capita income	$5,840	$9,506	$5,904	$7,431
			Percent	
Persons by household type				
In family households	94.1	87.7	90.0	94.1
In extended family households	10.7	3.3	18.1	14.6
In nonfamily households	5.9	12.3	10.0	5.9
Related children				
In two-parent family households	76.8	84.4	46.7	73.8
In female-headed family households	18.1	12.2	48.3	19.6
In extended family households	6.3	2.7	14.3	8.3
Mean number of children per woman age 35-44	2.9	2.1	2.7	2.8
Poverty rates by family and household structure				
In family households	33.7	11.2	38.7	24.7
In extended family households	31.7	14.7	46.8	23.7
In married-couple families	28.4	8.2	22.2	19.5
In female-headed families	57.5	34.0	60.4	45.3
In nonfamily households	40.3	28.2	52.2	28.0
1980				
Median household income[2]	$20,036	$24,681	$13,603	$24,005
Average household size	3.9	2.7	3.4	3.9
Per capita income	$5,895	$10,683	$5,414	$7,140
			Percent	
Persons by household type				
In family households	94.8	90.1	92.1	94.3
In extended familiy households	6.0	2.5	11.8	6.7
In nonfamily households	5.2	9.9	7.9	5.7
Related children				
In two-parent family households	84.6	88.3	59.4	80.0
In female-headed family households	12.5	9.7	36.9	16.9
In extended family households	3.0	1.6	72	3.2
Mean number of children per woman age 35-44	4.3	2.8	4.0	3.6
Poverty rates by family and household structure				
In family households	27.8	10.7	37.1	21.8
In extended familiy households	28.0	15.0	39.4	20.8
In married-couple families	24.2	8.9	26.7	17.4
In female-headed families	55.0	30.0	58.4	45.8
In nonfamily households	44.6	28.9	56.0	28.2

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
[2] Income items converted to 1989 dollars using the Personal Comsumption Expenditure index.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

Table 8—Effects of English language ability and immigration on Mexican-American employment in agriculture, educational attainment, and poverty rates, 1980-90

Item	Immigrant status		Speak English (age 5+)		
	In last 10 years	Over 10 years ago	Only	Very well/ Well	Not well/ Not at all
			Percent		
1990					
Rural[1] total	11.3	88.7	23.4	60.2	16.5
Employed in agriculture (age 16-64)	39.1	12.2	5.9	12.8	39.8
Poverty rate (age 18+)	39.0	28.3	21.5	27.3	43.8
Education (age 25-64)					
Less than high school	80.4	51.2	28.8	49.9	90.1
High school diploma	17.3	43.3	62.0	44.7	8.7
BA/BS degree or more	2.3	5.5	9.2	5.4	1.2
Urban total	18.4	81.6	22.9	54.5	22.6
Employed in agriculture (age 16-64)	13.4	5.3	2.8	5.0	15.1
Poverty rate (age 18+)	30.9	18.4	14.1	18.5	31.1
Education (age 25-64)					
Less than high school	75.1	47.9	25.1	46.4	84.9
High school diploma	20.0	44.5	62.3	45.8	13.2
BA/BS degree or more	4.9	7.6	12.7	7.8	1.9
1980					
Rural total	8.6	91.4	22.1	61.1	16.8
Employed in agriculture (age 16-64)	37.9	13.1	7.4	12.5	39.3
Poverty rate (age 18+)	25.6	16.7	23.6	20.5	39.1
Education (age 25-64)					
Less than high school	89.0	62.3	53.2	58.6	93.3
High school diploma	8.4	33.6	42.2	36.7	5.6
BA/BS degree or more	2.5	4.1	4.6	4.7	1.1
Urban total	16	84	23.1	56.3	20.6
Employed in agriculture (age 16-64)	10.9	5.2	2.1	4.9	14.1
Poverty rate (age 18+)	25.6	16.7	13.4	15.9	27.6
Education (age 25-64)					
Less than high school	81.9	53.8	34.1	52.2	89.5
High school diploma	15.2	40.2	56.4	41.6	9.0
BA/BS degree or more	2.8	6.1	9.4	6.1	1.5

[1] Rural is defined as those areas outside metropolitan boundaries and is equivalent to nonmetropolitan; urban is equivalent to metropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990 Census.

Mexican-Americans with poor English skills were much more heavily concentrated in agriculture than were nonimmigrants and rural Mexican-Americans with good English skills. The poverty rate for immigrants was much higher than for nonimmigrants, although the difference was only half as great as that between poor English speakers and those with good English skills.

Continuing Poverty Among English Speakers

Rural Mexican-Americans who speak English as their first language had levels of education in 1990 much closer to rural non-Hispanic Whites and are even less

concentrated in agriculture than rural non-Hispanic Whites. Yet, although their poverty rate in 1990 was much lower than that of poor English speakers, it was still more than twice that of Whites. What perpetuates such continuing high rates of poverty is not certain, although larger household size and lower labor force participation rates for women may account for some of it. Historical discrimination in landownership, quality of education, employment opportunities, and access to government services, exacerbated by segregated settlement patterns and continual immigration, are also important, if difficult to address (Rochin and de la Torre, 1991; Rochin, 1995; Rural Sociological Society, 1993; Saenz and Ballejos, 1993; Jensen, 1991; Tienda, 1981; Kuvlesky and others, 1982).

Effects of Poor English Language Skills

The disadvantage poor English language skills present to rural Mexican-Americans is real. Moreover, the earnings differential between poor and fluent English speakers seems to increase in areas where the population of non-English speakers is high (Bloom and Grenier, 1993). If concentration of recent immigrant, non-English speaking Hispanics in isolated rural communities like *colonias* continues to

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American Indians

Economic Opportunities and Development

Deborah M. Tootle

The 1980's may have marked a new era of economic development for American Indians. However, rapid but uneven economic development does not necessarily translate into improvements in labor market opportunities for American Indians. The geographically isolated rural areas in which many American Indians live mainly offer low-wage manufacturing and consumer services jobs. American Indians continue to be overrepresented in less remunerative occupations and industries and to face high unemployment. Unless economic development on or near American Indian reservations departs from the typical urban and rural division of labor, with much of the economic development in rural areas in the form of low-wage jobs, it may not reduce the economic disadvantages faced by American Indians.

The 1960's and 1970's were relatively good years for American Indians living in rural America.[1] During this time, American Indians, like other rural minorities, began to emerge from economic backwaters into the tributaries of the economic mainstream. However, ethnic and racial minority status, and economic isolation resulting from living in geographically isolated and disadvantaged rural regions or "forgotten places" (Lyson and Falk, 1993) are powerful deterrents to full participation in the American economic structure. American Indians, the most rural of minority groups, consequently remain one of the most economically deprived groups of people in the United States. As such, they are particularly vulnerable to the economic problems faced by rural America.

Recent studies of rural minority populations show that the forward momentum gained by Blacks and Hispanics faltered during the 1980's as rural areas encountered high underemployment, sluggish earnings, and deteriorating incomes. However, whether American Indians progressed, plateaued, or declined economically has been more difficult to determine. Data that adequately identify and represent American Indians are difficult to obtain. Moreover, generalizing about American Indians from other minorities is risky. Their path to economic development follows a singular terrain unfamiliar to most other population groups. A history of geographic isolation and the lack of demand for their labor leaves American Indians socially and economically isolated.

The 1980's may have marked a new era of economic development for American Indians. Until recently, responsibility for economic development on their reservations fell largely to the Bureau of Indian Affairs. However, because of a unique legal status based upon the inherent sovereignty of Indian Nations, American Indian tribes today shoulder more responsibility for their economic development than at

[1] The terms American Indian and Native American are often used synonymously. However, in recent years the term "Native American" has caused some confusion due to its lack of precision. According to the Bureau of Indian Affairs (BIA), the term "Native American" was originally used in the 1960's to identify groups they served: American Indians, and the Alaskan Eskimos and Aleuts (often referred to as Alaskan Natives). However, some Federal programs have more recently used the term to also include Native Hawaiians and Pacific Islanders. Subsequently, the term "Native American" fell into disfavor with some groups of American Indians (U.S. Dept. of the Interior, 1991) and Snipp (1991) finds that its use has declined considerably. In this chapter, I focus specifically on American Indians and Alaskan Natives and policies that affect these two groups, although I recognize that the Alaskan Eskimos and Aleuts are two culturally distinct groups and may be sensitive to being categorized as American Indians. However, because of the relatively small number of Alaskan Eskimos and Aleuts, all three are grouped together in the 1980 Census, and the 1989 and 1990 CPS. Most of this population, 96.1 percent, consists of American Indians. I follow Snipp's (1991) shorthand convention of referring to the group of Native Americans composed of American Indians, Eskimos and Aleuts as American Indians.

Rural people are defined here to be those who live in counties outside the boundaries of metropolitan areas, as defined by the Office of Management and Budget at the time of the census. See appendix for a complete definition.

any other point in this century. Unprecedented and lucrative economic opportunities for American Indians appear to be mushrooming, a phenomenon that seems to contrast sharply not only with the rural setting and poverty of most reservations, but with the experiences of other rural minorities as well.

Passage of the American Indian Self-Determination and Education Act in 1975 opened the door for many tribes to participate in revenue-generating projects. Anecdotal evidence implies that economic development on some reservations is proceeding at a rapid pace. Nonetheless, comparisons of data from the beginning and end of the 1980's suggest that American Indians made little, if any, improvement in economic well-being. In other words, the economic development taking place in and around American Indian reservations does not necessarily translate into higher incomes and less poverty, an apparent paradox ultimately tied to uneven economic development and the failure of some economic development strategies to be directly or strongly remunerative to tribal members.

Because some of these economic development strategies may benefit tribal community services more than the personal earnings and income of American Indians, socioeconomic indicators alone may provide an unrealistic picture of their economic status. Consequently, it is important to investigate the structural factors that contribute to economic well-being. In the second part of this chapter, I examine changes in labor market opportunities in rural areas during 1980-90, and the processes that link individuals, especially American Indians, to labor markets.

Changing Social and Economic Forces

The sovereignty of American Indians has been recognized, at least in theory, since the 1700's. Nonetheless, freedom to exercise self-government and economic determination has always been limited to some degree. During the mid-to-late 19th century, for example, American Indians were confined to federally controlled reservations. The Indian Reorganization Act of 1934 sanctioned the creation of federally sponsored tribal governments and supported the expansion of reservation economies. The 1940's and 1950's witnessed efforts by the Federal Government to dismantle the reservation system and assimilate American Indians into mainstream American society. In the 1960's, tribal leaders persuaded the U.S. Government to abandon the policy in favor of policies contributing to self-determination (Cornell, 1988). Today, although not all American Indians living in rural areas live on reservations, most live near a reservation and those that leave the reservation generally maintain close ties. Nagel, Ward, and Knapp (1988) report significant rates of return migration to reservations.

In 1975, the Congress passed the American Indian Self-Determination and Education Act (PL 93-693). This act may prove to be a watershed for American Indian economic development. The act provides tribal governments with the option to assume responsibility for tribal administration and to increase their control over their reservations and tribally owned resources (Nagel, Ward and Knapp, 1988; Snipp and Summers, 1991). Self-determination "reaffirms the concept of tribal sovereignty...tribal leaders are free to develop their community however they please, regardless of state and local restrictions and subject only to federal oversight" (Snipp and Summers, 1991: p.171). The promise of self-determination has enhanced the ability of tribes to participate in revenue-generating projects, and recent evidence suggests that economic development proceeds more reliably when American Indian tribes assume more responsibility for making development decisions (Cornell, 1992).

Since the late 1970's, tribes have become increasingly involved in both tribal and private enterprise as means to self-development such that today reservations have more businesses owned by tribes, individual American Indians, and non-Indians than ever before. Tribally owned business ventures include lucrative (and controversial) smoke shops, which are tax-free tobacco outlets, and gambling operations (Snipp and Summers, 1991). As of July 1993, 67 tribes in 19 States offered some form of gambling activity, including casino games, lottery, slot machines, and pari-mutuel wagering on horse and dog racing (NIGC, 1993). Private businesses owned by American Indians consist largely of small grocery stores, construction companies, gas stations, and repair shops. Outside firms have either set up shop on reservations, such as the American Greetings facility on the Choctaw Reservation in Mississippi, or contract with tribally owned enterprises for work. Residents of the Mississippi Choctaw Reservation produce wiring harnesses for General Motors, while members of the Navajo Reservation assemble electronic components for General Dynamics. As defense contractors, the Devils Lake Sioux in North Dakota manufacture camouflage netting (Millman, 1991; White, 1990).

However, the avalanche of publicity about prosperous tribal enterprises, gambling (or gaming), tourism, businesses, and other lucrative self-development ventures may be misleading. Citing hundreds of millions of dollars in tax-free revenues and the expansion of small bingo halls into multimillion-dollar casino complexes, much of the recent coverage implies that reservation economies are booming and that American Indians are moving up from the bottom of the socioeconomic rankings. This is hardly the case. If American Indians have improved their economic standing, it is not evident from data on income and poverty; over a third of rural American Indians continue to live in poverty (see appendices).

In light of recent economic development on and around reservations, why haven't American Indians made obvious economic gains? First of all, not all communities have experienced economic development; development has been uneven. Second, economic development does not necessarily translate into good jobs and improved economic well-being.

Development Is Uneven

Economic development strategies are not pursued with the same enthusiasm by all American Indians. In some cases, reluctance to engage in deliberate economic development may reflect a great diversity of attitudes found among American Indians. According to the 1990 Census, over 2 million American Indians and Alaska Natives live in the United States; approximately half of this population lives in rural areas. There are 278 federally recognized reservations, and 510 federally recognized tribes (including 200 village groups in Alaska), as well as additional Indian tribes and groups that are State-recognized (U.S. Dept of the Interior, 1991). Each of these communities, with their unique histories and myriad cultures, may embrace diverse goals. A market-oriented economy may be unappealing to communities resisting assimilation (Cornell, 1988).

Community-related obstacles to economic development include low levels of education and shortages of skilled workers, as well as physical properties such as non-arable land and geographic isolation (Nagel, Ward, and Knapp, 1988). The geographic isolation of some communities, combined with poorly developed infrastructures, ensures that few market-oriented enterprises will locate on or near reservations. Between the late 19th century and the early 1930's (often referred to as the reservation period), American Indians living east of the Mississippi were relocated to small, geographically isolated sites west of the river and away from major population centers. Even today, reservations such as the Supai Indian village located at the bottom of the Grand Canyon in Arizona remain distant from major growth and development centers and viable transportation arteries. Critical physical and institutional infrastructures, such as roads, utilities, and banking and financial services, are poorly developed, and in some cases, nonexistent. The Supai village is accessible only by foot, horseback, mule train, or helicopter (Wingenbach, 1991). Moreover, reservations encounter great difficulty in generating finance capital (Smith, 1990).

The sovereign status of tribal governments, which opens some doors for economic development, closes others by limiting State jurisdiction on reservations. As a consequence, private businesses owned by outside individuals or firms are reluctant to locate on reservations (Sandefur, 1989). Numerous failed efforts to attract private enterprise often leave tribal leaders suspicious of business with non-Indians, and reluctant to expend more time and effort to attract other businesses to the reservation. For example, the Lakota Sioux on the Pine Ridge Reservation in South Dakota bitterly relate the story of a company that received a Federal grant to locate a meatpacking plant on the reservation and hire Indian labor. It did neither (Valente, 1991).

Still other obstacles to development are embedded within the organizational framework of American Indian affairs at all levels of administration. These barriers include (1) factional politics at the tribal level; (2) local and State conflicts over some of the more lucrative forms of economic development such as gambling; and (3) administration at the Federal level, the scattering of programs among various agencies, and interagency rivalries (Nagel, Ward, and Knapp, 1988; Snipp, 1988).

Development and Jobs

Economic development does not guarantee good jobs and enhanced economic well-being. Not all business enterprises are profitable. Indian and tribally owned businesses, often managed by individuals with little entrepreneurial experience, are highly susceptible to failure. The rate of failure is higher for reservation businesses than off-reservation businesses (Sherbloom, 1990). Moreover, even when business enterprises are successful, they do not necessarily contribute greatly to the earnings of tribal members.

In some cases, like that of the 80-year-old sawmill on the Menominee Reservation in Wisconsin, the

primary purpose of the enterprise is to provide jobs for tribal members; profitability is secondary. Consequently, the sawmill cannot pay wages comparable to those in the immediate community. In other cases, although profits from tribally owned enterprises are sometimes paid to tribal members as per capita payments, channeling proceeds into community services for reservation residents is a common practice (White, 1990). For example, the Oneida Indians of Green Bay, Wisconsin, funnel proceeds from bingo, LottOneida, a chain of convenience stores, tribal smoke shops, a reservation-owned hotel, and other tribal enterprises into diverse social services for tribal members. These services, which include a health center, a tribal school, public transit, day care facilities, and recreation centers, contribute to communal well-being. The Sycuans of El Cajon, California, use proceeds from bingo to subsidize community services: fire, police, housing, and a medical clinic (Yoshihashi, 1991). Clearly, residents of the Oneida and Sycuan Reservations benefit from the gambling activity, although it may not contribute directly to their personal income.

More often than not, however, economic development efforts do little to improve the quantity or quality of jobs in sparsely settled rural areas where Indians tend to reside. Jobs are not equally allocated across urban and rural labor markets. Rural labor markets disproportionately depend on low-skill, labor-intensive routine industries and consumer services. In the 1980's, the division of labor between urban and rural areas increased (McGranahan and Ghelfi, 1991), with much of the economic development in rural areas in the form of low-wage jobs.

Jobs and Economic Opportunities in the 1980's

Limited human resources reduce the ability of American Indians to compete in the labor market. But the lack of demand for American Indian labor is an equally important cause of economic hardship. Labor demand is determined by complex interactions of market and social conditions, and the low demand for Indian labor in certain areas is consistent with historical patterns.

Since the demise of the fur trade and of their direct involvement in colonial and European trade markets, American Indians have found their land more valuable than their labor (Cornell, 1988). Today, American Indian land remains in high demand, as abundant agricultural, timber, and mineral resource leases attest (Ortiz, 1980; Snipp, 1988). Mineral leases are particularly sought by corporate interests. Vast reserves of mineral resources, including a third of the western low-sulfur coal and over half of uranium reserves (Nafzigger, 1980), lie under approximately 15 percent of American Indian land (Snipp, 1988). Yet, most tribes do not have the capital, technology, or expertise to develop these resources. Consequently, they enter into lease agreements with large corporations, which "virtually have given away Indian resources" (Snipp, 1988:9), or sell resources as raw materials rather than transforming them into finished goods (Reno, 1981). By leasing and selling resources as raw materials, American Indians forfeit the higher returns accruing to fabricated goods, as well as the higher paying jobs associated with transforming raw materials into finished products. According to Cornell (1988:31), "[H]ad Indian labor remained fundamental ... in the period following the collapse of the fur trade, it seems likely that Indians would have been much more widely integrated as individuals into local or regional economies." A noticeable demand for American Indian labor did not emerge again until the 20th century, and even now, the demand appears sporadic and sketchy, especially in certain areas. The gravity of the slack demand for American Indian labor becomes even more apparent with the recent recognition that economic problems in rural areas derive not so much from a shortage of qualified workers as from the remoteness of the areas and limited labor markets therein (McGranahan, 1991).

Assessing Recent Changes

The recent promise of self-determination has encouraged tribal leaders to promote economic development and job opportunities for American Indians through self-development of productive enterprises. The apparent proliferation of self-development projects and businesses owned by American Indians implies that job opportunities have expanded, but as of yet, no empirical data support this assumption. One way of assessing the impact of recent development efforts is to examine (1) changes in the industrial structure, (2) changes in the occupational structure, and (3) current patterns of labor force participation for American Indians and Whites in rural areas.

However, reliable data on American Indians are often difficult to obtain, and the data in this study are compiled from several sources. As a consequence, some of the data reported in this chapter represent

Table 1—Industrial distribution, rural[1] American Indian and White men and women, 18-65 years old, 1980 and 1990

Industrial sector	American Indians						Whites					
	1980			1990			1980			1990		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
	Percent											
Extractive	15.9	4.8	10.7	12.2	2.7	7.5	14.2	3.2	9.4	11.6	3.1	7.5
Agriculture	7.3	2.6	5.1	6.4	1.4	3.9	9.6	2.8	6.5	8.2	2.6	5.5
Forestry/Fisheries	3.7	1.4	2.6	2.9	1.0	2.0	0.5	0.1	0.4	0.6	0.2	0.4
Mining	4.9	0.8	3.0	2.9	0.3	1.6	4.1	0.3	2.5	2.9	0.3	1.6
Construction	17.4	1.0	9.7	17.3	1.7	9.6	12.6	1.2	7.5	12.8	1.4	7.4
Manufacturing	18.0	16.8	17.4	1.7	12.6	14.9	26.5	20.7	23.8	24.8	16.4	20.9
Nondurable	5.5	10.5	7.8	5.7	7.7	6.7	9.3	12.1	10.5	8.7	9.0	8.9
Durable	12.5	6.3	9.6	11.3	4.9	8.2	17.2	8.6	13.3	16.1	7.4	12.0
Transportation, communications, and utilities	7.6	2.1	5.1	8.4	3.1	5.8	9.1	3.2	6.4	9.1	3.8	6.4
Trade	8.9	15.2	11.9	13.5	21.1	17.1	16.0	24.1	19.7	17.2	24.5	20.7
Finance, insurance, and real estate	1.0	1.8	1.3	1.5	2.4	2.0	2.6	5.4	3.9	2.7	6.0	4.2
Personal services	5.7	9.1	6.3	7.4	11.3	9.3	5.2	8.0	6.4	6.8	8.7	7.6
Professional services	11.8	33.8	22.1	13.1	34.8	23.8	9.2	29.6	18.4	10.4	32.9	21.0
Public administration	13.7	15.1	14.4	9.7	10.2	9.9	4.6	4.4	4.5	4.5	3.9	4.2

[1] Nonmetropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990.

different populations. For example, data on industrial and occupational structure, as well as on occupational segregation (tables 1-3) come from the 1980 and 1990 Censuses. Representing American Indians and non-Hispanic Whites, these data are consistent with the data provided in the report's appendix tables. In contrast, the labor force participation data (tables 4-7), come from the 1989 and 1990 Current Population Survey (CPS) Monthly Earnings Files and portray slightly different populations.[2] In the CPS data, Hispanics could not be excluded from the sample of Whites as they were in the census data. Also, these data encompass a wider age range (16-64) than the census data. The wider age range more accurately reflects (1) the definition of those in the labor force used by CPS and (2) the age distribution of American Indians, which is younger.

Industrial and occupational structures are operationalized as employment shares, or the percentage of the workforce falling into different industry and occupation groups. Labor force

[2] CPS, a monthly household survey conducted by the Bureau of the Census, provides demographic, social, and economic information on the population of the United States. Households in the sample are rotated, such that a household is interviewed monthly for 4 months, drops out of the sample for the next 8 months, and then is included again the next year for the same 4 months as in the previous year. In the last month of each 4-month rotation, specific data regarding earnings are collected. These earnings data (collected from one-quarter of the sample) are compiled in the CPS Earnings files. As a consequence of sample rotation, there is a 75 percent monthly, and a 50 percent year-to-year overlap in households in the sample. Because the number of Native Americans in the sample is relatively small, the 1989 and the 1990 CPS are combined for this study. Social scientists use several approaches to combine CPS data from different years. The most conservative method is to pool the year-to-year data, excluding the 50-percent year-to-year overlap. The least conservative method is to pool the monthly data and retain all cases. A moderate approach is to pool the year-to-year data, and to retain the 50 percent of cases that overlap. I adopted the moderate approach for two reasons. First, among people at the lower end of the economic scale, lives may change dramatically from year to year. Second, CPS is a household survey, and the families and individuals in the household at one point in time may not be the same as those residing in the housing unit a year later.

participation is similarly measured as the percentage of the working-age population falling into each category of the labor force.

Industrial Structure

The industrial makeup of an area determines the population's economic well-being. Industrial restructuring in the 1980's shrank the proportion of the rural workforce employed in manufacturing. Many manufacturing jobs were replaced by lower wage, part-time, and temporary service and retail jobs. This restructuring displaced many rural workers, especially American Indians, for whom the shift from manufacturing to services has intensified existing employment inequities.

In 1980, manufacturing and service industries accounted for almost half of White and American Indian employment (table 1) and continued to do so in 1990, although the distribution of White and American Indian workers within these sectors varied. In 1980, roughly equal proportions (24 and 25 percent) of Whites were employed in manufacturing and services. By 1990, the share of Whites working in the service sector had increased from 25 to 29 percent while the share in manufacturing dipped from roughly 24 to 21 percent, a gap of about 8 percentage points. In contrast, American Indian service sector employment shares increased from 28 percent in 1980 to 34 percent in 1990, and manufacturing shares dropped from 17 percent to 15 percent, a gap of 19 percentage points. American Indian women shouldered most of the burden associated with the decline in manufacturing jobs. In 1990, the service sector employed twice as many American Indians as the manufacturing sector.

White and American Indian women alike are disproportionately represented in the service sector, which is skewed toward professional services. Most of these jobs are in elementary and secondary schools and health-related services such as hospitals, health clinics, and nursing facilities. Typically perceived as women's jobs, these jobs tend to pay less than jobs in other fields requiring comparable levels of education and training. Professional service industries alone account for over a fifth of the jobs held by all American Indians, and more than a third of the jobs for American Indian women. Overall, the proportion of American Indians employed in professional services remained about the same over the 1980's.

Personal services, businesses such as laundries, barber shops, photographic studios, and shoe repair shops, tend to pay low wages and provide few benefits to employees. Although consumer-oriented services constitute less than 10 percent of employment for Whites and American Indians alike, the demand for these labor-intensive jobs is rapidly expanding. During the 1980's, employment shares in personal services increased across the board for Whites and American Indians. However, employment in personal services grew more for American Indians than for Whites.

Industries that rely on sales (trade) have traditionally employed disproportionately more women than men, and more Whites than minorities. Because these jobs do not usually require high levels of human capital investment, minorities are not likely to be excluded from them on the basis of skills and credentials. Rather, their lack of participation in these industries is often attributed to discrimination on the part of employers; owners may believe that customers want to buy from, and co-workers want to work with, members of their own ethnic/racial group (Noyelle, 1987; McCreary, England, and Farkas, 1989). The proportion of Whites employed in wholesale and retail trade (20 percent) held steady over the 1980's. However, the proportion of American Indians in trades is fast approaching the White employment level, especially for women. In 1980, less than 12 percent of American Indians were engaged in selling goods, but by 1990, 17 percent were involved in sales. This increase may reflect increased demands for sales personnel in the local labor market areas where relatively high numbers of American Indians live, or it may reflect the increasing number of American Indian-run businesses. These industries lean heavily toward low-wage jobs.

Public administration provides about twice the percentage of jobs among American Indians as among Whites. Public administration activities consist primarily of tribal administration and services. Tribal government jobs are usually filled by American Indians, but they tend to pay low wages (White, 1990). Despite the assumption of greater responsibility for tribal administration, the relative number of American Indians working in public administration declined substantially in the 1980's. No comparable decline is evident for Whites during that period.

Financial, insurance, and real estate (FIRE) industries, often referred to as producer services, typically support very high incomes. However, because of their role in the "transnationalization of capital," they are primarily associated with major urban centers (Sassen, 1988:130). Although this sector generates

Table 2—Occupational distribution, rural[1] American Indian and White men and women, 18-65 years old, 1980 and 1990

Occupation	American Indians						Whites					
	1980			1990			1980			1990		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
	Percent											
Managerial	6.0	4.7	5.4	8.8	6.7	7.8	15.9	6.4	11.7	14.1	8.8	11.6
Professional specialties	6.0	11.1	8.4	5.0	11.4	8.2	7.8	12.1	9.8	8.2	14.2	11.0
Technical, sales, and administrative support	6.5	26.0	15.6	8.7	31.4	19.8	10.9	37.7	22.9	12.3	36.3	23.6
Supervisory	4.7	1.5	3.2	4.9	2.8	3.8	8.8	3.0	6.2	8.9	3.9	6.5
Services	12.1	30.7	20.8	14.8	29.2	21.9	6.2	20.1	12.5	7.6	20.0	13.4
Resources	10.8	3.2	7.2	7.9	12.0	4.6	4.9	1.5	3.4	4.4	1.1	2.8
Production and crafts	20.1	3.1	12.2	20.6	3.7	12.3	18.2	1.9	10.8	18.4	2.3	10.8
Operators, fabricators, and laborers	33.8	19.7	27.2	29.6	13.6	21.6	27.3	17.3	22.8	26.2	13.4	20.2

[1] Nonmetropolitan.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990.

few employment opportunities in rural areas, there are relatively more Whites than American Indians working in these industries. Employment changes during the past decade are negligible.

Despite the emphasis on resource development, the proportion of American Indians employed in extractive industries (agriculture, forestry, fisheries and mining) fell during the 1980's, as it did for Whites. Though certainly an important source of revenue for some American Indian communities, extractive industries do not provide as much employment as generally thought. In 1980, agriculture, fishing, forestry, and mining accounted for 11 percent of employment among American Indians; by 1990, less than 8 percent.

Occupational Distribution

Occupational groups, characterized by distinct skill and educational levels, command fairly specific wage and salary structures. Consequently, the occupational structure also governs labor market outcomes. Although most industrial sectors employ a wide array of occupational groups, not all sectors employ the same occupations in the same proportions, and many industries vary considerably in the proportion of occupations they use. In general, industries with a significant proportion of upper-level managerial, professional, and technical jobs are partial to urban areas, and industries relying on less expensive blue-collar labor favor rural areas (McGranahan, 1988).

Contrary to popular stereotypes, "traditional" American Indian occupations, such as native healers, sheepworkers, jewelers, and handworkers (weavers, basket makers, beaders), are not a major source of employment for American Indians today (U.S. Dept. of Commerce, 1986).[3] Rather, American Indians living in rural areas work in the same occupations as White rural workers (table 2). In 1990 rural areas provided relatively large numbers of jobs for American Indian and White technicians, salespeople, and administrative workers, as well as for fabricators, machine operators, and laborers. Relatively few supervisory jobs or resources-related jobs were available for either group, a consequence of the declining reliance of rural areas on resource extraction. Thus, much of the similarity in the occupational distribution of American Indians and Whites is related to the limited employment opportunities in rural areas. And, like rural Whites, American Indians did not realize much occupational

[3] Traditional crafts and subsistence activities are thought to play a much greater role in the informal economy, a set of economic activities that bypass the formal market (Portes and Sassen-Koob, 1987). Anecdotal evidence from numerous sources suggests that the vast majority of American Indian households are involved in some form of informal economic activity. However, how much these activities contribute toward economic well-being is unknown.

Table 3—Occupational segregation, rural[1] American Indians and Whites, 1980 and 1990

Race/Ethnicity	Occupational segregation	
	1980	1990
	Percent[2]	
American Indians and Whites	17.9	13.1
American Indian men and White men	20.2	16.1
American Indian women and White women	15.9	10.9

[1] Nonmetropolitan.
[2] The index of dissimilarity indicates the percentage of American Indians that would need to switch occupations to match the distribution of Whites.
Source: Compiled by Economic Research Service from Public Use Microdata Samples, 1980 and 1990.

mobility in the last decade; the occupations in which they were employed in 1980 were roughly the same in 1990. Yet, despite these similarities, important differences endure in employment opportunities for American Indian and White workers in rural areas.

Occupational segregation reflects the degree to which racial groups compete for the same jobs. Where the segregation is high, members of ethnic and racial groups are allocated to different positions within the occupational distribution. Minorities are less likely than Whites to secure positions in relatively complex or technical occupations that allow upward mobility. Positions dominated by non-Whites are generally acknowledged to yield fewer rewards, even when differences in skills and working conditions are taken into consideration (Baron and Newman, 1990; Fossett, Galle, and Kelly, 1986). Consequently, ethnic and racial "group differences in occupational distribution are an important indicator of the degree of racial inequality in American society, and a key measure of the extent of assimilation experienced by a group" (Fossett, Galle, and Kelly, 1986).

The index of dissimilarity, a frequently used measure of occupational segregation, indicates the minimum percentage of Whites or American Indians that must change places to make the occupational distributions equal (Fossett, Galle, and Kelly, 1986). A comparison of the index of dissimilarity for American Indians and Whites for 1980 and 1990 demonstrates that American Indians are still excluded from some occupations (table 3). Over 16 percent of American Indian men and almost 11 percent of American Indian women would have had to switch occupational groups for the distribution to be identical to the occupational distribution for Whites.

Despite the increased need for Indians with managerial expertise and administrative skills generated by self-development initiatives, better paid managerial, supervisory, and professional specialty jobs are still disproportionately filled by Whites. Whites are also more likely to be employed in technical, sales, and administrative support positions than are American Indians (table 2).

In contrast, American Indians are much more likely to be employed in general services, agriculture, forestry, or fishing. Service jobs, for the most part, are poorly remunerated and offer little job security and few opportunities for advancement. Farming, forestry, and fishing occupations may be intrinsically more rewarding and desirable to American Indians, but they often pay little more than subsistence wages (Reno,

Table 4—Labor force status of rural[1] American Indian and White men and women, 16 to 64 years old, 1988 and 1989

Labor force status	American Indians			Whites		
	Men	Women	Total	Men	Women	Total
			Percent			
Employed	60.7	48.2	54.1	80.6	63.0	71.7
Full-time	49.8	33.9	41.4	71.8	44.2	57.9
Part-time	10.9	14.3	12.7	8.8	18.8	13.8
Unemployed	11.5	6.9	9.1	4.5	3.5	4.0
Not in labor force	27.7	44.8	36.8	14.9	33.5	24.3

[1] Nonmetropolitan.
Note: Totals do not add to 100 due to rounding.
Source: Compiled by Economic Research Service from 1989 and 1990 Current Population Survey Monthly Earnings Files.

Table 5—Reasons for working part-time given by rural[1] American Indian and White men and women, 16-64 years old, 1988 and 1989

Item	American Indians			Whites		
	Men	Women	Total	Men	Women	Total
			Percent			
Share employed working part-time	18.0	29.7	23.5	10.9	29.8	19.3
Reasons for working part-time:						
Slack work	21.4	15.4	17.8	15.2	8.3	10.8
Material shortage, plant repair	0	1.4	.8	.6	.2	.4
New job	1.9	1.2	1.5	1.0	.7	.8
Job terminated	1.1	0	.4	.7	.2	.4
Holiday	0	0	0	3.7	2.3	2.9
Labor dispute	0	0	0	.1	0	0
Bad weather	0	0	0	7.0	.6	2.9
Own illness	.4	3.1	2.0	6.7	4.7	5.4
On vacation	0	0	0	8.2	4.2	5.7
Could only find part-time work	37.4	20.1	26.9	9.3	11.0	10.4
Too busy, did not want full-time	29.7	51.5	42.9	32.4	51.5	44.5
Full-time under 35 hours	3.0	5.7	4.6	3.9	8.4	6.7
Other	5.1	1.7	3.0	11.2	7.8	9.1

[1] Nonmetropolitan.
Note: Totals do not add to 100 due to rounding.
Source: 1989 and 1990 Current Population Survey Monthly Earnings Files.

1981) and generally involve physically demanding labor and the performance of tedious, menial tasks. Moreover, like service occupations, most of these manual-labor jobs guarantee little, if any, job and economic security. Having limited access to positions within the occupational structure, American Indians' economic opportunities are even more circumscribed than those of most rural residents.

The index of dissimilarity also indicates that American Indians, especially women, have more access to the traditional "White" jobs than they did 10 years ago. However, greater occupational equality presents somewhat of a paradox. When there is little occupational segregation, ethnic and minority group members must compete for the same jobs, often resulting in high unemployment, as opposed to employment at low wages, for the minority group (Tigges and Tootle, 1993).

Labor Force Activity

During the 1980's, changes in the structure of labor market demand left Americans fewer opportunities to fully participate in the labor market. The 1980's witnessed unmistakable increases in unemployment, part-time employment, and temporary work (Christensen and Murphree, 1988). These trends were particularly visible among American Indians, who were subject to higher rates of unemployment, part-time employment, and irregular participation in the paid labor force than Whites.[4] Unemployment among American Indians is twice as high as among Whites, and the percentage of American Indian men who are not in the labor force is also twice as high as for White men. The differences in labor force activity for women are not as pronounced (table 4).

Variable labor force activity is frequently justified on cultural and historical grounds; American Indians have long participated in societies that traditionally eschewed wage labor and market concepts. Granted, this argument is valid, but it tends to obscure socioeconomic origins of inconstant labor force activity. Closer examination of the components of labor force status (employment, unemployment, and

[4] Individuals are defined as in the labor force if they are employed or unemployed. They are considered to be unemployed if they are not currently employed but are (1) actively looking for work, (2) waiting to be called back to work from which they were laid off, or (3) waiting to report to a new job. All others are defined as not in the labor force (NILF).

Table 6—Reasons for unemployment among unemployed rural[1] American Indian and White men and women, 16-64 years old, 1988 and 1989

Reasons	American Indians			Whites		
	Men	Women	Total	Men	Women	Total
			Percent			
Laid off	17.6	4.2	12.2	24.6	15.2	20.4
Lost job	41.8	22.0	33.8	36.9	22.8	30.6
Left job	7.2	12.4	9.3	12.2	16.5	14.1
Re/new entrant	33.5	61.4	44.7	26.2	45.4	34.8

[1] Nonmetropolitan.
Note: Totals do not add to 100 due to rounding.
Source: 1989 and 1990 Current Population Survey Monthly Earnings Files.

participation in the labor force) sheds more light on the differences in labor force activity between American Indians and Whites.

Part-Time Employment

By historical standards, the number of Americans working part-time is particularly high. Nearly a fifth of the American workforce is employed part-time, and women are more likely to work part-time than men. About a third of employed American Indian and White women alike work part-time. However, part-time employment is more prevalent among American Indian men (18 percent of employed men) than White men (11 percent) (table 5).

However, the interpretation of this finding is not straightforward. First, the American Indian population is relatively young, and part-time employment is common among young people, many of whom are still in school (Plewes, 1988). Second, part-time employment is multifaceted. For those who voluntarily choose part-time employment, it can be superior to full-time employment. Part-time jobs enable workers to work flexible hours, supplement other income, and pursue interests outside of the workplace. On the other hand, involuntary part-time work, a form of underemployment, tends to penalize the worker; part-time jobs usually pay lower wages, provide fewer benefits, and afford infrequent opportunities for upward mobility (Blank, 1990). The only way to clarify the social and economic repercussions associated with part-time work for American Indians is to examine the reasons given by respondents for working part-time.

Although many American Indians, like many Whites, voluntarily work part-time (they are either too busy or simply do not want to work full-time), over a third of American Indian men working part-time cited the inability to find full-time work as a major reason (table 5). In contrast, less than a tenth of White men working part-time attributed their work status to the inability to find full-time work. American Indian women were also more likely than White women to work part-time because they could not find full-time work.

Another major reason for working part-time cited by American Indians is slack work. Slack work may refer to work that slows down periodically in response to market conditions, or to work that is seasonal. Over 20 percent of American Indian men and 15 percent of American Indian women work part-time because of slack labor demand, compared with 15 percent of White men and 8 percent of White women.

Unemployment

The context of unemployment is different for American Indians and Whites because the structure of unemployment is determined largely by the structure of employment. Schervish (1981) finds that unemployed skilled workers are more likely to have become unemployed through short-term layoffs and voluntary terminations than are workers in less complex jobs, who are more likely to have been released from their jobs permanently.

Whites predominate in the complex and better paid jobs. Although unemployment is primarily attributed to job losses for Whites and American Indians alike, unemployed Whites were more likely to have been laid off or to have quit their jobs voluntarily than were American Indians (table 6). Only a quarter of

Table 7—Reasons for not participating in the labor force given by rural[1] American Indian and White men and women, 16-64 years old, not active in the labor force, 1988 and 1989

Reason	American Indians			Whites		
	Men	Women	Total	Men	Women	Total
			Percent			
In school	33.7	15.5	21.7	29.1	13.3	18.1
Illness or disability	18.2	7.5	11.3	23.2	6.9	11.8
Home responsibilities	3.2	59.4	39.6	2.4	66.1	46.9
Retired	10.6	2.4	5.3	22.1	3.7	9.3
No desire	17.3	7.9	11.2	17.8	5.9	9.5
Employers think too young/old	.3	.5	.4	.2	.1	.1
Lack of education or training	1.5	.5	.8	.3	.3	.3
Other personal handicap	.2	.5	.4	.3	.2	.2
Couldn't find work	3.5	2.0	2.5	.8	.5	.6
Thinks no work available	9.0	1.6	4.2	1.3	.9	1.0
Other	2.5	2.4	2.5	2.4	2.0	2.1

[1] Nonmetropolitan.
Note: Totals do not add to 100 due to rounding.
Source: 1989 and 1990 Current Population Survey Monthly Earnings Files.

the unemployed American Indian men, compared with a third of the unemployed White men, were laid off or quit their jobs. The differences are more dramatic for women; less than 17 percent of unemployed American Indian women, and more than 31 percent of unemployed White women, attribute their status to layoff or voluntary termination.

Unemployed American Indians are also more likely than unemployed Whites to be either new or re-entrants into the paid labor market.[5] The difference is more pronounced for women, and women are more likely than men to be unemployed as a consequence of intermittent employment. Almost half of unemployed White women, and over half of unemployed American Indian women were either entering the job market for the first time or were re-entering the job market after a period of being out. Higher levels of unemployment due to new entry or re-entry into the labor force among American Indians may reflect a disrupted or incomplete transition from school to the full-time labor market (Nagel, Ward, and Knapp, 1988), or may be a consequence of participation in the informal economy. Many of the activities within the informal economy are subsistence-based and seasonal, such as hunting, trapping, and food-gathering. Family and household commitments may make intermittent employment a more common pattern for women.

Lack of Participation in the Labor Force

Much has been written about factors (such as education, marital status, and number of children in the family) that motivate labor force participation, but very little is known about reasons why people, particularly American Indians, do *not* participate in the paid labor force. For the most part, American Indians report very similar reasons for lack of labor force participation as Whites, suggesting that economic opportunity is a stronger determinant of labor force participation than culture (table 7). In fact, labor force participation patterns vary more by gender than by race and ethnicity.

Both American Indian and White men report attending school, illness and disability, retirement, and no desire to work as the major reasons for not participating in the labor force. The most often cited reason for lack of labor force participation is school attendance. The surprising higher value for school attendance among American Indian men over the age of 16 may be a consequence of sporadic school attendance associated with incomplete school-to-work

[5] New entrants are defined as individuals who never worked on a full-time job lasting at least 2 weeks. Re-entrants are individuals who previously worked on a full-time job for at least 2 weeks, but who were out of the labor force prior to beginning to look for work (U.S. Dept. Labor, 1988).

transition, and a tendency to complete high school education as an older student.

Illness and disability also limit labor force participation, especially for men. Yet, despite the high incidence of poverty among rural American Indians, and the serious poverty-related health problems experienced (Sorkin, 1988), American Indian men are less likely than White men to attribute their lack of labor force participation to illness and disability. White men are also twice as likely to be retired. These findings may stem from the fact that American Indian populations are disproportionately young and contain relatively few elderly (Snipp, 1989).

American Indians appear to be no less likely than Whites to desire paid employment; roughly 17 percent of American Indian and White men who are not in the labor force express no desire to work. However, American Indian men are more likely to be discouraged workers, those who have quit searching for work because they believe there is no employment available for them. Previous research documents disproportionately high levels of discouraged workers among minorities. Nearly all (92 percent) of White men attribute their lack of labor force participation to either their educational endeavors, retirement, illness or disability, or to disinterest. However, these four explanations are given by only 80 percent of the American Indian men who are out of the labor force. Over 10 percent of the American Indian men not in the labor force are either unable to find employment or believe there is no available employment. This figure contrasts sharply with 2 percent of comparable White men.

American Indian women's labor force participation is more similar to that of White women than to that of American Indian men. Labor force participation of both American Indian and White women is constrained primarily by household responsibilities. Relatively more White women cite household responsibilities as their reason for not participating in the labor force. This finding may reflect a greater tendency among American Indians than among Whites to live in family environments and larger households (Snipp, 1989). In such households, responsibilities may be shared by household and family members so that household responsibilities become less of a constraint on labor force participation.

Conclusions

Despite the promise of self-determination, American Indians in general made little economic progress in the 1980's and remain well below economic parity with Whites (see report appendices). American Indians, who continue to lag far behind their White counterparts in terms of education and marketable job skills, may be less competitive in the labor market, but the economic impasse experienced by American Indians cannot be attributed solely to a shortage of qualified workers. For most people, economic well-being is determined primarily by labor market outcomes, such as employment and earnings. Although these outcomes can be influenced by attributes of the individual, they are basically determined by economic structures and opportunities.

The 1980's provided few opportunities for American Indians to improve their economic well-being. They continue to be overrepresented in less remunerative occupations and industries. At the aggregate level, Indians and Whites continue to occupy different positions within the industrial and occupational structure. American Indians are overrepresented in industries associated with few labor market rewards and underrepresented in the better paid white collar and relatively complex occupations. American Indians, employed in essentially the same industries and occupations in 1990 as in 1980, have been unable to narrow the employment gap with Whites. American Indians also have fewer opportunities than Whites to be employed full-time in steady jobs and are plagued by high levels of unemployment. Their relatively low participation in the labor force is related more to inability to find work than to lack of interest in working. All of these conditions suggest that the current wave of economic development on and around reservation lands does little to improve economic opportunities.

Does this mean that American Indians have not entered a new era of economic development? Not necessarily. Economic development in rural America, and more so on reservations, is uneven at best, and American Indians living on and around some reservations have reaped the benefits of economic development. Others continue to face the legacy of social, geographic, and economic isolation experienced by American Indians in varying degrees over the past 200 years. They have inherited, and are still grappling with, formidable barriers to development.

However, economic development per se may not provide the solution to economic hardship and poverty for American Indians. Although not all reservations are located in remote rural areas, the overwhelming majority are, and rural areas, especially the more remote areas, tend to specialize in low-wage manufacturing and consumer services jobs. Unless economic development on and near reservations departs from the typical urban and rural division of labor, it may not reduce the economic disadvantages faced by American Indians. Rural economic development is enigmatic; it does not always contribute directly to greater earnings and income for individuals. As Cornell and Kalt (1992) suggest: "There are no quick solutions to the problem of economic underdevelopment in Indian country. There also are no uncomplicated solutions."

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Asians and Pacific Islanders in Rural and Small-Town America

Calvin L. Beale

People of Asian and Pacific Islander origin are the smallest racial minority group in rural and small-town areas, but had the most rapid rate of increase from 1980 to 1990, growing by 42 percent. They numbered 631,000 in 1990, with more than a fourth living in Hawaii. With the exception of those from Indochina, their status in education, occupation, and income is higher than that of the general population.

The Asian and Pacific Islander populations of the United States have been growing rapidly (fig. 1, table 1). Their overall numbers more than doubled from 1980 to 1990, up from 3.5 million to 7.3 million, and their growth was a sixth of all U.S. population increase. Immigration produced the major part of this extraordinary increase.

Although people of Asian and Pacific Islander origin are much more urbanized than are Americans as a whole, some members of all the groups represented are settled in rural and small-town communities. By 1990, 447,000 Filipinos, Japanese, Chinese, Koreans, Indochinese, Asian Indians, Hawaiians, and others of southern and eastern Asian or Pacific Islander origin lived in nonmetro parts of the United States (table 1). An additional 184,000 were in rural parts of metro areas (open country and outlying towns of less than 2,500 people). These numbers were up from 323,000 (nonmetro) and 121,000 (rural metro) in 1980, an overall growth of 42 percent, despite much reclassification of territory from nonmetro to metro and rural to urban between the two censuses. Thus, it seems timely to provide a review of the history, nature, and current presence of these minority groups in rural and small-town America.

Background

Almost no Asians or Pacific Islanders resided in the United States until the early 1850's (Hawaii had not

Figure 1
Nonmetro and rural metro Asian population, 1980-90

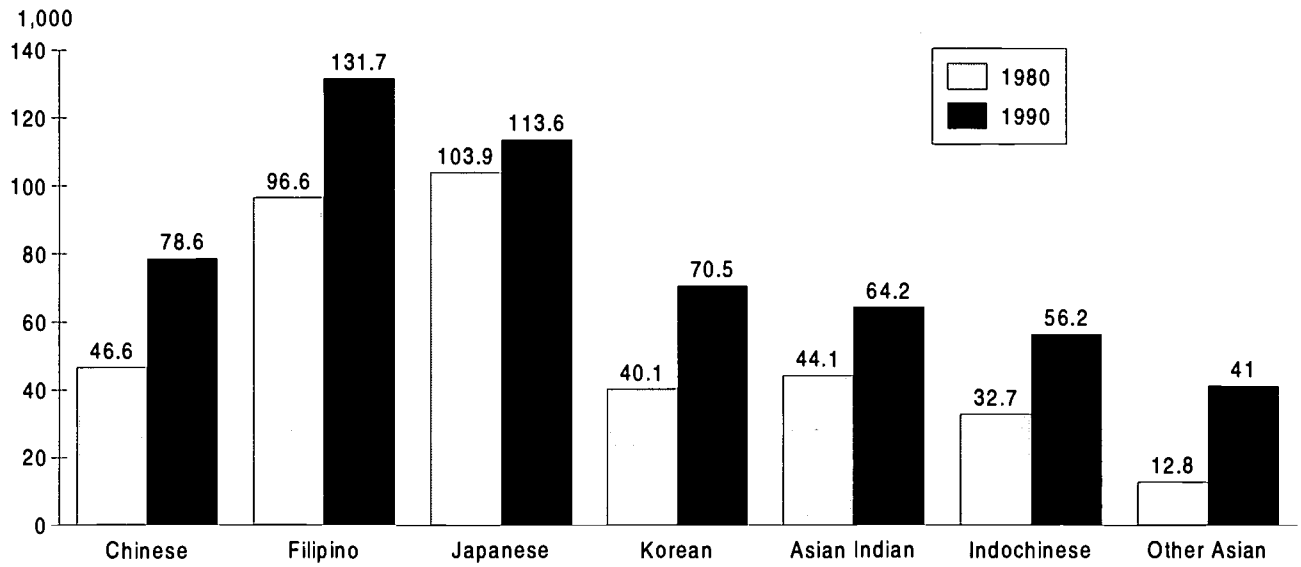

Table 1—Nonmetro and rural metro Asian and Pacific Islander population

Group/year	Total	Total nonmetro and rural metro	Non-metro	Rural metro
		Thousand		
Asian and Pacific Islander:				
1990	7,227.0	630.6	446.6	184.0
1980	3,726.4	444.1	323.4	120.7
Chinese:				
1990	1,648.7	78.6	51.0	27.6
1980	806.0	46.6	31.5	15.2
Filipino:				
1990	1,419.7	131.7	96.4	35.3
1980	774.7	96.6	70.2	26.4
Japanese:				
1990	866.2	113.6	89.9	25.7
1980	701.0	103.9	79.1	24.8
Korean:				
1990	797.3	70.5	43.7	26.8
1980	355.0	40.1	26.7	13.4
Asian Indian:				
1990	786.7	64.2	36.9	27.3
1980	361.5	44.1	28.4	15.7
Vietnamese:				
1990	593.2	31.0	21.0	10.0
1980	261.7	25.5	20.0	5.6
Cambodian:				
1990	149.0	5.6	3.9	1.7
1980	16.0	1.2	.9	.3
Laotian:				
1990	147.4	14.2	10.8	3.4
1980	47.7	5.5	4.8	.7
Hmong:				
1990	94.4	5.4	3.5	1.9
1980	5.2	.5	.5	.0
Other Asian:				
1990	373.8	41.0	28.2	12.8
1980	88.3	11.9	.1	2.8
Hawaiian:				
1990	205.5	63.9	54.5	9.4
1980	166.8	49.5	41.7	7.8
Other Pacific Islander:				
1990	145.1	15.1	10.7	3.4
1980	76.2	8.7	5.8	2.9

Note: Statistics for 1980 for total, Cambodian, Laotian, Hmong, other Asian, and other Pacific Islander are sample data. Nonmetro status is that of each census year.

Source: Compiled by Economic Research Service from 1990 and 1980 Censuses of Population.

yet been annexed). At that time, many Chinese began to come in or be brought in for rural labor in mining, farming, and railroad construction in the West. Nearly 300,000 immigrated from 1853 to 1885, before legislation barred most further inmovement. Over time, these rural settlers largely disappeared, either through return to China or movement to the cities. The Japanese and Filipino immigration that followed was also highly rural initially, but these groups, too, became predominantly urban, especially as they or their children moved out of farm labor.

The annexation of Hawaii in 1898 brought the first Polynesians under U.S. jurisdiction, as well as many additional Chinese and Japanese. The acquisition of American Samoa and Guam added other Pacific Islanders.

Until 1965, the immigration of all Asian groups into the United States was very episodic. Periods of rapid inmovement were followed by years of tight restrictions on entry. This led to distortions in age and sex composition that are still somewhat evident today among older people.

In the last third of the 20th century, Asian immigration became common again, first from the greatly liberalized provisions of the 1965 Immigration Act and then from admission of refugees from Indochina. From 1966 to 1990, 3.65 million Asian immigrants were admitted, compared with just 0.2 million in the prior quarter century. Many were of rural origin, but the vast majority headed for or were placed in urban areas–a rational choice given the generally poorer economic prospects in rural and small-town communities during most of this period. But even a minor rural share of so large a number of immigrants has been enough to begin to change the racial mix of many small communities.

Nonmetro Asians and Pacific Islanders live primarily in small urban places rather than in the countryside or villages, in contrast to other races. Thus, whereas in 1990 nearly two-thirds of nonmetro White people lived in rural territory, two-thirds of nonmetro Asians and Pacific Islanders lived in urban towns, especially in places of 10,000 or more population (fig. 2). To some extent, this may result from the late arrival of these groups in this country, but it also probably reflects their desire as visible and mostly new minorities to cluster for social purposes and to live where job opportunities and social services are most available. Only the Japanese and Asian Indians have any significant number of farms.

A noticeable feature of most Asian groups is their presence in college communities. This derives in part from wide-scale enrollment of foreign students in American schools. Thousands of these students are not permanent residents and return home after graduation, to be replaced by new students. But other thousands become expatriates who decide to settle permanently in the United States. From their ranks, and from the growing number of American-born people of Asian descent, colleges and universities increasingly have added Asian faculty members.

Chinese

When Chinese laborers (almost all men) first entered the United States from southern China, they were used as miners during the early boom years of gold and silver mining. Over 300 came to California in 1849, and could be regarded as authentic Forty Niners. The rush to the gold fields then built up so rapidly that just 3 years later, 20,000 Chinese arrived. By 1860, a fourth or more of the male labor force in a number of California gold rush counties was Chinese. Many also went to mining camps in other Western States, such as Nevada, Oregon, Idaho, and South Dakota.

The building of the transcontinental railroad in 1869 saw large-scale use of Chinese workers, and they were later used on other rail projects. In California, Chinese were recruited for drainage projects and farm fieldwork. Some became tenant farmers, and others were active in fishing and seafood processing. In Oregon, it was an immigrant Chinese, Ah Bing, who developed the popular Bing cherry in the 1870's. Chinese also became widely established in service occupations, such as cooking and laundering.

Gradually, severe resentment arose from the growth and use of cheap Chinese workers where they competed with American settlers. When augmented by racial antagonism, this resulted in serious violence against the Chinese and their eviction from many mining areas. As late as 1868, the United States had signed a treaty with China to ensure continued access to cheap labor. But anti-Chinese sentiment became so strong that it led to the Exclusion Act of 1882, which forbade further immigration of Chinese laborers. Many of the immigrants left. With few births, the number of Chinese in the United States dropped from 107,000 in 1890–of whom only 3 percent were female–to 62,000 in 1920. In this period, the remaining population shifted increasingly to urban areas, and the rural work that had brought

Table 2—Number of nonmetro/rural metro Asians and Pacific Islanders, by leading States of residence, 1990

Ethnic group/State	Population
	Thousand
Chinese	78.6
California	8.2
Hawaii	6.2
New York	6.2
Oregon	2.6
Illinois	2.6
Filipino	131.7
Hawaii	54.0
California	17.3
Washington	5.1
Alaska	4.8
Florida	3.5
Japanese	113.6
Hawaii	55.0
California	12.3
Washington	4.2
Oregon	3.2
Illinois	2.4
Korean	70.5
New York	4.6
California	3.8
Michigan	3.5
Pennsylvania	3.5
Minnesota	2.8
Vietnamese	31.0
Texas	3.3
Louisiana	3.1
Kansas	2.1
California	1.9
Pennsylvania	1.2
Cambodian	5.4
Washington	.7
California	.5
Laotian	15.0
California	1.5
Iowa	1.3
Minnesota	.9
Kansas	.8
Louisiana	.7
Hmong	6.0
California	2.4
Wisconsin	2.1
Asian Indian	64.2
California	6.2
New York	5.0
Pennsylvania	3.0
Illinois	2.7
Texas	2.6
Hawaiian	63.9
Hawaii	52.4
California	1.9
Washington	1.0
Oregon	.9
Alaska	.4

Source: Compiled by Economic Research Service from 1990 Census of Population, General Population

about the original immigration largely ended or was given up. In 1910, a fourth of American Chinese were still in rural communities, but by 1940 less than 10 percent were.

In the 1870's, some cotton plantation owners in the Mississippi Delta decided to hire Chinese workers to replace Black labor. The number hired was never large, and the attempt was short-lived. But, on a small scale, it had a lasting demographic effect. Some of the Chinese elected to stay in the Delta and established themselves as retail merchants, especially serving the Black population. Others followed. The Delta Chinese population peaked at about 1,500 in 1960, but had dropped to 1,000 by 1990 after cotton mechanization, Black outmovement, and the decline of the small groceries. Chinese grocers are still present, but the population is now a well-educated one engaged in a variety of occupations.

In Hawaii, Chinese were the first Asian immigrants sought to supply labor for the emerging sugar industry. The initial contracted group arrived in 1852, in part to offset the labor shortage created by the decline of the Hawaiian population. Additional modest numbers were brought in until about 1875. Others who had gone to the United States came to Hawaii from the American West to escape the restrictions and harassment that had developed there. But many Chinese soon left plantation work for urban and commercial life, and before the last groups arrived planters had already turned to Japan to help staff the burgeoning plantations.

During World War II, when China was a military ally, the Exclusion Act of 1882, with its extensions, was finally repealed. The postwar period saw an initial influx of refugees and war brides. Then, as with every other Asian group, inmovement became much larger and more general in character after 1965. By 1990, the Chinese population in the United States exceeded 1.6 million, having doubled since 1980. But, Chinese have so preferred central city and suburban locations that only 50,000, or 3 percent, live in nonmetro areas, with another 26,000 in the rural parts of metro areas (fig. 3).

Of the 17 mainland nonmetro counties that have 400 or more Chinese residents, 15 are university counties. Although a majority of these people may be only temporarily in the United States as students and their family members, many others are employed in professional and technical occupations. In the continental United States, the largest Chinese nonmetro population (2,000) is in and around Ithaca, New York, the site of Cornell University. Other groups of more than 1,000 are located around Corvallis, Oregon (Oregon State University), and Ames, Iowa (Iowa State University).

Aside from university locales, the largest Chinese nonmetro population is in Hawaii, numbering 5,500 people. Eighty-nine percent were American-born by 1990. Schooling levels are high, with 26 percent college graduates among adults 25 and over, the highest of any racial group in the islands, and well above the 20-percent level found in the total U.S. population. Trade, professional services, and tourism-related businesses are favored industries of work. The median nonmetro household income of Chinese in Hawaii was $39,125 in 1989–far above the U.S. metro median of $32,100–and bespeaks the financial success of this population. The transformation since the initial era of coolie labor has been remarkable.

Japanese

With the recent rapid increase in the American Filipino population, Japanese are now the second most numerous people of Asian origin in nonmetro and rural metro communities, after having been the largest for a number of decades. About 90,000 lived in nonmetro counties in 1990, with another 26,000 in outlying rural parts of metro counties.

The first Japanese settlers in the current borders of the United States were men recruited for sugarcane labor in Hawaii. A small group arrived in 1868, when the Japanese Government first permitted movement abroad. Relatively few others were brought in until 1885. But over the next 10 years, the importation of contract workers was so large that by 1894 a fifth of the population of Hawaii and nearly two-thirds of the labor force was Japanese.

Few Japanese lived in the continental United States before 1890. In the 25 years following, nearly 300,000 arrived, especially in California, to be employed in farming and as laborers in fishing, food processing, and logging. Japanese were the first commercially successful rice farmers in the Sacramento Valley, and were pioneers in reclaiming much poorly drained or desert land for fruit and truck farming. They gradually located more in towns, working as gardeners or domestic servants, running stores and other small businesses. But, their rapid growth engendered the same opposition experienced earlier by the Chinese, and, through the so-called

Gentlemen's Agreement of 1907-08, the Japanese Government halted further emigration of laborers. The agreement did not seek to stop the flow of family members or brides, however. The U.S. Japanese population thus was able to evolve into a more demographically normal community, unlike the Chinese in the same era.

The onset of war with Japan in 1941 led to the forced relocation of west coast Japanese to inland camps and sites until 1945. This resulted in economic loss for many and stimulated some permanent settlement away from the west coast. But thousands returned, and California is second only to Hawaii today in number of rural and small-town Japanese residents. In Hawaii, where there had been much more assimilation, intermarriage, and racial tolerance over the years, no general wartime relocation was required.

In the years after the war, thousands of American servicemen stationed in Japan married Japanese women, who then entered the United States as "war brides." With a continued American military presence in Japan, such marriages and subsequent emigration to the United States of the spouses still occur. As with other Asian groups, a general increase in Japanese immigration took place after 1965. In addition, the major growth of Japanese exports and business investment in this country has brought in many people to manage holdings and run plants, some of which are in nonmetro towns. These employees and their families typically rotate back to Japan, but are succeeded by others.

Despite the growth of settlement on the mainland, Hawaii still contains nearly half of all nonmetro and rural metro Japanese. Most work in the service, government, and retail business employment that dominates that State's economy. But there are still 2,000 Japanese farmers who operate over 40 percent of Hawaii's farms. They specialize in high-value-per-acre crops, such as fruits, horticultural products, and vegetables.

In California, some 1,800 Japanese worked as farm operators or managers in 1990. Their largest presence is in Fresno County, where they primarily produce tree fruits and are regarded as excellent farmers. Elsewhere, the largest mainland Japanese farming settlement is in easternmost Oregon, in the irrigated Snake River Plains of Malheur County. Some of the farms were established after World War II by families who had been displaced from the west coast during the war. Today there are about 60 farms, engaged in various irrigated row crops and dairying, with above-average economic status. Additional Japanese farmers are scattered through other parts of the West.

Nonfarm rural and small-town Japanese are rather widely distributed, with less concentration than is true of Filipinos or even the much less numerous Chinese and Koreans (fig. 4). Japanese in the United States are generally well educated and very prosperous, with poverty rates barely half as high as those of the total population.

They have, however, restricted childbearing to a level far below that of other ethnic groups. In nonmetro Hawaii, where three-fifths of all nonmetro Japanese live, Japanese women 35-44 years old in 1990 had borne just 168 births per each 100 women. The final number when their childbearing years are completed is unlikely to exceed 185 births per 100 women. With at least 205 births per 100 women needed for generational replacement, this population faces ultimate decline unless there is further immigration or increased family size. In the largest mainland rural Japanese population (1,800 in Fresno County, California), Japanese women age 35 to 44 had borne an extraordinarily low 120 births per 100 women, while all other Asian groups in the county were above 200. A comparable figure for Japanese in all nonmetro and rural metro areas is not available, but is believed also to be below replacement. Thus, for reasons not readily apparent, American Japanese–both metro and nonmetro, urban and rural–have chosen a level of childbearing well below generational replacement, despite a high degree of economic and financial success.

Filipinos

As noted, Filipinos supplanted Japanese during the 1980's as the largest Asian rural and small-town minority, numbering 133,000 in nonmetro and rural metro territory in 1990. (Chinese are the largest Asian group in metro urban areas). The first Filipino settlements stemmed from recruitment of laborers in 1906 to work in the Hawaiian sugar industry, and thereafter on pineapple plantations as well. The cutoff of new Japanese labor by the Gentlemen's Agreement of 1907-08 was a major stimulant to the hiring of Filipinos, as was the desire of the growers to inhibit labor demands by having an ethnic mix among workers. More than 100,000 Filipinos came to Hawaii between 1906 and 1931. Many returned to the Philippines, but thousands remained, while others

went on to California in the 1920's to do farmwork there.

When the Philippine Islands came under American jurisdiction after the Spanish-American War of 1898, the residents became U.S. nationals and were able to enter the United States freely. Direct inmovement of male Filipino labor to the mainland became especially large in the 1920's. In 1934, however, when the Tydings-McDuffie Act established the Philippines as a commonwealth in anticipation of future independence, the status of Filipinos as U.S. nationals was abolished. Immigration was largely halted until after World War II, and did not become significant again until after 1965.

In Hawaii, farm employment was curtailed drastically following a strike and mechanization after World War II, and most Filipinos there had to seek urban or other nonfarm jobs. As late as 1960, Filipino workers were a mainstay of the California farm workforce, but workers of Mexican origin have since come to dominate that work, and the aging Filipino farm group has not been replenished.

The extensive immigration of Filipinos into the United States since 1965 has been quite different from the earlier movement. The more recent immigrants have included many well-educated people in professional occupations, entering as families, with a balance of the sexes and a number of children. In contrast, the earlier movement of male workers was from a poorer, more rural stratum of society. The largest nonmetro mainland contingent of Filipinos today, by far, is in California (17,000).

As a product of the long association of the Philippine Islands with the United States, Filipinos have been more prone than other Asian groups to join the U.S. Armed Forces as a career, especially the Navy. In 1970, 10 percent of all employed Filipino men in rural America were military personnel, three times the representation of any other Asian group. The relatively greater affinity of U.S. Filipinos for military work has continued since then, although the Armed Forces make up a smaller percentage of the labor force today. The presence of two large U.S. military bases in the Philippines until recently also produced numerous marriages of Filipino women to American servicemen. So many of these families and Filipino servicemen live on or around nonmetro military bases that 20 percent of the entire nonmetro Filipino population outside of Hawaii is found in 42 military-base counties. By comparison, these counties have less than 4 percent of the nonmetro population of all races.

The largest Filipino rural and small-town population, by far, is that in Hawaii (table 2, fig. 5). It numbered 54,000 in 1990, or 18 percent of that State's nonmetro and rural metro residents. The educational and economic position of Filipinos in Hawaii is intermediate between that of Japanese and ethnic Hawaiians, and is somewhat below that of nonmetro Filipinos in the rest of the United States. Compared with other Asian groups in Hawaii, Filipinos continue to work disproportionately in the remaining farm labor force and in lower skilled retail and service industry jobs, without the prominence in professional occupations that they have on the mainland.

One area of Filipino settlement that seems unlikely for a population from a tropical climate is southern Alaska, but Filipinos had gone there as early as 1910 to work in fish canneries. Over time, some remained in Alaska, even though the work that attracted them initially was seasonal. This movement has continued, with the Filipino population more than doubling from its small base in both the 1970's and the 1980's. By 1990, 4,800 people of Filipino birth or ancestry were living in nonmetro Alaska, with 4,000 in coastal towns stretching in a lengthy arc from Ketchikan in the southeastern panhandle to Unalaska in the Aleutian Islands. The rapid growth of the fish-processing industry in recent years was a major force behind this increase, but other types of work are also now pursued. The largest settlement is at Kodiak, a major fishing center, where 1,000 Filipinos were a sixth of the population in 1990. Juneau has a growing Filipino population, numbering 750 in 1990, with employment in service industries as well as in the government. A majority of Alaska's Filipinos are foreign-born, but whereas males outnumbered females by two to one as late as 1970, this imbalance was nearly ended by 1990.

As a whole, Filipinos in the United States have a remarkably high degree of entry into hospital and other health services jobs. Although only 6 percent of all U.S. employment is in such work, 20 percent of all Filipinos are in these jobs, especially as hospital staff. A precise figure is not available for those living in rural and small-town areas, but Filipino presence in the health field is high in these places as well, except in Hawaii. Because of the large influx of nurses and other female health workers, the labor force participation of American Filipino women is very high.

Koreans

Koreans are yet another population group who first emigrated to American territory to fill the seemingly endless need for new sources of farm labor in Hawaii. Recruitment began in 1903, but ended just 2 years later when Japan took control of Korea and halted the arrangement. However, about 7,000 Koreans entered Hawaii in this brief span. Their descendants, along with many recent immigrants, live largely in the Honolulu urbanized area today, and most have intermarried with non-Koreans.

Some of the early Koreans in Hawaii moved on to California, initially for farmwork. But re-migration of both Koreans and Japanese from Hawaii to the mainland was halted by presidential decree in 1907. Only after World War II did emigration to the mainland from Korea again develop, first with refugees and orphans from the Korean War of 1950-53. Of more lasting duration is the flow of brides of U.S. military personnel (28,000 during 1950-75) that continues today.

With the liberal provisions of the Immigration Acts of 1965 and 1986, movement to the United States has become very attractive and achievable to Koreans. Their immigration averaged 34,000 persons per year in the 1980's. Korean immigrants since 1965 have included an above-average proportion of professionals and independent business owners. The vast majority are metro urban residents, but some live and work in nonmetro places, and Koreans are also inclined to live in the rural portions of metro areas.

The 71,000 Koreans in rural and small-town areas are widely distributed (fig. 6). New York has the largest number of any State (4,700), but only 7 percent of the total. Because so many of the women have entered as brides of non-Korean military personnel, the ratio of women to men is very high. In 1990, females age 16 or older outnumbered males by nearly three to one among nonmetro Koreans, a much higher proportion of females than the four-to-three ratio among metro urban Koreans, and a radical contrast to the very low incidence of women among American Asian groups in the past. The larger proportion of females among Koreans in rural and small-town areas results from the greater role that military marriages have played in bringing Korean women and their children to such places than to urbanized areas. Although Korean men do not have an above-average rate of military enlistment, the large number of Korean wives and children of non-Korean personnel has led to the location of a sixth of the entire nonmetro Korean population in military base counties. The biracial children seem generally listed as Korean in the census. The age distribution of this population is thus very unusual in that the males (lacking many adults) are much younger than the females, with a male nonmetro median age of 16 years, compared with 26 years for females. Of the 12 nonmetro counties outside of Hawaii that have 400 or more Koreans, 8 have large army bases. The other four have major universities.

In Hawaii, about 1,700 Koreans live in the nonmetro islands, mostly in Hawaii and Maui. Their numbers have grown rapidly since 1980 (57 percent), partly from recent immigration. But, with 70 percent still native-born, they contrast with the metro Korean Hawaiians who are just 43 percent native-born. Even though nonmetro Hawaii does not have many military families, Korean women outnumber men by a three-to-two ratio. A third of all employed nonmetro Koreans in the islands work in retail trade, a considerably higher proportion than found for any other racial group in Hawaii. In part, this results from the larger presence of women among Korean workers, for women typically work more in retail jobs than do men. But it also reflects the higher interest among Koreans in self-employment, regardless of sex.

Asian Indians

Few people, other than occasional visitors, came to the United States from the Indian subcontinent before 1900. But, beginning in 1904, male Indian workers began to come down into the west coast States after entering British Columbia. They worked initially in the timber industry, but were expelled by hostile White workers, after which many moved south to the Central Valley of California to do farm labor.

This inflow of Asian Indians was never large. It was nearly ended by the Exclusion Act of 1923 and, with few women to marry and some return movement to India, the population dwindled. Since 1965, though, the number of immigrants from India has risen to over 30,000 per year, and there is now a large base of women and children as well as adult men. About 36,000 lived in nonmetro areas and 26,000 in rural parts of metro areas in 1990. In many rural and small-town areas, Asian Indians are associated with universities. Many others are professionals and business people, especially in fields such as health services and engineering. Indians have created a notable niche in motel ownership and operation. In the late 1970's, an estimated two-fifths of all motels

in the association of motels located on Interstate Highway 75 (which runs from Michigan to Florida) were run by Asian Indians. (The location of Asian Indians is shown in fig. 7.) Indian immigrants benefit by their origin in a nation where English is an associate official language.

There is a wide contrast in social and educational status between the early Indian immigrants and the more recent arrivals. The earliest were poorly educated rural people, while those coming after 1965 were more likely to be well-educated professionals. Many of the most recently arrived merchants and business people are relatives of professionally employed people who preceded them.

The largest rural Asian Indian settlement is in the Sacramento Valley of California, around Yuba City in Sutter County. Over 1,100 live in the rural parts of this small metro area, primarily engaged in farming. Many others involved in agriculture live in nearby towns. The settlement dates from 1908, but has continued to grow from immigration, with three-fourths of current residents foreign-born. The first immigrants were hired workers on rice or fruit farms, but some succeeded in becoming tenant farmers or in creating partnerships with non-Asians to circumvent laws against Asian ownership of land. They are respected orchardists today, but the poverty rate in 1990 was high at 20 percent. To some extent, this reflects above-average family size and the presence of many fairly recent newcomers. Another well-established Asian Indian farming community is in Fresno County. This group, like that in Sutter County, has its principal origin in the Punjab area of northern India. The farmers in Fresno are primarily grape growers. There is still some entry of new farmers from India who have the funds to become landowners.

As modest in numbers as the early Asian Indian farmers and farmworkers were, it was from their ranks that the first Asian-born member of Congress came. Dilap Singh Saund came to the United States as a young man. He began as a farmhand, acquired graduate degrees from the University of California, and became a rancher in Imperial County, California. Just 10 years after citizenship for Indian immigrants was first permitted, he was elected to Congress in 1956 and served for three terms.

Because so many Asian Indians, especially men, come to the United States today for university education, all 6 of the nonmetro counties that have at least 400 Asian Indians are university areas. Many have remained to take academic or technical work. Ninety percent of all nonmetro Asian Indian males age 25 or older have 1 year or more of college education. Even though the comparable percentage for women (67 percent) is much lower, the education of Asian Indian women is still well above that of women in the general population or in most other Asian and Pacific Islander groups.

Indochinese

U.S. participation in the war in Vietnam brought hundreds of thousands of Indochinese people to this country as postwar refugees from ethnic groups that had been almost unrepresented here earlier–Vietnamese, Cambodians, Laotians, and Hmong (a distinct ethno-cultural group from Laos). This movement began with the fall of South Vietnam in 1975 and has continued ever since. The Indochinese thus have come to the United States as a displaced people rather than as recruited labor or in the more conventional voluntary way. As refugees, their immigration was organized and sponsored by the Federal Government and by private organizations, often church-affiliated.

Unlike earlier Asian groups, the refugees were not concentrated in Hawaii or the West Coast, but were placed in widely distributed locations, a number of which were small communities. Some locations proved relatively isolated and impractical, however, and many refugees moved on to urban places, as they were able, to be with larger groups of their countrymen. By 1990, there were 1 million Indochinese in the United States, of whom nearly 600,000 were Vietnamese. Of the grand total, only 38,000 lived in nonmetro counties and 16,000 in rural metro locations. (See fig. 8 for geographic location.) But, primarily because of the continued inflow of refugees, the number of Indochinese in rural and small-town locations grew by 77 percent from 1980 to 1990. The arrival of Cambodians, Laotians, and Hmong did not begin in earnest until the 1980's, and they have, thus, typically been in this country for less than 15 years.

Economic adjustment has been difficult for the Indochinese, given the abrupt and often penniless nature of their departure from Asia, and the lack of formal education and English language skills among the most recent immigrants. One small-town economic function that they now commonly perform is labor in meatpacking and other food-processing plants. The decentralization of much of the

meatpacking industry has placed some large plants in small towns. Such plants typically have labor shortages, because the work is often deemed undesirable by much of the local labor force. Therefore, it is commonly necessary to obtain needy workers from elsewhere to whom the jobs look relatively attractive. Most often this means recruiting Hispanics, but the Indochinese are also sought.

Major examples are found in Kansas in and around Garden City, Dodge City, and Liberal. These packing-plant towns had 1,100 Vietnamese and 550 other Indochinese in 1990, compared with 130 Vietnamese and a very small number of others in 1980. Another example is Tecumseh, Nebraska, where 100 Laotians had settled in a town of 1,700 people by 1990, attracted by jobs in a plant making soup ingredients. Mountain Lake, Minnesota, has become a rural focal point for Laotian industrial workers, whose presence has bolstered businesses and school enrollment in a town previously experiencing decline. In Storm Lake, Iowa, Laotians make up a fourth of the workers at a large pork plant and a tenth of those at a turkey plant. Outside of the Midwest, examples of the trend are found at Dumas, Texas, and in north Georgia, where several hundred Laotians and Vietnamese have settled near the poultry-processing plants at Cornelia and Gainesville.

Other factory jobs are sought where available. As a result, all Indochinese groups have an exceptionally high dependence on manufacturing employment, with 39 percent of their workers in such jobs nationally, compared with just 19 percent of all U.S. workers. Among Laotians, an astonishing 53 percent work in manufacturing plants. This characteristic sets the Indochinese apart from all other Asian and Pacific Islander groups, none of whom are highly represented in manufacturing.

For Vietnamese, shrimp and other fishing along the gulf coast is a notable exception to manufacturing work. The nonmetro settlements are in Aransas, Calhoun, and Matagorda Counties, Texas, and in St. Mary Parish, Louisiana. In both States, relations between the refugees and the local fishermen grew violent in early years because of competition for a limited natural resource, disputes over fishing practices, and cultural differences, such as the competitive advantage gained by intensive use of family labor among the Vietnamese. These problems have since lessened but have not ended.

Amelia, Louisiana, had become the nonmetro town with the largest Vietnamese population by 1990, where the 683 Vietnamese residents were 28 percent of the population. For "boat people" refugees, south Louisiana has some similarity in setting, climate, and religion to Vietnam (the majority of the refugees are Catholic). Although fishing is present among Amelians, work in the marine yards is more common whenever offshore oil and gas industries are thriving.

Many Indochinese farmed in their homelands. The capital-intensive nature of American farming makes entry into the business here difficult for a poor immigrant population. But by 1990, 174 Indochinese in California reported farm operation or management as their sole or principal work. In Fresno County, a number of refugees now farm small leased plots producing berries or Asian vegetables on contract. With their large families, they apply intensive hand labor to perform tasks that other farmers might do with mechanical means.

The Indochinese nationalities cluster more commonly into distinct communities within the areas where they live than is usually true of other Asians. This appears to derive from the limited time they have been in the country, their more traditional cultural background, and the fact that far fewer of them have come in as students or as partners in interracial marriages.

Household income levels are below average, with a nonmetro median of $18,800 in the 1990 Census, compared with $23,100 for the total nonmetro population. The effect of this disparity is worsened by the greater childbearing and larger household size of the Indochinese. With less income and more people per household, the Indochinese poverty rate was 30.1 percent, the highest of any Asian group, versus a national nonmetro average of 16.8 percent. In some areas, such as the Central Valley of California, poverty rates for the Laotian and Hmong people range from 55 to 75 percent in both cities and small communities alike. This is not surprising when one considers that in the rural and small-town sections of Fresno County, a majority of Indochinese (except for Vietnamese) had less than 5 years of schooling before reaching the United States and have averaged 497 children per 100 women 35-44 years old.

The exceptionally young age profile of the Indochinese, with its high proportion of children, gives this population much potential for rural population growth, regardless of the extent to which additional refugees are admitted. The disparity in education and cultural background between the parental generation and its American-oriented

children is very wide. It seems unlikely that the current extent of dependence on manufacturing jobs will persist as the younger generation matures. Whether it does or not, Indochinese minorities have become an established presence in a number of small towns, advancing in status, but with a high degree of current social service needs.

Hawaiians and All Others

Native Hawaiians, of Polynesian origin, are estimated to have numbered about 300,000 in the late 18th century, in the early days of European contact. Their population declined drastically thereafter from the consequences of Western diseases and cultural demoralization, until only 38,000 were counted in the census of 1910. Hawaiians mingled freely with the various ethnic groups who came to the islands and today they are overwhelmingly of mixed ancestry. To a certain extent, therefore, being Hawaiian today is as much a matter of values, sentiment, and cultural choice as it is of racial proportion. By 1990, 139,000 people in Hawaii reported their race as Hawaiian, of whom 52,000 lived in the nonmetro islands–principally Hawaii, Maui, Kauai, and Molokai–or in the rural parts of metro Oahu. They are more rural and small-town in residence than any other of the State's ethnic groups and make up a sixth of the nonmetro population. Some still use the native language at home.

In Hawaii, nonmetro Hawaiians are considerably younger than the other major ethnic groups, with a median age of just 25 years, compared with about 42 for Japanese and 31 for Filipinos. This probably reflects the sum of higher Hawaiian childbearing rates, the cultural acquisition of children born to mixed marriages, and somewhat less outmovement of young adults to metro areas than occurs in the other groups.

The social and economic condition of Hawaiians has typically not been as good as that of most other populations in the islands, as measured by education, income, health, or housing. Some observers believe this is at least in part a reflection of traditional culture that values social accommodation over personal achievement. In nonmetro Hawaii, 16 percent of all Hawaiians lived in households with poverty-level income in the 1990 Census, with the rate reaching 20 percent on the island of Hawaii. Nominally, this is not an extraordinary level compared with many mainland nonmetro areas, but the effect is more serious in Hawaii given the State's very high cost of living. The nonmetro poverty rate for Hawaiians is in marked contrast to the rates of just 4 percent for Japanese and 7 percent for Filipinos in the same islands.

As late as 1940, fewer than 700 Polynesians lived in the continental United States. Since World War II, however, there has been so much movement to the mainland that by 1990, 34 percent of all Hawaiians, or 72,000, were living there, along with 130,000 other Pacific Islanders. The latter are mainly from Samoa and Guam. Over half of the mainland Hawaiians have located in the west coast States, focusing on California. Just 16 percent are in nonmetro or rural metro communities.

An interesting characteristic of the nonmetro Pacific Islander groups is the extent to which they are either in military service or married to servicemen and thus living on or near military bases. A seventh of all nonmetro Hawaiians on the mainland lived in military base communities in 1990. (Among other Pacific Islanders the proportion is even higher, rising to three-tenths among Guamanians.) The economic status of Hawaiians on the mainland is generally higher than that in Hawaii.

About 56,000 other Asians and Pacific Islanders, aside from those discussed above, lived in nonmetro and rural metro locations in 1990, with Thais and Pakistanis being the most numerous. Like nonmetro Koreans, many of the adult Thais are women who married American military personnel stationed in their country. With American bases in Thailand now closed, this source of Thai growth in the United States has ended. Pakistanis are predominantly male, with a concentration in retail businesses and professional fields. Among both Thais and Pakistanis, many are young people studying at American colleges.

Conclusion

Except for Hawaiians, only a small and declining percentage of each of the various Asian and Pacific Islander populations lives in rural and small-town America. Yet the absolute growth of these ethnic groups in the United States is so large and rapid that they increased by 42 percent in nonmetro and rural metro areas from 1980 to 1990, even as they became more urban in overall location. Although Asians and Pacific Islanders were only 0.8 percent of the U.S. nonmetro and rural metro population in 1990, their increase of 186,000 persons during the 1980's

accounted for 14 percent of the total growth of nonmetro and rural metro population during the decade. Thus, their rate of gain was very disproportionate, and if such growth continues it will quickly further elevate their importance in the areas where they are settling. Except for the Japanese, their age composition is youthful and their rate of natural increase is substantial.

The individual Asian and Pacific Islander groups differ from one another in many respects, for the term combines people and racial groups of very different cultures, languages, religions, histories, and American origins. Thus, data for the overall category cannot be reliably generalized to all of its groups. But with exceptions, they show that Asians and Pacific Islanders as a whole are much better educated than the general nonmetro population, more likely to be in managerial or professional occupations, more successfully supportive of themselves (as evidenced by higher median household income), and far less susceptible to having single-parent families with their higher rates of poverty and welfare dependence.

In general, American demographic trends have tended to develop in metro areas and then disseminate out into smaller communities. This has been true of trends in fertility, mortality, marital status, and living arrangements, and is now true of Asian and Pacific Islander settlement, which is acquiring a growing rural and small-town component.

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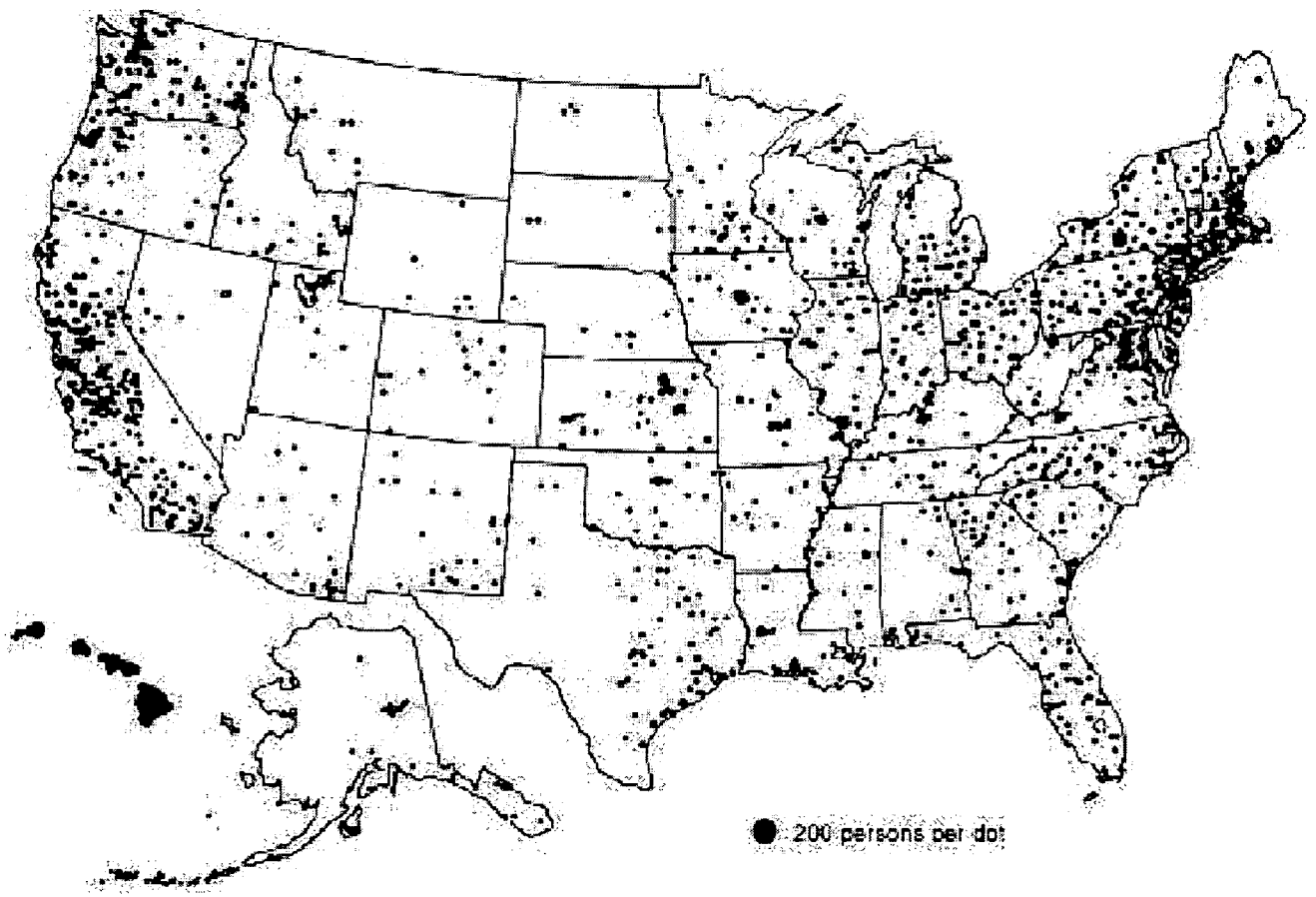
Figure 2

The nonmetro and rural metro Asian and Pacific Islander population, 1990



Data source: Bureau of the Census.
Map prepared by Economic Research Service.

Figure 3

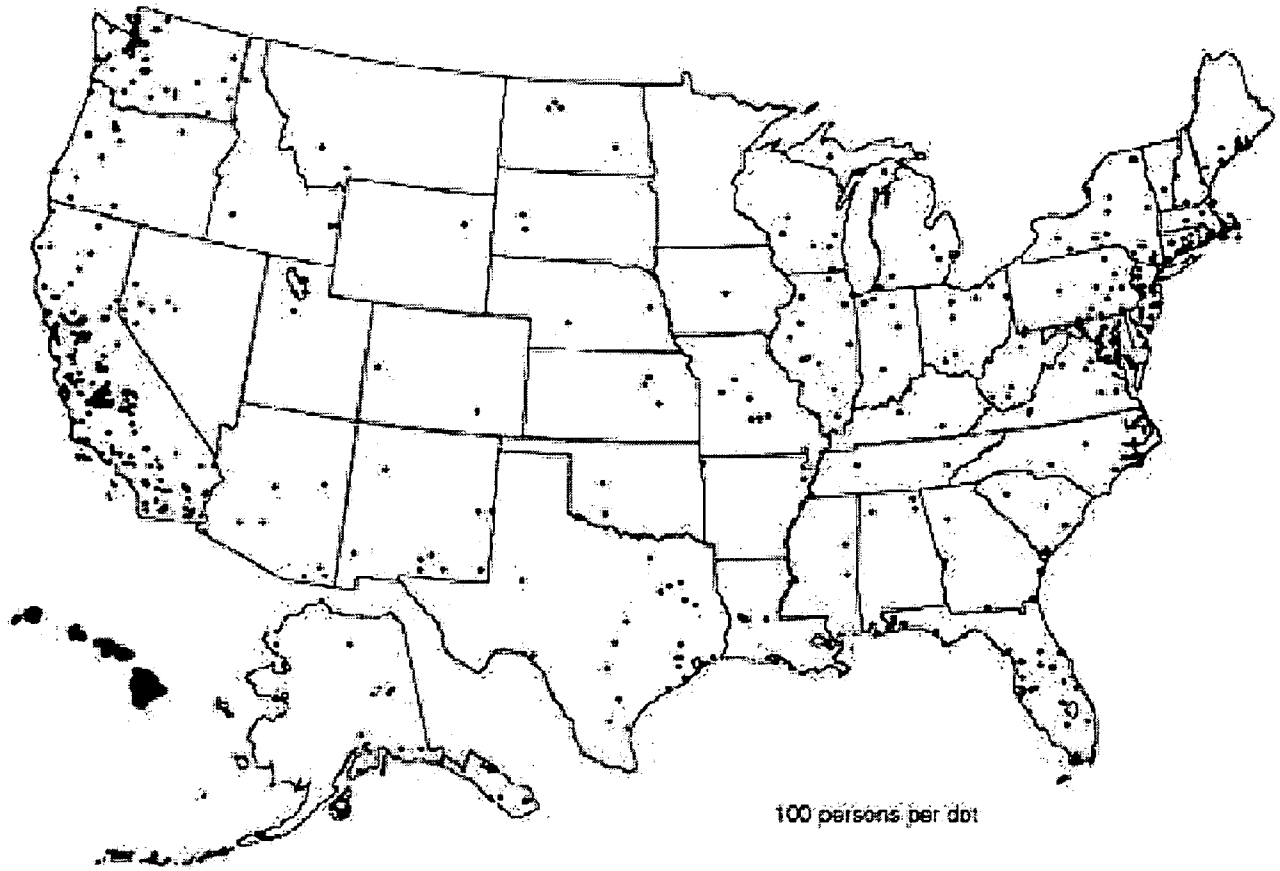
The nonmetro and rural metro Chinese population, 1990

Data source: Bureau of the Census.
Map prepared by Economic Research Service.

Figure 4
The nonmetro and rural metro Japanese population, 1990

Data source: Bureau of the Census.
Map prepared by Economic Research Service.

Figure 5
The nonmetro and rural metro Filipino population, 1990



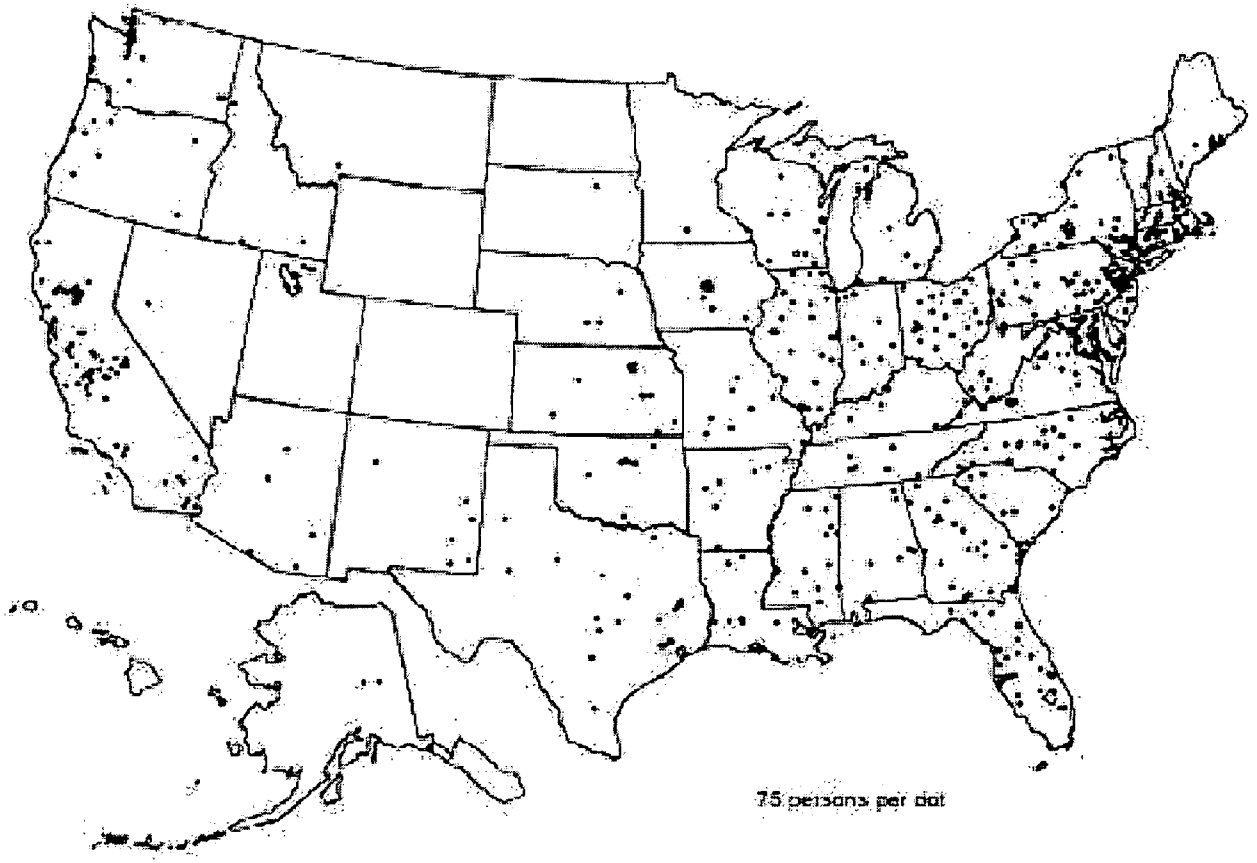
Data source: Bureau of the Census.
Map prepared by Economic Research Service.

Figure 6
The nonmetro and rural metro Korean population, 1990

Data source: Bureau of the Census.
Map prepared by Economic Research Service.

Figure 7

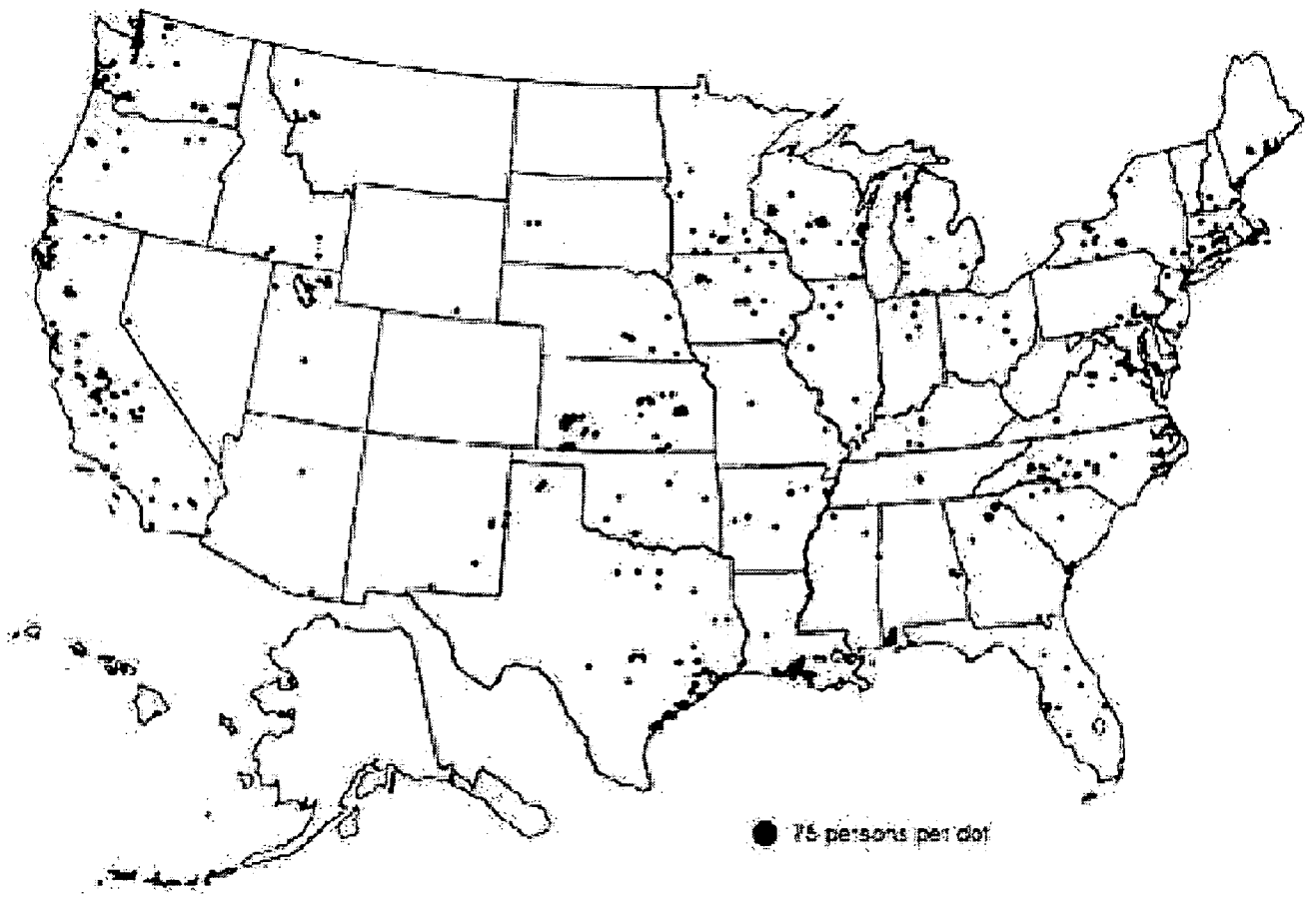
The nonmetro and rural metro Asian Indian population, 1990



Data source: Bureau of the Census.
Map prepared by Economic Research Service.

Figure 8

The nonmetro and rural metro Indochinese population, 1990



Data source: Bureau of the Census.
Map prepared by Economic Research Service.

Appendix

The data used in this report were drawn from the 1980 and 1990 Censuses. The Census of Population and Housing is taken every 10 years, counting each person at his or her "usual" residence. Six of the ten chapters use the Public Use Microdata Sample B (PUMS) files, where a 1 in 100 sample of households yields data for households and individuals. The other four chapters use the Summary Tape Files (STF) 3 and 4 or printed volumes, which contain data summarized for geographic units. The chapter on Native Americans augments the PUMS Census data with data from the Current Population Survey, a monthly sample survey taken by the Census Bureau.

Throughout this report, with the exception of the chapter on Asian and Pacific Islanders, rural people and places are defined as those outside the boundaries of metropolitan areas as defined by the Office of Management and Budget at the time of the census. Metropolitan areas consist one or more core counties containing an urbanized area of 50,000 or more people, together with surrounding suburban counties if they have a significant exchange of commuting workers with the metropolitan core and meet a set of conditions having to do with metropolitan character, such as population density and growth. Metropolitan areas and their residents are referred to as "urban" in this report. Rural (nonmetropolitan) counties do not have metropolitan qualifications and contain only open country, small towns, or small cities. (In the 1990 PUMS file, some of the areas were designated as "mixed metro/nonmetro." We assigned nonmetro status to those that had a majority of nonmetro population. Thus, 2.5 percent of the nonmetro population in our resulting 1990 PUMS file was originally designated as "mixed" by the Census Bureau.)

The maps in this appendix were constructed using STF3 data files. Data for the appendix tables were drawn from the Public Use Microdata Samples of the 1980 and 1990 Censuses. The summary description of trends below has been drawn from the information presented in the appendix tables.

- All minority groups had a younger age structure, with a larger percentage of both children and young working-age adults in their population, than did non-Hispanic Whites. In rural areas the proportion of minority children hovered around a third or more, depending on the particular group, and the proportion of young working-age adults was about a fifth.

- Unemployment rose over the decade for all rural minority groups except Asians and Pacific Islanders. Unemployment in 1990 for rural men was highest among Native Americans at 21 percent, up 4 percentage points over the decade. The labor force participation rate for all rural race/ethnic groups rose among women and essentially held steady among men.

- The proportion of rural minority workers with full-time, full-year work rose for women and Black men, but declined for non-Black minority men.

- Nonmetro median household income declined for all groups, particularly Native Americans. Although Blacks experienced a relatively small decline over the decade, their 1990 median household income was the lowest of all groups. In rural areas in 1990, Black median household income was 53 percent of the median for non-Hispanic White households and less than half that of Asians.

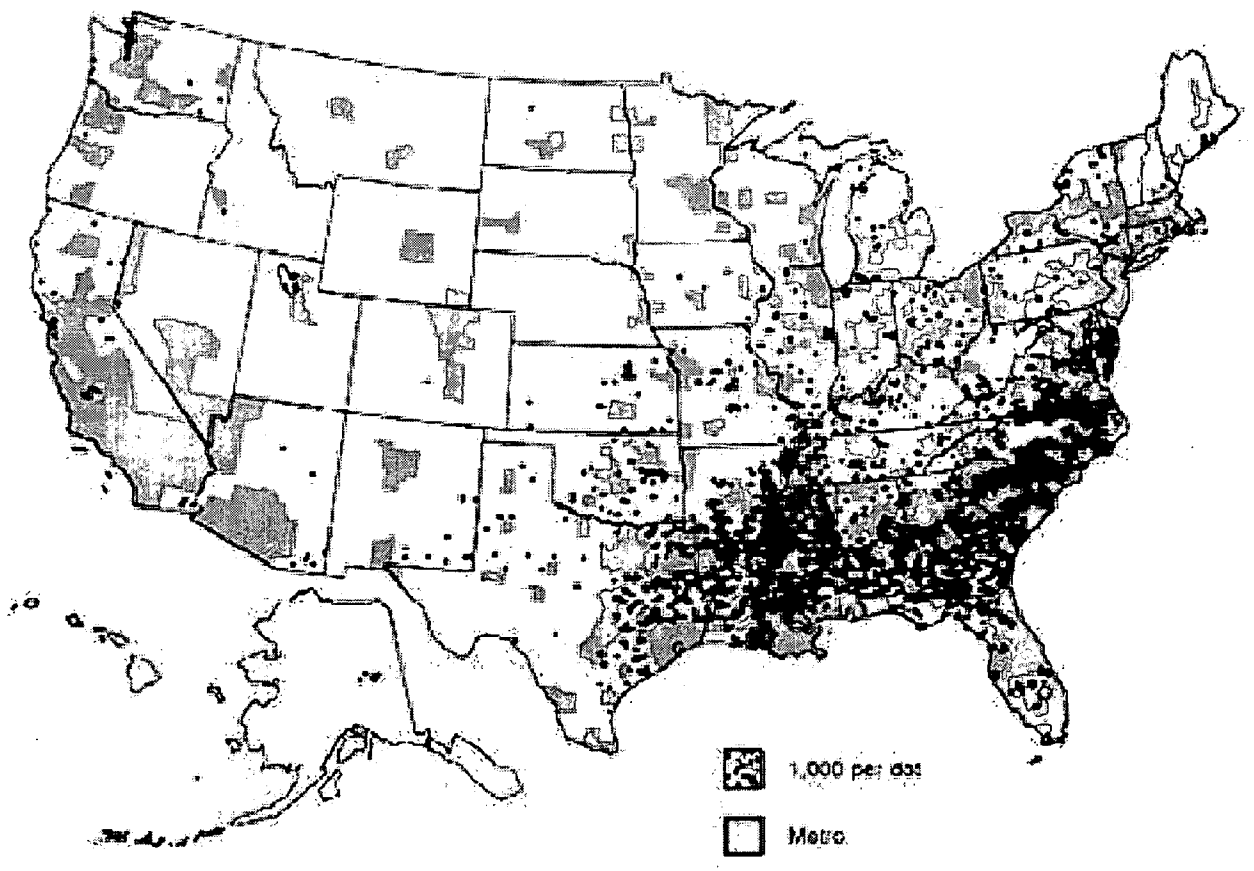
- Of those age 18-64, 60 percent of Black women and 54 percent of Black men have a high school diploma, while in 1980 it was less than half. High school completion among Native Americans rose to 64 percent of women and 62 percent of men. Although Hispanic men and women made educational gains as well, the gains were somewhat smaller. Fifty-three percent of Hispanic women and 49 percent of Hispanic men in rural areas had completed high school in 1990. Despite the lower high school completion rate, Hispanics with a high school diploma were likely to go on for more training. Twenty percent of Hispanic women and 18 percent of Hispanic men completed some college or training beyond high school by 1990, a post-high school training rate comparable to Blacks.

- The well-being of rural minority children, as measured by their poverty rate, declined sharply over the decade for all groups except Asians. This was the case even in groups where the situation of other age groups improved. Among rural Blacks, for example, the poverty rate of children rose from 45 percent to 50 percent at the same time it declined from 49 to 33 percent among 18-64 year olds. The child poverty rate for Blacks is the highest among rural minority groups.

- Poverty rose among single-parent households at the same time that the percentage of children being raised in that type of household greatly increased. The highest percentage of rural children in single-parent households, as well as the highest increase over the decade, was among Blacks. Fifty-three percent of rural Black children lived in a single-parent household in 1990, an increase of 12 percentage points since 1980.

Appendix figure 1

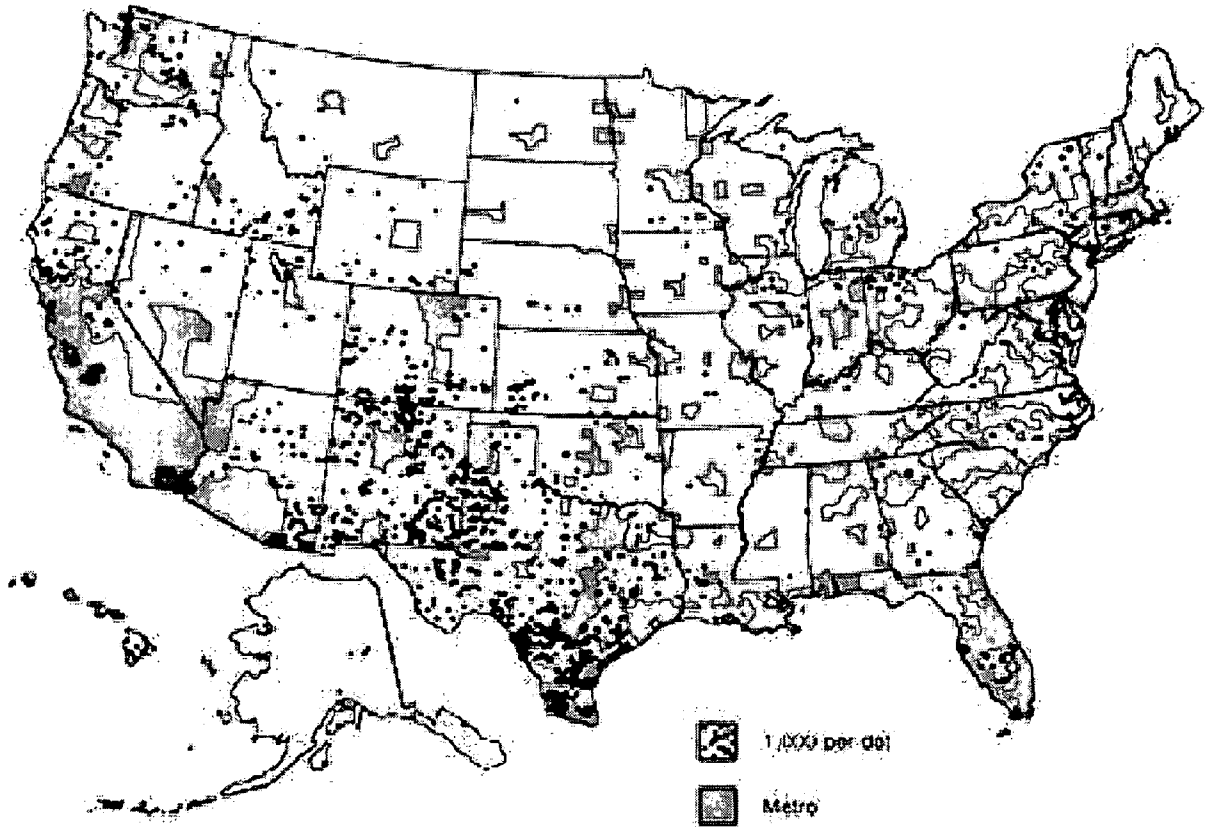
Blacks in nonmetro counties, 1990



Data source: Bureau of the Census.
Map prepared by Economic Research Service.

Appendix figure 7

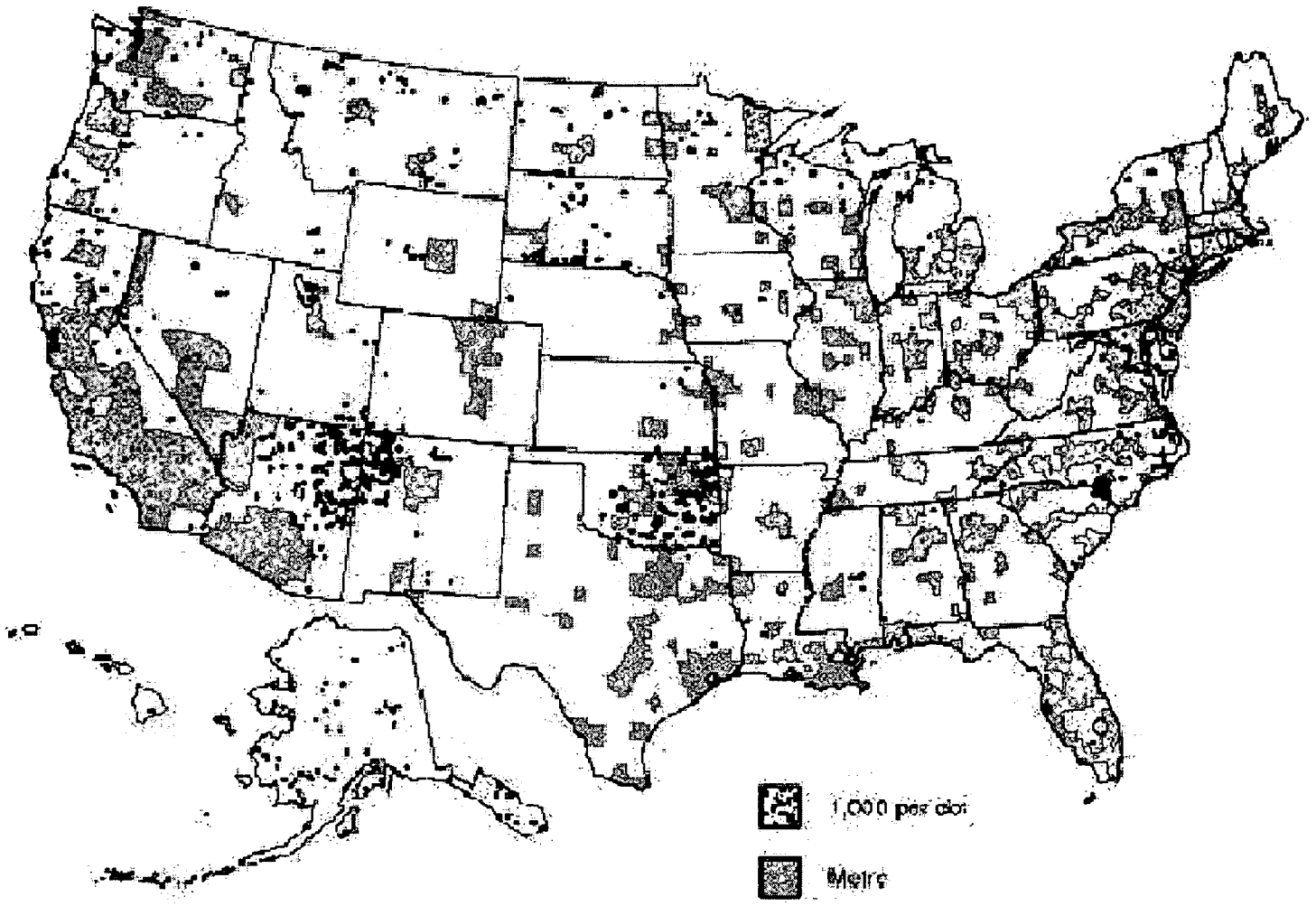
Hispanics in nonmetro counties, 1990



Data source: Bureau of the Census.
Map prepared by Economic Research Service

Appendix figure 3

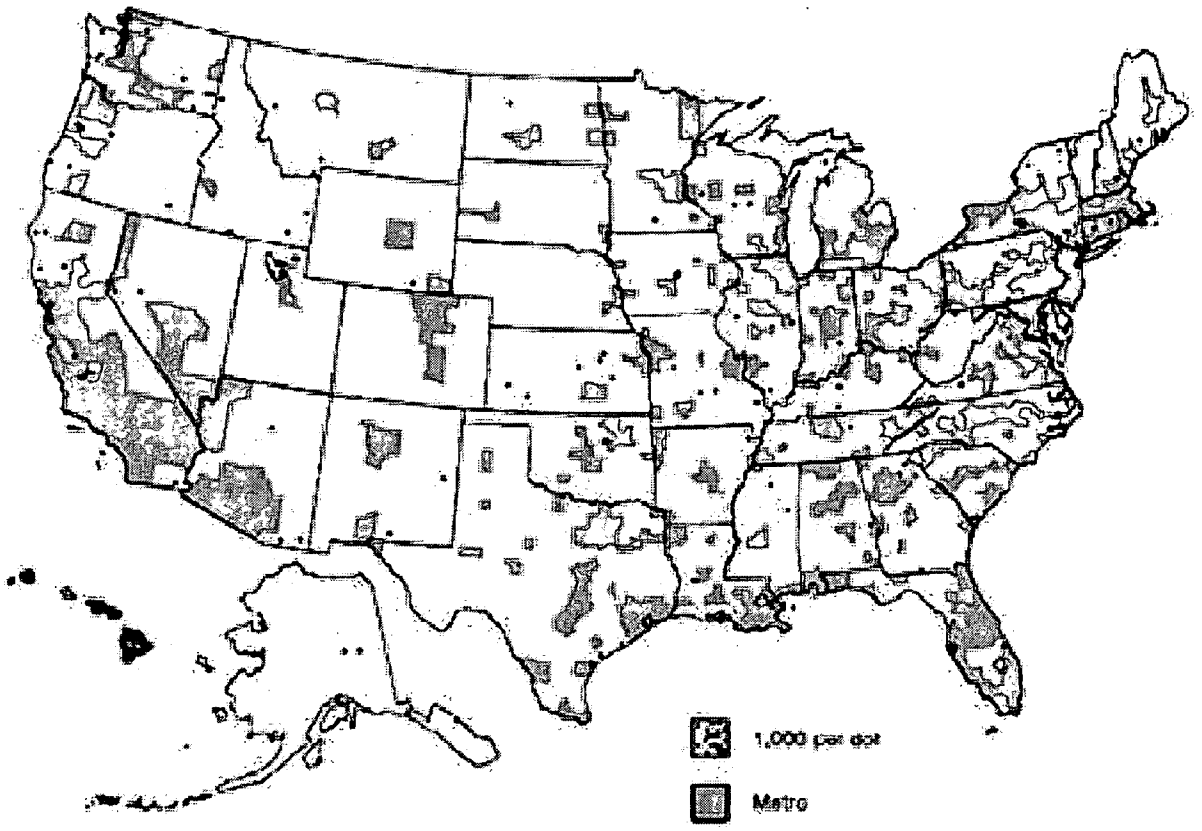
Native Americans in nonmetro counties, 1990



Data source: Bureau of the Census
Map prepared by Economic Research Service.

Appendix figure 4

Asians in nonmetro counties, 1990



Data source: Bureau of the Census.
Map prepared by Economic Research Service.

Appendix table 1--Socioeconomic indicators for the United States

Item	Nonmetro			Metro		
	1990	1990	1980	1990	1990	1980
	Thousands	--------*Percent*--------		*Thousands*	--------*Percent*--------	
Age:						
Total--	52,902	100.0	100.0	188,590	100.0	100.0
Under age 18	14,491	27.4	30.3	48,676	25.8	28.6
Age 18-34	12,793	24.2	26.4	52,985	28.1	29.5
Age 35-64	18,072	34.2	30.8	65,047	34.5	31.7
Age 65 and over	7,545	14.3	12.5	21,882	11.6	10.3
Education completed:						
Women--						
Total (age 18-64)	15,683	100.0	100.0	60,397	100.0	100.0
Less than high school diploma	3,599	22.9	31.6	11,148	18.5	24.6
High school diploma	10,197	65.0	59.2	37,033	61.3	61.4
Bachelor's degree or more	1,887	12.0	9.2	12,216	20.2	14.0
Age 18-34	6,478	100.0	100.0	26,776	100.0	100.0
Less than high school diploma	1,275	19.7	22.4	4,474	16.7	18.0
High school diploma	4,524	69.8	67.1	17,047	63.7	66.2
Bachelor's degree or more	679	10.5	10.5	5,255	19.6	15.8
Age 35-64	9,206	100.0	100.0	33,621	100.0	100.0
Less than high school diploma	2,324	25.2	39.3	6,674	19.8	30.6
High school diploma	5,674	61.6	52.6	19,986	59.4	57.1
Bachelor's degree or more	1,208	13.1	8.1	6,962	20.7	12.3
Men--						
Total (age 18-64)	15,182	100.0	100.0	57,635	100.0	100.0
Less than high school diploma	3,890	25.6	33.1	11,263	19.5	24.7
High school diploma	9,167	60.4	54.3	32,051	55.6	54.2
Bachelor's degree or more	2,126	14.0	12.6	14,321	24.8	21.0
Age 18-34	6,316	100.0	100.0	26,209	100.0	100.0
Less than high school diploma	1,506	23.8	24.1	5,231	20.0	19.2
High school diploma	4,212	66.7	63.4	15,861	60.5	61.0
Bachelor's degree or more	598	9.5	12.5	5,117	19.5	19.8
Age 35-64	8,866	100.0	100.0	31,426	100.0	100.0
Less than high school diploma	2,384	26.9	41.1	6,031	19.2	30.0
High school diploma	4,955	55.9	46.3	16,190	51.5	47.8
Bachelor's degree or more	1,528	17.2	12.6	9,205	29.3	22.2

See notes at end of table.

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Appendix table 1--Socioeconomic indicators for the United States, continued

Item	Nonmetro			Metro		
	1990	1990	1980	1990	1990	1980
	Thousands	*--------Percent--------*		*Thousands*	*--------Percent--------*	
Family and household structure:						
Persons by household type--						
In family households	46,661	88.2	90.5	162,076	85.9	87.9
In extended family households	2,365	5.1	96.9	10,743	6.6	96.8
In nonfamily households	6,242	11.8	9.5	26,514	14.1	12.1
Related children--						
In two-parent family households	11,329	79.5	84.6	36,065	75.4	79.2
In single-parent family households	2,929	20.5	15.4	11,768	24.6	20.8
In extended family households	614	4.3	2.4	2,604	5.4	2.4
	---------Number of persons---------			*---------Number of persons---------*		
Average household size	n.a.	2.6	2.8	n.a.	2.6	2.7
Poverty and income:						
All persons	8,771	16.6	15.5	223,426	11.9	11.3
By age--						
Under age 18	3,095	21.6	19.1	8,225	17.1	15.4
Age 18-64	4,335	14.0	12.4	11,792	10.0	9.2
Age 65 and older	1,341	17.8	21.0	2,326	10.6	12.3
By household type--						
In family households	6,894	14.8	13.8	17,289	10.7	9.9
In extended families	645	27.3	23.9	1,882	17.6	15.6
In married-couple families	3,873	10.0	10.7	7,354	5.7	5.8
In single-parent families	3,021	39.2	35.2	9,935	29.6	30.0
In nonfamily households	1,877	30.4	31.3	5,054	19.2	21.1
	----------1989 dollars----------			*----------1989 dollars----------*		
Median household income	n.a.	$23,000	$23,659	n.a.	$32,000	$30,307
Employment (age 18-64 only):						
Women--						
Civilian population age 18-64	15,667	n.a.	n.a.	60,288	n.a.	n.a.
With a work-limiting disability	1,478	9.4	9.8	4,518	7.5	8.0
Worked last year	11,930	76.1	62.4	45,111	74.8	66.6
Full-time full-year workers	5,083	42.6	40.4	22,793	50.5	45.0
Civilian labor force	10,330	65.9	56.1	42,501	70.5	61.6
Unemployed in the previous week	702	6.8	7.1	2,423	5.7	6.0
Men--						
Civilian population age 18-64	15,026	n.a.	n.a.	56,844	n.a.	n.a.
With a work-limiting disability	1,759	11.7	11.8	4,764	8.4	8.9
Worked last year	13,240	88.1	89.3	51,037	89.8	90.3
Full-time full-year workers	8,760	66.2	66.2	34,688	68.0	67.4
Civilian labor force	12,775	85.0	86.0	49,935	87.8	88.2
Unemployed in the previous week	843	6.6	6.8	2,940	5.9	6.0

Note: Income items converted to 1989 dollars using the implicit price deflator for personal consumption expenditures. n.a.=not applicable.
Source: Compiled by ERS using the Public Use Microdata Samples, 1980 and 1990 Censuses.

Appendix table 2--Socioeconomic indicators for the Non-Hispanic White population

Item	Nonmetro			Metro		
	1990	1990	1980	1990	1990	1980
	Thousands	--------*Percent*--------		*Thousands*	--------*Percent*--------	
Age:						
Total--	45,166	100.0	100.0	138,178	100.0	100.0
Under age 18	11,659	25.8	28.7	32,008	23.2	26.1
Age 18-34	10,684	23.7	26.3	37,376	27.0	29.1
Age 35-64	15,956	35.3	31.9	50,136	36.3	33.3
Age 65 and over	6,867	15.2	13.1	18,657	13.5	11.6
Education completed:						
Women--						
Total (age 18-64)	13,435	100.0	100.0	44,356	100.0	100.0
Less than high school diploma	2,694	20.1	28.8	5,839	13.2	20.3
High school diploma	9,008	67.0	61.5	28,478	64.2	64.4
Bachelor's degree or more	1,733	12.9	9.7	10,039	22.6	15.3
Age 18-34	5,365	100.0	100.0	18,759	100.0	100.0
Less than high school diploma	920	17.1	20.0	2,121	11.3	13.7
High school diploma	3,832	71.4	68.7	12,377	66.0	68.4
Bachelor's degree or more	614	11.4	11.3	4,261	22.7	17.8
Age 35-64	8,069	100.0	100.0	25,597	100.0	100.0
Less than high school diploma	1,775	22.0	35.8	3,718	14.5	25.9
High school diploma	5,176	64.1	55.7	16,101	62.9	60.9
Bachelor's degree or more	1,119	13.9	8.4	5,778	22.6	13.1
Men--						
Total (age 18-64)	13,205	100.0	100.0	43,156	100.0	100.0
Less than high school diploma	3,010	22.8	30.4	6,093	14.1	20.7
High school diploma	8,202	62.1	56.2	24,853	57.6	55.9
Bachelor's degree or more	1,993	15.1	13.4	12,210	28.3	23.4
Age 18-34	5,318	100.0	100.0	18,618	100.0	100.0
Less than high school diploma	1,116	21.0	21.3	2,587	13.9	15.0
High school diploma	3,652	68.7	65.1	11,775	63.2	62.5
Bachelor's degree or more	550	10.3	13.6	4,255	22.9	22.5
Age 35-64	7,887	100.0	100.0	24,538	100.0	100.0
Less than high school diploma	1,894	24.0	38.1	3,505	14.3	25.8
High school diploma	4,549	57.7	48.6	13,078	53.3	49.9
Bachelor's degree or more	1,443	18.3	13.3	7,955	32.4	24.3

See notes at end of table.

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Appendix table 2--Socioeconomic indicators for the Non-Hispanic White population, continued

Item	Nonmetro			Metro		
	1990	1990	1980	1990	1990	1980
	Thousands	*Percent*		*Thousands*	*Percent*	
Family and Household Structure:						
Persons by household type--						
In family households	39,611	87.7	90.1	116,728	84.5	87.2
In extended family households	1,299	3.3	2.4	4,372	3.7	2.5
In nonfamily households	5,555	12.3	9.9	21,449	15.5	12.8
Related children--						
In two-parent family households	9,693	84.4	88.3	26,472	83.9	86.0
In single-parent family households	1,788	15.6	11.7	5,075	16.1	14.0
In extended family households	305	2.7	1.6	1,010	3.2	1.7
		Number of persons			*Number of persons*	
Average household size	n.a.	2.5	2.7	n.a.	2.5	2.6
Poverty and Income:						
All persons	5,961	13.2	12.5	101,265	7.3	7.4
By age--						
Under age 18	1,858	16.1	14.4	2,847	9.0	8.7
Age 18-64	3,039	11.4	10.2	5,728	6.5	6.4
Age 65 and older	1,065	15.5	18.4	1,551	8.3	10.1
By household type--						
In family households	4,413	11.2	10.7	6,603	5.7	5.8
In extended families	191	14.7	15.0	323	7.4	7.0
In married-couple families	2,835	8.2	8.9	3,495	3.5	4.0
In single-parent families	1,578	30.7	26.8	3,108	18.3	18.7
In nonfamily households	1,549	28.2	28.9	3,523	16.6	18.5
		1989 dollars			*1989 dollars*	
Median household income	n.a.	$24,200	$24,681	n.a.	$34,402	$32,114
Employment (age 18-64 only):						
Women--						
Civilian population age 18-64	13,423	n.a.	n.a.	44,287	n.a.	n.a.
With a work limiting disability	1,217	9.1	9.5	3,135	7.1	7.5
Worked last year	9,749	72.6	62.8	34,147	77.1	67.6
Full time full year workers	4,464	45.8	40.8	17,302	50.7	45.1
Civilian labor force	8,933	66.5	56.1	31,759	71.7	61.8
Unemployed in the previous week	518	5.8	6.5	1,326	4.2	5.0
Men--						
Civilian population age 18-64	13,080	n.a.	n.a.	42,559	n.a.	n.a.
With a work limiting disability	1,500	11.5	11.7	3,520	8.3	8.8
Worked last year	11,679	89.3	90.3	39,173	92.0	92.1
Full time full year workers	7,900	67.6	67.4	27,728	70.8	69.4
Civilian labor force	11,227	85.8	86.9	37,952	89.2	89.4
Unemployed in the previous week	648	5.8	6.4	1,725	4.5	5.1

Note: Income items converted to 1989 dollars using the implicit price deflator for personal consumption expenditures. n.a.=not applicable.
Source: Compiled by ERS using the Public Use Microdata Samples, 1980 and 1990 Censuses.

Appendix table 3--Socioeconomic indicators for the Black population

Item	Nonmetro			Metro		
	1990	1990	1980	1990	1990	1980
	Thousands	--------*Percent*--------		*Thousands*	--------*Percent*--------	
Age:						
Total--	4,420	100.0	100.0	24,101	100.0	100.0
Under age 18	1,557	35.2	39.2	7,878	32.7	36.6
Age 18-34	1,160	26.2	26.3	7,006	29.1	29.7
Age 35-64	1,223	27.7	23.9	7,331	30.4	26.7
Age 65 and over	480	10.9	10.5	1,886	7.8	7.0
Education completed:						
Women--						
Total (age 18-64)	1,315	100.0	100.0	7,906	100.0	100.0
Less than high school diploma	523	39.8	51.4	2,168	27.4	36.4
High school diploma	710	54.0	42.7	4,751	60.1	55.3
Bachelor's degree or more	81	6.2	5.9	987	12.5	8.3
Age 18-34	639	100.0	100.0	3,848	100.0	100.0
Less than high school diploma	189	29.6	34.3	899	23.4	25.9
High school diploma	417	65.2	59.9	2,524	65.6	65.4
Bachelor's degree or more	33	5.1	5.8	424	11.0	8.7
Age 35-64	676	100.0	100.0	4,058	100.0	100.0
Less than high school diploma	334	49.4	69.3	1,269	31.3	48.0
High school diploma	293	43.4	24.8	2,226	54.9	44.0
Bachelor's degree or more	48	7.1	6.0	563	13.9	8.0
Men--						
Total (age 18-64)	1,068	100.0	100.0	6,431	100.0	100.0
Less than high school diploma	486	45.5	56.2	1,964	30.5	39.1
High school diploma	532	49.8	39.1	3,718	57.8	52.3
Bachelor's degree or more	50	4.7	4.6	750	11.7	8.6
Age 18-34	521	100.0	100.0	3,158	100.0	100.0
Less than high school diploma	194	37.2	42.6	878	27.8	29.4
High school diploma	310	59.6	52.8	1,987	62.9	62.1
Bachelor's degree or more	17	3.2	4.7	293	9.3	8.5
Age 35-64	547	100.0	100.0	3,273	100.0	100.0
Less than high school diploma	293	53.5	72.2	1,085	33.2	49.9
High school diploma	222	40.5	23.2	1,731	52.9	41.4
Bachelor's degree or more	33	6.0	4.6	456	13.9	8.7

See notes at end of table.

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Appendix table 3--Socioeconomic indicators for the Black population, continued

Item	Nonmetro			Metro		
	1990	1990	1980	1990	1990	1980
	Thousands	*Percent*		*Thousands*	*Percent*	
Family and household structure:						
Persons by household type--						
In family households	3,979	90.0	92.1	21,130	87.7	88.9
In extended family households	719	18.1	11.8	3,325	15.7	8.6
In nonfamily households	441	10.0	7.9	2,971	12.3	11.1
Related children--						
In two-parent family households	715	46.7	59.4	3,290	42.7	50.1
In single-parent family households	816	53.3	40.6	4,422	57.3	49.9
In extended family households	220	14.3	7.2	970	12.6	5.4
		Number of persons			*Number of persons*	
Average household size	n.a.	3.0	3.4	n.a.	2.9	3.0
Poverty and income:						
All persons	1,762	40.1	38.6	65,893	27.5	27.7
By age--						
Under age 18	765	49.8	45.5	2,954	38.1	36.0
Age 18-64	782	32.8	49.2	3,114	21.7	21.9
Age 65 and older	214	44.6	31.1	521	27.6	30.6
By household type--						
In family households	1,536	38.7	37.1	5,654	26.9	26.8
In extended families	336	46.8	39.4	936	28.2	29.3
In married-couple families	471	22.2	26.7	1,146	10.8	13.0
In single-parent families	1,065	57.7	55.4	4,509	43.1	45.3
In nonfamily households	226	52.2	56.0	935	31.9	34.7
		1989 dollars			*1989 dollars*	
Median household income	n.a.	$12,927	$13,603	n.a.	$20,864	$19,444
Employment (age 18-64 only):						
Women--						
Civilian population age 18-64	1,310	n.a.	n.a.	7,876	n.a.	n.a.
With a work-limiting disability	177	13.5	14.3	855	10.9	12.0
Worked last year	865	66.0	61.2	5,605	71.2	64.7
Full-time full-year workers	398	46.0	37.8	2,977	53.1	46.9
Civilian labor force	859	65.6	59.0	5,539	70.3	63.5
Unemployed in the previous week	117	13.6	12.0	625	11.3	10.7
Men--						
Civilian population age 18-64	1,047	n.a.	n.a.	6,309	n.a.	n.a.
With a work-limiting disability	157	15.0	14.3	727	11.5	11.9
Worked last year	811	77.4	78.5	4,995	79.2	79.2
Full-time full-year workers	464	57.2	54.8	2,985	59.8	57.7
Civilian labor force	813	77.6	77.2	5,064	80.3	79.6
Unemployed in the previous week	105	12.9	10.1	666	13.2	12.2

Note: Income items converted to 1989 dollars using the implicit price deflator for personal consumption expenditures. n.a.=not applicable.
Source: Compiled by ERS using the Public Use Microdata Samples, 1980 and 1990 Censuses.

Appendix table 4--Socioeconomic indicators for the Hispanic population

Item	Nonmetro			Metro		
	1990	1990	1980	1990	1990	1980
	Thousands	*Percent*		*Thousands*	*Percent*	
Age:						
Total--	1,989	100.0	100.0	19,385	100.0	100.0
Under age 18	788	39.6	43.3	6,810	35.1	39.5
Age 18-34	582	29.3	28.2	6,490	33.5	31.9
Age 35-64	506	25.4	22.7	5,166	26.6	24.2
Age 65 and over	112	5.7	5.8	920	4.7	4.4
Education completed:						
Women--						
Total (age 18-64)	537	100.0	100.0	5,777	100.0	100.0
Less than high school diploma	253	47.2	55.1	2,638	45.7	51.4
High school diploma	253	47.1	41.5	2,672	46.3	43.0
Bachelor's degree or more	31	5.7	3.4	468	8.1	5.7
Age 18-34	286	100.0	100.0	3,105	100.0	100.0
Less than high school diploma	114	40.0	44.5	1,272	41.0	43.1
High school diploma	157	54.8	51.9	1,588	51.1	51.1
Bachelor's degree or more	15	5.2	3.6	245	7.9	5.8
Age 35-64	252	100.0	100.0	2,673	100.0	100.0
Less than high school diploma	139	55.3	67.6	1,366	51.1	62.0
High school diploma	97	38.5	29.3	1,084	40.6	32.6
Bachelor's degree or more	16	6.3	3.1	223	8.3	5.5
Men--						
Total (age 18-64)	551	100.0	100.0	5,878	100.0	100.0
Less than high school diploma	283	51.3	55.6	2,860	48.7	50.5
High school diploma	236	42.8	38.6	2,481	42.2	41.3
Bachelor's degree or more	32	5.8	5.8	537	9.1	8.2
Age 18-34	297	100.0	100.0	3,385	100.0	100.0
Less than high school diploma	144	48.6	46.8	1,593	47.1	45.0
High school diploma	143	48.0	47.5	1,552	45.8	47.6
Bachelor's degree or more	10	3.4	5.7	240	7.1	7.4
Age 35-64	254	100.0	100.0	2,493	100.0	100.0
Less than high school diploma	139	54.6	67.4	1,267	50.8	58.0
High school diploma	93	36.7	26.7	929	37.2	32.7
Bachelor's degree or more	22	8.7	5.9	298	11.9	9.3

See notes at end of table.

--Continued

Appendix table 4--Socioeconomic indicators for the Hispanic population, continued

Item	Nonmetro			Metro		
	1990	1990	1980	1990	1990	1980
	Thousands	*Percent*		*Thousands*	*Percent*	
Family and household structure:						
Persons by household type--						
In family households	1,859	93.5	94.0	17,964	92.7	93.1
In extended family households	182	9.8	5.5	2,392	13.3	6.1
In nonfamily households	130	6.5	6.0	1,421	7.3	6.9
Related children--						
In two-parent family households	588	76.3	83.0	4,617	69.6	75.4
In single-parent family households	183	23.7	17.0	2,015	30.4	24.6
In extended family households	46	6.0	2.9	532	8.0	3.0
	Number of persons			*Number of persons*		
Average household size	n.a.	3.6	3.7	n.a.	3.6	3.6
Poverty and income:						
All persons	634	32.1	27.2	46,449	24.1	22.8
By age--						
Under age 18	297	38.3	31.8	2,080	31.1	28.9
Age 18-64	298	27.4	22.2	2,364	20.3	18.4
Age 65 and older	38	34.0	37.5	201	21.8	22.9
By household type--						
In family households	582	31.4	26.3	4,242	23.7	22.2
In extended families	58	31.7	30.1	567	23.8	20.7
In married-couple families	377	26.0	22.3	2,167	17.0	15.6
In single-parent families	205	47.4	50.6	2,075	40.4	45.2
In nonfamily households	52	41.1	42.3	403	29.1	30.5
	1989 dollars			*1989 dollars*		
Median household income	n.a.	$18,000	$19,812	n.a.	$25,000	$23,490
Employment (age 18-64 only):						
Women--						
Civilian population age 18-64	537	n.a.	n.a.	5,770	n.a.	n.a.
With a work-limiting disability	41	7.7	8.5	402	7.0	7.6
Worked last year	332	61.8	55.7	3,692	64.0	58.7
Full-time full-year workers	120	36.3	33.7	1,666	45.1	41.3
Civilian labor force	306	57.1	48.8	3,620	62.7	55.6
Unemployed in the previous week	40	12.9	11.4	391	10.8	9.0
Men--						
Civilian population age 18-64	544	n.a.	n.a.	5,829	n.a.	n.a.
With a work-limiting disability	55	10.1	9.4	403	6.9	7.3
Worked last year	470	86.4	87.9	5,024	86.2	86.9
Full-time full-year workers	253	53.8	58.5	2,847	56.7	58.8
Civilian labor force	464	85.4	85.5	5,116	87.8	87.5
Unemployed in the previous week	51	11.0	8.1	460	9.0	8.0

Note: Income items converted to 1989 dollars using the implicit price deflator for personal consumption expenditures. n.a.=not applicable.
Source: Compiled by ERS using the Public Use Microdata Samples, 1980 and 1990 Censuses.

Appendix table 5--Socioeconomic indicators for the Native American population

Item	Nonmetro			Metro		
	1990	1990	1980	1990	1990	1980
	Thousands	--------*Percent*--------		*Thousands*	--------*Percent*--------	
Age:						
Total--	947	100.0	100.0	1,015	100.0	100.0
Under age 18	372	39.3	43.5	316	31.1	35.5
Age 18-34	256	27.0	28.8	317	31.2	33.4
Age 35-64	261	27.5	21.8	325	32.0	26.3
Age 65 and over	58	6.2	5.9	58	5.7	4.8
Education completed:						
Women--						
Total (age 18-64)	347	100.0	100.0	342	100.0	100.0
Less than high school diploma	122	35.0	48.1	97	28.3	37.4
High school diploma	208	60.0	47.6	217	63.5	56.5
Bachelor's degree or more	18	5.0	4.2	28	8.2	6.2
Age 18-34	174	100.0	100.0	165	100.0	100.0
Less than high school diploma	54	31.2	38.0	47	28.2	31.0
High school diploma	113	65.2	58.3	108	65.5	63.3
Bachelor's degree or more	6	3.6	3.8	10	6.3	5.8
Age 35-64	173	100.0	100.0	177	100.0	100.0
Less than high school diploma	67	38.8	61.7	50	28.4	45.1
High school diploma	95	54.8	33.5	109	61.6	48.3
Bachelor's degree or more	11	6.5	4.9	18	10.0	6.6
Men--						
Total (age 18-64)	321	100.0	100.0	300	100.0	100.0
Less than high school diploma	119	37.2	46.7	80	26.7	36.0
High school diploma	185	57.6	48.6	183	60.9	52.5
Bachelor's degree or more	17	5.2	4.7	37	12.4	11.4
Age 18-34	158	100.0	100.0	152	100.0	100.0
Less than high school diploma	56	35.2	37.5	42	27.7	31.6
High school diploma	98	62.0	59.1	98	64.6	59.1
Bachelor's degree or more	4	2.8	3.4	12	7.7	9.3
Age 35-64	162	100.0	100.0	148	100.0	100.0
Less than high school diploma	64	39.2	58.6	38	25.7	42.0
High school diploma	86	53.2	35.0	85	57.1	43.8
Bachelor's degree or more	12	7.6	6.4	26	17.2	14.3

See notes at end of table.

--Continued

Appendix table 5--Socioeconomic indicators for the Native American population, continued

Item	Nonmetro			Metro		
	1990	1990	1980	1990	1990	1980
	Thousands	*--------Percent--------*		*Thousands*	*--------Percent--------*	
Family and household structure:						
Persons by household type--						
In family households	874	92.3	93.7	876	86.2	88.4
In extended family households	126	14.5	8.9	81	9.2	5.5
In nonfamily households	73	7.7	6.3	140	13.8	11.6
Related children--						
In two-parent family households	234	64.4	72.7	190	62.5	70.7
In single-parent family households	129	35.6	27.3	114	37.5	29.3
In extended family households	36	9.8	5.2	21	7.1	3.0
	---------Number of persons---------			*---------Number of persons---------*		
Average household size	n.a.	3.4	3.8	n.a.	3.0	3.1
Poverty and income:						
All persons	355	37.7	33.9	2,414	24.0	22.0
By age--						
Under age 18	159	43.4	38.2	102	33.3	28.0
Age 18-64	175	33.8	29.7	126	19.7	18.3
Age 65 and older	21	36.7	39.7	13	22.0	24.7
By household type--						
In family households	323	37.1	33.3	198	22.8	20.8
In extended families	61	48.1	38.2	19	24.0	34.7
In married-couple families	161	27.9	27.5	78	13.3	13.2
In single-parent families	162	55.5	49.6	120	42.3	43.6
In nonfamily households	32	45.0	44.1	43	31.7	31.1
	----------1989 dollars----------			*----------1989 dollars----------*		
Median household income	n.a.	$15,800	$18,046	n.a.	$23,000	$22,616
Employment (age 18-64 only):						
Women--						
Civilian population age 18-64	270	n.a.	n.a.	342	n.a.	n.a.
With a work-limiting disability	36	13.2	11.2	48	14.0	14.6
Worked last year	165	61.1	57.4	246	71.9	63.0
Full-time full-year workers	63	38.0	36.9	114	46.5	39.2
Civilian labor force	154	56.8	49.3	226	66.0	56.6
Unemployed in the previous week	24	15.4	12.4	26	11.3	10.2
Men--						
Civilian population age 18-64	245	n.a.	n.a.	295	n.a.	n.a.
With a work-limiting disability	42	17.2	14.2	45	15.3	15.1
Worked last year	186	75.8	78.5	250	84.7	87.6
Full-time full-year workers	86	46.1	48.6	142	56.8	56.7
Civilian labor force	179	73.3	72.5	243	82.3	84.3
Unemployed in the previous week	38	21.1	16.7	26	10.7	10.9

Note: Income items converted to 1989 dollars using the implicit price deflator for personal consumption expenditures. n.a.=not applicable.
Source: Compiled by ERS using the Public Use Microdata Samples, 1980 and 1990 Censuses.

Appendix table 6--Socioeconomic indicators for the Asian population

Item	Nonmetro			Metro		
	1990	1990	1980	1990	1990	1980
	Thousands	--------*Percent*--------		*Thousands*	--------*Percent*--------	
Age:						
Total--	431	100.0	100.0	6,616	100.0	100.0
Under age 18	140	32.4	34.5	1,924	29.1	31.2
Age 18-34	124	28.8	28.9	2,009	30.4	32.9
Age 35-64	137	31.9	29.3	2,294	34.7	30.2
Age 65 and over	30	6.9	7.3	389	5.9	5.8
Education completed:						
Women--						
Total (age 18-64)	140	100.0	100.0	2,236	100.0	100.0
Less than high school diploma	35	24.7	31.0	496	22.2	23.1
High school diploma	76	54.5	52.0	1,022	45.7	49.8
Bachelor's degree or more	29	20.9	17.0	718	32.1	27.1
Age 18-34	62	100.0	100.0	1,011	100.0	100.0
Less than high school diploma	12	18.5	24.6	176	17.4	17.2
High school diploma	38	61.0	54.2	510	50.4	53.5
Bachelor's degree or more	13	20.5	21.2	325	32.2	29.3
Age 35-64	78	100.0	100.0	1,225	100.0	100.0
Less than high school diploma	23	29.5	37.4	319	26.1	29.5
High school diploma	38	49.3	49.9	512	41.8	45.9
Bachelor's degree or more	17	21.2	12.7	393	32.1	24.6
Men--						
Total (age 18-64)	122	100.0	100.0	2,067	100.0	100.0
Less than high school diploma	21	17.2	25.9	344	16.6	17.0
High school diploma	62	51.2	48.2	914	44.2	44.9
Bachelor's degree or more	39	31.6	25.8	809	39.1	38.1
Age 18-34	62	100.0	100.0	998	100.0	100.0
Less than high school diploma	9	15.1	18.0	167	16.7	14.2
High school diploma	35	56.1	60.1	506	50.7	52.2
Bachelor's degree or more	18	28.8	22.0	325	32.6	33.6
Age 35-64	59	100.0	100.0	1,069	100.0	100.0
Less than high school diploma	12	19.4	33.7	177	16.5	20.0
High school diploma	27	46.1	36.8	408	38.2	37.0
Bachelor's degree or more	21	34.5	29.6	484	45.3	43.0

See notes at end of table.

--Continued

Appendix table 6--Socioeconomic indicators for the Asian population, continued

Item	Nonmetro			Metro		
	1990	1990	1980	1990	1990	1980
	Thousands	*--------Percent--------*		*Thousands*	*--------Percent--------*	
Family and household structure:						
Persons by household type--						
In family households	385	89.3	91.4	6,017	91.0	91.3
In extended family households	43	11.1	6.5	665	11.0	6.8
In nonfamily households	46	10.7	8.6	599	9.0	8.7
Related children--						
In two-parent family households	114	83.0	86.4	1,623	85.8	88.9
In single-parent family households	23	17.0	13.6	269	14.2	11.1
In extended family households	9	6.6	2.7	98	5.2	2.5
	---------Number of persons---------			*---------Number of persons---------*		
Average household size	n.a.	3.5	3.7	n.a.	3.5	3.4
Poverty and income:						
All persons	76	17.8	16.0	9,424	14.3	12.5
By age--						
Under age 18	24	17.5	18.4	334	17.6	14.7
Age 18-64	46	17.7	14.4	560	13.0	11.4
Age 65 and older	3	10.8	17.1	48	12.4	14.0
By household type--						
In family households	54	14.1	13.9	771	12.8	11.1
In extended families	2	5.2	9.5	55	8.3	6.9
In married-couple families	34	10.5	11.3	527	10.4	9.2
In single-parent families	20	33.8	31.1	244	25.7	24.6
In nonfamily households	19	42.8	38.3	171	28.9	27.7
	----------1989 dollars----------			*----------1989 dollars----------*		
Median household income	n.a.	$26,000	$26,489	n.a.	$37,000	$34,006
Employment (age 18-64 only):						
Women--						
Civilian population age 18-64	140	n.a.	n.a.	2,233	n.a.	n.a.
With a work-limiting disability	7	5.3	5.0	101	4.5	3.8
Worked last year	92	65.9	61.0	1,558	69.8	67.7
Full-time full-year workers	42	45.7	45.0	796	51.1	45.7
Civilian labor force	87	62.3	59.8	1,498	67.1	64.7
Unemployed in the previous week	6	6.3	8.4	78	5.2	4.7
Men--						
Civilian population age 18-64	120	n.a.	n.a.	2,045	n.a.	n.a.
With a work-limiting disability	6	4.8	3.6	83	4.1	3.9
Worked last year	103	85.6	87.6	1,749	85.5	86.9
Full-time full-year workers	62	60.2	63.0	1,076	61.5	61.7
Civilian labor force	99	83.0	84.9	1,720	84.1	85.4
Unemployed in the previous week	3	3.3	4.0	79	4.6	3.9

Note: Income items converted to 1989 dollars using the implicit price deflator for personal consumption expenditures. n.a.=not applicable.
Source: Compiled by ERS using the Public Use Microdata Samples, 1980 and 1990 Censuses.

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