Income Inequality in America

Nonmetro Income Levels Lower Than Metro, But Income Inequality Did Not Increase as Fast

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ncome inequality has been increasing in the United States since the 1970s (Ryscavage). But how have nonmetro areas compared to central cities and suburbs, and is income inequality across race and ethnic groups increasing or abating? Median household income provides a point estimate of differences in the level of income between groups, while income inequality measures the distribution of income among households within a group. Both are used here to examine income inequality by race and residence from 1979 to 1999

From 1979 to 1989, nonmetro median household income declined, both in comparison with central city and suburban areas and in real (inflation-adjusted) dollars. Despite improved prospects across the board in 1989-99, nonmetro median household income lagged that of central city and suburban households. The gap in inflation-adjusted median household income between central city and nonmetro areas increased from \$11 in 1979 to

Diane K. McLaughlin is an assistant professor of rural sociology and demography at Pennsylvania State University. The gap in median household income increased between metro and nonmetro households between 1979 and 1999. At the same time, inequality in metro household income distributions increased faster than among nonmetro households, resulting in nonmetro income inequality essentially identical to that in suburban areas and lower than in central cities. The continuing disparity in income levels by race/ethnicity and residence may reflect the local and race/ethnic-specific consequences of industrial restructuring, globalization, and changing household structures.

\$3,124 in 1999, while the difference between suburban and nonmetro incomes rose from \$13,771 to \$15.984.

Nonmetro areas experienced a 7.3-percent increase in income inequality from 1979 to 1999 (from a Gini coefficient of .398 to .427), but this increase was not as large as in central cities (12.3 percent, from .415 to .466) and suburban areas (18.2 percent from .362 to .428) (see "Assessing Income Levels and Income Inequality," p. 18, for an explanation of Gini coefficients). By 1999, nonmetro areas had the lowest income inequality overall (just slightly lower than that in suburban areas), and the lowest household income inequality among Whites and Hispanics (.418 and .406, respectively). Nonmetro Blacks (.465) had the highest household income inequality when compared with central city and suburban Blacks (.463 and .447) in 1999.

Unless we understand the factors influencing changes in the dis-

tribution of household incomes across local areas and across race and ethnic groups, we lack the information necessary to respond to the relative decline in economic well-being of nonmetro households and to develop policy to improve nonmetro conditions. In all residence areas, it is essential to identify the forces associated with increasing income inequality and to devise strategies to halt these disparities and to raise household income levels, especially among those at the bottom of the income distribution.

Explanations for Increasing Income Inequality

Increasing income inequality has been attributed to several factors. First, industrial restructuring—from a goods-production to a services-based economy—has occurred as demand within the United States has shifted and as global forces have increased their influence on U.S. markets. While



Figure 1

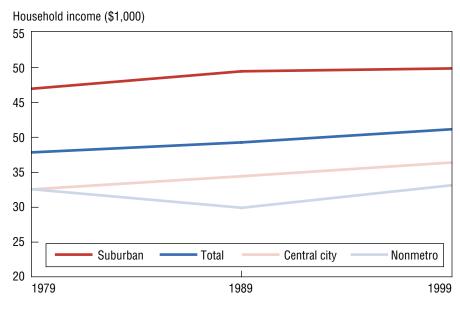
Median household income by residence, 1979-99

Nonmetro median income has continued to lag

many service sector jobs are associated with lower wages and parttime work, the service sector has more variation in wages and quality of work than the manufacturing sector. In addition, the decline of unions and introduction of increased technology and computerized production have lowered employment and wages in the manufacturing sector and eliminated jobs held by older workers who were often well paid but less educated. The increased demand for college-educated workers to fill higher level service sector jobs and to work in highly automated production facilities has increased the earnings gap between less and more educated workers.

In nonmetro areas, these changes surfaced as economic growth, especially in the South, when manufacturing plants shifted routine production to rural areas in search of cheaper labor and land. At the same time, globalization of the markets for coal, timber, and agricultural products caused fluctuations in prices, while technological change in these industries reduced the demand for labor and reduced employment in local economies reliant on extractive industries. Some manufacturers further responded to globalization by seeking even cheaper labor and land and fewer environmental restrictions overseas. While manufacturing remains more important as an employer in nonmetro than metro areas, manufacturing employment in nonmetro areas had declined from roughly six million in 1979 to just under five million by 1996 (Roth).

Nonmetro areas have had greater difficulty attracting the higher paying service sector jobs in business services and finance, insurance, and real estate found in



Source: Author's calculation from the 1980, 1990, and 2000 Current Population Surveys.

central city and suburban areas. Hence, rural economies have gained a larger share of jobs in lower-paid portions of the services sector—personal services and retail trade. Industrial restructuring has thus affected nonmetro areas differently than either the suburbs or central cities (Galston and Baehler).

Changing household structures and women's participation in the paid labor force also contributed to income inequality. The increase in female-headed households, which tend to have lower incomes, is one example. Women's labor force participation increase in the 1970s was initially believed to lower household income inequality. Women entering the labor force tended to be spouses of men with working and middle-class jobs, while those married to upper-class men tended to stay out of the labor force. But in recent decades, women's labor force participation has transcended partner's economic status. As a result, households with two highly educated career earners will have very high incomes, further outpacing the incomes of households with two less-educated workers. Additionally, the income gap between households with a single earner (whether the household has one or two adults) and households with two earners has increased.

These changes have occurred more slowly in nonmetro areaswhere female-headed households remain a smaller share of all households-than in metro areas generally and central cities in particular. Nonmetro women also have slightly lower labor force participation than metro women. The lower educational attainment of both nonmetro men and women suggests that they are likely to hold lower paid positions if both husband and wife are employed, and the differences in household income may not be as great across household types in nonmetro areas. Combined with the lower skill employment mix in nonmetro areas, earnings are lower than in metro areas.

Racial and ethnic groups were affected differently by these changes. Blacks, in contrast to



Table 1

Median household income and Gini coefficient by residence and region

Substantial variation exists across residence

	Media	n household	Gini coefficient			
	1979	1989	1999	1979	1989	1999
Total	37,405	38,745	40,551	.393	.418	.445
Central city	32,365	34,126	36,000	.415	.440	.466
Suburban metro	46,125	48,502	48,860	.362	.387	.428
Nonmetro	32,354	29,827	32,876	.398	.412	.427
Non-South	39,240	40,832	42,500	.388	.411	.443
Central city	32,129	34,529	36,199	.416	.440	.466
Suburban	47,857	50,391	50,308	.358	.382	.428
Nonmetro	34,975	32,453	35,983	.387	.396	.415
South	34.343	34.505	37.415	.402	.429	.447
Central city	33.228	33.324	35.000	.413	.440	.466
Suburban	41.769	43.531	45.600	.373	.398	.427
Nonmetro	30,057	26,123	29,303	.406	.429	.441

Note: Median household income is adjusted for inflation to 1999 dollars; higher Gini coefficient indicates greater inequality.

Source: Author's calculations from the 1980, 1990, and 2000 March Current Population Surveys.

Whites, have held the poorer quality positions in both the service and manufacturing sectors, and so may have been affected differently by industrial restructuring. Blacks have a larger share of female-headed households and higher labor force participation by women, but greater unemployment and underemployment of men. Hispanic workers also tend to hold more marginal employment regardless of sector, but with more traditional family structures than Whites or Blacks, Hispanic women have the lowest labor force participation

Finally, local variations in all of these patterns—the effects of industrial restructuring, changing household structure, and labor supply of men and women—make for varying income inequality across geographic areas. The singularity of metro and nonmetro economic growth in the South over 1979 to 1999 provides one reason to examine the South separately from the rest of the United States (Lyson).

The predominance of nonmetro Blacks in the South (just over 90 percent of nonmetro Blacks lived in the South in 2000) makes studying the South particularly salient when comparing racial variation in changes in income levels and income inequality.

Changes in Median Household Income by Residence

Median household income in nonmetro areas was lower than in metro areas at each juncture considered (1979, 1989, and 1999). Suburban metro areas had the highest income levels (fig. 1, table 1). Both central cities and suburban metro areas enjoyed increases in median household income in each decade, while nonmetro areas actually suffered a drop from 1979 to 1989 (from \$32,354 to \$29,827 in real dollars). Nonmetro income recovered to just above 1979 levels by 1999 (to \$32,876), but still trailed the U.S. average by almost \$8,000. Overall, nonmetro areas lost ground to both central city and

suburban households over the last two decades. The gap in inflation-adjusted median household incomes for central city and non-metro areas was \$11 in 1979 and \$3,124 by 1999 (table 1). The gap between suburban and nonmetro areas approached \$16,000 in 1999.

Median household income is consistently lower in the South than elsewhere (table 1), and its gains from 1979 to 1999 lag as well (\$3,072 versus \$3,260 in non-South households). By 1999, median household income was \$37,415 in the South and \$42,500 outside the South.

Median household income for each residence area in the South lagged incomes elsewhere, but especially in nonmetro areas. In 1999, Southern nonmetro median household income was \$29,303—\$6,680 less than in nonmetro areas outside the South. Central city incomes in the South and outside the South were more similar, with a difference of only \$1,199.

Race and Ethnic Comparisons of Median Household Income. The evolution of race/ethnic-specific median household incomes reveals how differently these groups were affected by changes from 1979 to 1999. White income increased by \$4,253 in that time, with most of the increase occurring from 1989 to 1999 (table 2). Black median household income also increased (in inflation-adjusted dollars) in each decade, rising from \$22,948 in 1979 to \$28,000 in 1999, a \$5,052 increase. Hispanics, on the other hand, suffered a decline in median household income from 1979 to 1989, and had not recovered to 1979 levels by 1999, losing \$1,290 over the 20-year period.

These national patterns are repeated in metro suburban areas, but not in nonmetro or central city



Figure 2 **Gini coefficients of household income inequality by residence**, **1979-99** *Nonmetro areas had slower increases in inequality*

Gini coefficient

0.5

0.45

0.4

0.35

Suburban Total Central city Nonmetro

0.3

1979

1989

1999

Source: Author's calculation from the 1980, 1990, and 2000 Current Population Surveys.

areas. In nonmetro areas, Whites saw a drop in median household income from 1979 to 1989 of \$2,754, but by 1999 recovered to

\$34,980, just over the 1979 level of \$34,421. Nonmetro Blacks, likewise, lost income from 1979 to 1989, but made a strong gain by 1999 (to

\$21,154). This gain still left incomes of nonmetro Blacks well below those of Whites and Hispanics (table 2).

In suburban areas, median household incomes were higher than in central city or nonmetro areas for each race/ethnic group in each year. In every year, for every race/ethnic group, households in nonmetro areas had the lowest median household incomes.

Changes in Household Income Inequality by Residence

Household income inequality increased in each decade in each residence area, with the highest levels in central cities and the lowest—except for 1999—in suburban areas (fig. 2, table 1). The increase in the Gini coefficient was greatest, however, in suburban metro areas and lowest in nonmetro areas. By 1999, income inequality was

Table 2

Median household incomes by race, residence, and region

Racial and ethnic variation over time and by residence reveals a nonmetro disadvantage

		1979			1989			1999		
	Non- Hispanic White	Non- Hispanic Black	Hispanic	Non- Hispanic White	Non- Hispanic Black	Hispanic	Non- Hispanic White	Non- Hispanic Black	Hispanic	
Total	40,067	22,948	31,530	41,642	24,140	29,262	44,320	28,000	30,240	
Central city	36,739	22,948	28,182	40,325	22,496	26,871	43,341	26,000	28,100	
Suburban	47,690	31,307	37,873	50,380	35,005	37,042	51,329	37,180	35,540	
Nonmetro	34,421	17,229	26,261	31,667	16,123	23,243	34,980	21,154	24,900	
Non-South Central city Suburban Nonmetro	41,388 35,982 48,651 35,560	25,070 23,122 32,127 22,489*	32,104 27,537 39,447 29,258	43,077 40,186 51,490 32,862	26,614 22,840 40,676 22,905*	31,137 28,215 38,096 25,662	45,550 43,000 52,150 36,439	28,400 25,000 38,000 27,707*	31,000 28,000 36,580 25,845	
South Central city Suburban Nonmetro	37,246 39,078 43,667 33,045	20,993 22,154 30,234 16,717	30,176 29,832 34,880 23,503	38,693 41,381 47,024 29,803	22,017 21,939 30,902 16,089	25,595 23,324 34,126 19,569	42,000 44,001 50,000 32,202	27,600 27,000 36,085 20,350	29,900 29,000 34,852 23,633	

*Estimates based on a very small number of households. View with caution. Source: Author's calculations from the 1980, 1990, and 2000 March Current Population Surveys.

Assessing Income Levels and Income Inequality

Income inequality is generally measured using one of a class of measures related to the Lorenz curve. The Lorenz curve plots the share of cumulative income held by the cumulative percentage of households, when the households are ranked from the poorest to the wealthiest. A diagonal line indicates perfect equality, with each percentage of households receiving that same percentage of income (e.g., 10 percent of households receive 10 percent of total household income). The Gini coefficient assesses how much the actual Lorenz curve differs from perfect equality by measuring the area between the curve and the diagonal line. Thus, a larger value indicates greater income inequality. A Gini coefficient can vary between 0 and 1, where 0 is perfect equality and 1 indicates all income is owned by one household. The Gini coefficient is particularly sensitive to changes in the middle of the income distribution.

The Gini coefficient was calculated using households as the unit of analysis. The data are weighted by a value assigned to each household by the Current Population Survey (CPS) to make the data representative of all U.S. households. The formula used to calculate the Gini coefficient is that described by Allison (1978) for continuous income. A change in the collection of CPS data in 1993 has increased the maximum for reported income. Because of this and other changes in data collection, part of the increase in income inequality between 1989 and 1999 (perhaps as much as half) may be due to change in methodology (Jones and Weinberg).

The Gini coefficient gives us one side of the inequality story, indicating inequality in household income within particular groups (e.g., nonmetro residents or Hispanics). But it does not capture how income levels differ across these groups. For example, a group with low income inequality may be considered to be better off than a group with high income inequality, but that would hold only if the levels of income were equivalent. A group may have very low income inequality only because everyone in the group has extremely low income.

To capture the level of household income and how it differs across race and residence groups, the median household income—the income of the household at the 50th percentile of households ranked by income level—is adjusted to 1999 dollars (using the CPI-U). Thus, it is possible to track whether the median household income for a group has increased or declined in real terms, the extent to which income inequality has changed, and the relative gains of race and residence groups.

Using household income rather than family income ensures that all people who are not institutionalized are included in the analysis. All income from any source contributed by every household member is counted in the household's income level, without assumptions about whether household members share incomes. For simplicity, no adjustments are made for household size, noncash benefits, or taxes. The median household income values reported here are within the standard errors reported in DeNavas and Cleveland, and the 1999 Gini coefficient matches that reported by CPS.

Three race/ethnic groups—non-Hispanic Whites, non-Hispanic Blacks, and Hispanics—and three residence groups (metro central city, metro suburban, and nonmetro) are represented in this analysis (those with residence not classified are not included). The March 1980, 1990, and 2000 Current Population Survey Annual Demographic Supplements (CPS) are used as they are the most current data on income. Because of the importance of the South as the residence of nonmetro Blacks, household income by race/ethnicity and residence for the South versus the rest of the country is included. Relatively few Blacks live in nonmetro areas outside the South. As a result, only 61 Black households from nonmetro areas outside the South were included in the CPS sample for 2000. Thus, the numbers reported here for this group of households need to be viewed with caution.

Because the CPS is a sample of households and geographic detail is limited due to confidentiality reasons and accuracy concerns for smaller geographic areas, the analysis examines only broad residence categories. An updated detailed analysis of income inequality across U.S. counties awaits the availability of the data from the 2000 U.S. Census of Population and Housing.

comparable in suburban and non-metro areas.

Nonmetro households in the South had greater income inequality in each year than did those outside the South, and the increase from 1979 to 1999 was greater in the South. As in the rest of the country, central city areas in the South had the highest income inequality, while suburban areas had the lowest. Unlike the country as a whole, nonmetro income inequality in the South remained higher than that in suburban areas in 1999.



Gini coefficient by race, residence, and region

Blacks have the highest income inequality across residence areas

		1979			1989			1999		
	Non- Hispanic White	Non- Hispanic Black	Hispanic	Non- Hispanic White	Non- Hispanic Black	Hispanic	Non- Hispanic White	Non- Hispanic Black	Hispanic	
Total	.383	.431	.389	.405	.460	.423	.434	.468	.437	
Central city	.401	.430	.400	.417	.465	.434	.450	.463	.438	
Suburban	.358	.400	.359	.381	.419	.390	.422	.447	.428	
Nonmetro	.388	.438	.405	.402	.446	.421	.418	.465	.406	
Non-South	.380	.426	.387	.401	.466	.415	.433	.483	.434	
Central city	.405	.431	.399	.420	.474	.429	.447	.474	.445	
Suburban	.354	.394	.354	.377	.413	.385	.425	.461	.409	
Nonmetro	.384	.438*	.403	.393	.424*	.415	.410	.520*	.433	
South	.388	.434	.393	.413	.447	.436	.435	.453	.442	
Central city	.392	.425	.399	.409	.447	.440	.456	.446	.418	
Suburban	.367	.406	.367	.390	.413	.403	.416	.433	.461	
Nonmetro	.391	.433	.399	.413	.445	.407	.431	.452	.373	

^{*}Estimates based on a very small number of households. View with caution Note: A higher coefficient indicates greater inequality in income.

Source: Author's calculations from the 1980, 1990, and 2000 March Current Population Surveys.

Race and Ethnic Comparisons of Household Income Inequality. The highest within-group levels of income inequality are experienced by Blacks, with Whites having the lowest and Hispanics in between (table 3). This racial/ethnic pattern holds in each year and in each residence area except in 1999. In that year, nonmetro and central city Hispanics had lower income inequality than Whites. Levels of income inequality within each group increased from 1979 to 1999. The largest increase in the Gini coefficient from 1979 to 1999 occurred among Whites, the smallest among Blacks.

In 1979, each race/ethnic group had higher income inequality in the South than in the rest of the United States. By 1989 and in 1999, income inequality among Blacks was lower in the South than among Blacks elsewhere, although the values for Blacks in nonmetro areas outside the South must be viewed with caution because of the small sample size in the CPS.

Among Southern Whites, income inequality is lowest in sub-

urban areas, but increases steadily from 1979 to 1999. The pattern is not as straightforward for central cities and nonmetro areas. In 1979, central city and nonmetro Southern Whites had essentially equal levels of income inequality. By 1989, inequality was slightly higher in nonmetro than central city areas, but by 1999 Whites in central cities (in the South) had higher income inequality than nonmetro Whites.

In both 1979 and 1989, Southern Blacks had the highest levels of income inequality in each residence area. As with Whites, Blacks in the South experienced shifts in the relative ranking of income inequality across residence areas for the three decades examined. In 1979, Southern nonmetro Blacks had the highest income inequality compared with other Southern Blacks. By 1989, central city Blacks' income inequality crept slightly higher than nonmetro Blacks' before reverting in 1999. These shifting patterns of income inequality may reflect the economic growth in the nonmetro South during the 1980s that provided

employment for minorities, which was then followed by the movement of manufacturing to overseas locations in the 1990s and the loss of lower paid jobs.

The decline in income inequality for nonmetro Hispanics is driven by the decline in inequality among Southern nonmetro Hispanics from 1989 to 1999. Suburban Hispanics in the South had lower income inequality than did Southern Hispanics in other residence areas, except in 1999 when Hispanics living in Southern suburban areas had the highest levels of income inequality. Income inequality declined for Hispanics in central city and nonmetro areas of the South from 1989 to 1999.

The relatively high income inequality within race and ethnic groups indicates that the levels of overall inequality are not due solely to the differences in income levels between race/ethnic groups (e.g., higher White and low Black or Hispanic incomes). Within-race/ethnic-group inequality also contributes to income inequality overall.



Income Inequality: What Does It Mean?

Our society is conflicted about what increasing income inequality means. Some argue that extreme income inequality will ultimately yield a nation of haves and havenots, with increased conflict between the two groups. Others argue that as long as everyone's income levels are increasing in real terms, the increase in income inequality is not a problem. They suggest that people are not as concerned about their economic status relative to others as by improvement in their own economic wellbeing. These two divergent perspectives suggest that what is important to know is whether real incomes are increasing at the same time that income inequality rises.

This has not been the case for nonmetro households. Nonmetro households experienced a decline in real income by 1989 and then a return to 1979 levels of median household incomes in 1999. At the same time, they faced an increasing gap in real income with city and suburban households. This occurred even during the prosperous 1990s. At the same time, income inequality within groups increased. The growing gap between nonmetro households and those in other areas, along with variations by race and ethnicity across residence, suggest that the extent and nature of industrial restructuring, changing household structure, and labor supply influence income levels and income inequality differently across geographic areas and across race and ethnic groups.

These factors affecting income distributions—industrial restructuring, changing household structure, and women's labor force participation—merit study. In addition, the immigration of less educated Hispanics and internal migration of minority groups from central cities to suburban and nonmetro areas may also contribute to observed changes in the distribution of income.

Clearly, the shift toward increasing income inequality occurred during both the economic malaise of the 1980s and the boom years of the mid- to late 1990s. This suggests two things. First, if industrial restructuring affects income

inequality, its influence is toward increasing inequality regardless of economic growth and type of residence. But, the mechanisms by which this occurs are likely to vary across areas with different industrial composition. Second, the variation in shifts in metro and nonmetro areas indicates the importance of recognizing that national patterns of economic and social change are experienced differently in local areas. As more geographically refined analyses of data from 1980 and 1990 have shown, variation extends below the metro and nonmetro classification to smaller geographic units, such as counties or labor markets. RA

For Further Reading . . .

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