Household Income Inequality Within U.S. Counties: 2006–2010

American Community Survey Briefs

Issued February 2012

ACSBR/10-18

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Since 1967, U.S. household income inequality has grown 18 percent. Nearly half of that growth occurred during the 1980s. More recently, the growth in income inequality has tapered off.[1] Levels of inequality vary across the country. This report presents measures of household income inequality for counties in the United States, based on data pooled from 5 years (2006 to 2010) of American Community Survey (ACS) data.[2]

The ACS surveys households in each month from January to December. It asks about income received during the previous 12 months. Each year's survey covers 23 months, from January of the previous year to November of the survey year. In total, the 5-year ACS used in this report covers the 71-month period from January 2005 through November 2010. Pooling data allows more accurate measurement of inequality in less populous counties.

Figure 1 illustrates each county's level of income inequality, as measured by the Gini index. The 5-year 2006–2010 Gini index for the United States as a whole was 0.467. County-level Gini indexes ranged from 0.645 to 0.207.

The South had a disproportionately large number of counties with high income inequality, while counties in the Midwest had lower levels of income inequality.[3] Specifically, 32 percent of the 1,423 counties in the South had Gini indexes ranking among the top fifth of all 3,143 U.S. counties. By contrast, 31 percent of the 1,055 counties in the Midwest had Gini indexes in the *bottom* fifth (Table 1).

Table 2 shows that the more unequal counties were also more populous. Thirty-four percent of Americans lived

Household income: Includes pre-tax money income of the householder and all other people 15 years and older in the household, whether or not they are related to the householder.

Gini index: Summary measure of income inequality. The Gini index varies between zero and one. A value of one indicates perfect inequality where only one household has any income. A value of zero indicates perfect equality, where all households have equal income.

[1] DeNavas-Walt, Carmen, Bernadette D. Proctor, and Jessica C. Smith. 2011. "Income, Poverty, and Health Insurance Coverage in the United States: 2010." Table A-3: Selected Measures of Household Income Dispersion, 1967 to 2010.

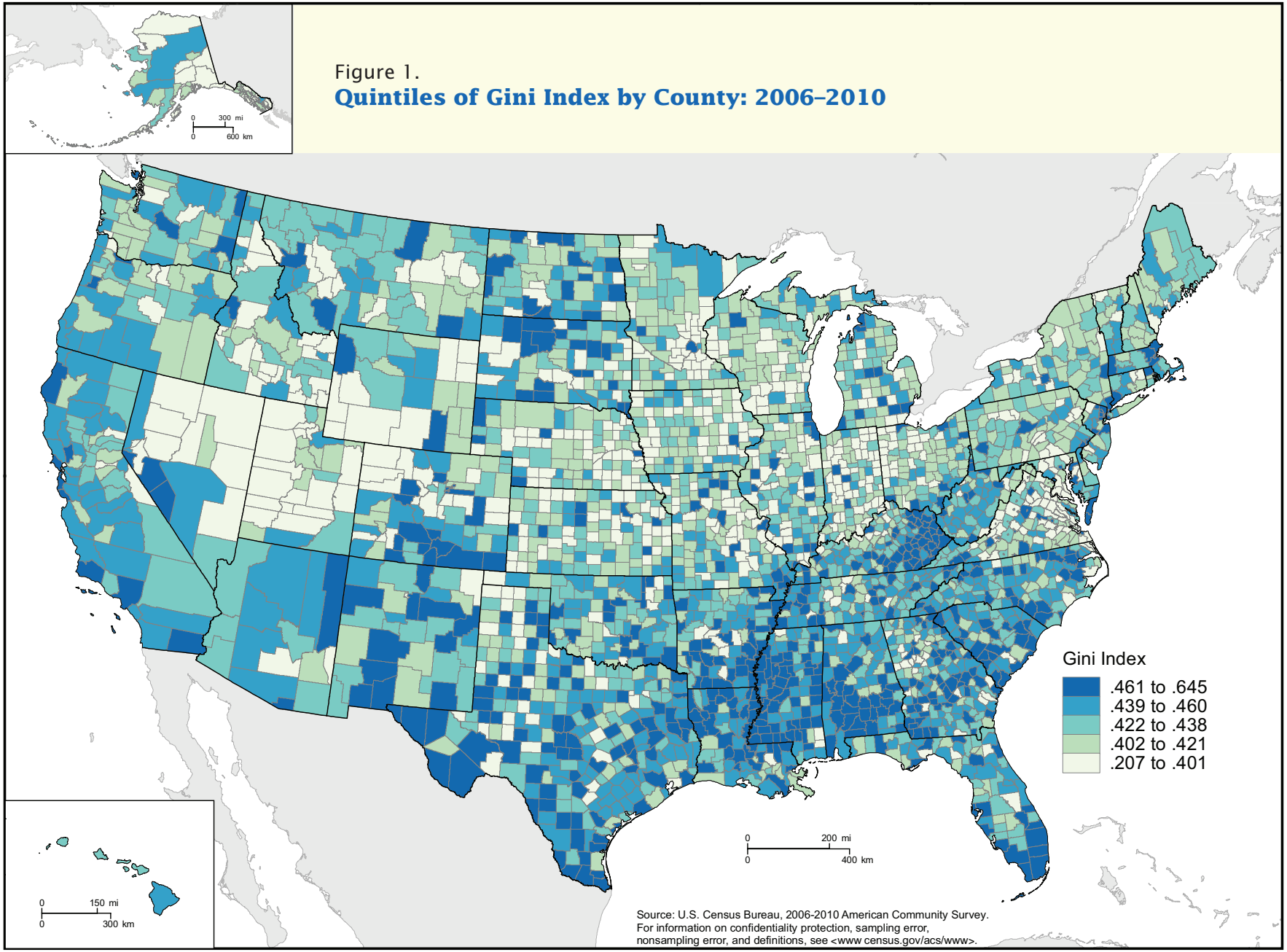
[2] In this report, the term "county" is used to refer to counties and statistically equivalent entities. This includes parishes, boroughs, municipalities, census areas, independent cities, the District of Columbia, and historical counties. For details see <www.census.gov/geo/www/2010census/GTC_10.pdf> and <www.itl.nist.gov/fipspubs/fip6-4.htm>.

[3] The South region includes Alabama, Arkansas, Delaware, the District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. The Midwest consists of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. The West region is Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. The Northeast is Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

United States Census Bureau

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

Figure 1.
Quintiles of Gini Index by County: 2006–2010



Source: U.S. Census Bureau, 2006-2010 American Community Survey.
For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www.census.gov/acs/www>.

in a county that ranked in the top 20 percent of U.S. counties by Gini index. In every region, the counties in the most unequal fifth of U.S. counties accounted for a disproportionately large share of that region's population. For example, only 8 percent of Midwestern counties had Gini indexes ranking among the top fifth of U.S. counties, but they contained 26 percent of the region's population.

While Tables 1 and 2 describe the national distribution of Gini indexes across counties, Table 3 considers the national distribution of county-level Gini indexes across people. Specifically, Table 3 shows the proportions of each region's population that ranked in each quintile of the national distribution of county-level Gini indexes across people. For example, the entry in the first row and the first column means that 17 percent of Westerners were among the top fifth of Americans with the highest county-level Gini indexes. This table reflects the same pattern as shown in Tables 1 and 2 above. Southerners disproportionately lived in more unequal counties than other Americans, while Midwesterners disproportionately lived in more equal counties than their compatriots.

For the 25 most populous counties in the nation, Table 4 lists their Gini indexes and the largest cities within their metropolitan statistical areas (MSA). These 25 counties contained 21 percent of the U.S. population.[4] Nearly all were above the median county Gini index of 0.430; two major exceptions were San Bernardino County, CA, and Suffolk County, NY. San Bernardino County is the largest county by area in the contiguous United States, stretching from the western suburbs of Los Angeles to the eastern border of California. Suffolk County consists of the eastern two-thirds of Long Island. As such, these counties include more sparsely populated areas than other counties in this list.

[4] Source: U.S. Census Bureau, 2010 Census.

Table 1.
Distribution of County Gini Indexes for Regions: 2006–2010

Distribution	West	South	Midwest	Northeast	U.S. overall
Number of counties	448	1,423	1,055	217	3,143
Proportion of counties ranking in:					
Top fifth of U.S. counties	0.12	0.32	0.08	0.12	0.20
2nd-highest fifth of U.S. counties	0.21	0.25	0.13	0.18	0.20
Middle fifth of U.S. counties	0.22	0.18	0.19	0.24	0.20
2nd-lowest fifth of U.S. counties	0.19	0.14	0.29	0.32	0.20
Bottom fifth of U.S. counties	0.26	0.11	0.31	0.13	0.20
Total	1.00	1.00	1.00	1.00	1.00

Note: Totals may not sum exactly due to rounding.
Source: U.S. Census Bureau, 2006–2010 American Community Survey.

Table 2.
Distribution of County Gini Indexes for Regions, Weighted by Population: 2006–2010

Distribution	West	South	Midwest	Northeast	U.S. overall
Population (millions)	72.3	114.4	67.0	55.4	309.1
Proportion of population residing in:					
Top fifth of U.S. counties	0.23	0.45	0.26	0.36	0.34
2nd-highest fifth of U.S. counties	0.42	0.23	0.22	0.22	0.27
Middle fifth of U.S. counties	0.19	0.14	0.17	0.19	0.17
2nd-lowest fifth of U.S. counties	0.11	0.09	0.18	0.18	0.13
Bottom fifth of U.S. counties	0.05	0.09	0.17	0.04	0.09
Total	1.00	1.00	1.00	1.00	1.00

Note: Totals may not sum exactly due to rounding.
Sources: U.S. Census Bureau, 2006–2010 American Community Survey and 2010 Census (Population).

Table 3.
Distribution of Region Population by County Gini Index Quintile: 2006–2010

Distribution	West	South	Midwest	Northeast	U.S. overall
Population (millions)	72.3	114.4	67.0	55.4	309.1
Proportion of people ranking in:					
Top fifth of U.S. population	0.17	0.25	0.12	0.23	0.20
2nd-highest fifth of U.S. population	0.13	0.25	0.20	0.18	0.20
Middle fifth of U.S. population	0.34	0.16	0.15	0.16	0.20
2nd-lowest fifth of U.S. population	0.22	0.16	0.21	0.24	0.20
Bottom fifth of U.S. population	0.14	0.18	0.32	0.18	0.20
Total	1.00	1.00	1.00	1.00	1.00

Note: Totals may not sum exactly due to rounding.
Sources: U.S. Census Bureau, 2006–2010 American Community Survey and 2010 Census (Population).

Table 5 lists counties among the highest and lowest estimated Gini indexes.[5] Many of the counties with low Gini indexes were either very low in population or a fast-growing county containing commuter towns within a large metropolitan area. Loving County, TX, is an example of the former kind of county; it had both the lowest population in the country as well as the lowest Gini index estimate. Kendall County, IL, near Chicago, is an example of the latter kind; it had the highest population growth rate between the 2000 and 2010 Censuses, more than doubling over that decade.

SOURCE AND ACCURACY

Data presented in this report are based on people and households that responded to the ACS in years 2006 through 2010. The resulting estimates are representative of the entire population. All comparisons presented in this report have taken sampling error into account and are significant at the 90 percent confidence level unless otherwise noted. Due to rounding, some details may not sum to totals. For information on sampling and estimation methods, confidentiality protection, and sampling and nonsampling errors, please see the "2010 ACS Accuracy of the Data" document located at <www.census.gov/acs/www/Downloads/data_documentation/Accuracy/ACS_Accuracy_of_Data_2010.pdf>.

[5] Few of the highest estimated Gini indexes are statistically significantly different from one another, and none of the lowest estimated Gini indexes is statistically significantly different from any other. The Gini index estimate for Franklin County, MS, is not statistically significantly different from the next highest estimated Gini index, and the estimate for Manassas Park city, VA, is not statistically significantly different from the next lowest estimated Gini index. The counties listed are intended as typical examples of counties with relatively high and low Gini indexes, respectively.

Table 4.
Gini Indexes for the 25 Most Populous Counties

Population rank	County	Population (2010)	Largest city of MSA	Estimated Gini index (2006–2010)
1	Los Angeles County, California	9,818,605	Los Angeles	0.489
2	Cook County, Illinois	5,194,675	Chicago	0.488
3	Harris County, Texas	4,092,459	Houston	0.488
4	Maricopa County, Arizona	3,817,117	Phoenix	0.452
5	San Diego County, California	3,095,313	San Diego	0.452
6	Orange County, California	3,010,232	Los Angeles	0.455
7	Kings County, New York	2,504,700	New York	0.499
8	Miami-Dade County, Florida	2,496,435	Miami	0.503
9	Dallas County, Texas	2,368,139	Dallas	0.492
10	Queens County, New York	2,230,722	New York	0.433
11	Riverside County, California	2,189,641	Riverside	0.439
12	San Bernardino County, California	2,035,210	Riverside	0.422
13	Clark County, Nevada	1,951,269	Las Vegas	0.434
14	King County, Washington	1,931,249	Seattle	0.456
15	Wayne County, Michigan	1,820,584	Detroit	0.469
16	Tarrant County, Texas	1,809,034	Dallas	0.448
17	Santa Clara County, California	1,781,642	San Francisco	0.450
18	Broward County, Florida	1,748,066	Miami	0.469
19	Bexar County, Texas	1,714,773	San Antonio	0.463
20	New York County, New York	1,585,873	New York	0.601
21	Philadelphia County, Pennsylvania	1,526,006	Philadelphia	0.494
22	Alameda County, California	1,510,271	San Francisco	0.456
23	Middlesex County, Massachusetts	1,503,085	Boston	0.461
24	Suffolk County, New York	1,493,350	New York	0.417
25	Sacramento County, California	1,418,788	Sacramento	0.431

Sources: U.S. Census Bureau, 2006–2010 American Community Survey and 2010 Census (Population).

Table 5.
Counties Among the Highest and Lowest Levels of Income Inequality: 2006–2010

County	Estimated Gini index (2006–2010)
East Carroll Parish, Louisiana	0.645
Edwards County, Texas	0.626
New York County, New York	0.601
Mineral County, Colorado	0.598
Pitkin County, Colorado	0.591
Allendale County, South Carolina	0.582
Greene County, Georgia	0.564
Randolph County, Georgia	0.558
Sioux County, North Dakota	0.556
Franklin County, Mississippi	0.555
Manassas Park city, Virginia	0.339
Blaine County, Nebraska	0.337
Kendall County, Illinois	0.332
Craig County, Virginia	0.327
Bath County, Virginia	0.326
Logan County, Nebraska	0.314
San Juan County, Colorado	0.313
McPherson County, Nebraska	0.311
Kalawao County, Hawaii	0.304
Loving County, Texas	0.207

Source: U.S. Census Bureau, 2006–2010 American Community Survey.

WHAT IS THE AMERICAN COMMUNITY SURVEY?

The American Community Survey (ACS) is a nationwide survey designed to provide communities with reliable and timely demographic, social, economic, and housing data for the nation, states, congressional districts, counties, places, and other localities every year. It has an annual sample size of about 3 million addresses across the United States and Puerto Rico and includes both housing units and group quarters (e.g., nursing facilities and prisons). The ACS is conducted in every county throughout the nation, and every municipio in Puerto Rico, where it is called the Puerto Rico Community Survey. Beginning in 2006, ACS data for 2005 were released for geographic areas with populations of 65,000 and greater. For information on the ACS sample design and other topics, visit <www.census.gov/acs/www>.