

The World's Largest Open Access Agricultural & Applied Economics Digital Library

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.





#### **Overview**

Unemployment continued to decline in rural areas in 2015, falling close to levels last seen before the Great Recession, as employment continued to grow. After declining for several years, rural population stabilized. Median annual earnings rose in rural areas and poverty fell markedly in 2015, as in urban areas; the rise in earnings occurred across most major industry sectors. Trends in poverty and median household income were similar across county economic types. While employment in recreation is associated with relatively low earnings, recreation counties overall had relatively high levels of household income and low levels of poverty in 2015.

# Little change in population and slow growth in employment in rural America

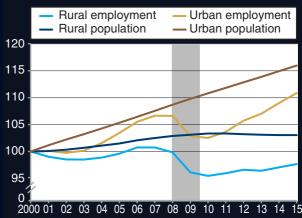
The total population in rural (nonmetro) counties stood at 46.2 million in July 2015, representing 14 percent of U.S. residents in 72 percent of the Nation's land area. The rural population declined by 136,000, or 0.3 percent, between 2010 and 2014, before leveling out in 2015. (Except where noted, all

data for metro and nonmetro areas reported here are based on the metropolitan area designations established by the Office of Management and Budget in 2013 based on 2010 Census results.)

The rural population trend was in marked contrast with urban (metro) trends. Urban areas have had moderate but consistent population growth of close to 1 percent per year in recent years. As a result, by 2015 the urban population was nearly 8 percent above its level at the start of the recession in 2007, while rural population was up only 0.5

Rural employment has grown slowly in recent years while rural population has declined slightly





Note: Shaded area indicates Great Recession.
Source: Population data reflect July 1 estimates from the U.S.
Census Bureau. Employment data are USDA, Economic Research
Service estimates based on data from the Current Population
Survey and the Bureau of Labor Statistics, Local Area
Unemployment Statistics.

percent. Across many rural regions, slow rates of population growth from natural increase (births minus deaths), together with net population losses from migration, are netting little or no growth in the total rural population, with significant declines in some rural areas. The divergence between urban and rural population growth rates is longstanding, but has been more marked since the Great Recession. In the long run, the periodic redefinition of many fast-growing rural counties as urban further contributes to these patterns, making those areas classified as rural less likely to sustain overall population growth.

Rural employment has risen modestly—including an increase of about 1.3 percent between 2013 and 2015—as the national economy has recovered since employment levels bottomed out in 2010. Seasonally adjusted rural employment grew a further 0.5 percent between the end of 2015 and the second quarter of 2016. Still, the overall rural employment level remains well below its pre-recession level. Meanwhile, urban employment has risen more than twice as rapidly in recent years and was 4 percent above its 2007 level by 2015.

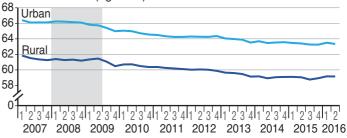
#### Labor force participation rises after long decline

Labor force participation measures the share of the adult civilian, noninstitutionalized population that is either employed or actively seeking employment. Labor force participation rates in both rural and urban areas have declined markedly since the onset of the Great Recession in 2008.

Recent data show labor force participation stabilizing in urban areas and increasing slightly in rural areas, which may suggest that economic recovery is beginning to draw people into the labor market. The gap between rural and urban labor force participation rates largely reflects the fact that a larger share of rural adults are older than the typical working age.

#### Labor force participation declined during and after the Great Recession but has recently risen in rural areas

Percent of adults (age 16+) in labor force



Note: Shaded area indicates Great Recession.

Source: USDA, Economic Research Service estimates based on data from the U.S. Census Bureau, the Current Population Survey, and the Bureau of Labor Statistics, Local Area Unemployment Statistics.

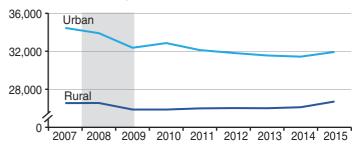
#### Median earnings are lower but rising in rural areas

Median earnings are substantially lower in rural areas than in urban areas, although this shortfall is mitigated by rural-urban differences in living costs, especially for housing. Both rural and urban median annual earnings (for adults with earnings) fell markedly during the Great Recession, but the decline in rural earnings was much smaller and relatively shortlived. In 2015, rural median earnings rose by more than 2 percent and exceeded their 2007 level. In contrast, urban (median) earnings continued to fall in most years since the recession. Despite an increase of 1.6 percent in 2015, urban median earnings are still more than

7 percent below prerecession levels. As a result, the ratio of rural earnings to urban earnings rose from 77 percent in 2007 to nearly 84 percent in 2015. Because median earnings are calculated only among the employed, changes over time and rural-urban differences are strongly affected by changes in the industrial and occupational composition of employment.

#### Median earnings rose in both rural and urban areas in 2015

Median annual earnings in inflation-adjusted dollars



Note: Real median earnings in 2015 dollars for all adults with earnings during past year. Urban and rural area definitions reflect metropolitan area definitions for each year. Shaded area indicates Great Recession. Source: USDA, Economic Research Service using data from the U.S. Census Bureau, American Community Survey.

#### Poverty declines in 2015 as employment rebounds

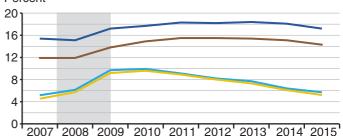
Rural unemployment nearly doubled during the Great Recession, rising from 5.2 percent in 2007 to 9.9 percent in 2010. Over the same period, the urban unemployment rate more than

doubled. Both rural and urban unemployment rates have fallen since: rural unemployment from 9.9 percent in 2010 to 5.7 percent in 2015 and urban unemployment from 9.6 percent to 5.2 percent. By the second quarter of 2016, seasonally adjusted unemployment was slightly above 2007 levels.

Although the number of people working has increased since 2010, declines in the unemployment rate have also reflected fewer people seeking

#### Poverty rate in 2015 marked greatest decline since the Great Recession as unemployment continued to fall





Note: Shaded area indicates Great Recession. Poverty rates for 2007-12 reflect 2003 OMB metro definition.

Source: Unemployment—USDA, Economic Research Service based on data from the Bureau of Labor Statistics, Local Area Unemployment Statistics; Poverty—U.S. Census Bureau, Current Population Survey 2007-2008; American Community Survey 2009-2015.

work. If participation levels in 2015 had been identical to 2010, then the unemployment rate in 2015 would have been an estimated 8.2 percent in rural areas and 7.4 percent in urban areas, well below recessionary peaks but far above the levels expected in prosperous times.

Both unemployment and poverty rates rose throughout the Great Recession. Poverty rates continued to rise until 2011 in urban areas and until 2013 in rural areas. Poverty has been slow to abate in the wake of other recessions since the 1980s. Poverty rates in both rural and urban areas fell slightly in 2014 and more markedly in 2015—by 0.9 percentage point in rural areas and 0.8 percentage point in urban areas—but remain well above prerecession levels. Rural poverty rates have been higher than urban rates since the 1960s when the rates were first recorded. However, the Supplemental Poverty Measure, which adjusts for geographic differences in housing costs (among other adjustments), estimates a higher poverty rate in urban areas.

# The rural economy depends more on goods production

Many of the differences between the rural and urban economies reflect differences in their industrial composition. While service industries account for the largest share of jobs and earnings in both rural and urban areas, rural areas are more dependent on goods production. The primary goods production industries—farming, forestry, fishing, and mining—account for more than 11 percent of rural earnings but only 2 percent of urban earnings. The manufacturing sector accounts for nearly 15 percent of earnings in rural areas and just over 9 percent in urban areas. The composition of the service sector is also very different in rural and urban areas. Within the producer services category, 52 percent of urban employment is managerial and professional, compared with just 39 percent of rural employment in that sector.

#### Producer services play a larger role in the labor market in urban areas, 2014



Note: Data shown are for 2014. Recreation and related includes accommodation and food services. Agriculture and related also includes forestry, hunting, and fisheries. Source: USDA, Economic Research Service based on data from the Bureau of Economic Analysis,

U.S. Department of Commerce.

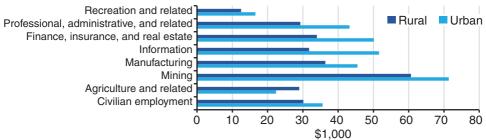
#### Growth by industry similar in rural and urban counties

Recent trends in employment by industry have not differed greatly between rural areas and urban areas. Mining employment (though still a small component of total employment) more than doubled from 2001 to 2014 in both rural and urban counties, reflecting a boom in unconventional oil and natural gas production. Of the 537 counties with substantial oil and gas production, 444 are rural and 93 are urban. Over 2001-14, the much larger producer services sector has seen employment growth of more than 20 percent in both rural and urban areas. Between 2001 and 2010, manufacturing employment fell by close to 30 percent in both rural and urban areas, reflecting the impacts of trade competition, rising labor productivity, and the Great Recession. While manufacturing employment has recovered some since 2010, it remains well below levels of the early 2000s. The greatest rural-urban difference in jobs growth is in recreation employment, which has risen markedly faster in urban areas; this may reflect both overall population growth in urban areas and their success in attracting younger adults.

#### Median earnings generally higher in urban areas

Earnings are generally higher in urban areas, but the rural-urban disparities vary greatly by sector. In 2015, overall annual earnings were 15 percent lower in rural areas, but the gap was much larger in the producer service sectors (information; finance, insurance, and real estate; and professional/related services). Producer service firms in urban areas employ more professional and managerial workers, accounting for the earnings premium that accrues in urban areas.

#### Rural median earnings are highest in mining and manufacturing



Note: Values in 2015 inflation-adjusted dollars. Values reflect earnings for past 12 months for individuals in households interviewed during 2015. Professional, administrative and related also includes scientific, technical, management, and waste management. Civilian employment includes additional sectors not individually listed.

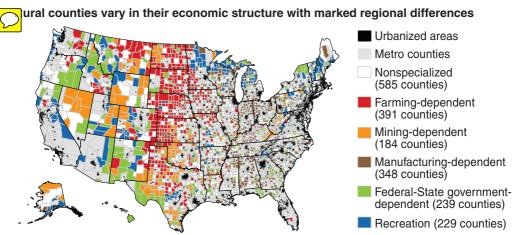
Source: USDA, Economic Research Service using data from the U.S. Census Bureau, 2015 American Community Survey.

The rural-urban earnings gap was also large in manufacturing—where rural areas have long been associated with lower skill, less technically advanced operations—and in recreation. Still, median earnings in rural manufacturing are above those for any other rural sector except for mining. The relatively high earnings in manufacturing jobs explain the continued emphasis that many rural stakeholders place on attracting or retaining these jobs.

## Industry dependence is reflected in local economic trends

Rural America is economically diverse, and while most rural counties offer employment in a variety of industries, they differ in their industry mix. Here we compare rural counties based on the industry that most supports their economies. The 2015 ERS County Typology Codes classify all U.S. counties according to six mutually exclusive categories of economic dependence: farming, mining, manufacturing, Federal/State government, recreation, and nonspecialized counties. Local economies are more sensitive to economic trends that have a pronounced effect on their leading sectors. For example, the recent boom in U.S. oil and natural gas production had a major impact on many mining-dependent counties, although lower oil and gas prices have led to reduced oil exploration and economic activity in these counties. Trends in agricultural prices have a disproportionate impact in farming-

<sup>&</sup>lt;sup>1</sup> Farming-, government-, manufacturing-, and mining-dependent counties are classified based on whether the share of employment or earnings in the corresponding sector is markedly above the average. Recreation counties are defined based on an index that reflects earnings and employment in selected recreation-related industries together with the percentage of vacant housing units intended for seasonal or occasional use. Further detail on the criteria for classification can be found at http://www.ers.usda.gov/ data-products/county-typology-codes.aspx.



Note: The 2015 county typologies use data from 2010-2012. See footnote 1. Source: USDA, Economic Research Service using data from the Bureau of Economic Analysis.

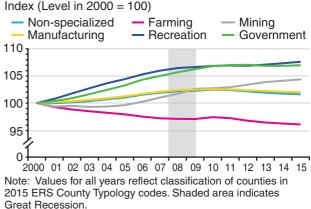
dependent counties, which accounted for 19.8 percent of all rural counties and 6 percent of the rural population in 2015. Declines in manufacturing employment, meanwhile, have particularly affected counties that are manufacturing-dependent—17.8 percent of rural counties with 22.5 percent of the rural population.

### Population growth varies across rural county types...

The significance of these economic specializations can be seen in population trends for several major county types. Recreation counties have seen the most robust population

growth since 2000, reflecting rising demand for recreational services. Many of these counties also attract retirees or others who are able to relocate based on their desire for amenities like open space or water views. However, growth in these counties slowed sharply during and after the recession, reflecting declines in discretionary income and mobility. Rural manufacturing counties, hard-hit by the recession and its aftermath, went from modest population growth in the early 2000s to slight population decline in more recent years.

#### Rural recreation county population grew in the early 2000s but leveled off after the Great Recession



Source: USDA, Economic Research Service based on county population estimates from U.S. Census Bureau.

Demand for local goods and services is not the only factor affecting population. For example, farming-dependent counties have seen population drop 4 percent since 2000 despite generally robust demand for U.S. agricultural products. This decline continues a long-term trend reflecting rising labor productivity in the farm sector, as well as the lack of other economic opportunities and amenities in many of these often remote counties.

#### ...Though household incomes generally growing

Median household incomes fell for all county types during the Great Recession, but by 2014, median incomes in both farming- and mining-dependent counties were more than 4 percent above 2007 levels. Median household income for all other types remained below their 2007 levels in 2014.

From 2007 through 2014, rural median household incomes were highest in rural recreation counties. This is despite the dropoff in population growth that characterized these counties after the recession. These high levels of household income appear to reflect higher income from assets (dividends, interest, and rent) among the residents of these counties. Median household incomes were also relatively high in farming and mining counties, reflecting the relative prosperity of the farm and energy sectors during 2007-14. Household incomes were lowest in nonspecialized and government dependent-counties; in many of the latter

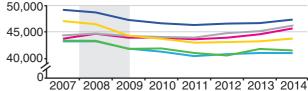
counties, the relative prominence of the public sector reflects a lack of private employment opportunities. Manufacturing counties enjoyed relatively high median household incomes in 2007, but suffered the greatest losses of any economic type during the Great Recession, reflecting the loss of manufacturing jobs; by 2014, the median income level in these counties was well below that for farming and mining counties. (County-level estimates for median household income are not yet available for 2015.)

The poverty rate was substantially higher in 2014 than in 2007 for all rural county types except mining counties. The highest poverty rates and the lowest median household incomes are in those county types not associated with a clear private-sector economic base—that is, nonspecialized and government-dependent counties. Although earnings in the recreation sector are low, recreation counties have the lowest poverty rate and highest household incomes, possibly reflecting the importance of income from assets and transfer payments like Social Security. Poverty rates and per capita incomes are intermediate for farming, mining, and manufacturing counties.

#### Rural median household incomes were highest in recreation counties

Median household income (2014 dollars)

- Nonspecialized Government dependent
- Manufacturing dependent - Mining dependent
  - Farming dependent Recreation



Note: Medians shown are the population-weighted median value of county median household income for the indicated county type: that is, one-half of those who live in this type of county are in a county with a lower median household income, and one-half are in a county with a higher median household income. Constant 2014 dollars, deflated by the Consumer Price Index.

Shaded area indicates Great Recession. Source: USDA, Economic Research Service estimates based

on Small Area Income and Poverty Estimates data sets from U.S. Census Bureau.

#### Rural poverty rates are highest in governmentdependent and nonspecialized counties

Aggregate poverty rate (%)

- Nonspecialized Government dependent Manufacturing dependent - Mining dependent Farming dependent Recreation
- 22 20 18 14 12 2009 2010 2011 2012 2013 2014

Note: Shaded area indicates Great Recession. Source: USDA, Economic Research Service estimates based on Small Area Income and Poverty Estimates data sets from from U.S. Census Bureau.

#### **Data sources**

American Community Survey, Census Bureau, U.S. Department of Commerce Current Population Survey, Bureau of Labor Statistics, U.S. Department of Labor Local Area Unemployment Statistics, Bureau of Labor Statistics, U.S. Department of Labor Population Estimates, Census Bureau, U.S. Department of Commerce Local Area Personal Income and Employment Data, Bureau of Economic Analysis, U.S.

Department of Commerce Small Area Income & Poverty Estimates, Census Bureau, U.S. Department of Commerce

#### **Definitions and additional information**

For more on the 2003 and 2013 definitions of metropolitan and nonmetropolitan areas as well as related concepts such as urbanized areas and central counties, see www.ers.usda.gov/topics/ruraleconomy-population/rural-classifications/what-is-rural.aspx

#### **ERS Website and Contact Person**

Information on rural America can be found on the ERS website at http://www.ers.usda.gov/ topics/rural-economy-population/. For more information, contact Lorin D. Kusmin at Ikusmin@ers.usda.gov or (202) 694-5429.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.