Rural manufacturing wages vary by sector and are lowest in production worker–intensive sectors.

Wages vary across manufacturing sectors for a variety of reasons, including the education/skills required, technology adoption, proximity to urban areas, and the occupational mix of the worker’s workforce (fig. 9). Average annual wages in manufacturing sectors can be considered a rough proxy for education or skill requirements since higher wages are correlated with higher levels of human capital.

Subsectors with lower average wages are those requiring more production workers, such as furniture manufacturing and food manufacturing. In furniture manufacturing in 2015, 63 percent of employees were in production worker occupations in food manufacturing, the share was 54 percent. Conversely, workers in production occupations accounted for only 41 percent of chemical manufacturing employment and 43 percent of petroleum/coal product manufacturing—two subsectors with high average wages.

In real dollars, average annual rural manufacturing wages grew modestly after the 2001 recession. Wages dipped during the Great Recession, then slowly rebounded, exhibiting the highest rate of growth between 2014 and 2015 and ending 11 percent higher than 2001 levels in 2015 (fig. 10). Average wages for many rural manufacturing sectors appeared to move in the same trajectory during the study period. The jump in 2010 wages may be due to lower-paid production workers being laid off during the recession.

Rural manufacturing wages also varied by subsector, being lowest for textile product/apparel manufacturing and highest for energy products/chemical manufacturing. This report examines the health of the rural manufacturing sector, including employment and wages for various manufacturing industries, during a period that includes a longstanding decline in manufacturing employment and the aftermath of two recessions.

Definitions and additional information

Throughout this report, nonmetro counties, as defined by the Office of Management and Budget (OMB), are referred to as “rural” or “nonmetro.” The 2013 OMB definition of metropolitan (urban) and nonmetropolitan (rural) is used in this report. See the discussion of these terms on the Economic Research Service’s website.

This research was conducted with restricted access to Bureau of Labor Statistics (BLS) data. The views expressed here do not necessarily reflect the views of the BLS.

Nationally, manufacturing “value added” is back to pre-recession levels but continues to decline as a percentage of gross domestic product.

Despite facing pressures from a variety of factors—including increased global competition and technological change—the U.S. manufacturing sector has exhibited steady growth in value added since 2009. By 2015, value added had returned to levels observed in 2007 (fig. 11), just before the Great Recession that began in the fourth quarter of 2007. As a percentage of gross domestic product (GDP), however, manufacturing value added has generally declined since peaking in 1953 at 28 percent. As a percentage of GDP, manufacturing value added declined from 14 percent in 2001 to 12 percent of GDP in 2015.

In 2015, manufacturing value added was growing, but shrinking as a percentage of gross domestic product.

Change in U.S. manufacturing value added and value added as a share of GDP

Note: Gray background indicates recessionary periods.


Rural Manufacturing at a Glance, 2017 Edition

Overview

Despite declining rural manufacturing employment between 2001 and 2015, the manufacturing sector is relatively more important as a source of employment and earnings to the rural economy than it is to the urban economy. While manufacturing remains concentrated in the Eastern United States, employment has declined in most counties in this region. Rural manufacturing employment and wages vary among the 21 subsectors that comprise the manufacturing sector, with food manufacturing being the largest and also having relatively stable employment levels before, during, and after the recession. Average rural manufacturing wages also varied by subsector, being lowest for textile products/apparel manufacturing and highest for energy products/chemical manufacturing. This report examines the health of the rural manufacturing sector, including employment and wages for various manufacturing industries, during a period that includes a longstanding decline in manufacturing employment and the aftermath of two recessions.
Manufacturing employment is concentrated in the Eastern United States and has declined in most of these counties. The 29 percent of counties with manufacturing employment growth from 2001 to 2015 are spread throughout the country, but the majority of these counties had low levels of growth relative to total employment (fig. 2). Counties with the largest relative declines in manufacturing employment are concentrated in the Eastern United States.

Despite growth elsewhere, manufacturing employment remains concentrated in both the so-called manufacturing belt (around the Great Lakes) and across much of the South (fig. 3). Almost 20 percent of manufacturing jobs in 2015 were located in rural (nonmetropolitan) counties.

Despite the relative importance of manufacturing to the rural economy, economic restructuring is altering job opportunities for rural areas of the country as demand for services grows. Rural manufacturing employment was smaller both in relative and absolute terms in 2015 than in 2001—there were 21 percent fewer manufacturing jobs while total rural employment grew almost 7 percent; that is, manufacturing employment became a smaller piece of a larger pie. During the same period, jobs in producer services increased by 27 percent, accounting for almost 20 percent of rural private nonfarm jobs in 2015. Rural median earnings are higher in manufacturing and mining than in other sectors (fig. 5). However, manufacturing is more important to the rural economy than mining because it is responsible for a greater share of total rural employment (14 percent versus 3 percent of private nonfarm rural employment).

Food manufacturing is the largest sector of rural manufacturing, accounting for over 18 percent of rural manufacturing employment in 2015 (fig. 6). By comparison, food manufacturing represents 11 percent of urban county manufacturing employment (third largest). Like wood product manufacturing, food manufacturing is not necessarily footloose (i.e., able to locate anywhere); in some instances, there may be gains in locating near the source of inputs such as cattle or processed tomatoes.

Transportation equipment manufacturing is the second-largest rural sector at 12 percent of rural manufacturing employment in 2015 (fig. 6) and is the largest urban manufacturing sector (13 percent). Transportation equipment includes auto, auto parts, aerospace, ship, and railroad manufacturing. In 2015, over half of rural employment in this subsector was in auto parts manufacturing.

Fabricated metal product manufacturing is the third-largest rural subsector, with 11 percent of rural manufacturing employment, almost the same as the urban share (at 12 percent, the second-largest urban subsector). Fabricated metal product manufacturing includes forging, hardware manufacturing, machine shops, and coating/engraving/heat-treating establishments.

Employment has declined in most manufacturing subsectors, but employment in the largest rural subsectors declined less, rebounding after the recession.

As with employment shares, looking at aggregate employment change masks differences across manufacturing subsectors. Employment declined in almost every manufacturing subsector during 2001-15 (fig. 7). Employment in the four largest rural manufacturing subsectors (food, transportation equipment, fabricated metal, and machinery manufacturing) declined less than in many other subsectors, each exhibiting a decline in jobs of less than 20 percent. Although beverage and tobacco manufacturing employment increased by over 35 percent from 2001 to 2015, this subsector represented only 1 percent of rural manufacturing jobs in 2015. The growth was in brewing rather than tobacco manufacturing; rural beverage manufacturing employment increased by over 50 percent during the study period, with brewery employment increasing three-fold.

Rural textile and apparel employment experienced the largest decline between 2001 and 2015; however, these three subsectors (textile mills, textile product mills, and apparel manufacturing) represented a relatively small proportion of rural manufacturing employment (3 percent in 2015; down from 9 percent in 2001).

Trends in average annual manufacturing employment change were similar in urban and rural portions of the country (fig. 8; dotted lines are for total metro or nonmetro manufacturing employment). Rural manufacturing employment was at 77 percent of 2001 levels in 2015, while urban employment was at 75 percent.

Rural manufacturing employment trends vary by subsector.

Aggregate trends in manufacturing employment mask differences across manufacturing subsectors. For example, rural America has a comparative advantage in proximity to raw materials for the wood product subsector, which is relatively larger in rural areas. Wood product manufacturing accounted for 7 percent of rural manufacturing jobs and just 2 percent of urban manufacturing jobs in 2015 (fig. 6). Wood product manufacturing includes many inputs to housing, like wood flooring, trusses, engineered flooring, and manufactured homes.