

# Contribution of Agriculture to Wisconsin

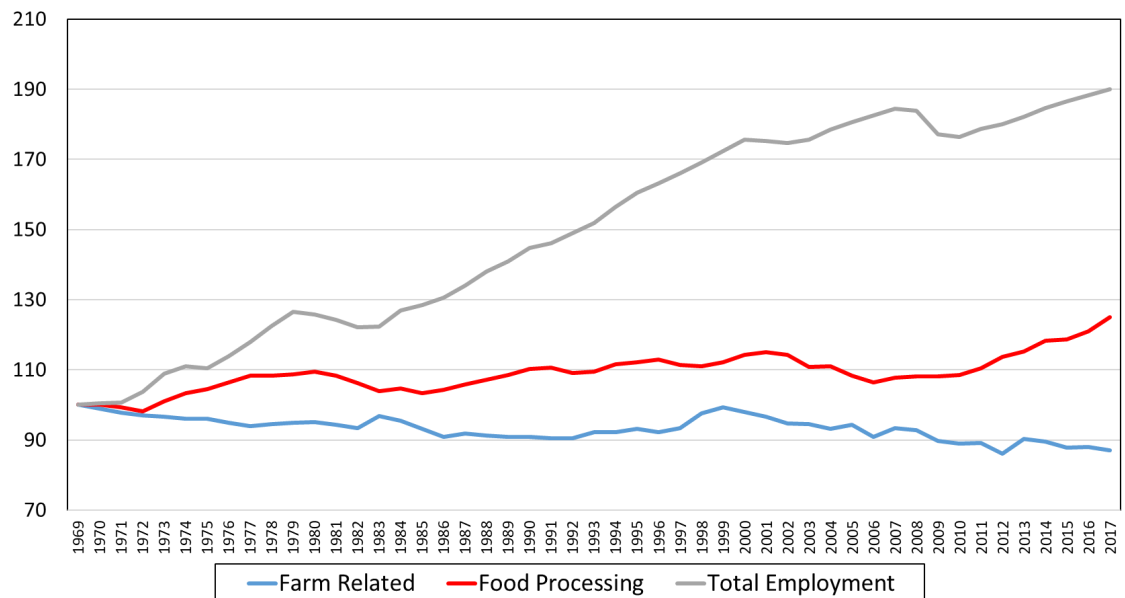
## Trends in Wisconsin Agriculture Employment

Wisconsin agriculture remains an important component of the Wisconsin economy. In 2017 agriculture, defined as on-farm and food processing activities, contributed some \$104.8 billion to industrial revenues (16.4% of the state total), 435,700 jobs (11.8%), \$22.5 billion to labor income (11.3%), and \$37.6 billion to total income (11.6%). Although these represent increases over 2012 levels, agriculture is not historically viewed as a growth industry, such as the health care sector. What exactly are the historical trends for Wisconsin agriculture? As demonstrated with the contribution analysis, there are several ways to measure economic trends including jobs, income and gross state product. In this short report we focus on historical trends in agriculture's contribution to employment.

As seen in Figure 1, employment measures for Wisconsin go back to 1969 and currently run to 2017. In order to compare on-farm, food processing, and total economic activity a simple growth index is constructed with 1969 as the base year. Movement from one year to the next represents a percent change in gross state product. Wisconsin trends are provided in Figure 1, and comparisons to the other Great Lake States and the U.S. are provided in Figures 2 and 3 for on-farm and food processing, respectively.

Since 1969, the average annual rate of overall employment growth in Wisconsin is about 1.9%, compared to 0.5% for food processing. For farming, however, there has been an annual rate of decline of about 0.3%. Other than short up-ticks (e.g., 1983, 1999) there has been a consistent downward trend. This is reflective of two driving forces: (1) a decline in the number of farms, and (2) the rise of productivity enhancing technologies. Wisconsin has been left with fewer, but larger farms, that are able to adopt labor saving technologies.

Figure 1: Wisconsin Employment Growth Index



Of particular importance is the growth in employment in the food processing sector, specifically since end of the Great Recession. From 2011 total employment in Wisconsin increases by 13.6% but for food processing employment increased by almost 16.5%. This surge in food processing employment is reflective of the growth in specialty food processing, generally those associated with local foods such as craft beers and artisan cheese, and growing demand by consumers for prepared meals (outside of restaurants). If we compare Wisconsin to our neighboring Great Lake States and the nation (Figure 3), this upward swing in food processing is not unique to Wisconsin.

If one decomposes the make-up of the increase in the contribution of agriculture to the Wisconsin economy....much of the growth in the increase comes from growth in the food processing sectors.

If we look at Wisconsin farm employment relative to the Great Lake States and the U.S. overall, Wisconsin appears to be following a slightly different trend. From 1969 to about 1997 Wisconsin is following the trends for the Great Lakes, but sliding behind national trends. For the period of about 1997 to 2009, Wisconsin appears to be defying national and regional trends.

Figure 2: Farm Production Related Employment Growth Index

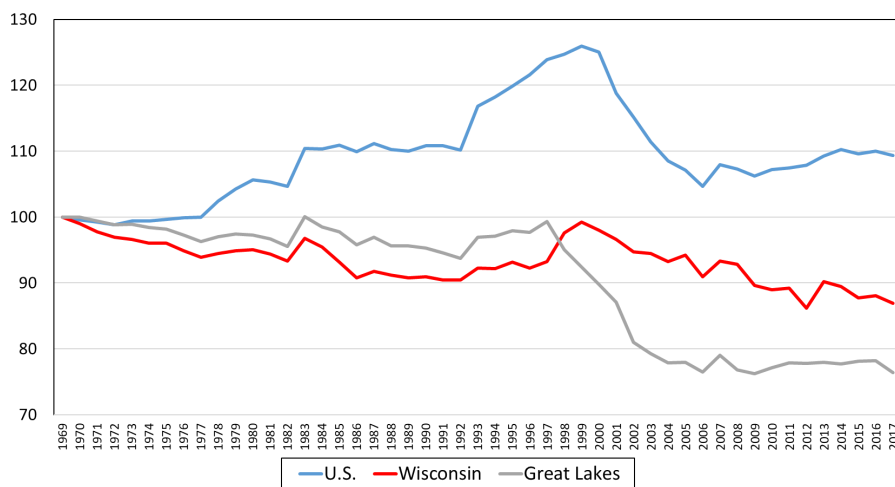
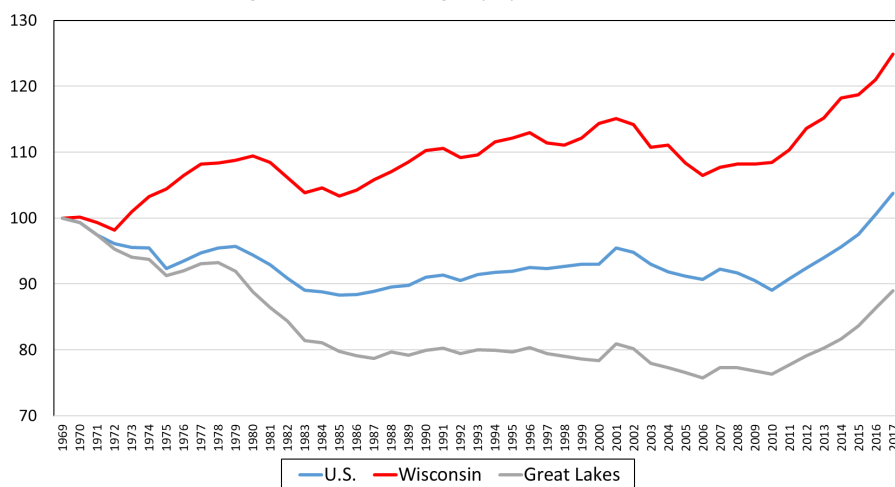


Figure 3: Food Processing Employment Growth Index



In this period farm employment plummeted for the nation and region (Great Lakes) but declined much more modestly in Wisconsin. Starting in 2006, however, modest growth trends returned for the U.S., and largely stabilized for the Great Lake States, but Wisconsin continued to experience a slight downward trend. One likely explanation is the significant level of diversity in Wisconsin agriculture. While dairy still accounts for slightly half of Wisconsin agriculture, there is significant presence of a wide range of agricultural goods.

The policy implication here is clear: while programs aimed at supporting farms are vital, more attention must be paid to the food processing parts of the Wisconsin agricultural milieu or agricultural clusters.