

## Agricultural Processing Growth Patterns in Wisconsin: Gross State Product

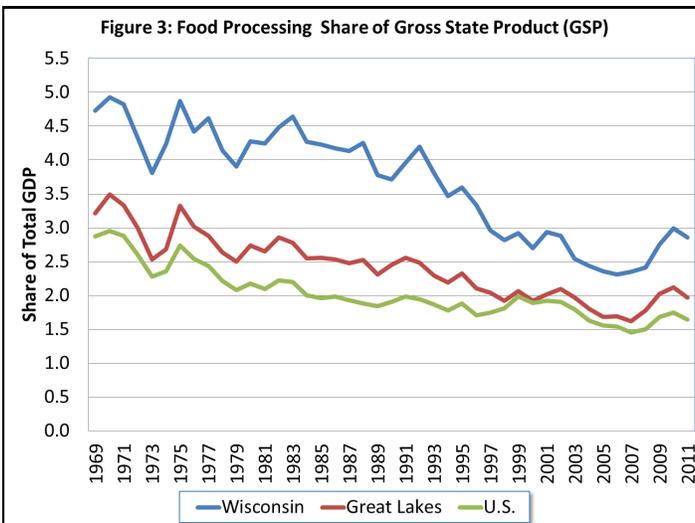
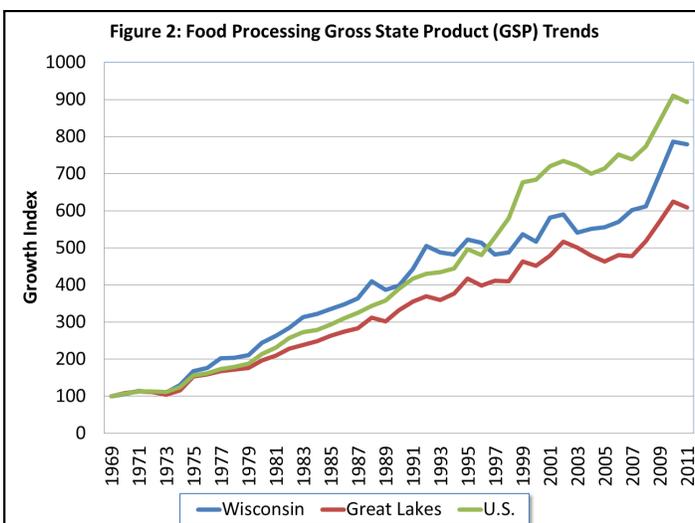
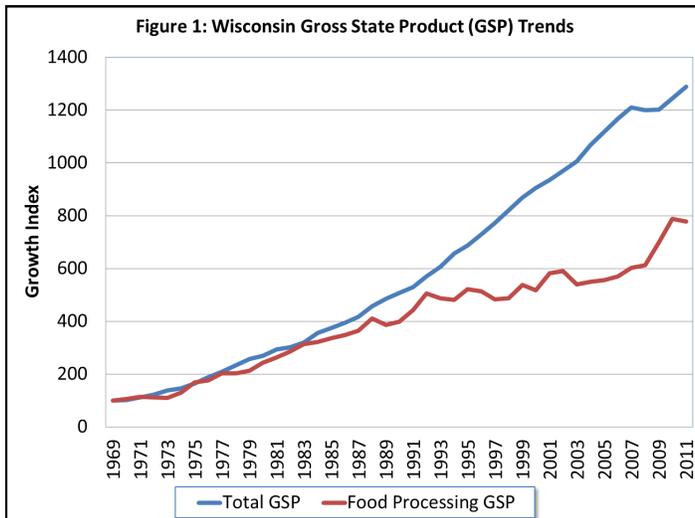
Food processing, such as the production of cheese, canned vegetables or fruit jams and jellies, is widely believed to be an important part of the Wisconsin economy and in 2011, the most recent year for which we have data, food processing contributed \$6.4 billion to Wisconsin's Gross State Product (GSP). This represents about 2.5 percent of the state's total GSP. This compares to 1.4 percent for the U.S. and 1.7 percent for the Great Lake states. Gross State Product here is the monetary value of all finished goods and services within a given area and time period. It includes all private and public consumption, government outlays and investments.

Over the past forty years Wisconsin's food processing's Gross State Product has increased an average of 5.3 percent annually, in nominal terms. This is about on par with the national average of 5.5 percent and above the growth rate for the Great Lakes region of 4.6 percent. On its face value this suggests that food processing is a source of growth for the Wisconsin economy. But when compared to overall growth in Gross State Product, food processing appears to be lagging behind. Over the same 40 plus year period Wisconsin's overall growth rate in GDP averaged about 6.3 percent, but food process manufacturing was only 5.3 percent, again in nominal terms (Figure 1). While the food processing manufacturing has grown, the growth rate is slightly lower than the overall economic growth rate.

Another way to think about the contribution of food processing to the Wisconsin economy is to track the share of the state's Gross State Product that comes directly (i.e., no multiplier effect is considered) from food processing. In 1969, the beginning of our study period, food processing accounts for 4.7 percent of Wisconsin's Gross State Product which is much higher than the national average of 2.9 percent and the

In a 2009 study of the Wisconsin agricultural economy Deller and Williams documented that the food processing industry generates about 252,000 jobs and \$15.5 billion in income. This represents just over seven percent of all employment and just less than seven percent of all income in Wisconsin. In addition, the economic activity associated with food processing generated just over \$1 billion in state and local government revenues. This series of factsheets is aimed at helping better understand the food processing industry in Wisconsin and identify policies that may enhance the competitiveness of the industry.

Agricultural process manufacturing, such as cheese making, vegetable canning and freezing and breweries as well as wineries, remains an important part of the Wisconsin economy. Equally important, the products that are associated with food processing, in particular cheese and beer, are an integral part of the Wisconsinites self-identity. Curly Lambeau, one of the founders of the Green Bay Packers, used funding from his employer, the Indian Packing Company, a meat canning processor, to fund the early operations of the team. The Milwaukee Brewers are named in recognition of the city and state's long tradition in making beer.



average for the Great Lake states of 3.2 percent (Figure 3). The share of Wisconsin's GDP that comes from food processing peaked at 4.9 percent in 1975. Since then, however, food processing's share of Wisconsin GSP has been declining to a low of 2.3 percent in 2006. This downward trend outlined in Figure 3 is not indicative of a declining food processing industry, but rather one that is not growing as fast as the whole of the economy.

The one pattern in the shares analysis presented in Figure 3 is the up-tick in the share of GDP during periods that are generally associated with recessionary periods. While there are clear periods of growth and decline in the food processing industry as measured by GSP, this up-tick in shares during periods of overall recessions provides weak evidence that food processing is not as sensitive to recessionary pressures as other manufacturing related industries. There is some evidence that swings in the food processing is more susceptible to changes in commodity prices, which in turn is reflective of growing conditions, then recessionary pressures. In essence, the demand for processed foods such as cheese and canned and frozen vegetables tends to be less sensitive to downturns in the national economy. This simple observation suggests that food processing, while sensitive to agricultural growing conditions, may provide a weak counter-balance to recessionary pressures.

Food processing remains a growth industry for Wisconsin, but the growth may be more modest than overall economic growth. While its relative share of Gross State Product is declining, it remains a relative strength when compared to the U.S. and neighboring Great Lake states.

References: Deller, Steven C. and Williams, David. 2009. "The Contribution of Agriculture to the Wisconsin Economy." Department of Agricultural and Applied Economics Staff Paper No. 541. University of Wisconsin-Madison/Extension. (August). [www.aae.wisc.edu/pubs/sps/pdf/](http://www.aae.wisc.edu/pubs/sps/pdf/)