

## **Michigan Forest Products Sectors: Comparative Gross and Base Value Added and Structural Path Analysis**

Topic: Agribusiness and Forestry

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The forest products sectors in Michigan are the primary focus of this analysis with comparisons made to Wisconsin, Minnesota, the Great Lakes and Southern Regions of and to the U.S. After modeling the current and predicting possible forest products markets, the challenge is to determine what, if any, recommendations are possible for forest market expansions within Michigan. Prior to this analysis, policy makers in the State set the following performance targets for these sectors: 1) increase economic impact on state and regional economies from \$14 to \$20 billion, 2) increase the value-added exports by 50 percent and 3) increase jobs by ten percent. More general questions include "how to support the existing forest products industry and encourage regionally-based industry development to achieve targets 1-3. The methods for analyzing and predicting the forest product markets in Michigan are three. First, compare gross and base value added derived from social accounting models for Michigan and the comparison regions over time. Second, use base and gross measures of value added to determine the changing comparative advantage for Michigan forest products and present in the form of a strengths, weaknesses, opportunities and threats framework. Finally, derive the structural paths of the forest products sectors in Michigan using a 27 sectors technical coefficients matrix closed with households. Apply network analysis to the structural paths to find the central paths. National, state and county IMPLAN social accounting data from 2007 through 2013 are used in these analyses between regions. In Michigan, preliminary analysis suggests that for the six forest products aggregated sub-sectors of logging and forestry, primary and secondary paper, primary and secondary solid wood, and wood furniture that wood furniture has the best chance of expanding foreign exports. Secondary solid wood product sectors represent the best chance of expanding domestic exports.