Executive Summary

Identifying Opportunities for Growth in Michigan's Forest-product Sectors

A Michigan Forest Products Industry Market Analysis

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In 2013, Michigan's Governor Snyder proposed the goal of increasing the contribution of forest products to the state's economy. The general category of forest products includes logging, primary and secondary wood and paper production and wood furniture. Out of the 535 sectors available in the IMPLAN economic data system, forest-product sectors make up twenty-seven. Which forest-product sectors have the greatest growth potential? Which ones offer the best hope of responding positively to state government's efforts to increase exports, value added, employment and output and also works best with the non-forest-product sectors in the state?

Three analytical models combined with qualitative interviews with stakeholders are used to make this determination. Each model uses coefficients derived from IMPLAN social accounting data—annual data from 2007 to 2013 available for each state with more than 400 sectors of detail. The first model generates measures of gross and base value added for Michigan, which identifies the primarily exporting and import substituting sectors. Then the changing shares of value added by sector in the state are used in a SWOT analysis (strength, weakness, opportunity and threats) to determine changing comparative advantage of each of Michigan's forest-product sectors compared to the baselines of shares for All States and for 2007. Finally, which sectors are potential bottlenecks in the supply chains for forest products within the Michigan economy? By analyzing the multiplier model, the network of directed payments is revealed as forest products move between firms through supply chains from forest sector production to household consumption. These "structural paths" describe the structure of inter-firm markets for forest products within the Michigan economy. The relative importance of industries (nodes) at various locations within these networks is measured as the size of "betweenness centrality".

Ten of twenty-seven forest-product sectors are identified as playing key roles in the growth of this broadly defined sector in Michigan. Three sectors—office furniture and institutional furniture and paperboard container manufacturing offer an opportunity to expand exports. In the case of containers, these "exports" include increased sales to non-forest-product sectors in the state. Four sectors—paper, paperboard, shelving and veneer manufacturing—can expand both exports and sales to other important forest-product sectors in the state. Three sectors—logging, sawmills and pallets—can increase sales primarily to other important forest-product sectors in the state. In fact, the lack of increased sales by these important "betweenness centrality" sectors would pose a barrier to the growth in the other important forest product exporting sectors. Hence, we argue that programs and policies should support these industries as needed and where appropriate to encourage import substitution for low value-added forest-product sectors and export expansion for the high value-added ones.