Dr. Seuss, Spatial Analysis, and Wood Procurement Realities

This is the fourth in a series related to the analysis of timber markets and wood baskets.

An architect buddy told me, “Brooks, I can build a house anywhere a client wants – they can have it on a cliff, they can have it in a tree, on an island, or on Mercury. [Pause]. As long as they have the budget for it.” This near “green eggs and ham” reference applies to wood procurement. You can put a wood-using facility anywhere you want and supply it with wood, as long as you have the budget. In practice, financial performance and operating realities constrain wood procurement budgets and limit the number of viable markets for operating profitable mills and timberland investments.

The exercise of evaluating viable wood baskets and timber markets requires analysis of both space and time (cue the Theremin). Spatial analysis – using maps and mapping software – of actual or potential wood markets initiates the process of comparing the locations of wood-using mills to each other and to the forests that supply their raw material. An understanding of typical hauling distances, the shape or direction of actual procurement activities and key geopolitical barriers (i.e. the Mississippi River) support this assessment.

Also, size matters. In the U.S. South, industrial facilities that use 500,000 tons of wood per year or more buy 60% to 80% of the wood they consume from within 50 air miles of the facility. The 50-mile buffer represents a zone of “intense” competition for new plants attempting to procure raw materials.

Forisk employs multiple data sources and an iterative mill-by-mill process to estimate the actual, current baseline wood demand and raw material competition in each market over time. The strengths of this approach are the ability to include current mill intelligence and to reconcile multiple data sources. The primary weakness is the dependence on mill-specific assumptions related to mill capacity, mix, chip use or consumption of recycled fiber. In practice, mills adjust their procurement activities and mixes continuously, so an analysis must take this into account.

We review specific mill-by-mill assumptions with clients and track key factors continuously over-time as part of our ongoing research. Estimates of market demand are cross-checked against data from other sources, such as the Wood Demand Report from the UGA Center for Forest Business and the US Forest Service TPO database. In cases, we also “back into” what’s possible and operable, taking a whiteboard
approach to “how would we operate in this market?” This exercise generates ideas and strategies that can be tested against the data.

End markets matter, too. In pulpwood markets, pulp and paper mills are of particular interest because they typically have the highest “ability to pay” for wood raw materials. Therefore, market assessments must account for trends by product and the economics associated with longer-term paper and paperboard demand.

Forisk will address “operable” and “analyzable” markets during “Timber Market Analysis” on August 11th in Atlanta, a one-day course for anyone who wants a step-by-step process to understand, track, and analyze the price, demand, supply, and competitive dynamics of timber markets and wood baskets.

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