Stumpage Market of Central Georgia: Identifying Driving Factors and Market Risk from Bid Transactions

Tim Sydor and Brooks C Mendell

Abstract

Stumpage prices in a given timber market is driven by the demands and preferences of buyers and sellers. The majority of these preferences are often unobserved, but some may be approximated and quantified by various characteristics that accompany bid sales. Accounting for observed characteristics of timber transactions may improve our understanding of stumpage market fluctuations and reduce our exposure to market volatility. A hedonic price model is developed for the pine sawtimber stumpage market in Central Georgia. An allocated pine sawtimber price per ton is regressed against observed characteristics of the tract and factors quantifying product size, volumes, and distributions on the tract. Results suggest that both size of the product and its total volume can be associated with higher stumpage prices. Other significant factors include product distribution, with preference given to higher grade products and timber quality. The model explains the effects of the observed characteristics on stumpage prices. As a result, accounting for these effects can be used to segregate the total price variance between explained and unexplained effects, thereby providing a perspective on the true price volatility with respect to general market fluctuations.

1 Forest Economist, Forisk Consulting and Visiting Assistant Professor, Center for Forest Business and Department of Banking and Finance, University of Georgia. Dr. Sydor can be reached at 706.621.2370, tsydor@forisk.com