Abstract for “New Techniques for Measuring Structure Depreciation Rates”

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Hulten and Wykoff used sales of used machinery to estimate depreciation rates for various asset classes. Their techniques cannot be applied directly to the sales of used structures because the sale price includes both the structure and the land that the structure sits on. The paper will draw on recent work by Diewert and Shimizu that applied hedonic regression techniques to residential house sales in order to obtain estimates of land prices, structure prices and depreciation rates. A feature of their work is that piecewise linear depreciation schedules were estimated. Their research indicated that depreciation rates were not constant throughout the life of the asset. The methods used by Diewert and Shimizu will also be applied to commercial properties.