Rural and Urban Influences on Agricultural Land Values

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Increasing land values pose challenges to farmers, both established and prospective. For established farmers, high land prices may make selling attractive, either to fund retirement or to finance the purchase of an alternative site with fewer urban intrusions. For prospective farmers, high land prices create a barrier to entry. The purpose of this poster is to invite discussion of factors impacting land values, using research on urban, recreational and rural influences on land values as a basis for discussion. Time-series data for Oklahoma agricultural land sales from 2001-2005 are analyzed to measure the impacts of agricultural, recreational, and urban factors. Agricultural influence is measured by the percent of acres in irrigated land, cropland, pasture, water, timber, and waste plus rainfall and crop and livestock income. Recreational use is portrayed using recreational income and deer harvest data. Urban influences are captured through population density, population growth and per capita income variables. Hedonic regressions are used to estimate results for the capitalization model in which agricultural land values derive from discounted returns to the land. Three models demonstrate differences in impacts on tracts of different sizes. Results indicate that agricultural factors and tract size are important determinants of land values. Although recreational income was often insignificant, positive significant coefficients on the deer harvest variable supports the idea that recreation uses are an important factor in explaining land value. The positive impact of urban influences is registered through both population density and per capita income.

Keywords: land values, land prices, urban/recreational/rural influences