

WHAT DOES LAND RENT FOR IN OHIO?

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A recent land rent survey conducted by the USDA reported the following average cash rents being paid for farm land in Ohio.

AVERAGE CASH RENT FOR FARM LAND
 OHIO - 1977

Crop Reporting District	Whole Farm Per Acre	Cropland Per Acre	Pasture	
			Per Acre	Per Head Per Month
1 (northwest)	\$68	\$71	\$19	\$5
2 (north central)	50	53	20	4
3 (northeast)	27	52	18	5
4 (west central)	73	83	32	5
5 (central)	56	58	21	4
6 (east central)	33	41	17	4
7 (southwest)	50	55	23	5
8 (south central)	34	38	18	3
9 (southeast)	28	34	20	4
STATE AVERAGE	\$47	\$58	\$21	\$4

mum plant size; A_n = marginal processing cost (dollars per quart) associated with the quarts in segment X_n ; $E^t(X_j)$ = expected size of plant j in time "t"; α = a non-negative scalar used in model validation and imposition of anti-merger restrictions; σ_j^t = the standard deviation around the expected size of plant j in time "t"; C = the minimum processing plant size = 750 quarts per day; B = the maximum processing plant size = 524,200 quarts per day; D_K^t = the demand for fluid milk products in demand area K in time "t"; δ = a non-negative scalar with a maximum value of 1 used when market share restrictions are imposed on the model.

⁵For detailed information on the linear separable programming algorithm employed, see the IBM 360 users manual.

⁶Alpha is used to introduce market share restrictions into the model. A precise parameter value representing the decrease in firm growth caused by merger restrictions is not available. An arbitrary value of .5 was assigned alpha. This is predicated on the fact that alpha for Model A, B and C was established as .65 (during model validation) and on the assumption (Scherer, p. 122) that the alpha in Model A should be greater than the alpha of Model D. The selected value of alpha will allow the effects of merger policy, in general, to be observed. The real magnitude of the effects will vary with the unknown magnitude of the merger influence on plant growth in the fluid milk processing industry.

⁷Gamma is used to introduce market share restrictions⁴ into the model. The parametric value of 20 percent was chosen because of its significance in anti-trust policy guidelines. Justice Department guidelines indicate that mergers will likely be challenged when four-firm concentration is 75 percent or more in any market (Trade Regulation Report, para. 4532-2). A 10 percent market share restriction was chosen because of its significance in the literature which suggests that when four firm concentration is less than 40 percent, the competitive norm is approximated (Bain, Mueller, Stigler).

⁸For the county in which the processing plant is located, the in-county distribution function is used with a value of \$.049785 per quart.

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