

March 30, 2007**FEFO 07-06****Farmland Price Increases Continue: Are They in Line with Farmland Returns?**

The Illinois Society of Professional Farm Managers and Rural Appraisers recently released their annual report on farmland values in Illinois. This report details farmland prices of different qualities across ten regions in Illinois. A PowerPoint file summarizing the report and a form for ordering the report are available under the "Land Values" tab at the Illinois Society's website (www.ispfmra.org).

Farmland Prices Continue to Increase

Farmland values continued to increase in Illinois during 2006, with the average increase across Illinois equaling roughly 5%. This increase is a continuation of a string of increases that have occurred in recent years, with increases in recent years being quite large. Farmland prices increased over 50% in many areas of Illinois between 2002 and 2006.

Development pressures caused much of the increase between 2002 through 2005. During this period, farmland near Chicago and other metropolitan areas was sold for urban development, with sellers often receiving high prices. Some of these sellers reinvested their proceeds in farmland further away from urban areas, sometimes being able to buy multiple acres for each acre sold. If the sellers of farmland who also bought farmland met certain requirements, the taxable gains on their sold farmland were deferred because they invested in like-kind property. These transactions often are termed "1031 exchanges" after that tax code that allows for deferral of gains.

In 2006, demand to develop farmland around urban areas declined. As a result the number of "1031 exchange" buyers declined. In 2006, Illinois Society members estimated that 43% of farmland transactions in Illinois involved 1031 exchanges, down by 13% from an estimated 56% of transactions in 2005. Because development pressures softened, some suspected that farmland prices would not increase during 2006. A survey conducted by the Illinois Society supported this suspicion. A 2006 mid-year survey indicated that farmland prices remained stable between the beginning and mid-year of 2006.

The situation changed in the second half of 2006. Due to increased demand for corn for ethanol production, corn and soybean prices began to rise. Currently, it is reasonable to expect commodity prices to be above historical averages for the next several years. Above average commodity prices lead to higher expected farmland returns. These higher actual and anticipated returns then likely led to farmland price increases during the second-half of 2006.

Farmland Prices Relative to Farmland Returns

Recent large increase in farmland prices raises the question of whether farmland returns have kept up with farmland prices. That is, are today's higher farmland prices causing earnings to lag behind prices?

To examine that issue, average farmland prices were compared to imputed farmland prices. For this comparison, imputed farmland price equals farmland return divided by interest rate.

Imputed farmland prices will increase as farmland returns increase. Comparisons of actual farmland prices to imputed farmland prices indicate whether growth in farmland prices is outpacing growth in returns. Over time, an increasing ratio means that farmland prices are growing faster than farmland returns and vice versa.

For this comparison, farmland prices in eastern Illinois (Champaign, Coles, Douglas, Edgar, Ford, Iroquois, and Vermillion counties) for excellent quality farmland as reported by the Illinois Society of Professional Farm Managers and Rural Appraisers were used. As can be seen in Table 1, these prices have been increasing. Farmland prices in eastern Illinois rose from \$3,200 per acre in 2002 up to \$5,150 in 2006, an increase of over 60 percent.

Farmland returns are taken from Illinois Farm Business Farm Management (FBFM) summaries for central Illinois grain farms with high quality farmland. FBFM reports per acre "operator and farmland returns" that represent returns to both operators and farmland (see Table 1). Imputed operator returns, equaling returns to the farmers' labor and capital, are subtracted from operator and farmland return to arrive at farmland returns (see Table 1).

Table 1. Land Prices, Farmland Returns, and Imputed Prices for East Central Illinois, 1995 - 2006.

Year	Average Land Price ¹	Operator and Farmland Return ²	Imputed Operator Return ²	Farmland Return ³	20-Year Treasury Rate ⁴	Imputed Farmland Price ⁵	Actual Divided by Imputed Price
		\$ per Acre					
1995	3,080	173	44	129	7.0	1,856	1.66
1996	3,340	222	42	180	6.8	2,635	1.27
1997	3,550	190	48	142	6.7	2,123	1.67
1998	3,180	129	44	85	5.7	1,486	2.14
1999	3,090	165	41	124	6.2	2,000	1.55
2000	3,100	179	44	135	6.2	2,167	1.43
2001	3,150	153	44	109	5.6	1,936	1.63
2002	3,200	155	40	115	5.4	2,118	1.51
2003	3,600	207	38	169	5.0	3,407	1.06
2004	4,800	230	37	193	5.0	3,829	1.25
2005	5,000	199	40	159	4.6	3,427	1.46
2006	5,150	248	45	203	5.0	4,060	1.27

¹ Taken from yearly "Illinois Farmland Values and Lease Trends" reports prepared by the Illinois Society of Professional Farm Managers and Rural Appraisers. Data are for the eastern region (region 5) and for excellent productivity farmland. Usually the reports give a price range. The midpoint of the range is reported in this table. The region definition changed in 2001. Since 2001, the eastern district contains seven counties in eastern Illinois. Prior to 2001, the eastern region was larger.

² Data are taken for high-productivity farmland in central Illinois. Data are provided from Illinois Farm Business Farm Management and represent summaries for Illinois grain farms.

³ Equals operator and farmland return minus operator return.

⁴ Taken from Federal Reserve Statistical releases at <http://www.federalreserve.gov/RELEASES/H15/data.htm>.

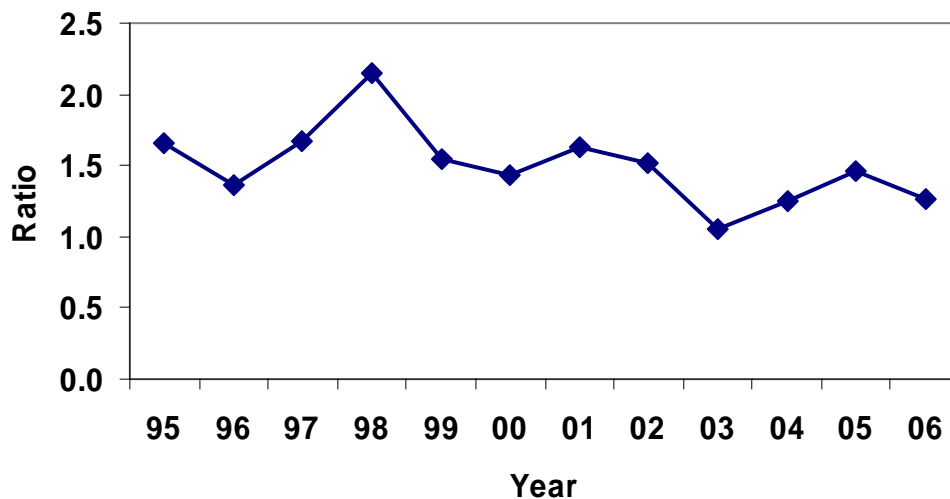
⁵ Imputed farmland prices equal farmland return divided by interest rate.

From 1995 through 2006, farmland returns averaged \$145 per acre (see Table 1); however, returns in later years averaged higher than early years. Farmland returns averaged \$127 from 1995 through 2002 compared to \$181 between 2003 through 2006. The farmland return in 2006 was \$203 per acre, considerably higher than the than average and higher than any other return between 1995 through 2006.

Imputed prices were calculated by taking yearly farmland returns and dividing by rates on 20-year treasury notes. Imputed farmland prices exhibited considerable variability, having a low of \$1,486 in 1998 and a higher of \$4,060 in 2006 (see Table 1). Overall, imputed prices increased in later years.

Ratios of actual to imputed prices have not shown a trend between 1995 through 2006 (see Table 1 and Figure 1). The ratio averaged 1.5 between 1995 through 2006 and recent years have been below the average. This suggests that recent increases in farmland returns have kept up with increases in farmland prices.

Figure 1. Actual Divided by Imputed Farmland Price, East Central Illinois, 1995 - 2006.



However, some caution should be expressed in this conclusion. The 2006 return, in particular, reflects rising commodity prices from ethanol demands. Movement back to nearer historical commodity price levels would result in lower farmland returns. This would cause the ratio of actual to imputed farmland price to increase, perhaps leading to downward adjustments in farmland prices.

Summary

Farmland prices in Illinois continue to increase, primarily because ethanol demands have led to higher commodity prices and higher farmland returns. It does not appear that higher farmland prices are out of line with farmland returns in east central Illinois. Price and return relationship will vary across Illinois and may diverge in some regions, particularly those close to urban areas. A return to historical average returns could cause a divergence between farmland returns and prices, potentially leading to downward farmland price adjustments.

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