

Indiana Land Values and Cash Rent Update

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In spite of a significant drought in several areas of the state and low returns or losses associated with the production of pork, beef, poultry, and milk, cash rents and land values remain strong. The results of the Purdue Land Value and Cash Rent Survey conducted in June indicated that land values and cash rents continued to increase. Land values increased 3.2% to 7.8% compared to the previous year. Cash rents increased 1.4% to 4.6% compared to the previous year. Indiana land values and cash rents surpassed their previous high in 1998, so these increases are new highs, Figure 1 and Figure 2.

Figure 1. Indiana per acre land values

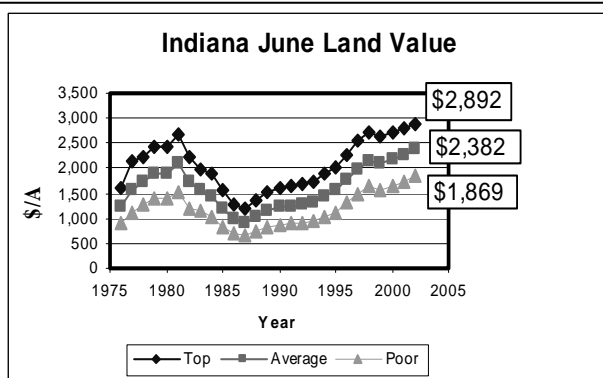
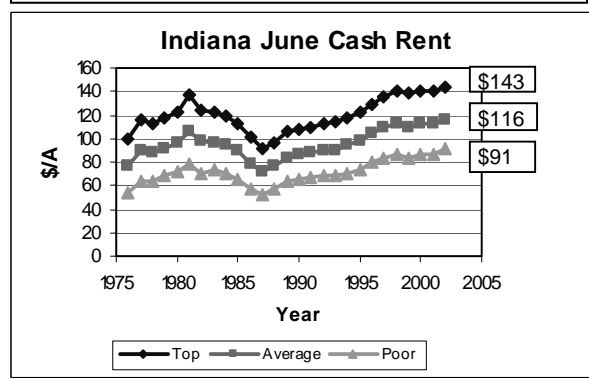


Figure 2. Indiana per acre cash rent



Land Values

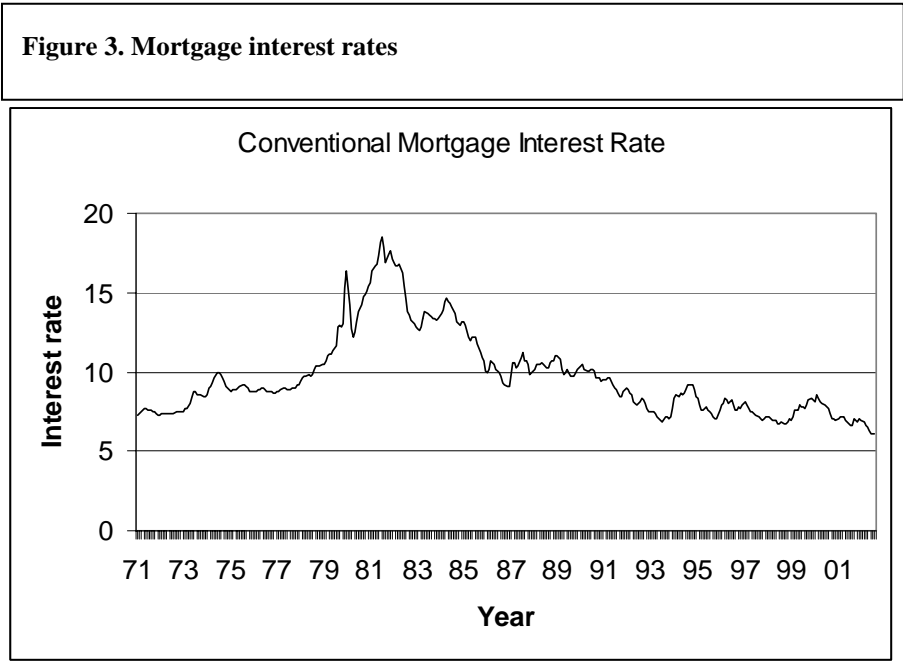
Since June, there have been two published sources of information that provide insight into the changes taking place in the farm real estate market. One of these sources is the quarterly survey of farmland values and credit conditions conducted by the Chicago Federal Reserve Bank. Based on a survey of agricultural bankers in Iowa, Illinois, Wisconsin, Michigan, and Indiana, the quarterly (July 1 to October 1, 2002) increase in farmland values was two percent. For the year, October 1, 2001, to October 1, 2002, district farmland values increased seven percent. The northern and central regions of Indiana are in the Chicago Federal Reserve District. For the quarter, there was a one percent increase in land values for the northern region and no change in the central region. For the year ending on October 1, 2002, farmland values in the northern region increased seven percent and four percent in the central region.

Data from the November survey conducted by Iowa State University also indicates continued strength in farmland values. Data from this survey indicated an 8.2% increase in farmland values for the state. The average value of \$2,083 per acre was the second highest figure reported since the annual survey of land values began in 1941. Results from this survey are also reported for each county. These results indicate the importance of local conditions and the variability in values from one county to another. Fourteen counties had an increase of 20 percent or more while 19 counties showed a decrease from 2001 values. The largest being a decline of 8.7 percent.

Land values remain strong because of the limited supply of land for sale and the strong demand. While many expected the housing boom to cool, it has continued. Developers continue to purchase land for subdivisions and commercial development. Rather than pay the capital gains tax from the sale of farmland to developers, many sellers chose to use tax-free exchanges. These purchases continue to set the tone for the land market, especially for the larger tracts of prime farmland. In many cases, these buyers must convince the current owners to sell. The demand for country home sites also continues to be strong and purchases of land for recreational use continue.

As the return on stocks, bonds, CDs, etc. declined, there has been some increase in demand for farmland from nonfarm investors. The decline in the attractiveness of these alternative investments has also influenced the supply of farmland for sale. Owners of farmland presently have an investment that provides a 4-5 percent annual income and is appreciating in value. While a farmland investment is not as liquid as other investments, the current return on alternative investments is not providing a strong incentive to sell.

There also continues to be demand from farmers seeking to increase the size of the farm. Farmers tend to buy smaller tracts than nonfarm investors or people making tax-free exchanges. Low long-term interest rates are providing support to the entire real estate sector and certainly reduce the repayment cash flow requirements. Figure 3 illustrates the drop in conventional mortgage rates that has occurred. In the last two years, mortgage interest rates have declined nearly two percent. On January 3, 2002, the interest rate on a 20-year fixed mortgage from Farm Credit Services was 6.85% to 7.25%. If these rates have declined in a fashion similar to conventional mortgage interest rates, this means that the repayment requirements for each \$1,000 borrowed declined 14% in the last two years.



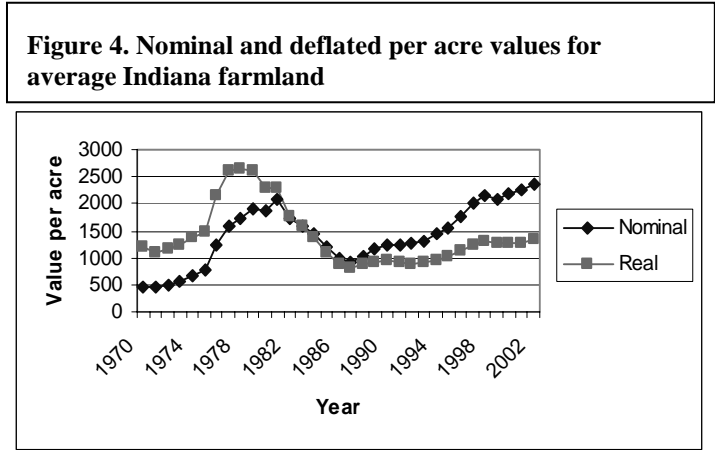
This reduction in interest rate improves the cash flow requirements of a purchase using debt. However, while interest rates were declining, the value of farmland was increasing. In 2000, an investor purchasing average Indiana farmland needed a down payment of 53 percent for the cash rent to make the loan payments. In 2002, this same investor only needed a down payment of 49 percent. While not a big change, the decline in interest rates has lowered the cash flow demands of a debt purchase.

When the general economy gains strength, long-term interest rates are likely to increase. The influence of changing interest rates would then be the reverse of those discussed above. If the returns from crop production continue to remain low, the rising interest rates could slow the rate of land value increase.

The new farm bill with its counter cyclical provisions will provide income support for Indiana farmers. As with other farm bills, this income support will quickly be bid into land values and cash rents.

While the market or nominal farmland values have recovered more than the value lost in the 80s, adjusting these values for inflation provides a somewhat different picture. To reflect the purchasing power associated with farmland, market values were adjusted to real or deflated values using the consumer price index. The results for average Indiana farmland are presented in Figure 4.

How well your farmland investment has conserved its purchasing power depends on when a purchase is made. If a purchase was made in 1987, the bottom of the decline in the 80s, the



farmland purchase has not only held its purchasing power but has increased in real terms. However, if the purchase was made between 1974 to 1984, farmland has not retained its purchasing power.

The final issue related to farmland ownership in Indiana is the new assessment process used for property taxes. The assessment process is being revised in order to make assessments market based as required by the Indiana constitution. Assessors are

currently making assessments under the new procedures. While this process is moving ahead, it is moving ahead slowly. There is concern that this work will not be completed in time for the Spring tax bills. Changes made to the procedures for assessing agricultural land appear to be minimal. The major change is the increase of the base rate value to \$1,050 per acre. This value is then adjusted for productivity and other influences of value. While the new assessment process has created uncertainty, studies of the changes indicate that on average owners of agricultural land will see a reduction in property taxes of about 13 percent.

Cash Rent

Rental of farmland is an important method by which farmers obtain control of farmland. The 1997 Census of Agriculture indicates 16.5 million acres of Indiana land is in farms. Of the total land in farms, 8.7 million acres (52.7 percent) is rented. While the image of the Indiana farmer may be an owner-operator, the reality is that on average the state's farmers rent more land than they own.

The 1997 Census of Agriculture also reported the number of various lease types. Census data indicates the most common lease is the cash lease, totaling 51.9 percent of all leases. Cash leases are used on 50.7 percent of the rented acres. The cash/share lease was the next most common lease, accounting for 27 percent of the leases and 27.5 percent of the leased acres. Next was the share lease, accounting for 18.8 percent of the leases and 19.4 percent of the acres. The final

category of leases reported was the adjustable cash lease. These leases accounted for 6 percent of the leases and 4.4 percent of the lease acres.

Since 1997, the general trend away from crop-share leases towards cash leases has continued. Part of the reason for this shift has been the higher less risky return provided to the landowner by the cash rent lease when compared to the crop-share lease. It seems that many landlords and tenants would rather change from a crop-share to a cash rent lease, than change the traditional terms of a crop-share lease. Another advantage of the cash rent lease is simplicity.

The demand for rental land is quite strong. Expanding the size of the farm by renting land is a strategy that is being aggressively pursued by many farmers. Combining the strong demand with the limited supply of land available to rent each year creates a strong rental market. The new Farm Bill has removed the uncertainty of income support levels for the next several years. Various analyses of the farm bill indicate that support levels are such that they will not require a downward adjustment in cash rent. The implementation process associated with updating base acres and yields is under way and while it is taking longer than people would like, the process is proceeding. Once the process is complete, producers and/or landowners can obtain a payment. The loss of LDPs this fall and the change in the timing of government program payments is creating a tighter cash flow situation for some farmers. This tighter cash position may be contributing to some resistance to increases in cash rent, but it appears rents are increasing. Areas of the state in which yields were poor because of the dry weather in 2002, are expected to see smaller changes in cash rent.

To estimate the return that might be received by farmers for 2003, a corn and soybean rotation budget was prepared (Table 1). The corn and soybean prices used were developed using closing future price quotes obtained December 27, 2002. The estimated harvest price for corn, \$2.16, was assumed to be \$0.25 less than the close for the December 2003 contract. The estimated harvest price for soybeans, \$4.83, was assumed to be \$0.30 less than the close for the November 2003 contract. While these prices are better than they have been in the past, their influence is dampened because the revenue from higher prices is offset by lower government payments. Given the estimated prices, only soybeans receive the loan

Table 1. Budgeted return for average land with a corn-soybean rotation using 5-year expected prices.

Project harvest price	Corn	Beans
Projected harvest price	\$ 2.16	\$ 4.83
Yield	140.3	47.0
Market revenue	\$ 303.05	\$ 227.01
LDP Payment	\$ -	\$ 14.57
Direct government payment	\$ 26.30	\$ 13.84
CCP government payment	\$ 5.67	\$ 8.36
Gross revenue	\$ 335.02	\$ 263.78
Variable production cost	\$ 154.00	\$ 98.00
	<u>\$ 181.02</u>	<u>\$ 165.78</u>
50-50 rotation	\$ 173.40	
Machinery overhead	\$ 52.10	
Drier overhead	\$ 7.20	
Operator labor	<u>\$ 35.00</u>	
	<u>\$ 94.30</u>	
Return to land	\$ 79.10	
Rent	\$ 123.00	
Return after rent	\$ (43.90)	

deficiency payment (LDP). Both corn and soybeans received a counter cyclical payment (CCP)¹. While the direct payment and CCP payment are attributed to corn or soybeans in the budget, these payments will be received even if corn and soybeans are not produced.

Production costs are based on Purdue Extension Publication ID-166, *2003 Purdue Crop Guide*. These costs are above those of last year. The largest cost increases arise from changes in the prices of fertilizer, especially nitrogen, and fuel. The prices of these items reflect January 2002 prices. These prices are being influenced by international events and suppliers are reluctant to provide long-term price quotes at this time.

Machinery and drier expenses represent the ownership costs, depreciation, interest on the average investment, property taxes, and insurance, of these assets. Labor expenses include a family living withdrawal of \$24,723 (\$48,097 of family living expenses less \$23,374 in net nonfarm income reported by Illinois Farm Business Farm Management Association records in 2001) and \$10,000 for hired labor. The per acre numbers assume a 1,000 acre farm.

The budgeted return to land is about \$79 dollars per acre, \$44 less than the \$123 estimated cash rent for land producing 140 bushel corn. This value continues to indicate that the full cost of machinery and labor is not being recovered for the 1,000 acre farm.

Summary

The value Indiana farmland continues to increase and it appears that the forces are in place for this trend to continue. It is expected that values will increase 3 – 6 percent. The strong demand for rental land and its limited supply is expected to push cash rents 2 – 3 percent higher. These increases are being supported by government payments and off-farm income, low interest rates, higher grain prices, a modest increase in production costs, and pressure to expand farm size. Land values are also being influenced by tax-free exchanges. Because of the variations in yields caused by the weather in 2002, there will likely be greater variations in cash rents and land values across the state.

¹ Additional assumptions used in estimating the corn government payments include the following: direct payment yield - 105 bu. per acre, direct payment rate - \$0.28, target price - \$2.60, CCP program yield 133.4 bu per acre (0.935*average 1998-2001 Indiana yields), 12-month U.S. marketing year price - \$2.27. Additional assumptions used in estimating the soybean government payments include the following: direct payment yield - 37 bu. per acre, direct payment rate - \$0.44, target price - \$5.80, CCP program yield 44.7 bu per acre, 12-month U.S. marketing year price - 5.02.