



Iowa farmland values and cash rental rates

by William Edwards, extension economist, 515-294-6161, wedwards@iastate.edu

Perhaps no topic generates as much interest in rural areas as the value of Iowa farmland. A close second would be rental rates for farmland in Iowa. Survey results, auction values and trends are all watched closely and reported in detail.

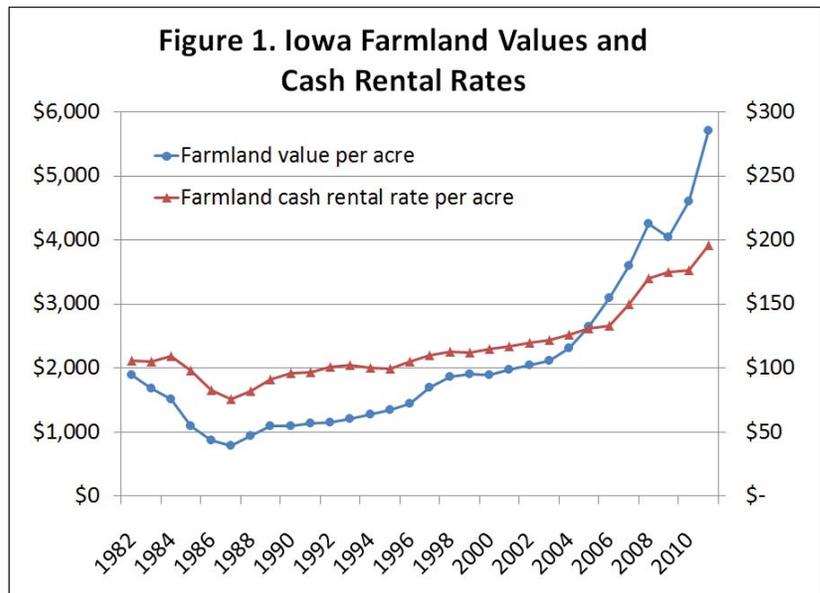
Profit margins

Cash rental rates basically react to the profit margins available from producing Iowa's major crops, that is, revenue minus costs. The revenue side of the equation is the product of yields and prices, plus any additional income such as commodity program payments and crop insurance indemnities. The cost side includes seed, fertilizer, pesticides, machinery, labor and other inputs. When the difference between revenue and costs expands or diminishes, rents eventually follow suit. Because most cash rents are set in advance, they reflect renters' and owners' expectations about profit margins, which in turn are highly influenced by results in the most recent crop years.

Land values are influenced by the same variables as cash rents, but because a land purchase is a longer-term commitment than a rental contract, values reflect longer-term expectations about revenue and costs. In addition, interest rates and expected returns in other types of investments affect what buyers are willing to pay and sellers are willing to accept in a land transaction, but have less impact on rental bids. Potential future uses of land for development or recreation also affect land purchase values in certain locations, but have little impact on annual rents.

Recent trends

In the past three decades, Iowa farmland values and rents have experienced a decline, a period of gradual increases, and a period of rapid increases, as shown in Figure 1. The data shown in Figure 1 are from the USDA National Agricultural Statistics Services (NASS) annual survey of farmers and represent January 1 values each year. Both land values and cash rental rates reported are for all cropland, not just land planted to corn and soybeans. The NASS values tend to be slightly



lower than the values reported in the Iowa State University surveys, but they follow the same general trend.

The trend lines in Figure 1 indicate that land values have been increasing faster than cash rental rates during the past decade. Only a small percentage of farmland changes hands each year, but the sale prices are generally public knowledge and quickly influence the public perception of land values. Cash rents, on the other hand, may not be adjusted every year for changing economic conditions for a variety of reasons. Landowners may not become aware of changes in prices or costs as quickly as tenants, some lease contracts may be for multiple years, gratitude for long-term land stewardship or extra services may make owners reluctant to increase rental rates, and rental rates are not public information. Thus, the average rent paid each year may lag behind the level of rents that are newly negotiated in any given year when crop margins are either increasing or decreasing.

Figure 2 shows the ratio of cash rents to land values in Iowa since 1982. It peaked at nearly 10 percent in 1987, and has dropped below 4 percent the past two years. Note that it is not an actual net return because ownership costs, such as real estate taxes, have not been subtracted from the cash rent received.

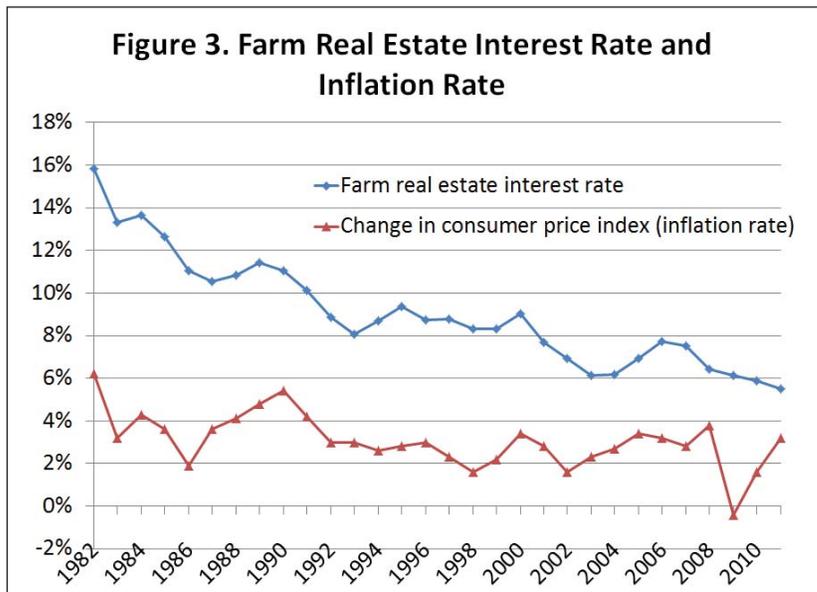
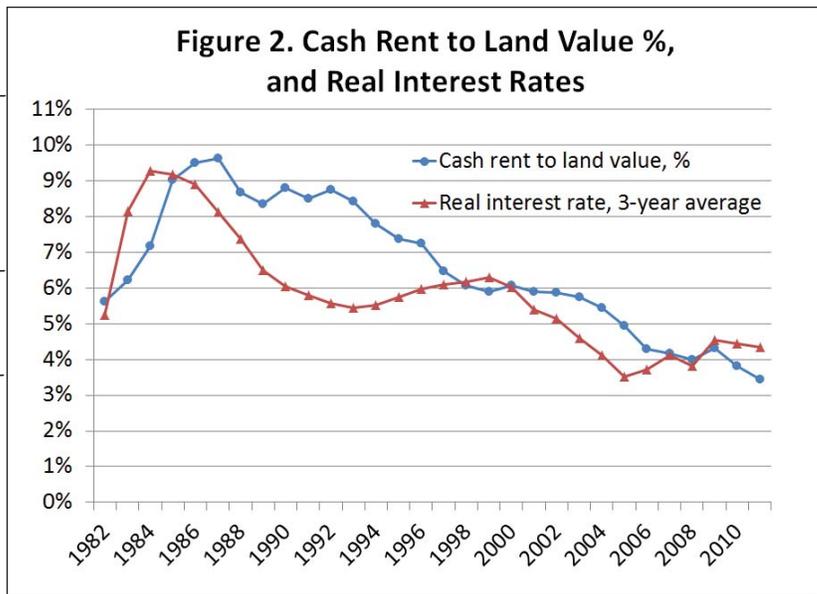
Iowa farmland values and cash rental rates, continued from page 5

Interest rates

The role of interest rates on land values and rents must also be considered. The U.S. Federal Reserve System made a decision to raise interest rates and tighten credit in the early 1980s to reduce inflation in the economy. Ever since then both interest rates and the general rate of inflation have been on a gradual downward path. Figure 3 compares the annual changes in the consumer price index (inflation rate) estimated by the U.S. Department of Commerce to the three-year average interest rate for farm real estate loans as reported by the Chicago Federal Reserve Bank. Although both rates have followed a similar trend, the gap between them has been narrowing. The difference is known as the real interest rate, that is, the cost of borrowing net of inflation. As shown in Figure 2, it has followed the same general path as the rent-to-value ratio, especially since 1997.

The explanation is that buyers will bid up the price of income-producing assets, such as farmland, until their expected rate of cash return is near the real cost of borrowing. Rates of return on alternative investments, such as certificates of deposit, are lower than returns to farmland (they carry less risk), but also follow the same trend. To put it another way, farmland investors are willing to accept a rent-to-value ratio of less than 4 percent today because alternative investments with similar degrees of risk are not returning any higher rates.

To summarize, cash rental rates have not been rising as fast as land values partly due to “sticky” rents that have not responded quickly to higher profit margins, but a general decline in real interest rates has also had a major role in pushing down rent-to-value ratios. Until interest rates increase we cannot expect rent-to-value ratios to return to levels seen in the 1980s and 1990s.



Updates, continued from page 1

Current Profitability

The following tools have been updated on www.extension.iastate.edu/agdm/info/outlook.html.

- Corn Profitability** – A1-85
- Soybean Profitability** – A1-86
- Iowa Cash Corn and Soybean Prices** – A2-11
- Season Average Price Calculator** – A2-15
- Ethanol Profitability** – D1-10
- Biodiesel Profitability** – D1-15

... and justice for all

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Many materials can be made available in alternative formats for ADA clients. To file a complaint of discrimination, write USDA, Office of Civil Rights, Room 326-W,

Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and August 30, 1914, in cooperation with the U.S. Department of Agriculture. Cathann A. Kress, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

Permission to copy

Permission is given to reprint ISU Extension and Outreach materials contained in this publication via copy machine or other copy technology, so long as the source (Ag Decision Maker Iowa State University Extension and Outreach) is clearly identifiable and the appropriate author is properly credited.