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Have Iowa farmland values reached the top?

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Have Iowa farmland values reached the top?

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Two recent surveys of Iowa farmland values show the increase in farmland values has slowed, if not stopped altogether. The Federal Reserve Bank of Chicago survey of bankers reported Iowa land values were unchanged in the second quarter of 2013. The Realtors Land Institute reported that Iowa farmland values increased just 1.2 percent from March to September, 2013.

Do these surveys show a land market that is just catching its breath or a boom land market that is gasping its last breath? Obviously only time will answer that question correctly but speculation on what is and what will happen to Iowa farmland values abounds.

Before addressing the question of the current farmland market it might be informative to see if the past two land booms provide any insights. There have been several land booms throughout the history of the United States, with the two most recent being from 1900 to 1920 and from 1973 to 1981.

The first boom period, 1900 to 1920, shown in Figure 1, has been referred to as the first golden era in agriculture. Corn prices began rising at the turn of the century and land values followed suit. From 1900 to 1914, Iowa farmland values increased an average of 7.8 percent a year. During the years of WWI, 1914 to 1918, land values increased 8.8 percent a year, and in the final two years, 1919 and 1920, land values increased 9.1 percent and 33.5 percent, respectively. From 1900 to 1920 Iowa farmland values increased from $44 an acre to $255 an acre, an increase in land values of almost 480 percent in 19 years.

The second boom period, 1973 to 1981, has been referred to as the second golden era in agriculture. Land values in Iowa increased by over 30 percent per year in 1973, 1974 and 1975. Over the entire boom period Iowa farmland values went from $482 an acre in 1972 to $2,147 an acre in 1981, an increase of 345 percent.

These land booms have some aspects in common and some differences. It isn't possible in a single column to discuss all of the various nuances of these booms.

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Handbook updates

For those of you subscribing to the handbook, the following new updates are included.

Grain Storage Alternatives: An Economic Comparison – A2-35 (7 pages)

2012 Iowa Farm Costs and Returns – C1-10 (12 pages)

Survey of Iowa Leasing Practices – C2-15 (8 pages)

Farmland Value Survey (Realtors Land Institute) **–** C2-75 (2 pages)

Agricultural Measurements and Conversions – C6-84 (4 pages)

Please add these files to your handbook and remove the out-of-date material.

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However, three salient features stand out in these booms. One feature is the booms were driven by increasing prices and returns. A 1967 publication by the State Historical Society described the first boom period as, "For agriculture this was prosperity piled on top of prosperity." The second boom in the early 1970s was fueled by the rapid rise in commodity prices due in part to the opening of major export markets. Corn prices in Iowa averaged $1.04 per bushel in 1972 and they averaged $2.58 per bushel in 1974.

A second distinguishing characteristic of the two boom periods was the level of borrowing and enthusiasm that was created. Responses to a 1919 survey illustrate the prevailing attitude in the first boom. A Tama county banker responded saying land, "…will never be worth any less and the tendency will be for higher prices from now on, as land will be the safest investment in the world."

There were contrarians to this position. Another Tama county banker responding to the 1919 survey expressed concerns the high prices wouldn't last, saying, "… I believe it behooves us all to go cautiously, and instead of contracting heavy future obligations we should be utilizing these high prices to free ourselves from debt."

Similar statements can be found regarding the boom in the 1970s. "They don't make land anymore, everybody has to eat, and I made more money owning the land than I did farming it" are common phrases that were heard or recorded during this "second golden era."

Figure 1. Iowa Land Values per Acre, 1900 - 1949

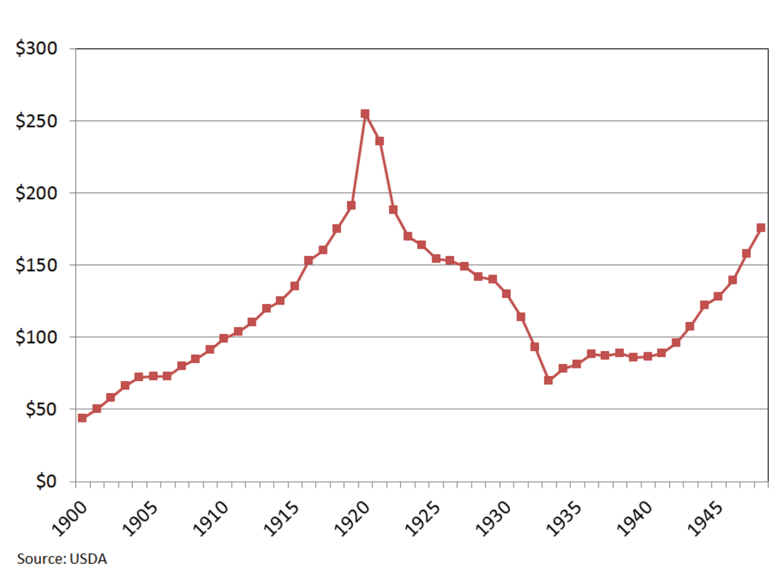
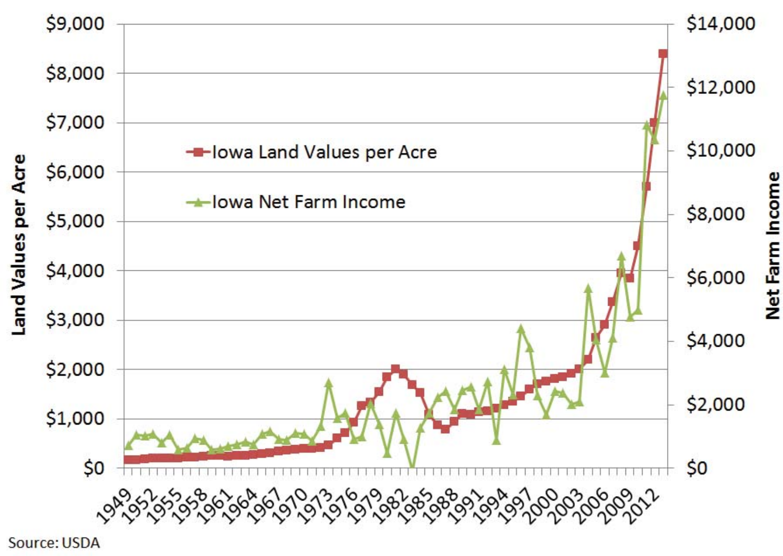


Figure 2. Iowa Land Values and Net Farm Income, 1949 - 2013



Exceptionally higher income and an increasing optimism for the continuing rise in land values, which led to excessive debt and mortgages being assumed, are two of the hallmarks of the boom periods. The third common feature with both the booms is they ended dramatically and with significant social unrest. Land values dropped 73 percent from 1920 to 1933 and they dropped 63 percent from 1981 to 1986. The decline in the 1920s was more severe and lasted longer due to the major depression in the entire economy that followed the initial depression in the agricultural sector.

Obviously there is more to the boom periods but these three features provide some guideposts for us to begin thinking about whether or not Iowa land values have peaked or are just catching their breath. Since 2004 Iowa farmland values have increased over 10 percent a year in every year except 2009. In that year, 2009, Iowa farmland values actually decreased 2.2 percent.

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A major similarity between now and the booms of the past has been the accelerated increase in income. The estimated 2012 Iowa net farm income is 340 percent higher than in 2004. Iowa farmland values were 265 percent higher over the same time period.

There is a very direct correlation between farm income and farmland values (Figure 2). The correlation is higher between land values and gross farm income than between land values and net farm income.

Since 1949 there is a .97 correlation coefficient (1 is perfect correlation) between gross farm income and land values and a .88 correlation between land values and net farm income. Given these very high correlations it is possible to estimate what might happen to land values with a change in income.

A series of simple models was estimated using gross and net farm income, nominal and real values, and log values to predict land values. The predictive power of some of the models was very high, especially considering the models only included one explanatory variable. The estimated percent change in land values from a percent change in gross farm income is approximately .75 percent. In other words, every one percent change in gross income will produce a .75 percent change in land values.

This is a strong estimator, however, for the 10 years of boom and bust in the 1970s and 1980s and, for the past few years, the models lose their predictive power. Many other factors take over during these periods of dramatic swings in income and land values.

The second similarity between the two previous booms was the amount of debt accrued and the exuberance that was generated. Currently there doesn't appear to be an inordinate amount of debt being generated. This isn't to say some people have not put themselves into a position where a downturn could be devastating. However, for the most part, farmers, landowners and lenders have been more cautious than during previous booms. A 2012 study of Iowa landowners found that 78 percent of the land is held without any debt.

There has been enthusiasm generated with this current land value expansion. One farm magazine even declared this was a new golden era for agriculture. But the enthusiasm has not become the unbridled exuberance of the previous busts. This might be due to the fact that many people who experienced the land boom and bust of the 1970s are still active.

Now we are back to the original question: are we at the top of the farmland market or is this just a temporary resting point? Will the third common feature of the two previous land booms (a big bust) come to pass?

I was taught if you predict, predict the worst because if you are right you can say I told you so and if you are wrong everyone is relieved and they don't remember what you said. But in spite of this sound advice, I am going to go out on a limb and say that the answer to the question of whether or not we are at the top in the land market depends.

The most important variable to watch is income. What happens to farm income will have a direct bearing on land values. While it isn't a perfect correlation, it is a strong one. I think some of the factors that created the busts we saw after the past two booms haven't been as strong this time.

I do not think land values will continue to increase as they have in the past few years. There has been too much pressure put on farmland prices to be sustainable. Farmland value increases of over 60 percent in two years are not sustainable. Increases in the number of alternative investments, changing interest rates, and lower expectations for farm income will all stop the rapid rise in farmland values.

Farmland is an investment for the long run. In fact, most land is bought by farmers and most farmers buy land to own it, not sell it. The land is obtained with an idea that it will become the legacy, inheritance and social security, not as a get rich scheme.

I think the double digit increases in land values might be over for now. I also think if the projections for income hold then we will see a decline in land values. In 2009 we saw land values drop slightly over 2 percent. I think we will likely see a larger drop than that in the years ahead but I don't think a collapse is a high probability. War, interest rate changes, fiscal paralysis, world economic conditions and a host of other factors will exert influences on land values but in the end income will continue to be the key.