



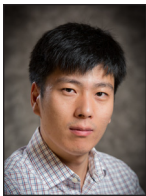
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Iowa farmland values increase after three years of decline

By Wendong Zhang, extension economist, 515-294-2536, wdzhang@iastate.edu

After having fallen in each of the three previous years, the average value of an acre of farmland in Iowa saw an increase in 2017. The average statewide value of an acre of farmland is now estimated to be \$7,326. This represents an increase of 2.0 percent, or \$143 per acre, from the 2016 estimate.

Land values were determined by

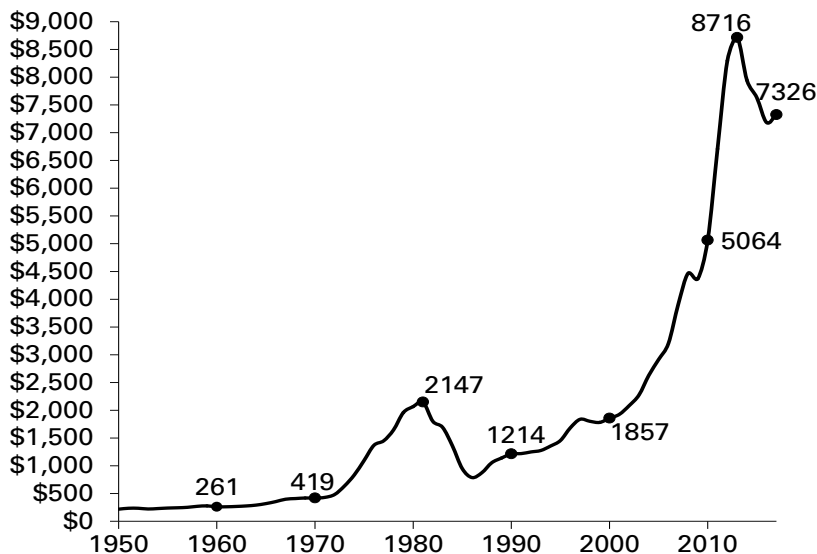
the 2017 Iowa State University Land Value Survey, which was conducted in November by the Center for Agricultural and Rural Development (CARD) at Iowa State University and Iowa State University Extension and Outreach. Results from the survey are consistent with results by the Federal Reserve Bank of Chicago, the Realtors Land Institute, and the US Department of Agriculture.

Dr. Wendong Zhang, Assistant Professor of Economics at Iowa State University, led the annual survey.

The \$7,326 per acre estimate, and 2.0 percent increase in value, represents a statewide average of low-, medium-, and high-quality

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Figure 1. Average value per acre of Iowa farmland



Source: Iowa State University Land Value Survey

Handbook updates

For those of you subscribing to the handbook, the following update is included.

2017 Farmland Value Survey
Iowa State University – C2-70
(8 pages)

Please add this file to your handbook and remove the out-of-date material.

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farmland. The survey also reports values for each land quality type, crop reporting district (district hereafter), and all 99 counties individually.

Starting in 2004, several factors, including the ethanol boom and historically low interest rates, drove five consecutive years of double-digit growth in average farmland values, culminating in an historic peak of \$8,716 per acre by 2013. Average farmland values then began an immediate decline, dropping 8.9 percent, 3.9 percent, and 5.9 percent, in the following three years. Those declines were the first time since the 1980s farm crisis that farmland values had declined three consecutive years.

Limited land supply is the main factor driving this year's increase in farmland values. Commodity prices and farm income are still stagnant. I would not consider this a turn of the land market. Given the rising interest rates and stagnant farm income, I would not be surprised to see a continued decline in values in the future. This, to me, is a temporary break in a downward adjustment trajectory.

Land values by county

Only four of Iowa's 99 counties—Fremont, Mills, Montgomery, and Page—reported lower land values this year. Each of those counties reported a decline in value of 0.3 percent. For the fifth year in a row, Scott and Decatur counties reported the highest and lowest farmland values, respectively. Decatur County reported a value per acre of \$3,480, a gain of \$37, or about 1.1 percent, from last year's report. Scott County reported a value of \$10,497, an increase of \$162 per acre, or about 1.6 percent.

Dubuque County reported the largest dollar increase in value with a gain of \$335 per acre, and Allamakee and Clayton Counties reported the largest percent increase in values, 4.7 percent. Of the four counties that reported a decrease in value, Mills County had the largest dollar decrease in value, showing a decline of about \$25 per acre.

Land values by district

Of the nine crop reporting districts, only the South Central district reported a decrease in average value, with values falling from \$4,241 per acre in 2016 to \$4,172 in 2017, a loss of 1.6 percent. The Northwest district again showed the highest overall value—\$9,388 per acre, up from \$9,243 per acre in 2016, a gain of 1.6 percent. The East Central district showed the largest percentage gain in value, 3.8 percent, bringing average value there to \$8,218.

Land value by quality

Statewide, high-, medium-, and low-quality farmland values increased 2.0 percent, 2.2 percent, and 0.5 percent, respectively. High-quality farmland saw the largest increase in value in the East Central district, 4.2 percent, and the largest decrease in the South Central district, 1.2 percent. Medium-quality farmland increased the most in the Southeast district, 4.2 percent, and the decreased the most in the South Central district, losing 1.2 percent. Low-quality farmland gained the most value in the Northwest district, 3.3 percent, and decreased the most in the Southwest district, where it fell 6.1 percent.

Factors influencing land values

The most common positive factors influencing land prices noted by survey respondents were favorable interest rates, strong crop yields, limited land supply, strong demand, and the availability of cash and credit. The most commonly cited negative influences were lower commodity prices, cash or credit availability, high input prices, weak cash rental rates, an uncertain agricultural future, and strong alternative (stock market, economy).

The ISU land value survey was initiated in 1941, the first in the nation, and is sponsored annually by Iowa State University. The survey is conducted every November and the results are released mid-December. Only the state average and the district averages are based directly on the ISU survey data. The county estimates are derived using a procedure that combines the ISU survey results with data from the US Census of Agriculture.

The ISU Land Value Survey is based on reports by agricultural professionals knowledgeable of land market conditions such as appraisers, farm managers, agricultural lenders, and actual land sales. It is intended to provide information on general land value trends, geographical land price relationships, and factors influencing the Iowa land market. The 2017 survey is based on 877 usable responses from 710 agricultural professionals. Sixty-four percent of these 710 respondents answered the survey online.

CARD offers a web portal at www.card.iastate.edu/farmland/ that includes visualization tools, such as charts and interactive county maps, allowing users to examine land value trends over time at the county, district, and state level. AgDM File C2-70, 2017 Farmland Value Survey-Iowa State University, also provides more details of the results, www.extension.iastate.edu/agdm/wholefarm/html/c2-70.html.

Census countdown begins for Iowa's farmers and ranchers

For more information about the 2017 Census of Agriculture, visit www.agcensus.usda.gov or call (800) 727-9540.

Iowa's farmers and ranchers will soon have the opportunity to make a positive impact on their industry and communities by taking part in the 2017 Census of Agriculture. Conducted every five years by the U.S. Department of Agriculture's (USDA) National Agricultural Statistics Service (NASS), the Census is a complete count of all U.S. farms, ranches and those who operate them.

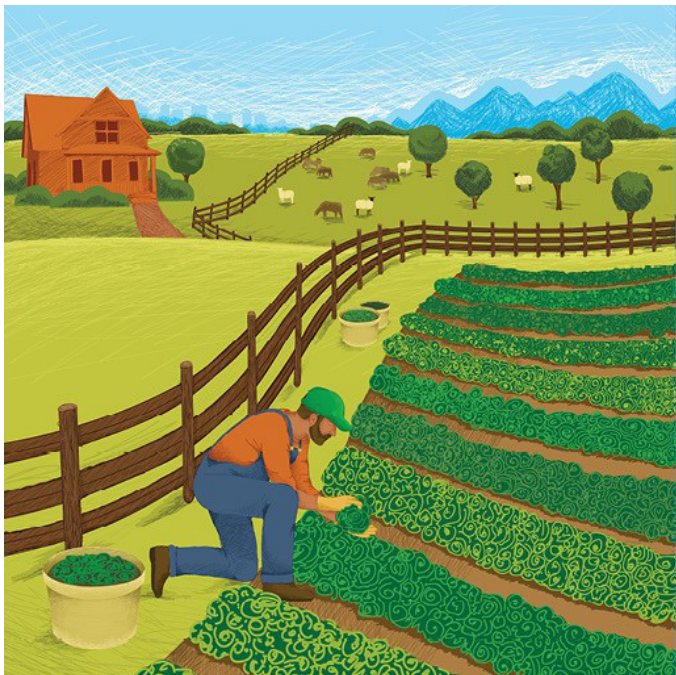
The Census of Agriculture provides a wealth of information to everyone at Iowa State University that are involved in agriculture. It is important in tracking trends, analyzing farm demographics, as well as developing extension programming and decision tools for farmers. Census information provides a voice for farmers and helps shape the future of the industry. Your answers to the Census also impact farm programs and rural services that support your community so, do your part and be counted when you receive your form, because there's strength in numbers that only the Census can reveal.

The Census remains the only source of uniform, comprehensive agricultural data for every county in the nation and looks at land use and ownership, operator characteristics, production practices, income and expenditures and other topics. Farm and commodity organizations, state departments of

agriculture, elected representatives and legislators at all levels of government, public and private sector analysts, news media, community-based organizations, and USDA agencies all routinely use data from the Census of Agriculture for a wide variety of purposes. They use the information to:

- Promote the agricultural industry.
- Formulate, evaluate, change, and propose policies and programs that help farmers.
- Identify services and facilities needed in rural communities.
- Develop and improve methods to increase agricultural production and profitability.
- Allocate local and national funds for farm programs (including extension service projects, conservation programs, farm loan programs, research, and land grant universities).
- Develop grant proposals to address rural and agricultural issues.

NASS will mail out Census forms in mid-December to collect data for the 2017 calendar year. Completed forms are due by February 5, 2018. Producers can fill out the Census online via a secure website at www.agcensus.usda.gov, or return their form by mail. Federal law requires NASS to keep all individual information confidential.



2017 CENSUS OF AGRICULTURE
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USDA AGRICULTURE COUNTS

COMING THIS DECEMBER
www.agcensus.usda.gov



Custom fit your farm lease

By William Edwards, retired extension economist

Iowa farms come in all sizes and shapes. Finding the right lease arrangement for each farm requires some careful thought. Fortunately Iowa land owners and operators have several common and some not so common types of leases to choose from.

Table 1 shows how the number of acres under each of the most common types of lease agreements in Iowa has changed over the last few decades. The data come from a survey on Farmland Ownership and Tenure in Iowa that is carried out every five years. New data will be available in 2018.

The proportion of acres under crop-share leases has declined from 21 to 13 percent of the total since 1982. Acres operated by the landowner declined from 55 to 40 percent over the same period. Conversely, acres under a cash rent arrangement increased from 21 to 46 percent of the total acres farmed. It should be noted, however, that the shares of the different land tenure options have been relatively stable since 2002.

The decision on what type of lease arrangement works best for individual landowners may begin with how much risk they are willing to take on. Figure 1 depicts the sharing of risk for tenants and landowners under different types of lease arrangements. A recently retired farmer who wants to stay involved in crop production may prefer a custom farming or crop-share arrangement. A landowner who has recently inherited land, however, may prefer to receive a set amount of a cash rent, with less involvement in the decisions needed for crop production and less financial risk.

Cash leases

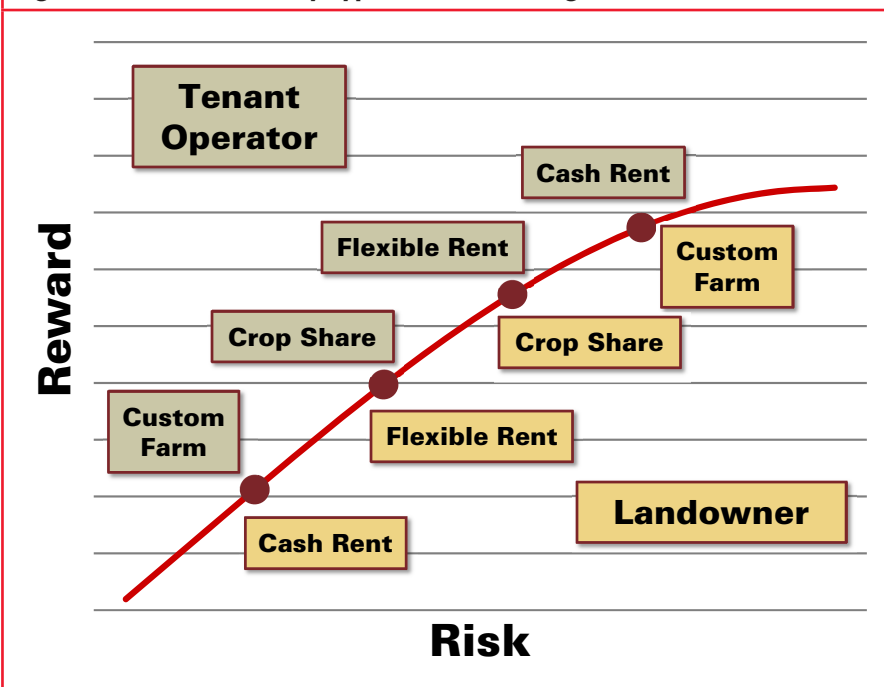
Cash lease agreements are popular with landowners because they provide a fixed income, at least for the length of the contract, and require very little involvement in the management aspects of growing and marketing the crop. Many tenants prefer cash leases, as well. When a tenant is renting from multiple owners, cash rents reduce the amount of record keeping needed and let the tenant manage all the rented acres as a single unit. Grain can be commingled for purposes of storage and marketing. Some tenants feel that they can rent land based on average expected yields in the area, and if they are

Table 1. Ownership and leasing agreements, percent of Iowa farm acres

	1982	1992	2002	2007	2012
Operated by owner	55	50	41	40	40
Cash rent lease	21	27	40	46	46
Crop share lease	21	22	18	13	13
Custom farmed, other	3	1	1	1	1

Source: Farmland Ownership and Tenure in Iowa, Iowa State University Extension and Outreach PM 1983, 2012. Does not include CRP or custom acres.

Figure 1. Share of risk by type of lease arrangement



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Custom fit your farm lease, continued from page 4

able to achieve superior yields they will retain all the additional income.

The primary disadvantage of a cash lease is the need to agree on a rental rate that accurately reflects the profit potential of the farm. Tenants and owners need to re-evaluate the amount of rent periodically, sometimes annually. When yields and prices are relatively stable, setting the rent may be fairly easy. However, when conditions are more volatile it becomes more difficult to determine a mutually agreeable rent.

Crop-share leases

Sharing of costs and production had been a traditional means of renting land in Iowa for over a century. Rental terms have changed very slowly, even when technology has changed the relative values of the contributions from the owner and the tenant. The most desirable feature of a crop-share lease is that both parties automatically share in increases or decreases in profits, making yearly negotiations about rental terms unnecessary. Share leases also allow young operators to benefit from the expertise of experienced landowners, and decrease the amount of operating capital the tenant has to supply by over 50 percent. If a tenant is farming enough acres to reach the limitations on USDA program payments, a share lease may prevent some payment dollars from being lost.

Whether landowners are willing to take on the added financial risk and management considerations of a crop-share lease is a very individual question. Retired operators who still want to have active involvement are good candidates for share lease agreements. In other cases, a professional farm manager may be hired to carry out the owner's management and marketing responsibilities.

Other choices

Owners or managers who wish to assume all price and production risk and be very involved in management may choose to have their land custom farmed. Tenants who custom farm often find that adding some extra land with a guaranteed return allows them to fully utilize their machinery and labor without adding financial risk.

Figure 2. Return to landowner - corn/soybeans rotation

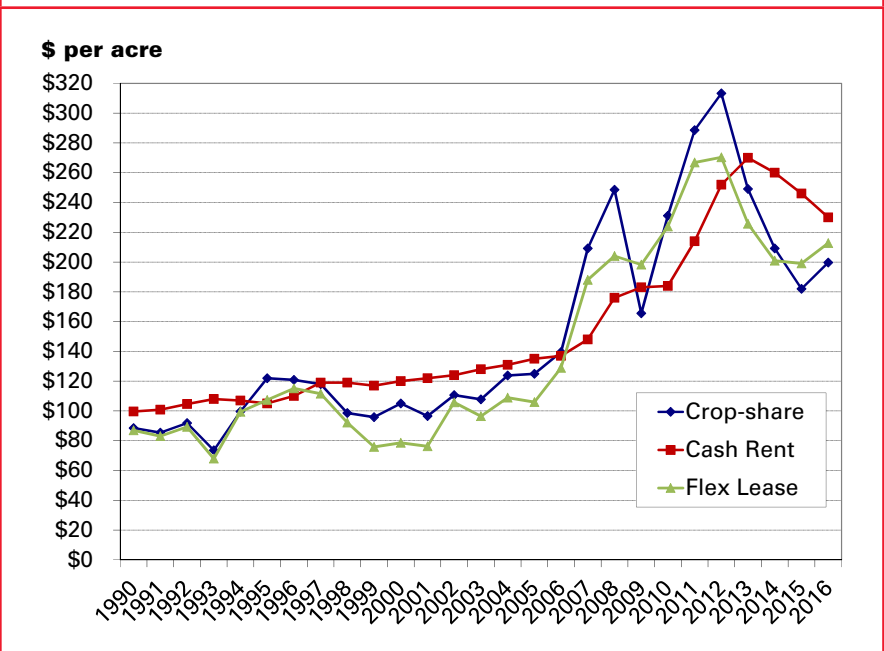
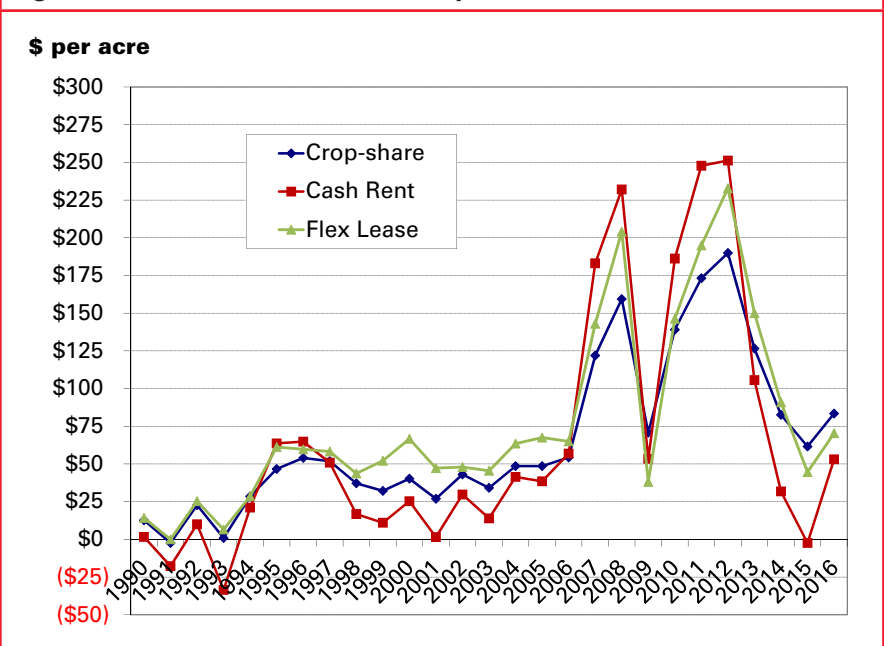


Figure 3. Return to tenant - corn/soybeans rotation



Custom fit your farm lease, continued from page 5

Tenants and owners who are willing to share risk but want the simplicity of a cash lease may prefer some type of flexible cash rent agreement. Terms of a flexible lease can vary considerably, but common arrangements include calculating the rent as a percent of realized gross crop revenue, or a base rent with a bonus that depends on actual prices and yields achieved. More explanation of Flexible Farm Lease Agreements can be found in AgDM File C2-21, www.extension.iastate.edu/agdm/wholefarm/pdf/c2-21.pdf.

Comparing returns

Figure 2 shows how the returns to a landowner under three different types of lease agreements would have varied since 1990. The crop-share lease income is based on one-half of the revenue received from the state average yields and fall cash prices from each year, plus one-half of any USDA commodity payments and crop insurance indemnities paid each year. One-half of the estimated costs of seed, fertilizer, pesticides, crop insurance, drying and operating interest were deducted, but land ownership costs were not deducted. The land was assumed to be planted half to corn and half to soybeans.

The returns to a cash lease were the average cash rental rates for Iowa as estimated by the annual Iowa Farmland Cash Rental Rate Survey carried out by

ISU Extension and Outreach. Again, no land ownership costs were deducted. The returns to a flexible cash lease assumed that the rental rate was equal to 30 percent of the gross value of the corn crop and 40 percent of the gross value of the soybean crop each year. These terms were chosen for purposes of illustration, but many other variations could be used.

Figure 3 shows the return to the tenant each year after subtracting estimated production costs and cash rent payments. The average returns from the three types of leases were nearly identical over the 27-year period, for both the owner and the tenant. However, the fixed cash lease put nearly all the income variability on the tenant's shoulders. The crop-share lease and the flexible cash lease shared risk between the two parties, and provided more stable returns over time.

AgDM Decision Tool C2-01, Estimated Returns by Farm Lease Arrangement, www.extension.iastate.edu/agdm/wholefarm/xls/c2-01leasecomparison.xlsx, can be used to estimate returns to a landowner and tenant under different rental agreements, including cash rent, flexible rent, crop-share, or a custom farming agreement. For more information on farmland leasing, visit the AgDM leasing page, www.extension.iastate.edu/agdm/wdleasing.html.

Updates, continued from page 1

Internet Updates

The following Information Files and Decision Tools have been updated on www.extension.iastate.edu/agdm.

Designing Family Business Teams – C4-73 (2 pages)

Resolving Family and Business Conflicts – C4-74 (2 pages)

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

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