



# Ag Decision Maker

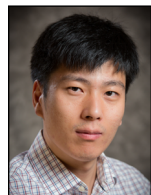


A Business Newsletter for Agriculture

Vol. 21, No. 9

www.extension.iastate.edu/agdm

July 2017



## Where are Iowa and U.S. land values headed?

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

Farmland is arguably the most significant asset in the landowner's investment portfolio and its strength is critical to maintain a strong equity position of producers and robust collaterals for lenders in this current downturn in agricultural economy. Despite its significance, it is a bit unclear to project where Iowa and U.S. land values are headed and unfortunately the signals are somewhat conflicting.

### Survey trends

According to the ISU Land Value Survey, the Iowa farmland market has been declining three years in a row since its November 2013 peak. The first time a three year decline has occurred since the 1980s. However, recently, several sources seem to suggest that the "waning" of the Iowa farmland market has stopped. For example, the Federal Reserve Bank of Chicago's May 2017 AgLetter ([www.chicagofed.org/publications/agletter/index](http://www.chicagofed.org/publications/agletter/index)) reported a two percent and five percent increase in farmland

values for Iowa and Wisconsin from April 2016 to 2017, which is the first year-over-year increase for Iowa since the third quarter of 2013. The REALTORS® Land Institute ([www.rlifarmandranch.com/news\\_trends.aspx](http://www.rlifarmandranch.com/news_trends.aspx)) also reported a 0.9 percent rise in Iowa cropland values over the six month period from September 2016 to March 2017, for the first time since 2013. USDA's August 2016 Land Value Survey release also showed a modest uptick in cropland values in the Southeast, Delta, and Southern Plains from June 2015 to June 2016.

While it is tempting to jump to the conclusion that after several years of falling, the agricultural economy and land market has turned around, I would caution any determination of the comeback story of Iowa land values for now. Given the continuous declines in nearby states' land values with similar crop and livestock market fundamentals and growing pressure from higher interest

rates, the direction of land values remains fairly unclear.

### Future projections

Put simply, land value is the net present value of all discounted future income flows. With certain

*continued on page 2*

### Handbook updates

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

2016 Iowa Farm Costs and Returns – C1-10 (9 pages)

Historic County Cropland Rental Rates – C2-11 (10 pages)

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

*continued on page 6*

### Inside . . .

Research briefs from the ISU Department of Economics.....	Page 3
Farmland leasing meetings.....	Page 5

Where are Iowa and U.S. land values headed?, continued from page 1

assumptions imposed, one could think of land value being net income divided by interest (discount) rate. In particular, the net income tends to be localized, often influenced by local livestock-crop mix and related commodity market fluctuations, while the interest rate tends to be universal across districts and states. To understand how the land values will change in the future, it is critical to understand how the interest rates will change as well as how the net income will change for a particular area. For example, for a dairy-intensive area such as Northeast Iowa, dairy price movements matter for net farm income. Compared to a year ago, the milk price has been 13 percent higher as of April 2017, which is now reflected in higher Wisconsin land values. In contrast, corn or soybean price changes are more relevant for the land market fluctuations for areas with heavier reliance on crop production such as Central Iowa.

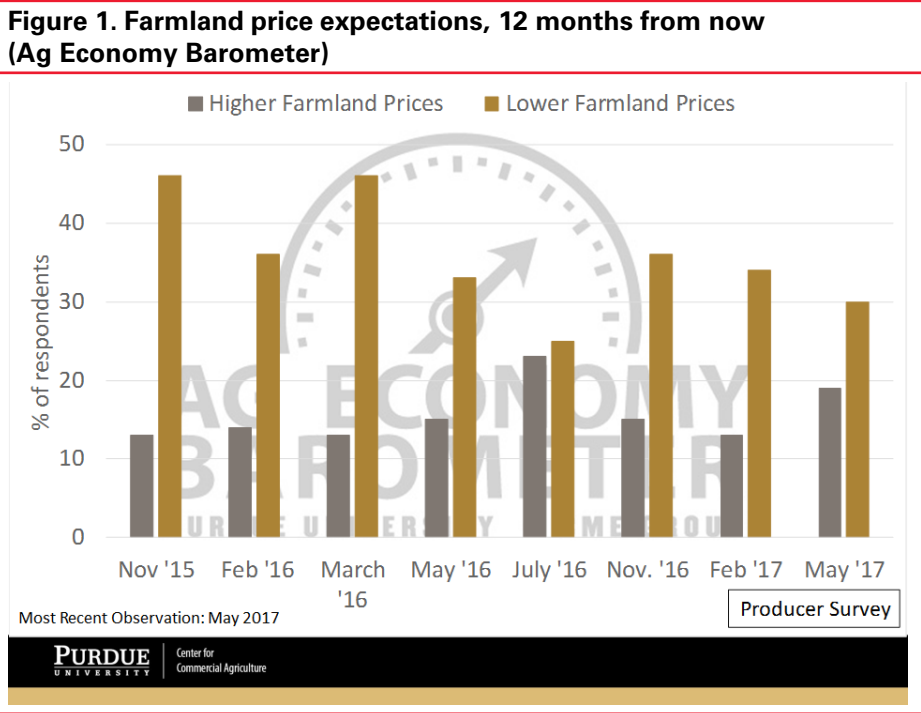
### Upside potential

There are legitimate reasons for optimism in the Iowa farmland market: **Iowa State University Cost of Production** estimates for 2017 show that after more than three years of operating loss, Iowa farmers finally on average will have a break-even crop production for both corn and soybean ([www.extension.iastate.edu/agdm/crops/html/a1-20.html](http://www.extension.iastate.edu/agdm/crops/html/a1-20.html)).

Lower production costs bring cautious optimism among the agricultural community. Despite the Federal Reserve's recent moves to raise interest rates, the interest rates in general are still at very low levels, which allow the possibility of debt restructuring for troubled producers. In addition, many landowners are holding onto their land and the limited supply has buoyed the farmland values in many states. Due to the recent record crops, **USDA Economic Research Service** is forecasting the 2017 U.S. net cash farm income to rise by \$1.6 billion from the 2016 value to \$93.5 billion in 2017, an increase of 1.8 percent. ([www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/highlights-from-the-farm-income-forecast/](http://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/highlights-from-the-farm-income-forecast/))

### Downside potential

However, while I agree with most analysts on the improvement in agricultural profitability, there are several factors that prevent me from being too optimistic. In the same USDA-ERS February 2017 report, they also forecasted U.S. net farm income to decline by 8.7 percent to \$62.3 billion, the fourth consecutive year of declines after reaching a record high in 2013. The Ag Credit Survey from the Federal Reserve Bank of Kansas City reported that non-irrigated, irrigated farmland, and ranchland values in Northern Plains and Mountain states all reported



Where are Iowa and U.S. land values headed?, continued from page 2

a loss compared to a year ago. The AgLetter through the Federal Reserve Bank of Chicago also revealed that after adjusting for inflation, the average farmland values in the 7th district were down two percent for the first quarter of 2017 relative to a year ago. This year-over-year decline in the real values of District agricultural land was the 11th in a row (stretching back nearly three years). In particular, Indiana experienced its sharpest year-over-year decrease (-5 percent) of the current downturn. In addition, the average cash rental rates in the 7th district decreased nine percent since 2016 – the fourth consecutive negative result and the longest-streak of declines since 1990-94. The University of Illinois March 2017 Land Values Survey reported a five percent, six percent and 12 percent decline in all excellent, good and average quality land from 2015 to 2016, respectively.

Conclusion

The bottom line is that the crop prices and margins are improving but still at fragile breakeven levels, the Federal Reserve has raised interest rates three times over the last 12 months and are expected to continue a gradual upward adjustment in the months ahead. Both will continue to put downward pressure on the land markets in the near term. The limited farmland supply is elevating the prices of parcels that are sold at auctions, especially given that the farmland market is typically a thin market with few transactions and even less available to non-related parties. However, it is difficult to argue that Iowa has dramatically different market fundamentals that move the market in a different direction than Indiana or Illinois. It is

currently too early to claim that Iowa leads the next round of increases in the agricultural economy and land market.

Purdue University and CME Group's Ag Economy Barometer gives a monthly look at the health of the U.S. agricultural economy. The most recent release shows that while more producers surveyed expect farmland values to decline over the next year than those forecasting a rise, producers were more optimistic about farmland values in the year ahead than they were in May 2017 – 19 percent of respondents expect a rise, the highest since November 2015 expect for July 2016 (Figure 1). The farm managers and rural appraisers surveyed at Iowa State University's Soil Management and Land Valuation conference reported a land and crop price forecast in May 2017 very similar to what they did a year ago. In essence, they are forecasting the stabilization in Iowa farmland values within the next year and an increase before 2020.

Looking ahead, I think the probability of a replay of the 1980s farm crisis remains low, but I also would not embrace any land market comeback already. In my opinion, the Iowa and U.S. farmland market are likely headed towards stabilization and potentially slightly more modest downward adjustments over the next year before bouncing back in the near future. We are still in the middle, hopefully the latter half, of the transition towards a gradual, drawn-out downward adjustment to the historical normal return levels for the agricultural economy.

Research briefs from the ISU Department of Economics

Department News

Farm decision tool updated

The decision tool "Iowa Cash Rents by Land Quality" on the Center for Agricultural and Rural Development's (CARD) website has been updated with 2017 data. (http://card.iastate.edu/tools/ag-risk/cash-rental-rates/)

ISU team takes 2nd place in national banking competition

Iowa State's team was awarded second place in the Community Bank Case Study Competition sponsored by the Conference of State Bank Supervisors. Thirty

three teams from universities across the country competed. (www.econ.iastate.edu/isu-team-takes-2nd-place-national-banking-competition)

Zhang hosts 90th Soil Management conference

The 90th annual Soil Management and Land Value Conference, the longest-running ISU conference, was held Wednesday, May 17 at the Scheman Building, and is sponsored by the ISU College of Agriculture and Life Sciences and ISU Extension and Outreach. (www.econ.iastate.edu/zhang-hosts-90th-soil-management-conference)

Research briefs from the ISU Department of Economics, continued from page 3

**Weninger, Jacobs win USDA grant**

Quinn Weninger, professor, and Keri Jacobs, assistant professor, have been awarded a two-year grant totaling \$196, 257 from the United States Department of Agriculture, National Institute of Food and Agriculture. ([www.econ.iastate.edu/weninger-jacobs-win-usda-grant](http://www.econ.iastate.edu/weninger-jacobs-win-usda-grant))

**Edwards named interim director of two centers**

William Edwards, emeritus professor, has been named interim director of two extension-focused centers in the College of Agriculture and Life Sciences — the Beginning Farmer Center and the Center for Agricultural Law and Taxation. ([www.econ.iastate.edu/edwards-named-interim-director-two-centers](http://www.econ.iastate.edu/edwards-named-interim-director-two-centers))

**Schulz, Artz, Edwards publish articles**

A new on-line journal, *Journal of Applied Farm Economics*, is being published by the Center for Commercial Agriculture at Purdue University. Two of the articles in Volume 1, Issue 1, are “Succession Planning and Perceived Obstacles and Attractions for Future Generations Entering Beef Cattle Production,” by Lee Schulz, Georgeanne Artz and Patrick Gunn, and “How Much is That Farm Really Worth — A Comparison of Three Land Purchase Analysis Tools,” by William Edwards. ([www.econ.iastate.edu/schulz-artz-edwards-publish-articles](http://www.econ.iastate.edu/schulz-artz-edwards-publish-articles), <http://docs.lib.purdue.edu/jafe/vol1/iss1/>)

**Lawrence interim VP for ISU Extension and Outreach**

John Lawrence, CALS associate dean and director of extension and outreach, has been named interim vice president of Iowa State University Extension and Outreach. Lawrence will succeed Cathann Kress, who is leaving to accept a dean position at The Ohio State University. ([www.provost.iastate.edu/about/news/2017/03/lawrence-named-interim-vice-president-extension-and-outreach](http://www.provost.iastate.edu/about/news/2017/03/lawrence-named-interim-vice-president-extension-and-outreach))

**Keiser publishes in Journal of Public Economics**

David Keiser, assistant professor, has published a paper in the forthcoming edition of the *Journal of Public Economics*. The paper studies the effectiveness of recent bans on phosphates in household automatic dishwasher detergents. It is co-authored with Alex Cohen. “The effectiveness of incomplete and

overlapping pollution regulation: Evidence from bans on phosphate in automatic dishwasher detergent” (<http://dx.doi.org/10.1016/j.jpubecon.2017.03.005>).

**ISU Extension and Outreach provide help video**

Iowa State University Extension and Outreach has partnered with Iowa Mediation Service to create “Understanding Farm Mediation,” a video providing information and tips to help farmers better understand the mediation process. ([www.extension.iastate.edu/article/video-explains-mediation-farmers-facing-financial-difficulties](http://www.extension.iastate.edu/article/video-explains-mediation-farmers-facing-financial-difficulties))

**Jacobs featured in co-op video series**

Keri Jacobs, assistant professor, is featured in a five-part video series focusing on the history and function of co-ops that is now available through a partnership with the Iowa Institute for Cooperatives. ([www.extension.iastate.edu/article/cooperatives-provide-necessary-market-iowa-producers](http://www.extension.iastate.edu/article/cooperatives-provide-necessary-market-iowa-producers))

**Swenson, Eathington conduct SAVE study**

David Swenson, associate scientist, and Liesl Eathington, assistant scientist conducted a study with Mack Shelley for the Iowa Association of School Boards. They analyzed how school districts used Secure an Advanced Vision for Education (SAVE) funds. ([www.econ.iastate.edu/swenson-eathington-conduct-save-study#overlay-context=swenson-eathington-conduct-save-study-0](http://www.econ.iastate.edu/swenson-eathington-conduct-save-study#overlay-context=swenson-eathington-conduct-save-study-0))

**Keiser publishes water quality paper**

David Keiser, assistant professor, recently published the working paper, “Consequences of the Clean Water Act and the Demand for Water Quality.” This paper is part of the National Bureau of Economic Research Working Paper Series. ([www.nber.org/papers/w23070](http://www.nber.org/papers/w23070))

**Kling named to EPA Scientific Advisory Committee**

Catherine Kling, Charles F. Curtiss Distinguished Professor, and Matthew Helmers, professor of agricultural and biosystems engineering, were nominated to the Agricultural Science Committee of the Environmental Protection Agency’s Science Advisory Board. ([www.cals.iastate.edu/news/releases/iowa-state-university-professors-named-environmental-protection-agency-scientific](http://www.cals.iastate.edu/news/releases/iowa-state-university-professors-named-environmental-protection-agency-scientific))



Research briefs from the ISU Department of Economics, continued from page 4

Recent publication by Feng, Hayes

Feng, Xiaoguang and Hayes, D.J. (2016), "Diversifying systemic risk in agriculture". (http://dx.doi.org/10.1108/AFR-06-2016-0061)

Award recipients

Artz, Jacobs, Boessen publication receives award

Georgeanne Artz, assistant professor, Keri Jacobs, assistant professor, and Christian Boessen, senior lecturer, received notification from the North American Colleges and Teachers of Agriculture (NACTA) that their recent publication in the NACTA Journal is being awarded the E.B. Knight Journal Award

Lence wins teaching award

Sergio Lence, professor, has been named the winner of the 2017 James Huntington Ellis Award for Excellence in Undergraduate Introductory Teaching by the university. This award is a reflection of his commitment to Iowa State University, his professional reputation, and the esteem of his peers.

ISU Economics ranked 34th among public universities

In the recent U.S. News & World Report Rankings of about 148 U.S. graduate programs in economics, Iowa State University ranked 53rd overall, and 34th among public universities. Harvard, MIT, Princeton, Stanford, Berkeley, and Yale all tied for first. (www.usnews.com/best-graduate-schools/top-humanities-schools/economics-rankings)

Huffman wins AAEA's publication award

Wallace Huffman, professor, has been awarded the prestigious Publication of Enduring Quality award by the Agricultural & Applied Economics Association for his co-written book with Dr. Robert E. Evanson, entitled Science for Agriculture: A Long-Term Perspective.

Hayes named Distinguished Professor

Iowa State University has named Dr. Dermot Hayes Charles F. Curtiss Distinguished Professor of Agriculture and Life Sciences.

Iowa State Ag Econ/Policy ranks #3 worldwide

Iowa State University features in the Top 10 out of 26,000+ degree-granting institutions of higher education worldwide in 2 subjects. The inaugural subjects ranking by the Center for World University Rankings (CWUR), publisher of the largest academic ranking of global universities was released on Monday, April 3rd 2017. (www.cwur.org/2017/subjects.php).

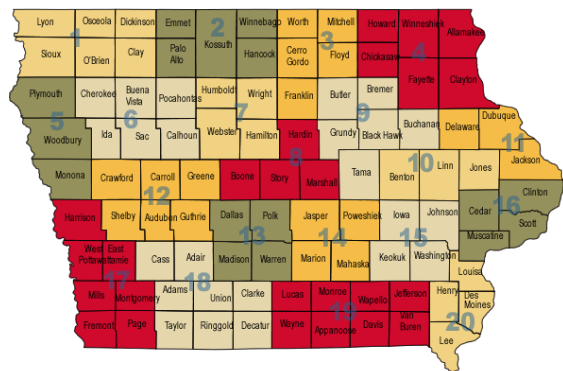
Lawrence team wins Secretary of Ag Leader Award

Iowa Secretary of Agriculture Bill Northey presented an Iowa Secretary of Agriculture Leader Award--the Leadership in Conservation--to the Iowa Nutrient Reduction Strategy Science Team.

Farmland LEASING Meetings

In partnership with county staff and private partners, 89 meetings will be held focused on farmland leasing in July and August of 2017. Through these meetings ISU Extension and Outreach specialists have attendance of around 2,000 participants.

The feedback provided in the 2016 follow-up survey is used in determining the focus of the 2017 program. When asked what topics participants would like to have covered in 2017, up-to-date research and outlook,



Farmland Leasing Meetings, continued from page 5

determining fair rates for unique leasing arrangements, and land stewardship were the top three issues requested. A large percentage of respondents attend year-after-year to hear current information from ISU Extension and Outreach.

While not every unique situation can be covered in the 2-3 hour program, online videos, publications, and Decision Tools on the Ag Decision Maker Leasing page, as well as farm management staff are available to help Iowan's with further questions on farmland leasing. ([www.extension.iastate.edu/agdm/wdleasing.html](http://www.extension.iastate.edu/agdm/wdleasing.html))

**Attend a local meeting**

The leasing meetings held across Iowa are facilitated by farm management specialists with ISU Extension and Outreach. A listing of county offices hosting the 2017 meetings is available through the Ag Decision Maker website for July and August. ([www.extension.iastate.edu/agdm/info/meetings.html](http://www.extension.iastate.edu/agdm/info/meetings.html))

For registration information, contact your local ISU Extension and Outreach county office. Pre-registration is encouraged as an additional fee may be added if registering less than two calendar days prior to the meeting date.

Updates, continued from page 1

**Internet Updates**

The following Information Files and Decision Tools have been updated on [www.extension.iastate.edu/agdm](http://www.extension.iastate.edu/agdm).

Livestock Enterprise Budgets – B1-21 (22 pages)

Livestock Enterprise Budgets – B1-21 (12 Decision Tools)

Central Iowa Case Study Farm – C2-20 (Voiced Media)

Farmland Leasing Overview – C2-20 (Voiced Media)

Legal Issues of Farmland Leasing – Center for Agricultural Law and Taxation (Voiced Media)

**Current Profitability**

The following tools have been updated on [www.extension.iastate.edu/agdm/info/outlook.html](http://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**

Iowa State University Extension and Outreach does not discriminate on the basis of age, disability, ethnicity, gender identity, genetic information, marital status, national origin, pregnancy, race, religion, sex, sexual orientation, socioeconomic status, or status as a U.S. veteran. (Not all prohibited bases apply to all programs.) Inquiries regarding non-discrimination policies may be directed to Ross Wilburn, Diversity Officer, 2150 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, 515-294-1482, wilburn@iastate.edu.

**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.