

# Iowa Farmland Market Update: What's Ahead?

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April 4<sup>th</sup>, 2017

# The new Mike Duffy since Aug 2015

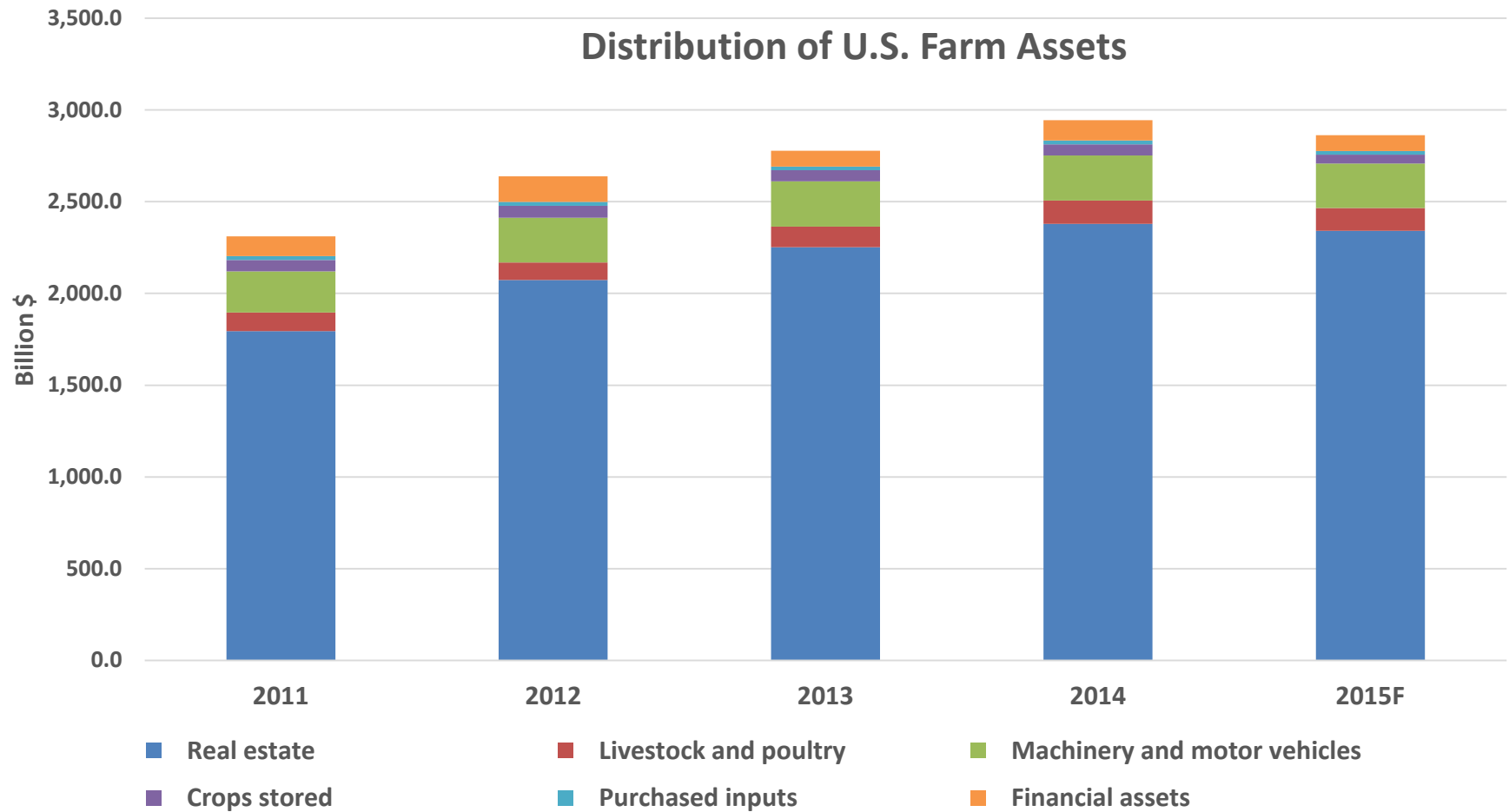


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# Why Care About Farmland Market?

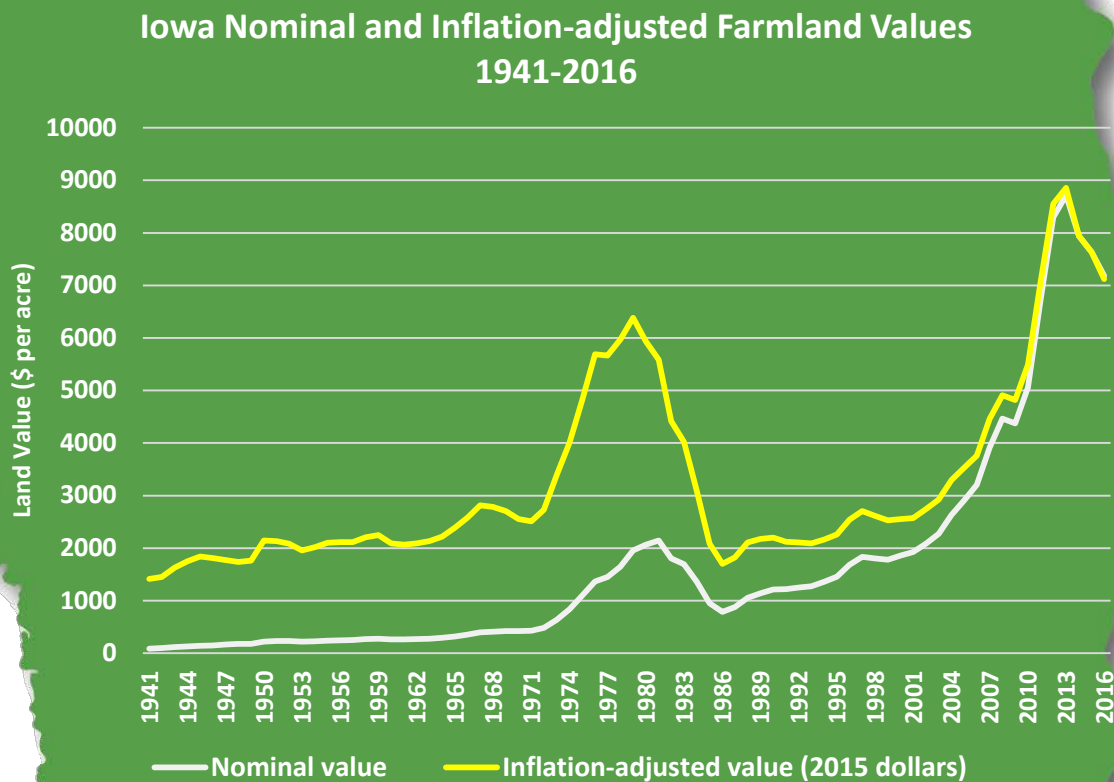


# Guiding Framework

Land Value = net  
income / interest rate

# AVERAGE VALUES

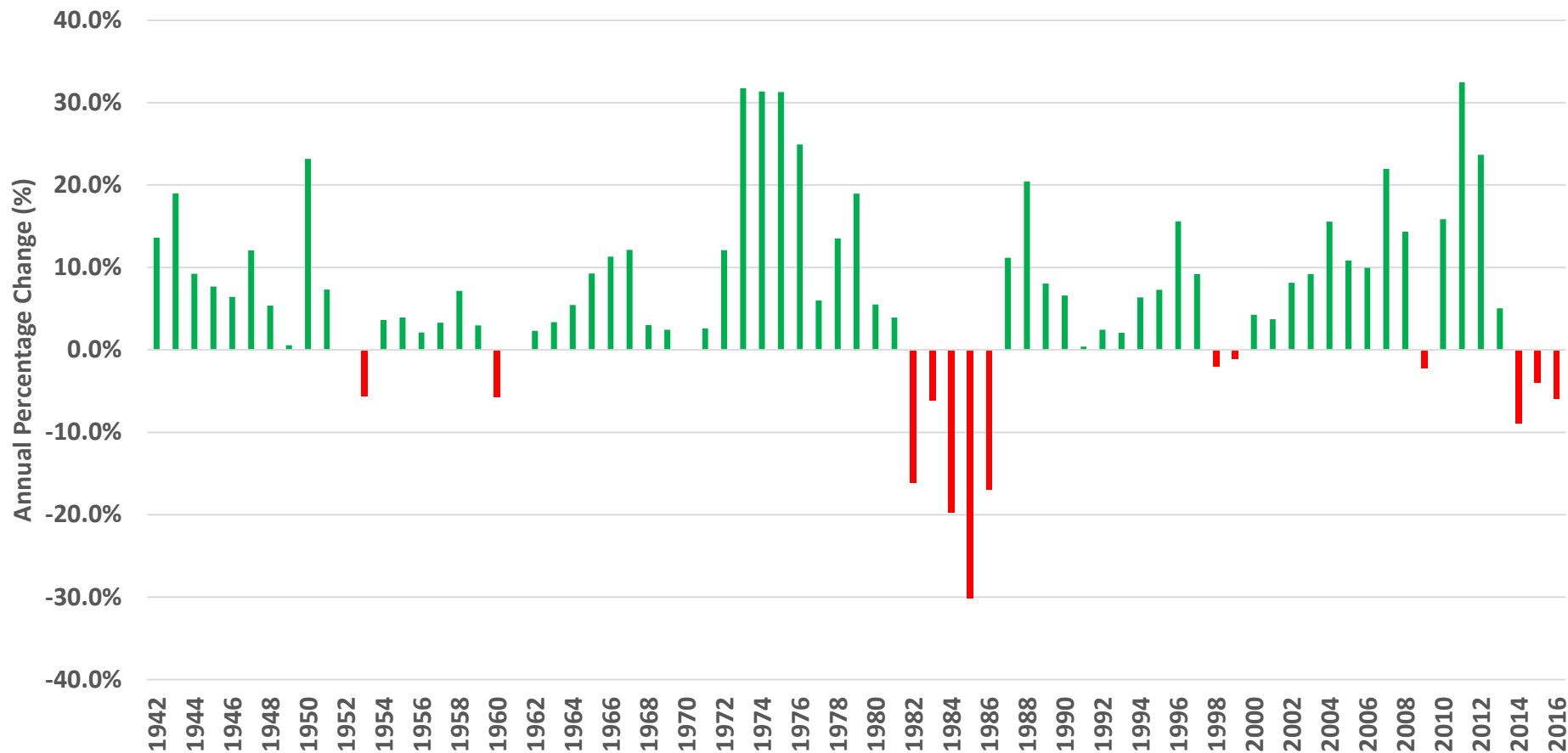
all farmland 1941-2016



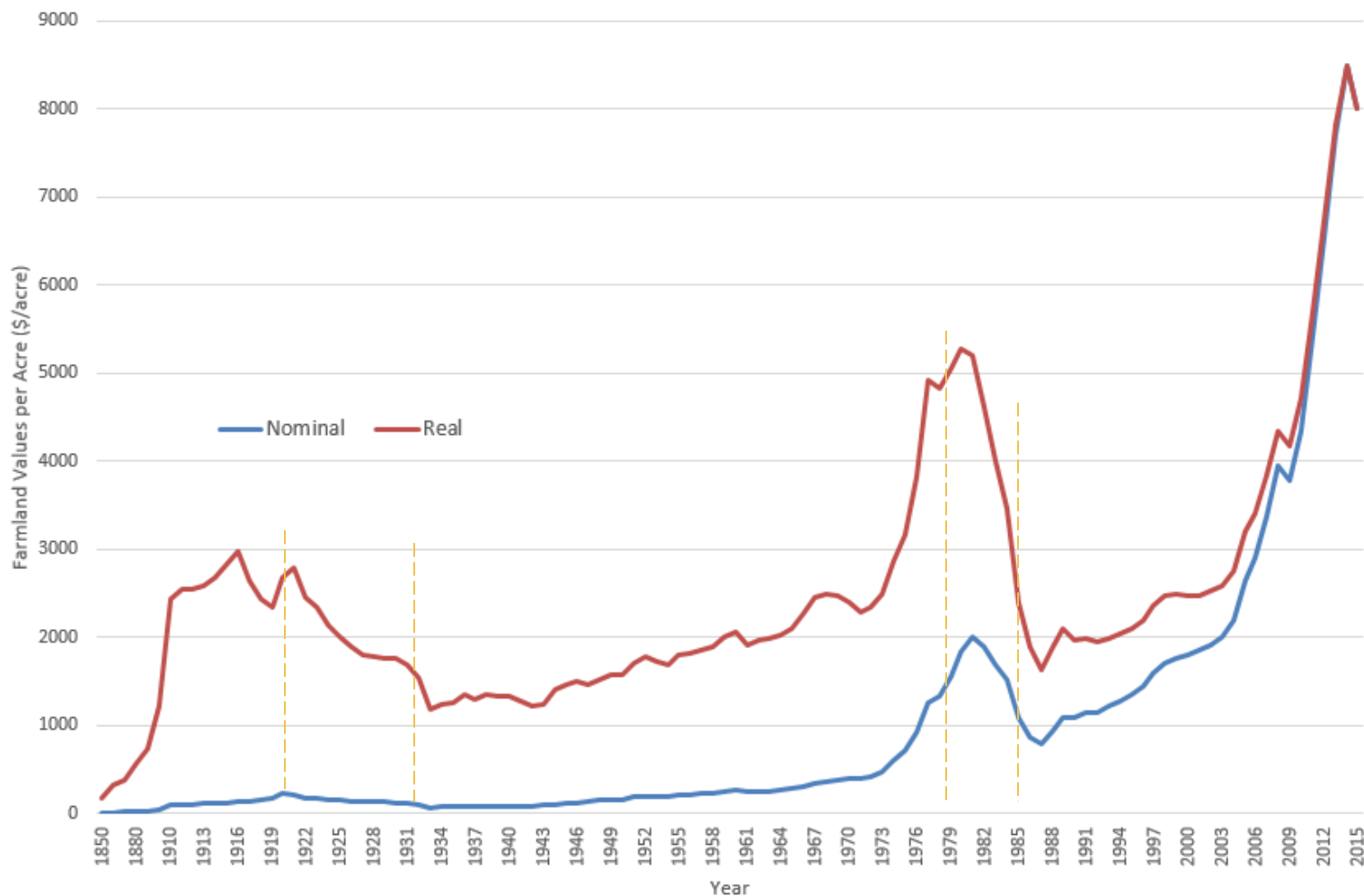
\$7,183  
As of  
Nov 16

-5.9%

# % Change in Nominal Iowa Farmland Values 1942-2016



# Iowa Ag Real Estate Values 1850-2015



# Farm Crises and this downturn

- Positives
  - High income in pre-crisis “golden” eras
  - Low interest rate environment
  - Prudence among ag lenders and bank regulators
  - Wider, stronger (?) gov’n’t safety net
- Concerns
  - Deteriorating farm income and ag credit
  - High reliance on ag exports, US \$
  - Uncertainty in farmland supply and turnover
- Looking Ahead



# Positive 1: Real Income Accumulation 2003-2013

## Average % change in inflation-adjusted values per year

### Golden Eras

	<i>Land</i>	<i>Gross Income</i>	<i>Net Income</i>
<b>1910-1920</b>	1.2%	0.8%	0.2%
<b>1973-1981</b>	9.7%	0.9%	-3.2%
<b>2003-2013</b>	11.1%	4.5%	8.1%

### Crises and Declines

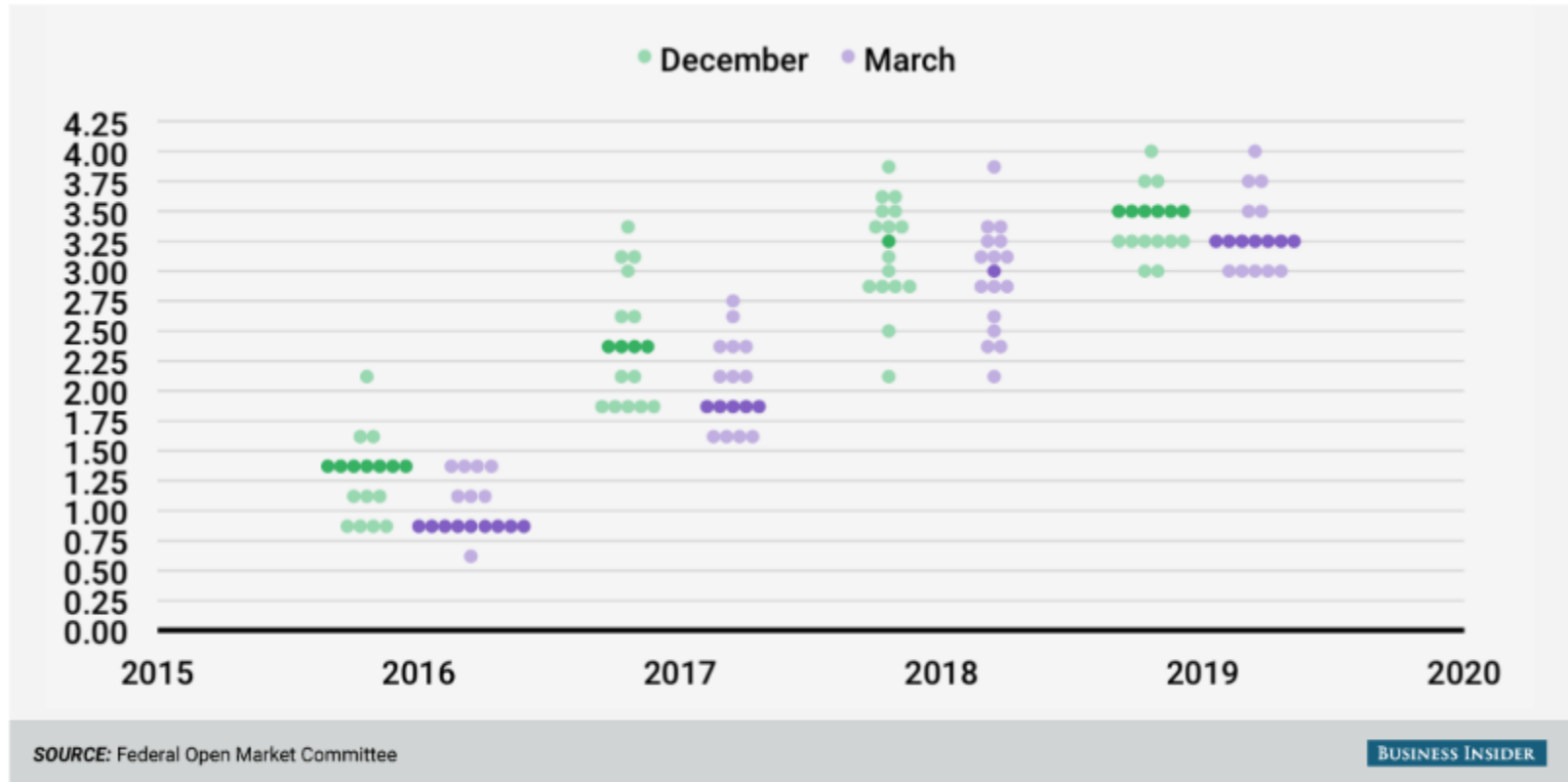
	<i>Land</i>	<i>Gross Income</i>	<i>Net Income</i>
<b>1921-1933</b>	-5.8%	-1.9%	-1.0%
<b>1981-1987</b>	-15.0%	-2.5%	2.6%
<b>2013-2016</b>	-6.0%*	-2.7%	-9.5%

# Positive 2: Historically low interest rates



# Expect at least two interest rate hikes in 2017

## What the Fed Reserve thinks the interest rate should be

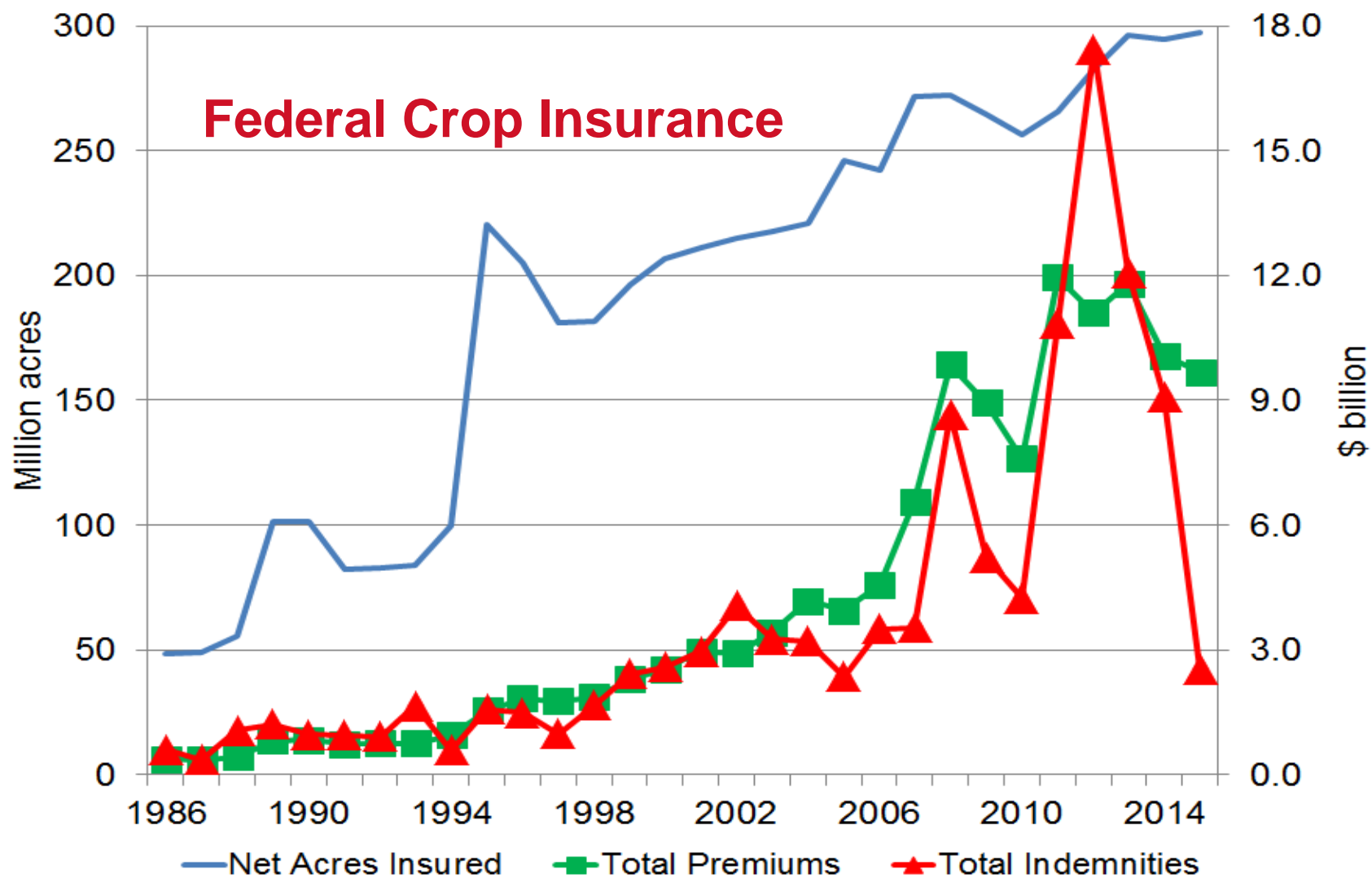


The Fed moved its dots down in March, which the markets interpreted as a signal only two rate hikes would happen this year. Business Insider/Andy Kiersz, data from FOMC

# Positive 3: Prudence in Ag Lenders/Regulators

- Banking Regulations
  - More stringent, frequent stress-test
  - BASEL III, liquidity requirements for banks
  - (Ron Hansen – Iowa Division of Banking Superintendent) walk into this “with eyes wide open”
- Changes in Loan Practices (FCS, Iowa)
  - Before 1987: loan to value ratio is 85%
  - 1987-2008: loan to value ratio is 65%
  - After 2008: use cash-flow method for collateral (\$4 corn, \$10 bean) and 50% of cash flow value

# Positive 4: Stronger Govn't Safety Net



Farmland market tends  
to be localized

Local Land Value =  
local net income /  
universal interest  
rate

# Land Values by District and Land Quality, Nov 2016

District	Average Value	% Change	High Quality	% Change	Medium Quality	% Change	Low Quality	% Change
Northwest	\$9,243	-4.6%	\$10,650	-5.2%	\$8,468	-4.1%	\$6,019	-3.7%
North Central	\$7,562	-5.0%	\$8,442	-5.9%	\$6,992	-4.9%	\$5,164	-3.9%
Northeast	\$7,313	-7.0%	\$8,892	-7.1%	\$6,994	-6.2%	\$4,847	-7.5%
West Central	\$7,358	-8.7%	\$8,874	-8.4%	\$6,870	-9.4%	\$4,577	-9.9%
Central	\$7,841	-7.8%	\$9,299	-7.8%	\$7,186	-7.4%	\$5,158	-2.5%
East Central	\$7,917	-6.9%	\$9,502	-7.6%	\$7,396	-6.8%	\$5,153	-4.0%
Southwest	\$6,060	-4.9%	\$7,527	-6.3%	\$5,683	-5.9%	\$4,189	2.9%
South Central	\$4,241	-3.6%	\$5,980	-7.2%	\$4,128	-3.6%	\$2,892	5.2%
Southeast	\$6,716	-2.6%	\$9,265	-2.8%	\$6,283	-3.7%	\$3,783	-0.4%
Iowa Avg.	\$7,183	-5.9%	\$8,758	-6.5%	\$6,705	-5.9%	\$4,665	-3.5%

# Livestock and Crop Inventory by District

	Inventory 2012				Harvested Acres 2015	
	Chickens, Layers	Hogs	Milk Cows	Cattle	Corn	Soybean
Northwest	30%	26%	29%	22%	15%	16%
North Central	64%	16%	4%	6%	14%	13%
Northeast	1%	12%	51%	16%	12%	8%
West Central	0%	13%	1%	13%	15%	16%
Central	3%	13%	1%	7%	15%	14%
East Central	1%	5%	10%	11%	10%	10%
Southwest	0%	2%	0%	9%	7%	9%
South Central	0%	2%	1%	9%	4%	5%
Southeast	1%	11%	3%	6%	7%	8%
State Inventory	20.4 million	20.4 million	0.17 million	2.34 million	13.2 million	9.8 million



**Dollar Values**

- \$6,500 or less
- \$6,501 to \$7,500
- \$7,501 to \$8,000
- \$8,001 to \$9,000
- \$9,001 or more



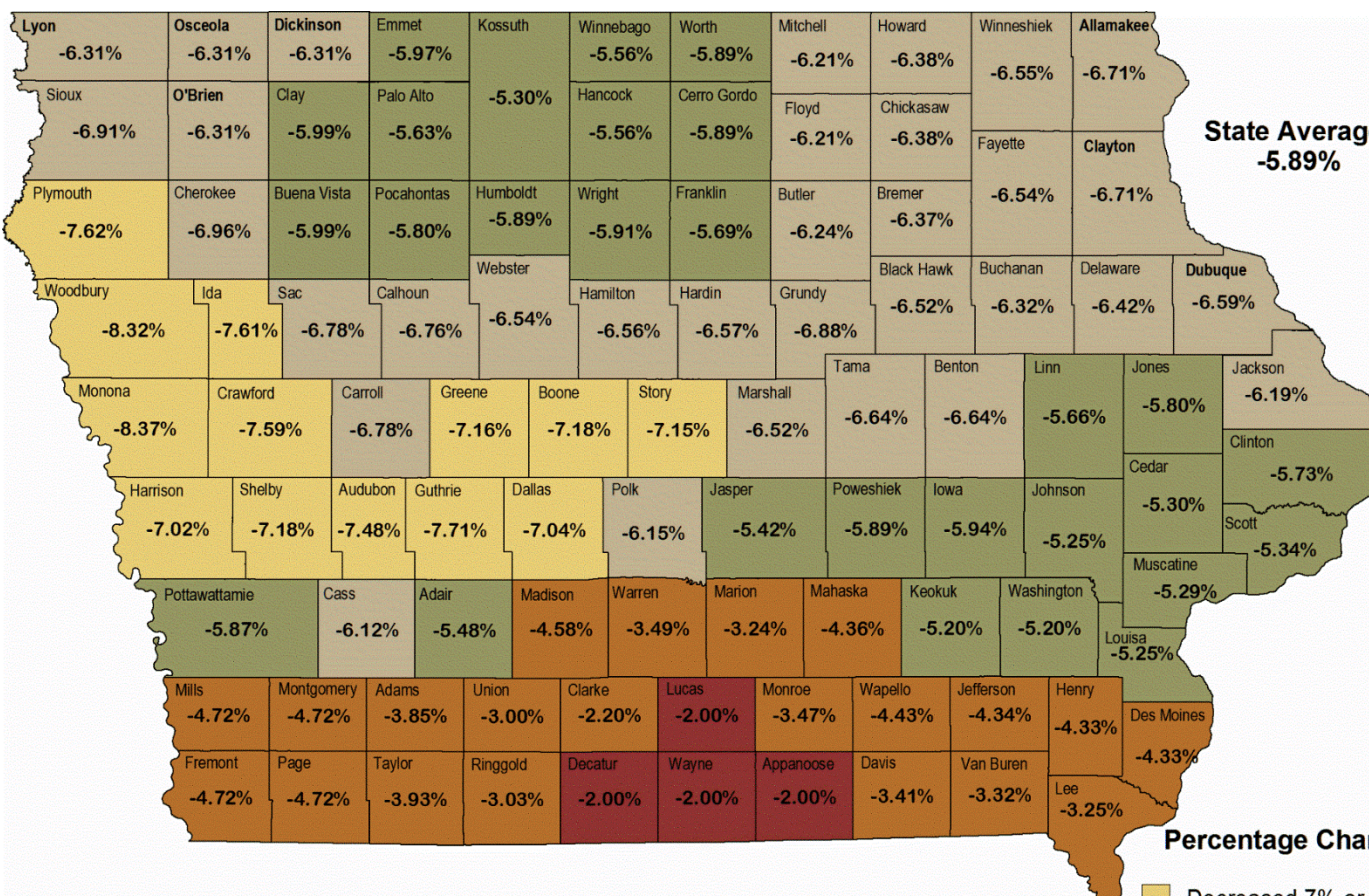


# Percent Changes in Land Values from Nov 2015

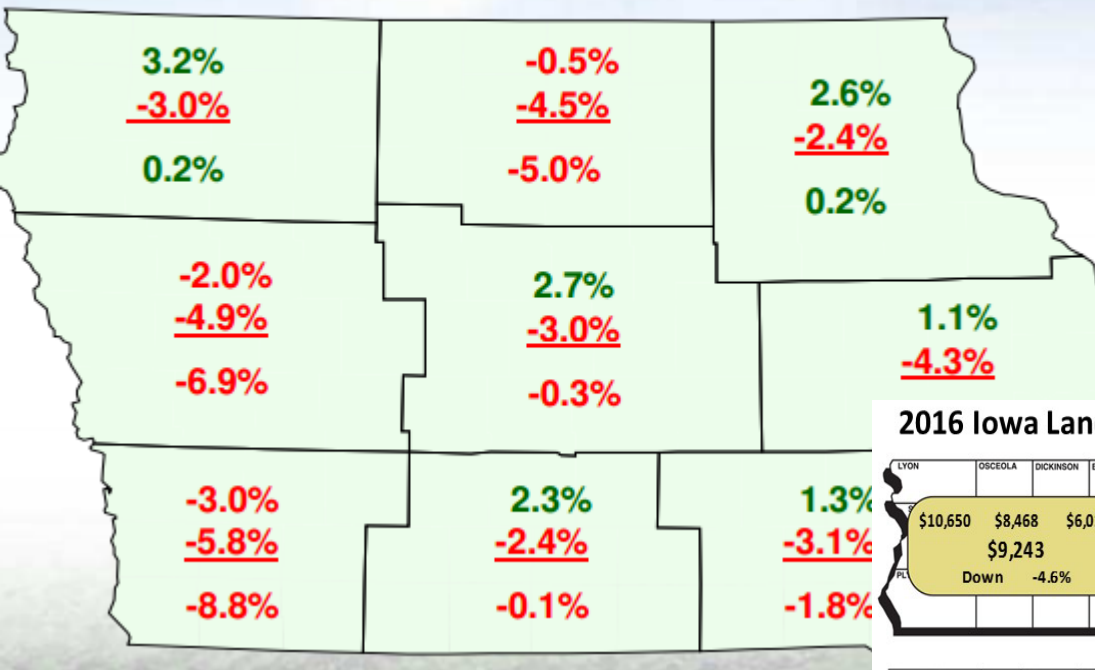
State Average  
-5.89%

Percentage Change

- Decreased 7% or more
- Decreased 6 to 7%
- Decreased 5 to 6%
- Decreased 2 to 5%
- Decreased less than 2%

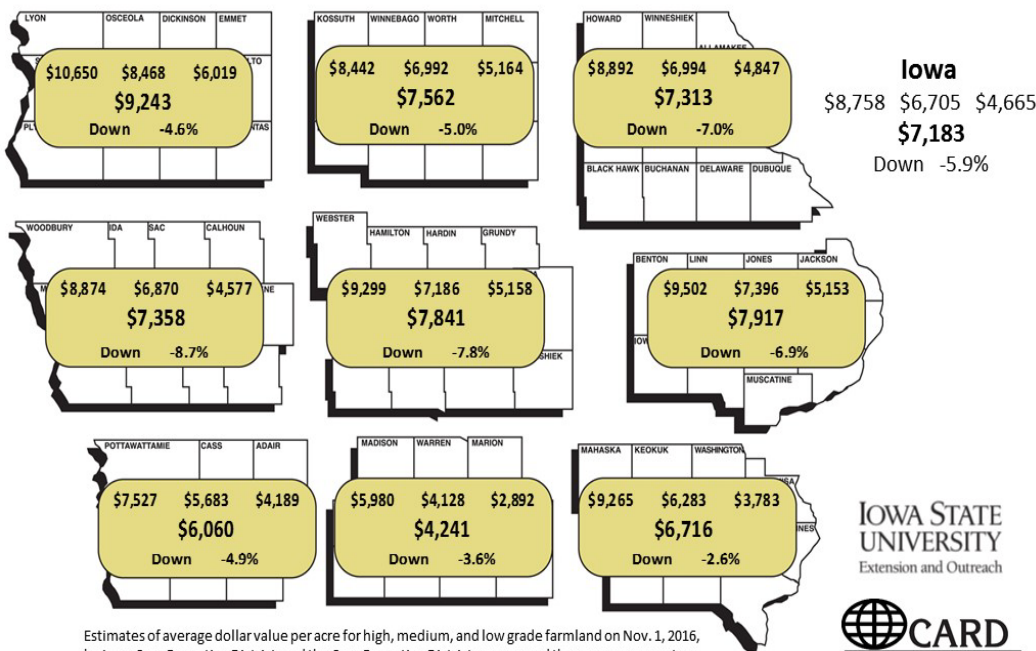


March 1, 2017



ISU survey  
results echo  
other surveys

### 2016 Iowa Land Values by Crop Reporting District



Estimates of average dollar value per acre for high, medium, and low grade farmland on Nov. 1, 2016, by Iowa Crop Reporting District, and the Crop Reporting District average and the average percentage change from Nov. 1, 2015. The estimates are based on a survey conducted by Iowa State University, Center for Agricultural and Rural Development and Iowa State University Extension and Outreach.

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Center for Agricultural  
and Rural Development

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## Percent change in dollar value of "good" farmland

Top: October 1, 2016 to January 1, 2017

Bottom: January 1, 2016 to January 1, 2017

	October 1, 2016 to January 1, 2017	January 1, 2016 to January 1, 2017
Illinois	-1	-2
Indiana	-2	+2
Iowa	0	-2
Michigan	-1	-8
Wisconsin	-2	+3
Seventh District	-1	-1

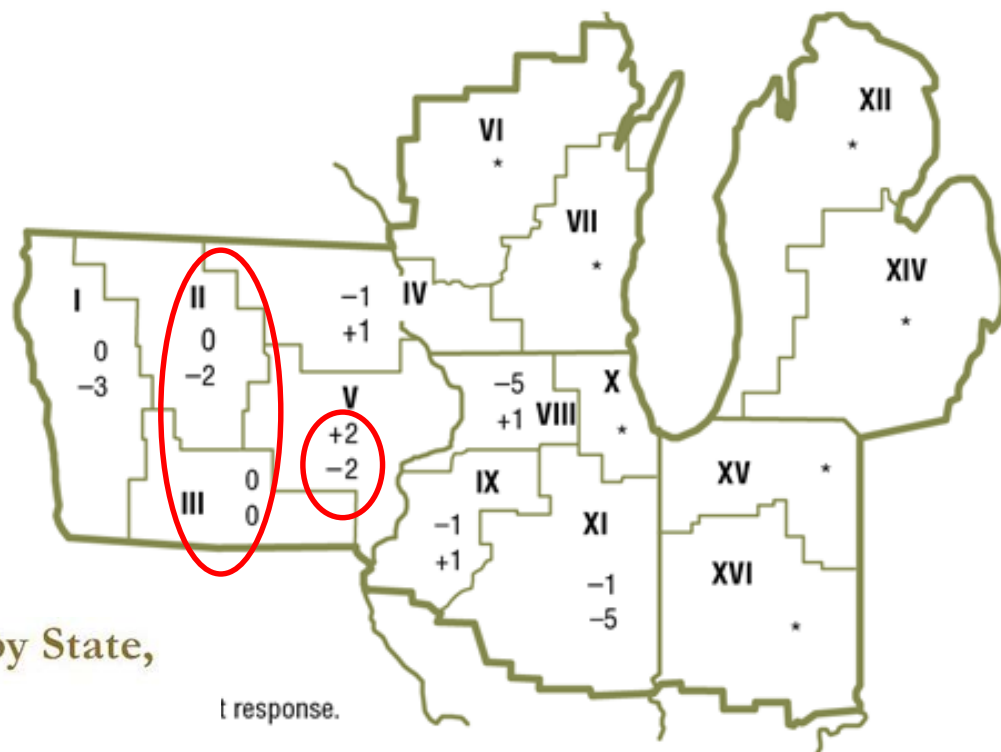


Table 1: Tenth District Farmland Value by State, Fourth Quarter 2016

Percent change from previous year \*

	Nonirrigated	Irrigated	Ranchland
Kansas	- 13	- 4	- 10
Western Missouri	1	n/a **	- 5
Mountain States***	- 7	- 5	0
Nebraska	- 4	- 8	- 10
Oklahoma	- 4	- 6	- 2
Tenth District	- 6	- 6	- 7

ISU survey results echo other surveys

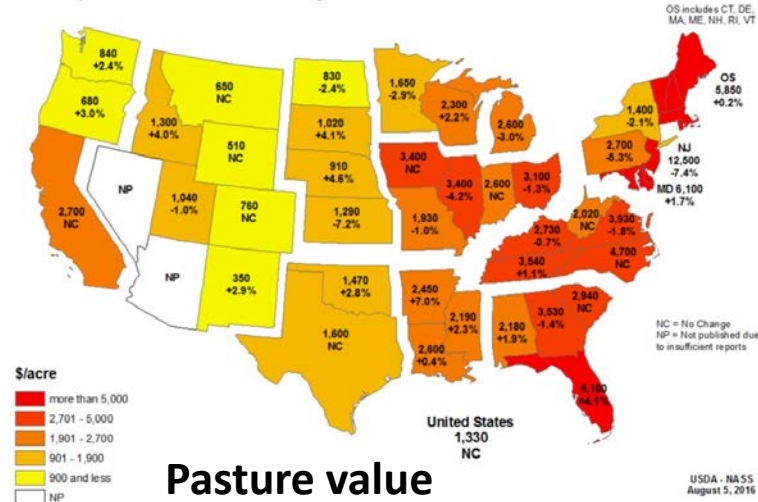
Federal Reserve  
Bank of Chicago,  
Kansas City  
Feb 2017 Ag  
Letter



**CARD**

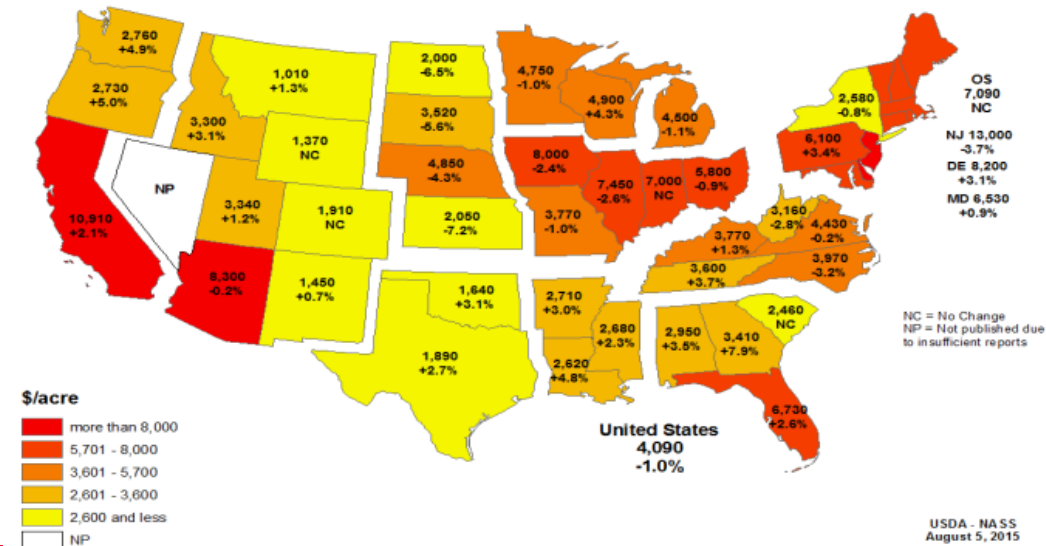
Center for Agricultural and Rural Development

## Dollars per Acre and Percent Change from 2015



## Pasture value

## Dollars per Acre and Percent Change from 2015



# 2016 – Results at a Glance

*Farm profits and soil quality are important!*

Lower commodity prices affect values.

*Land*

*Mid Range*

FARM OPERATION

## Land value survey indicates "bleeding" has stopped

Iowa farmland values appear to be taking a breather to identify future direction.

Rod Swoboda 1 | Mar 27, 2017

but remained relatively  
kets of strength still exist.  
pay for high quality soil.

ary buyers. Buyers were  
for deals in this land class.  
riods noticed on listings.

higher maintenance and  
rs were selective. More  
lines. More Auction "No

Sales" in this land class than others.  
Investment Funds focused here in 2016  
recognizing the steeper declines.

Recreational

*Steady*

Volume of sales increased slightly. More  
support around metropolitan areas. Very rural  
areas seeing longer marketing periods. Prices  
tied more to the general economy.

Transitional

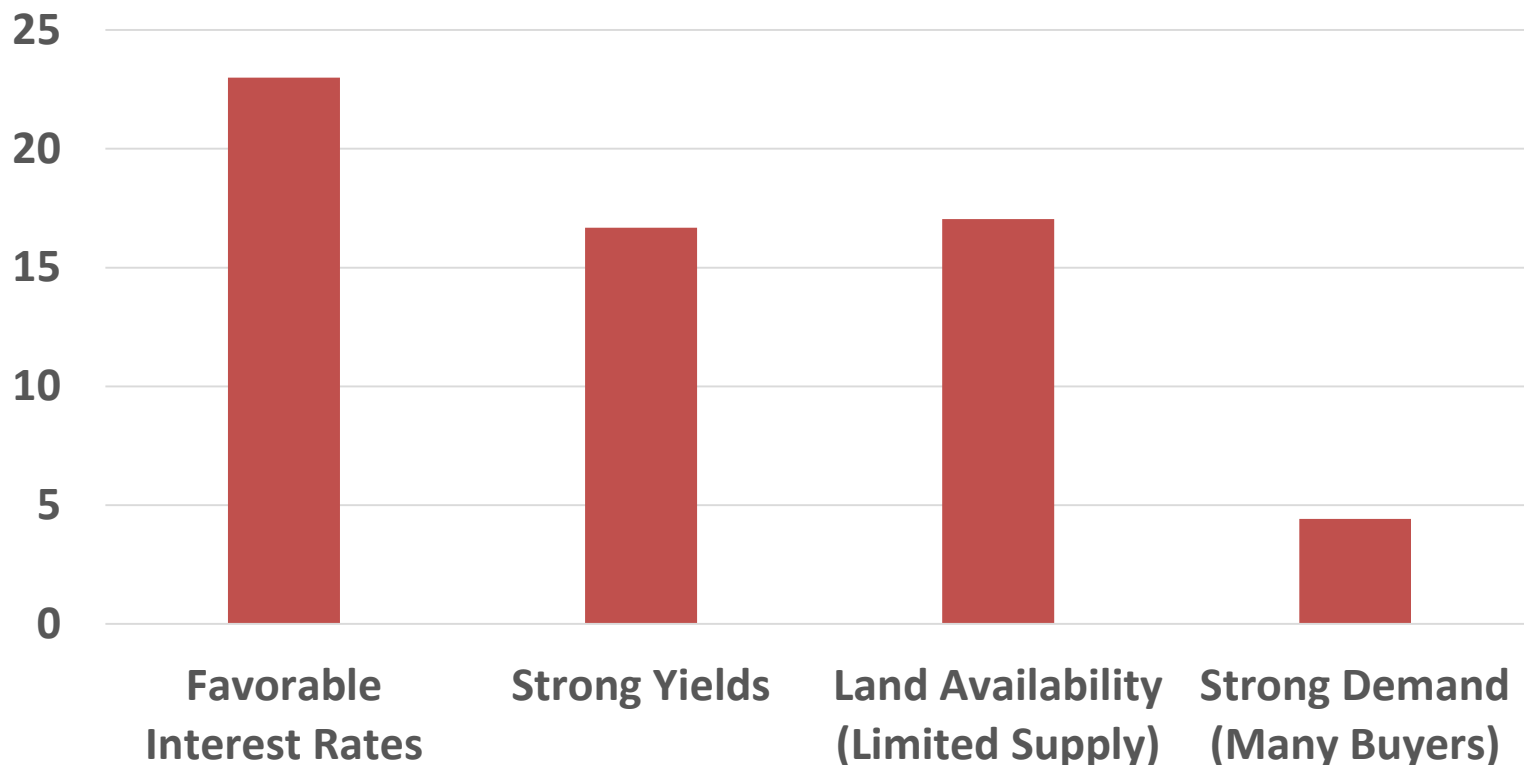
*Lower on  
Limited  
Information*

Activity very limited in our metropolitan areas.  
Market comeback slowly underway in the  
Chicago area. There is a little 1031 money.

# Factors Driving Past (and Future!) Land Value Changes

# Major Positive Factors Affecting Iowa Farmland Market, 2016

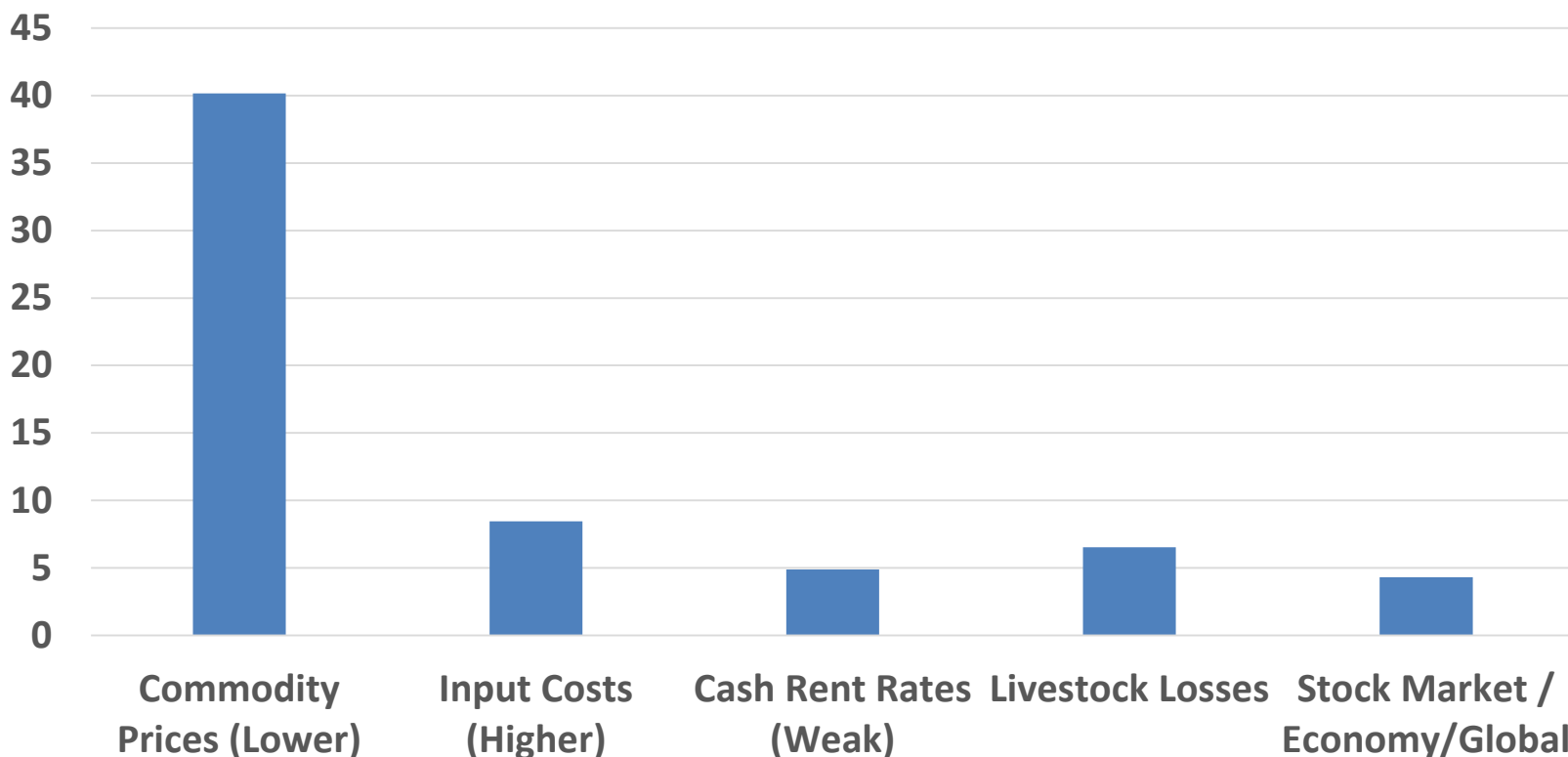
Positive Factors, 2016 (Percent)





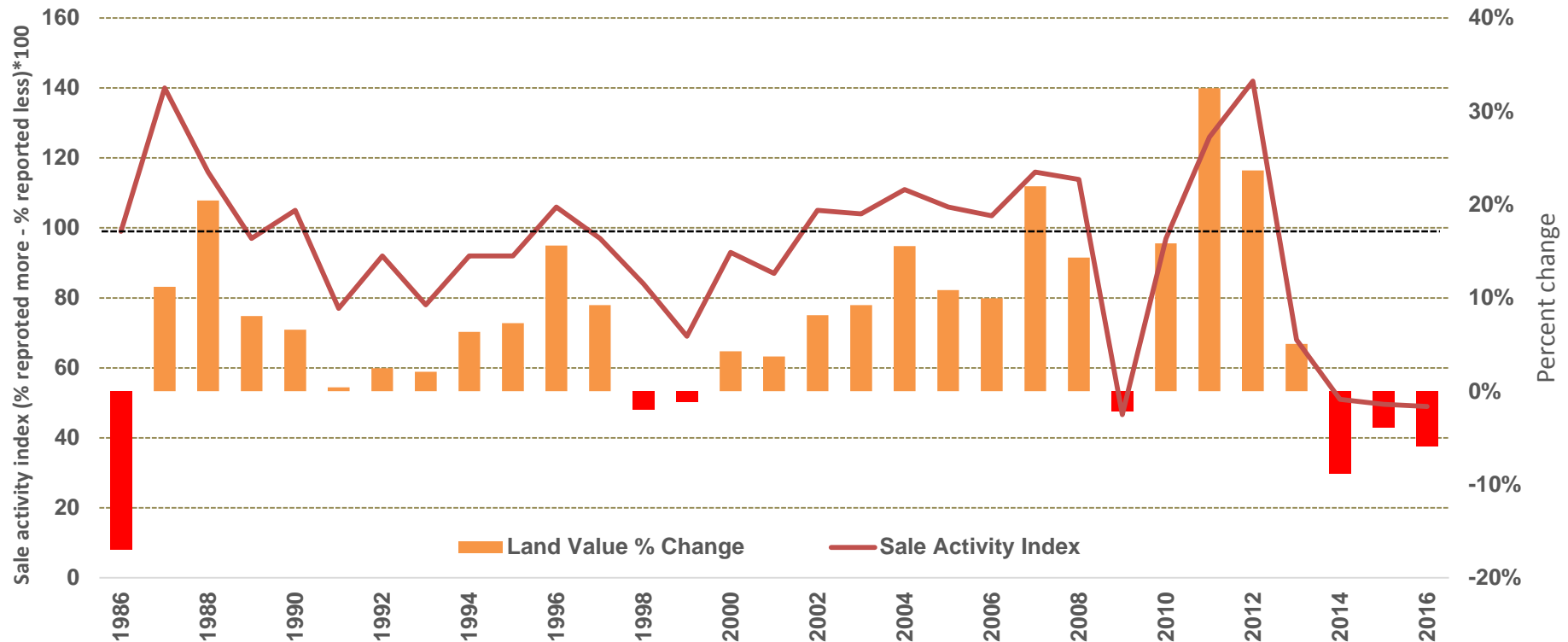
# Major Negative Factors Affecting Iowa Farmland Market, 2016

Negative Factors, 2016 (Percent)



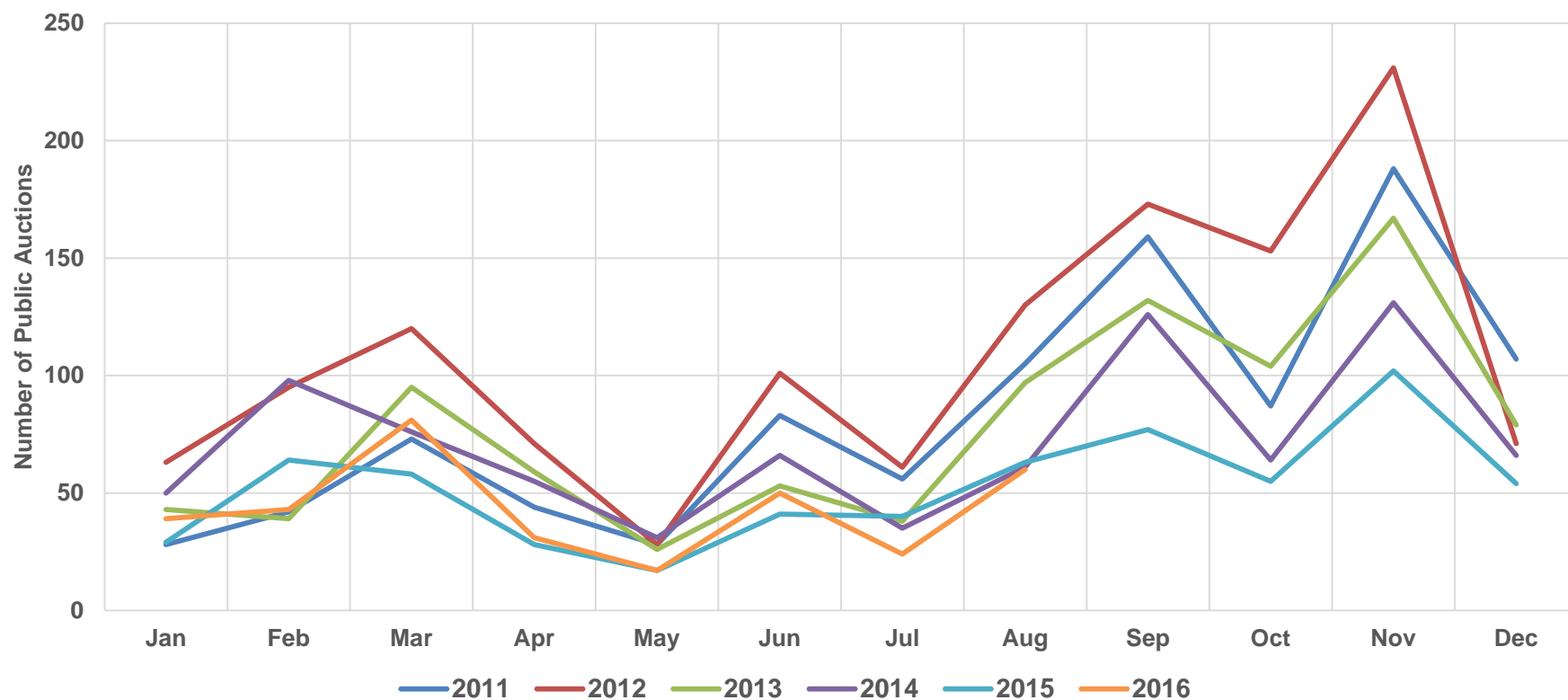
# Farmland supply tends to be tighter in down years

ISU sale activity index and percent change in  
Iowa land value, 1986-2016  
(% reported more sales - % reported less sales) + 100



# Limited farmland supply tends to bolster land values

Number of Public Auctions by Month 2011-2016



# Looking Ahead

# Cash Crop Price Predictions for Nov 2017, 2018, 2020

	Cash Corn Prices			Cash Soybean Prices		
	2017	2018	2020	2017	2018	2020
<b>Northwest</b>	\$ 3.34	<b>\$ 3.65</b>	\$ 3.98	\$ 9.25	\$ 9.61	<b>\$ 10.32</b>
<b>North Central</b>	\$ 3.42	\$ 3.59	\$ 3.93	\$ 9.16	\$ 9.46	\$ 10.01
<b>Northeast</b>	\$ 3.41	\$ 3.59	\$ 3.95	\$ 9.19	\$ 9.28	\$ 9.76
<b>West Central</b>	\$ 3.34	\$ 3.59	\$ 4.02	\$ 9.12	\$ 9.33	\$ 10.06
<b>Central</b>	\$ 3.36	\$ 3.50	\$ 3.77	\$ 9.17	\$ 9.40	\$ 9.86
<b>East Central</b>	\$ 3.42	\$ 3.58	\$ 3.89	\$ 9.26	\$ 9.51	\$ 10.00
<b>Southwest</b>	\$ 3.31	\$ 3.56	\$ 3.94	\$ 9.15	\$ 9.42	\$ 10.09
<b>South Central</b>	\$ 3.36	\$ 3.59	\$ 3.90	\$ 9.51	<b>\$ 9.76</b>	\$ 10.35
<b>Southeast</b>	<b>\$ 3.50</b>	\$ 3.83	\$ 4.17	\$ 9.49	\$ 9.59	\$ 10.08
<b>STATE</b>	<b>\$ 3.38</b>	<b>\$ 3.60</b>	<b>\$ 3.94</b>	<b>\$ 9.24</b>	<b>\$ 9.48</b>	<b>\$ 10.06</b>

## 2016 Estimated Land and Commodity Prices

### AVG. Estimate

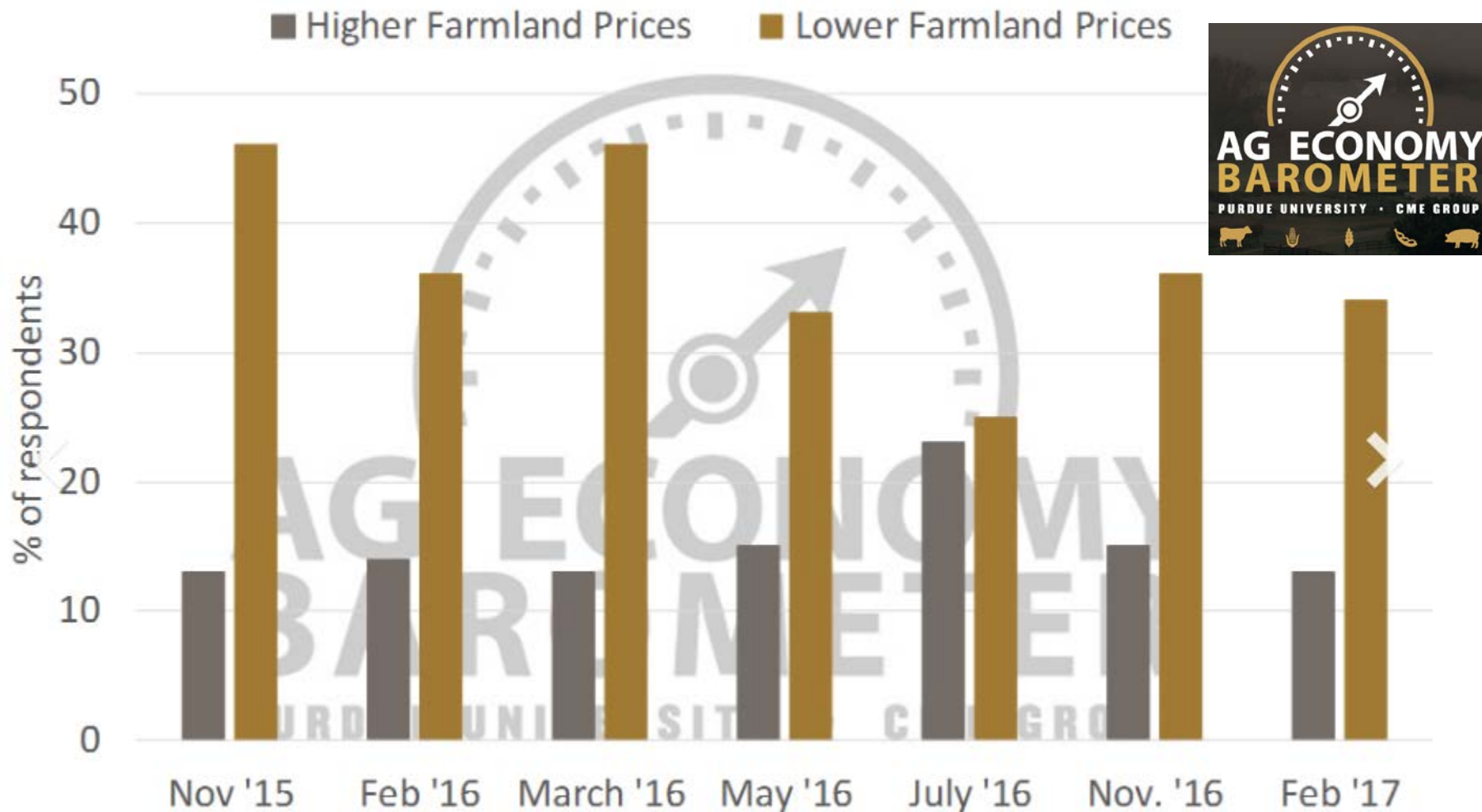
#### LAND:

	NW	NE	SW	SE	STATE
<b>Nov 2016</b>	\$ 8,358	\$ 8,191	\$ 6,958	\$ 7,320	\$ 7,776
<b>Nov 2017</b>	\$ 8,137	\$ 7,991	\$ 6,991	\$ 6,869	\$ 7,572
<b>Nov 2020</b>	\$ 8,884	\$ 8,758	\$ 7,698	\$ 7,614	\$ 8,303
<b>Nov 2025</b>	\$ 10,199	\$ 9,756	\$ 8,834	\$ 8,681	\$ 9,446
<b>Nov 2040</b>	\$ 14,487	\$ 12,818	\$ 11,833	\$ 11,988	\$ 12,866

#### Commodity Prices

	CORN	SOYBEAN
<b>Nov 2016</b>	\$ 3.75	\$ 9.44
<b>Nov 2017</b>	\$ 3.73	\$ 10.12
<b>Nov 2020</b>	\$ 4.32	\$ 10.78

## Farmland Price Expectations, 12 months from now

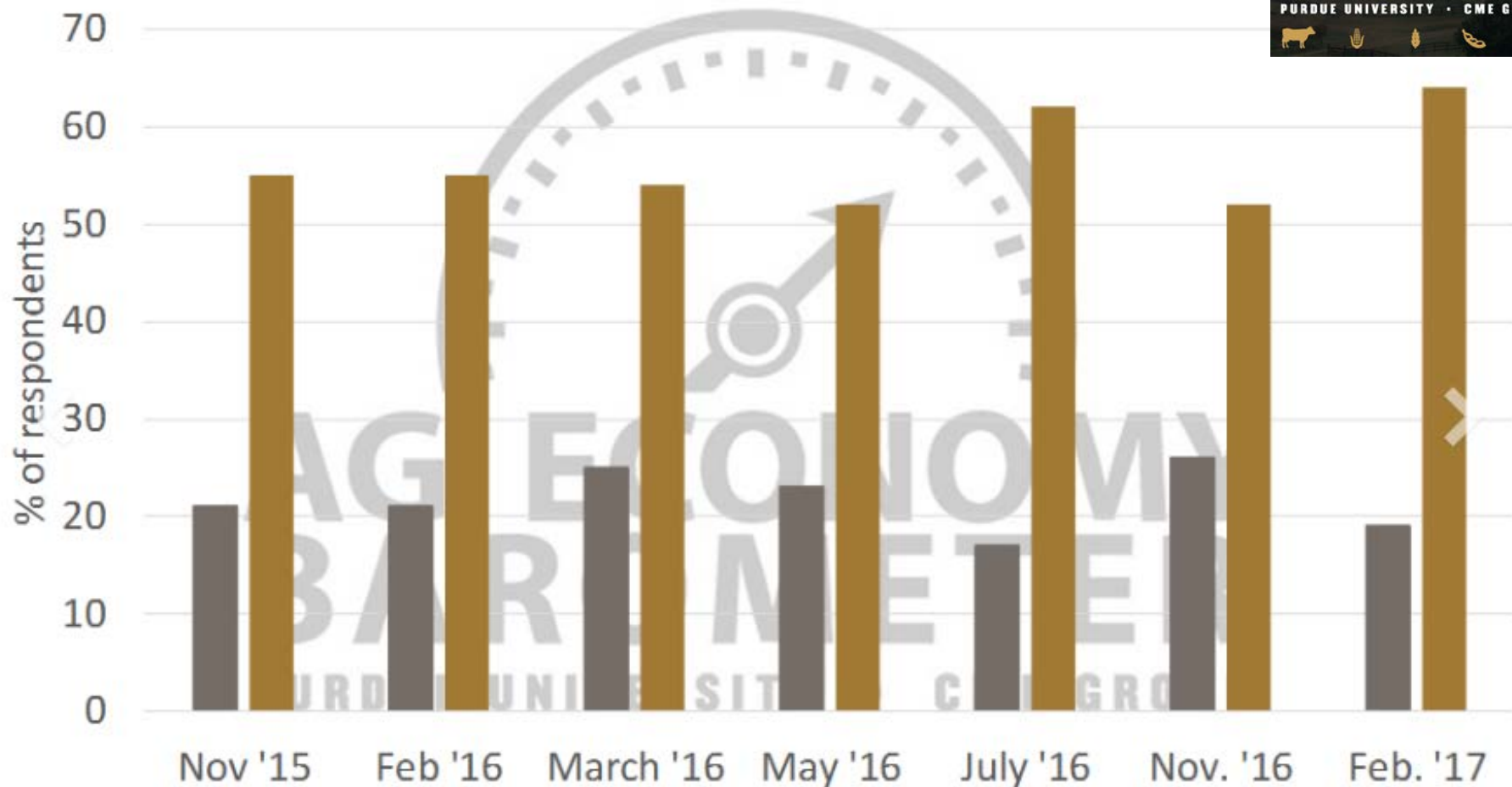


Most Recent Observation: Feb. 2017

Producer Survey

## Rating Farmland as an Investment

■ Poor ■ Good



Most Recent Observation: Feb. 2017

Producer Survey





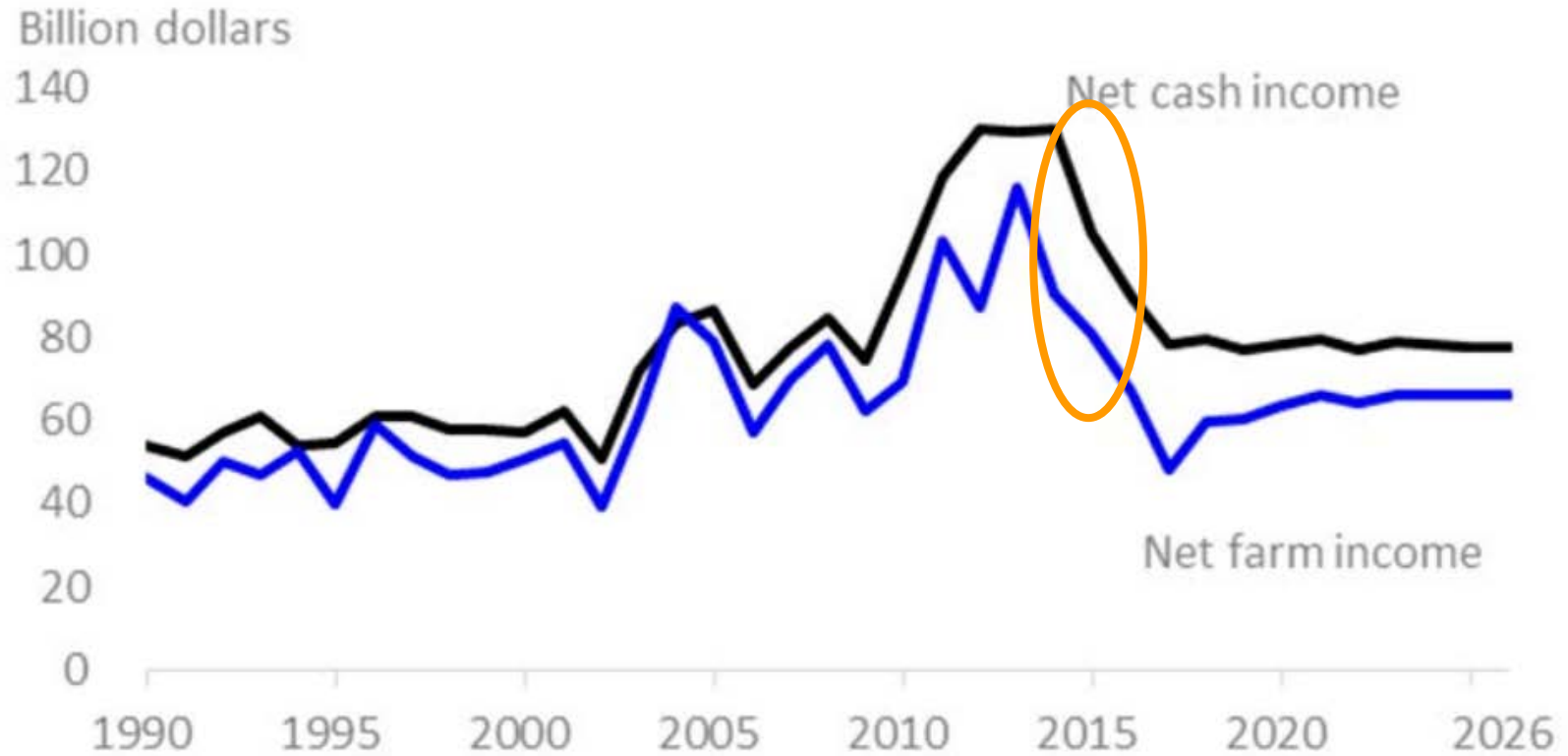
# Key Indicators to Watch

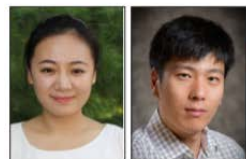
$$\text{Land Value} = \frac{\text{net income}}{\text{interest rate}}$$

- USDA Farm Income Forecast
  - Price Outlook
  - Ag Exports / Exchange Rate
  - China
  - Ethanol, E-85, RFS
- Fed's move on Interest Rate
- Ag Loan Delinquency; Vendor Credit

# US Farm Income 1990-2026

## U.S. farm income indicators





## Of maize and markets: China's new corn policy

By Qianrong Wu, economics graduate student, [qianrong@iastate.edu](mailto:qianrong@iastate.edu); Wendong Zhang, extension economist, [wdzhang@iastate.edu](mailto:wdzhang@iastate.edu)

2017

美国农业大州爱荷华州的农畜产品在世界市场上长期占据重要地位，现任州长特里·布兰斯塔德已被特朗普政府提名为下一届驻华大使。爱荷华州立大学中国留学生对中国玉米产业政策的一份研究报告获得州农业部长Bill Northey 的推荐转发，芝华特对此深度报告进行了翻译整理。

玉米与市场：谈中国的新玉米政策

作者：Qianrong Wu Wendong Zhang

翻译：芝华数据 李佳璇



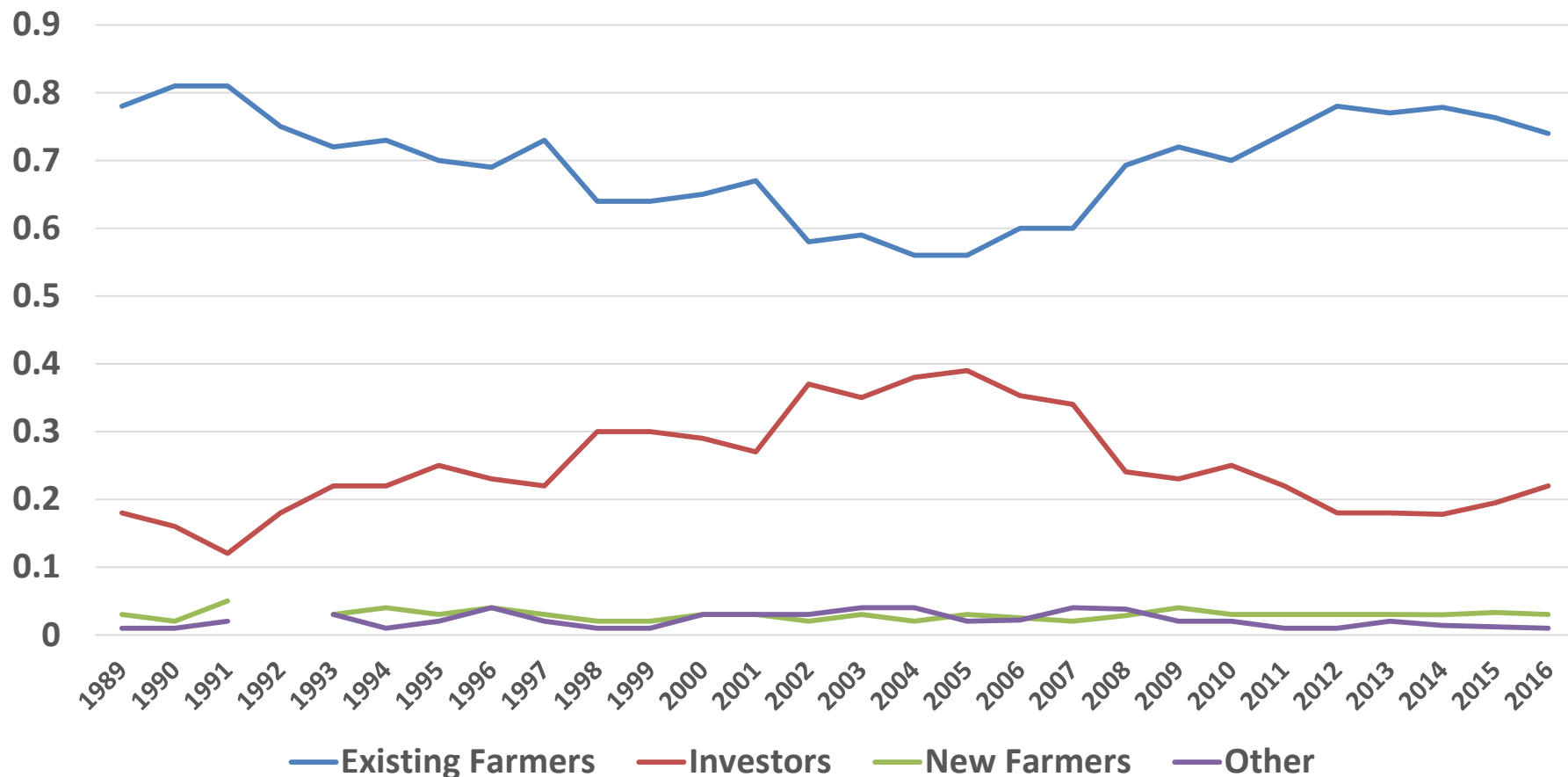
# Federal Reserve raises interest rates for second time in a decade, expects 3 hikes in 2017

The Washington Post

By Jim Tankersley December 14 at 3:30 PM

# Facts and “Alternative Facts” about the Farmland Market

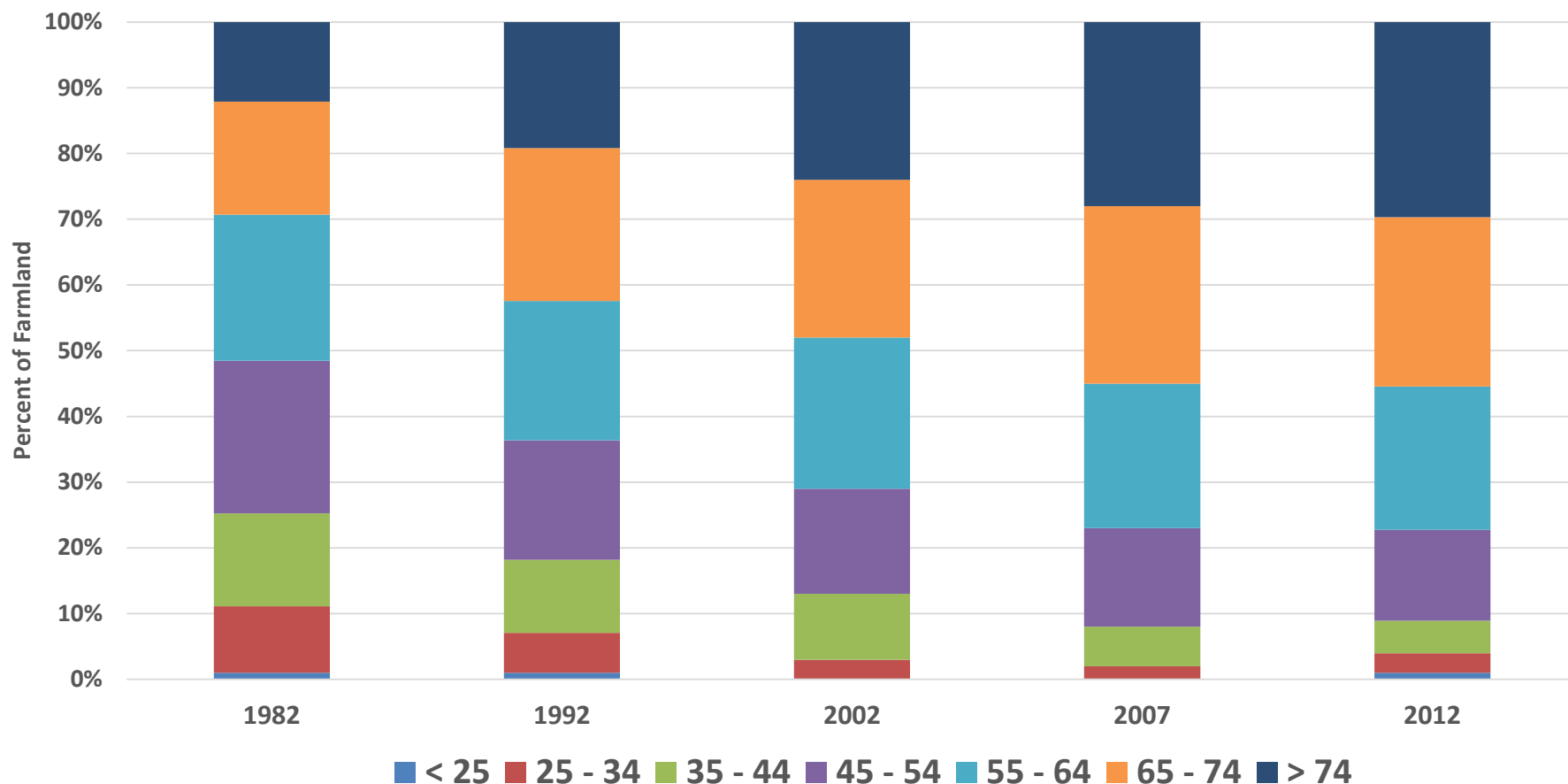
# Iowa Farmland Purchases by Buyer Types 1989-2016



# Iowa Landowners tend to hold the farmland

Years of ownership	% of Iowa Farmland
Less than 10 years	24%
10-20 Years	21%
20-30 Years	19%
30-40 Years	15%
> 40 Years	20%

# % of Iowa Farmland by Age and Life Stage of Owners

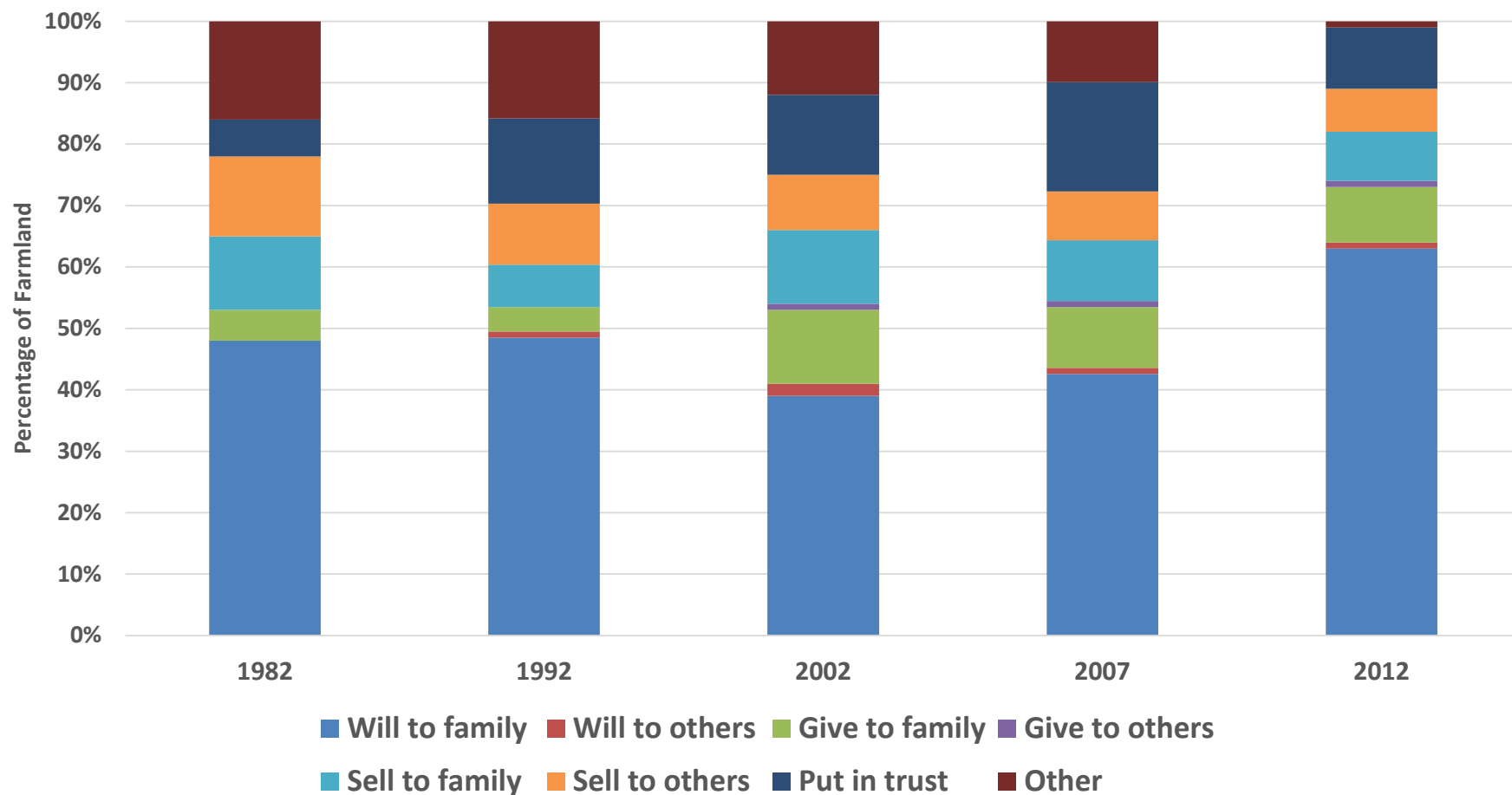




# Iowa Farmland Purchases by Seller Types, 2016

	Active Farmers	Retired Farmers	Estate Sales	Investors	Other
	PERCENT				
Northwest	12	17	64	5	3
North Central	8	17	61	10	4
Northeast	14	34	43	6	5
West Central	12	25	57	5	2
Central	13	22	53	8	4
East Central	11	24	53	9	2
Southwest	15	24	47	13	1
South Central	17	24	37	19	3
Southeast	11	24	57	10	2
STATE	12	23	53	9	3

# Method of Anticipated Transfer 1982-2012



# A New, Interactive Iowa Farmland Value Portal

<http://card.iastate.edu/farmland/>

# Iowa Farmland Value Portal

<http://card.iastate.edu/farmland>



IOWA STATE UNIVERSITY  
Extension and Outreach

## Iowa Farmland Value Portal <sup>BETA</sup>

Your One-Stop Web-Portal for Everything You Need to Know about Iowa's Farmland Value

[2015 Results](#) [Charts](#) [Interactive County Maps](#) [Downloads](#) [Resources](#) [Archive](#)

Select a county or district:

Select result format: ☒ dollar value ☐ annual percentage change ☐ farmland value indexes (state only)

Select data sources: ☒ ISU Iowa Land Value Survey ☐ USDA National Agricultural Statistics Service  
☐ REALTORS Land Institute ☐ Federal Reserve Bank of Chicago

Years:  through

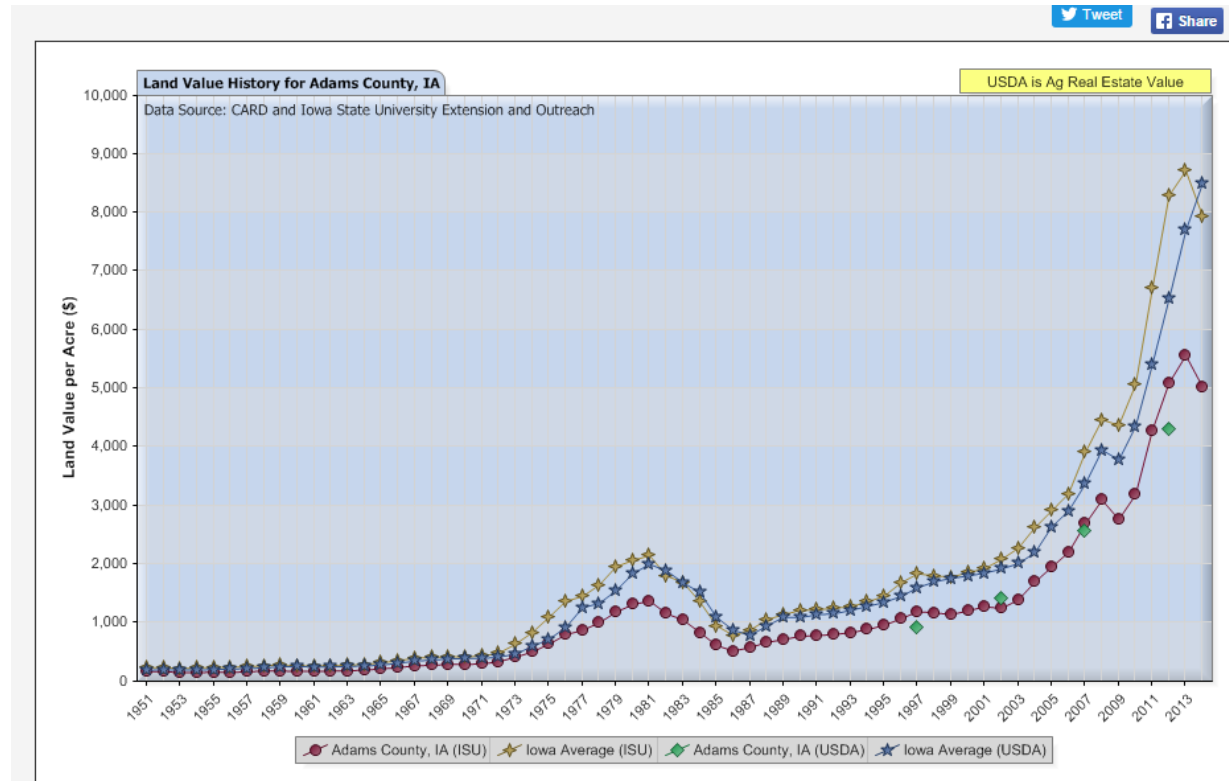
☐ Show Values

☐ Show Iowa Average ☐ Show District Average

# Iowa Farmland Value Portal

twitter  
#ISUland  
value

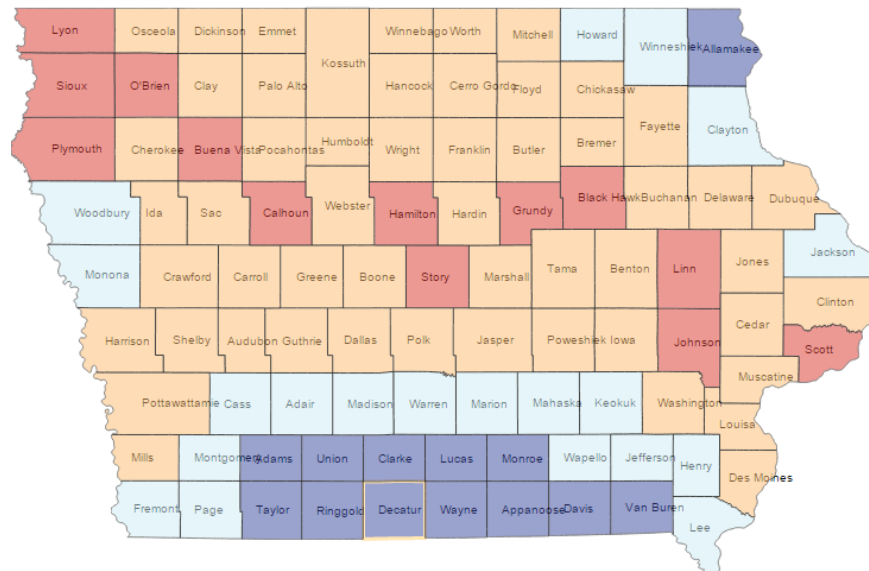
<http://card.iastate.edu/farmland>



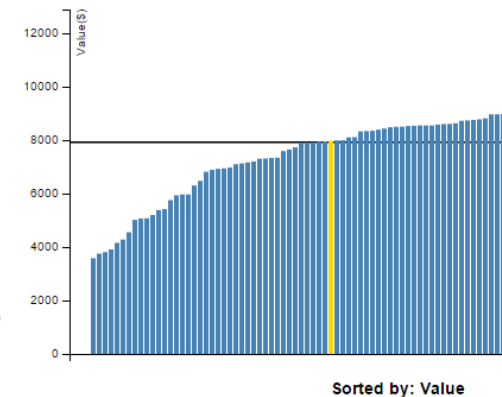
☒ Land Value
 ☐ Value Change(%)
 ☐ Value Change(\$)  
☐ Nominal Value
 ☒ Inflation Adjusted

Year:

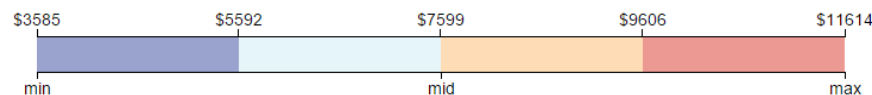
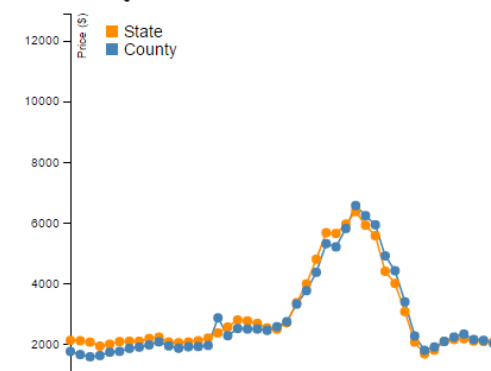
County



Iowa County Land Value in 2014



Land Value Trend in County: Dubuque







# Thank You!

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