

U.S. Farmland Market Update: What's Ahead?

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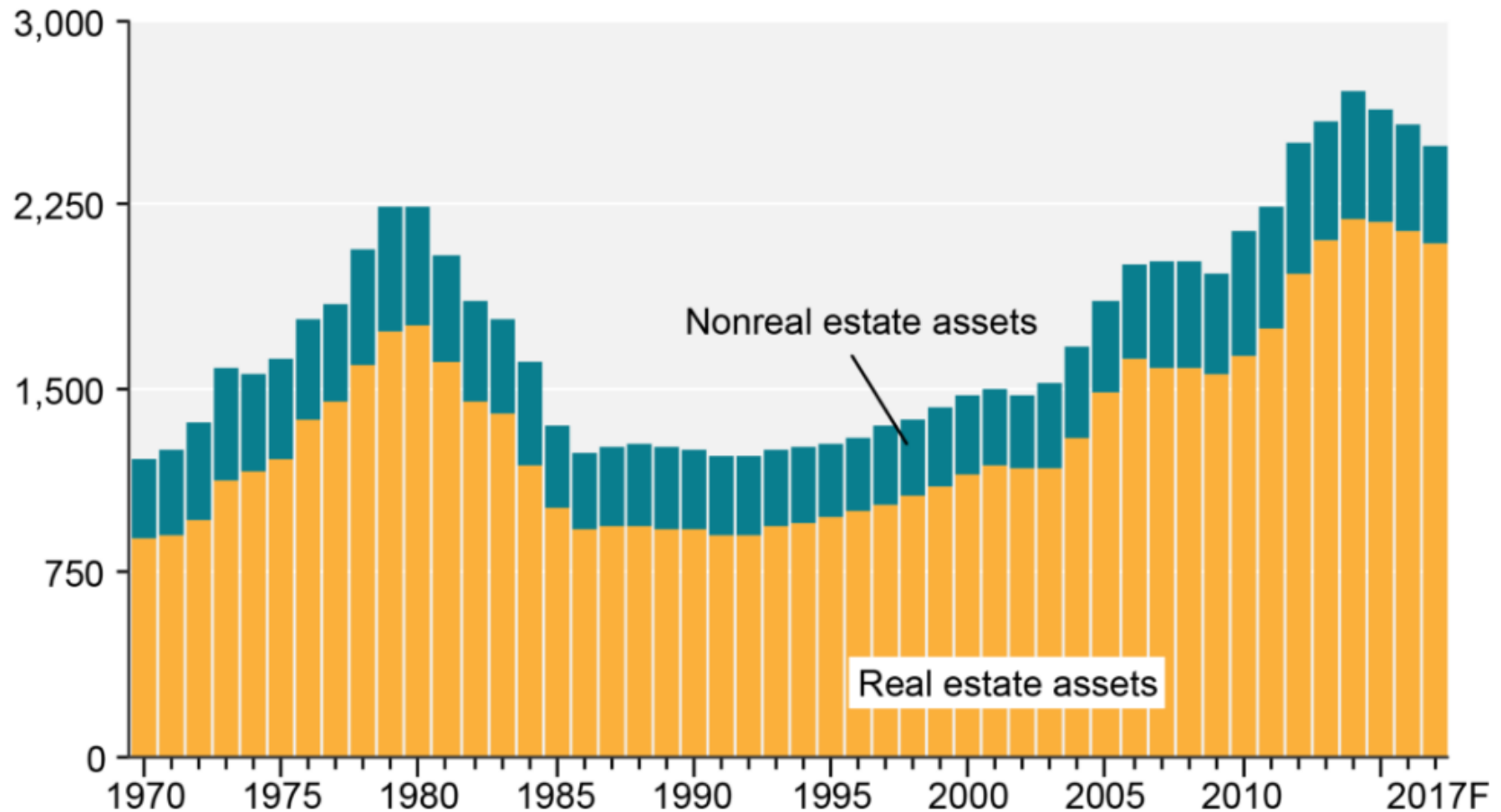
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April 26th, 2017

Why care about farmland?

Farm sector assets, inflation adjusted, 1970-2017F

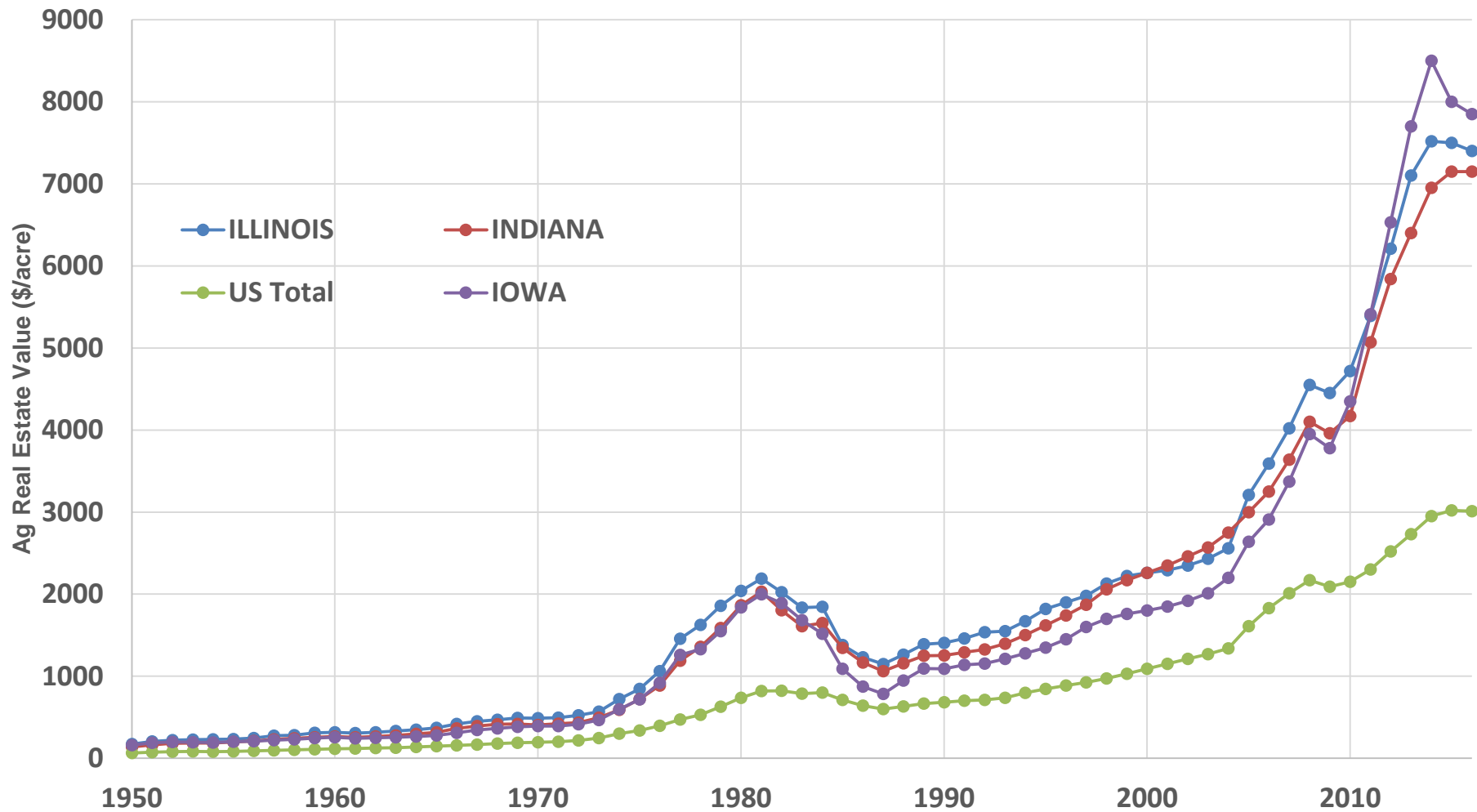
\$ billion (2009)



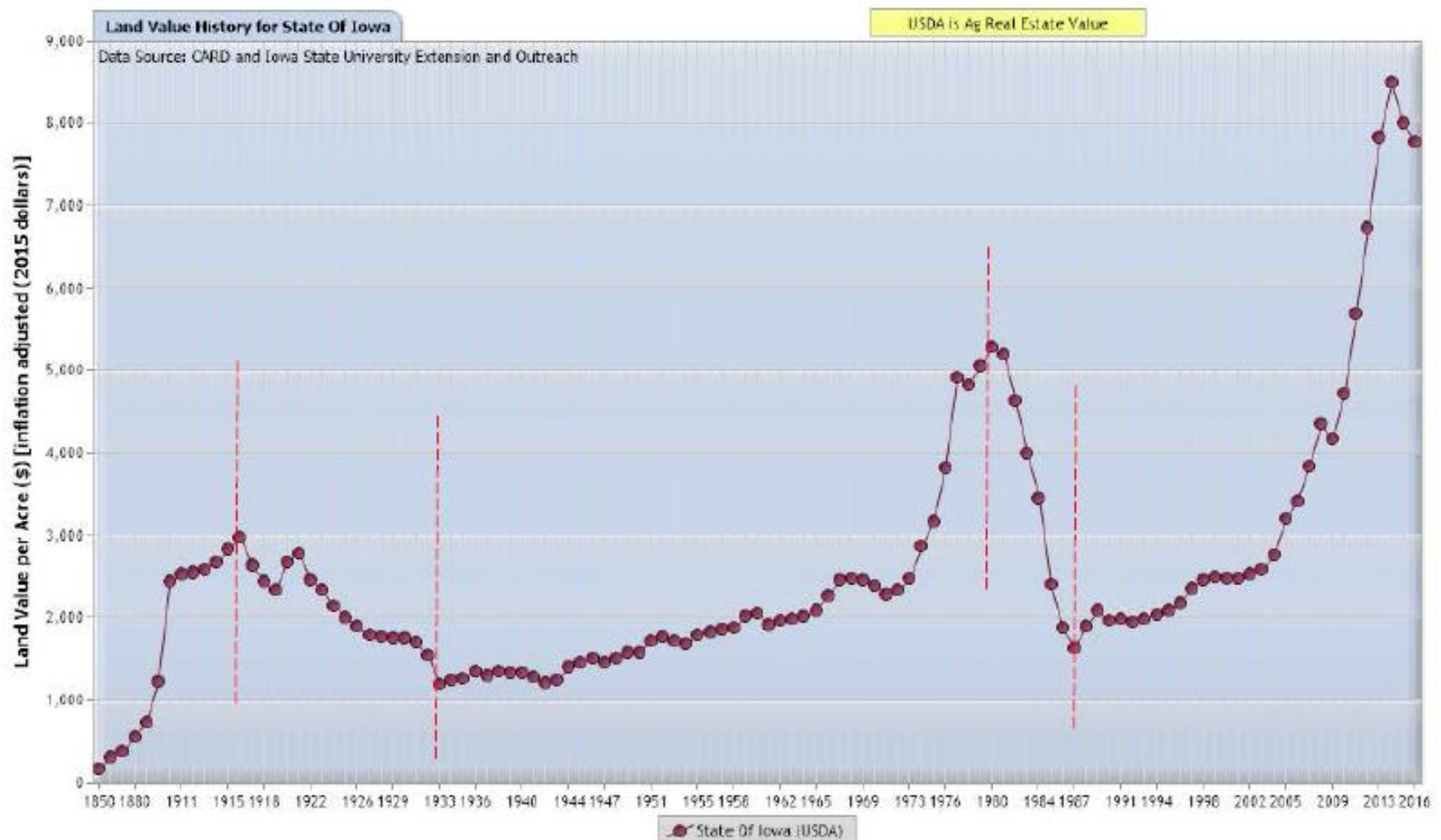
Guiding Framework - Ricardian

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

Corn Belt vs. U.S. Farmland Values



Inflation-adjusted Iowa Ag Real Estate Values 1850-2016



Farm Crises and this downturn

- Four Reasons why this is not likely another farm crisis
 - High income in pre-crisis “golden” eras
 - Low interest rate environment
 - Prudence among ag lenders and bank regulators
 - Wider, stronger (?) government safety net
- Concerns
 - Deteriorating farm income and ag credit, disproportionately affecting beginning farmers
 - High reliance on ag exports, strong US \$
 - Liquidity/profitability crisis vs. solvency problem

Positive 1: Real Income Accumulation 2003-2013

Average % change in inflation-adjusted values per year

Golden Eras

Land

Gross Income

Net Income

1910-1920

1.2%

0.8%

0.2%

1973-1981

9.7%

0.9%

-3.2%

2003-2013

11.1%

4.5%

8.1%

Crises and Declines

Land

Gross Income

Net Income

1921-1933

-5.8%

-1.9%

-1.0%

1981-1987

-15.0%

-2.5%

2.6%

2013-2016

-6.0%*

-2.7%

-9.5%

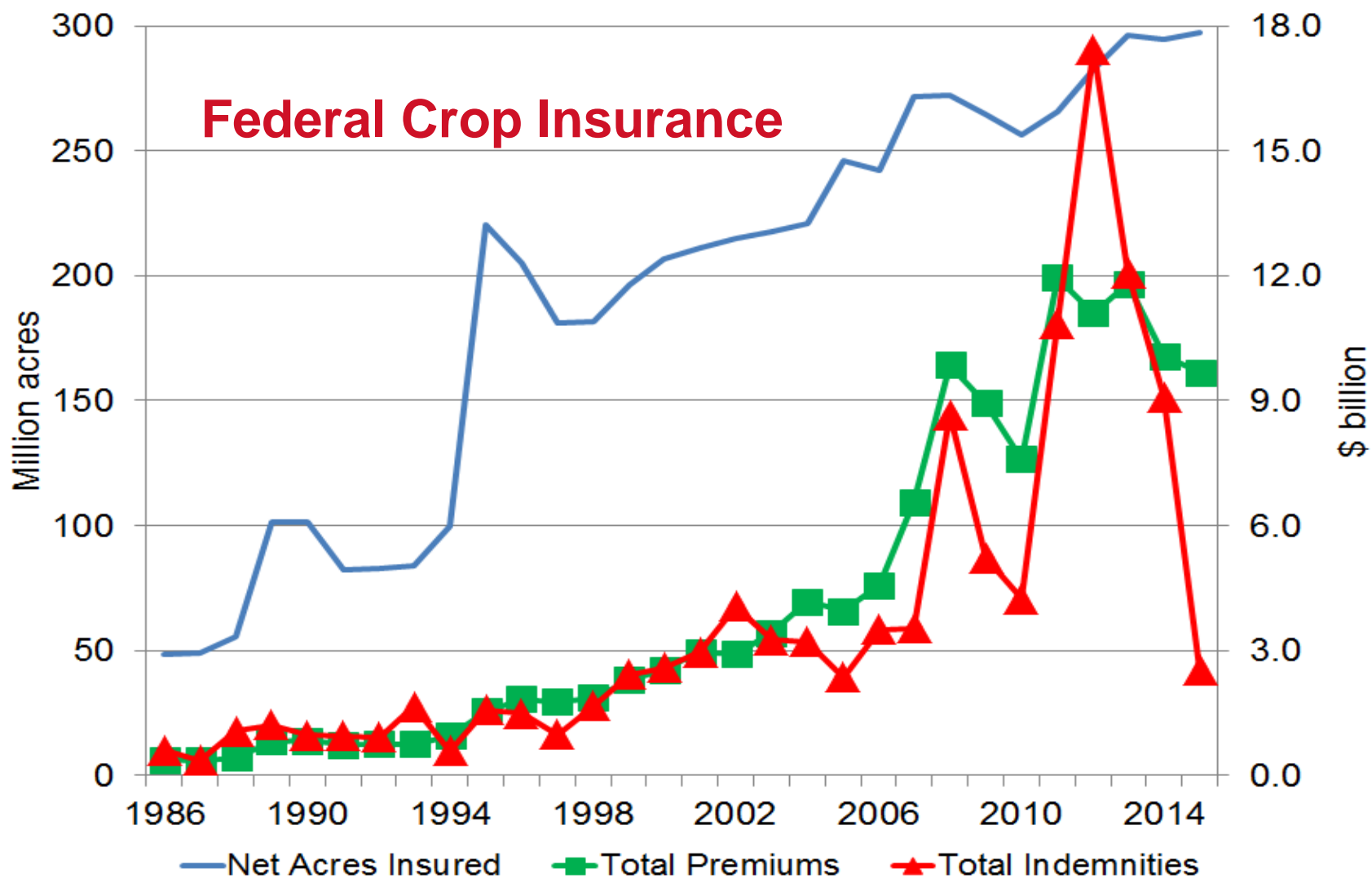
Positive 2: Historically low interest rates (despite recent hikes)



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

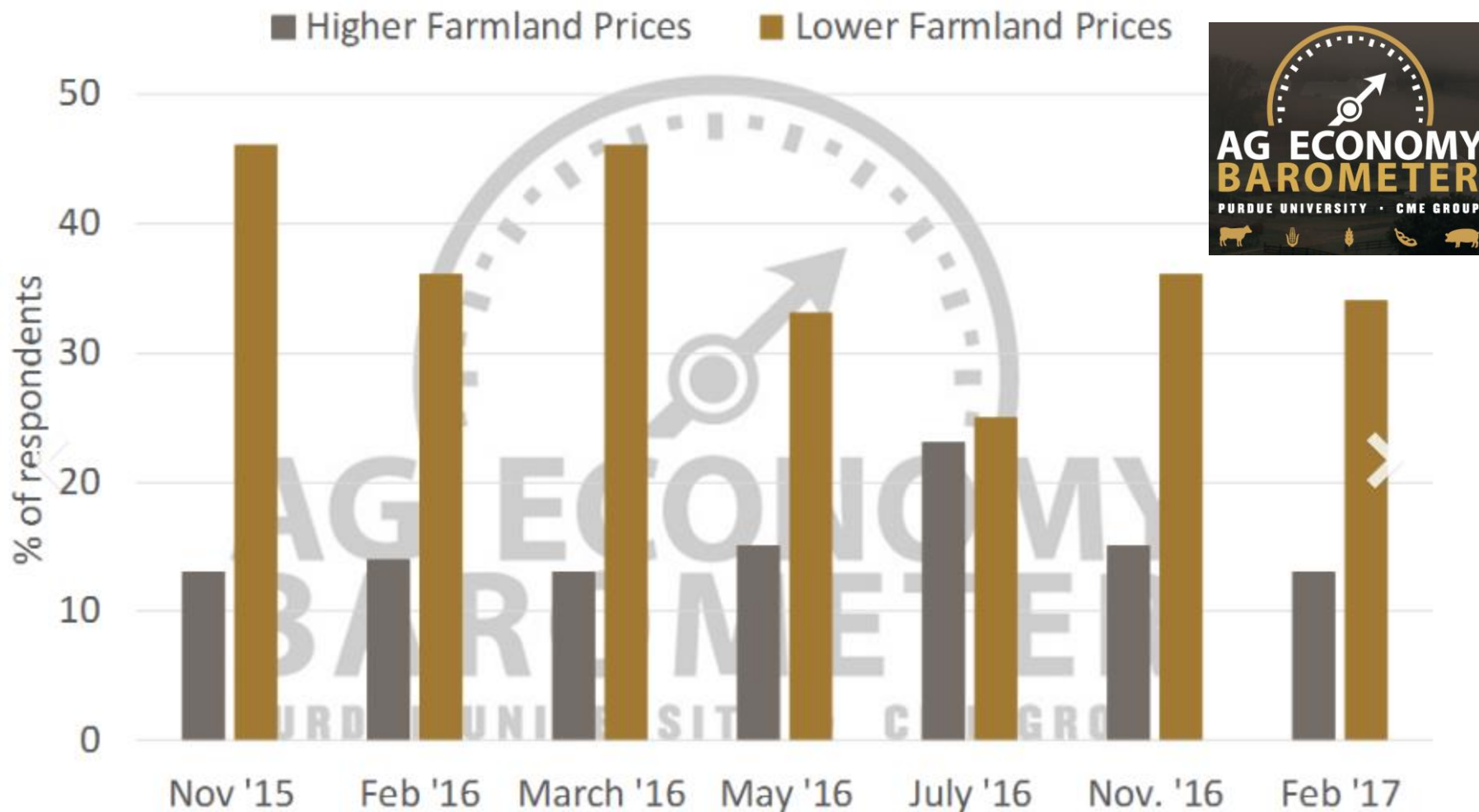
Positive 4: Stronger Govn't Safety Net



Looking Ahead:

Stabilization in the farmland market (modest decline)

Farmland Price Expectations, 12 months from now



Most Recent Observation: Feb. 2017

Producer Survey

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

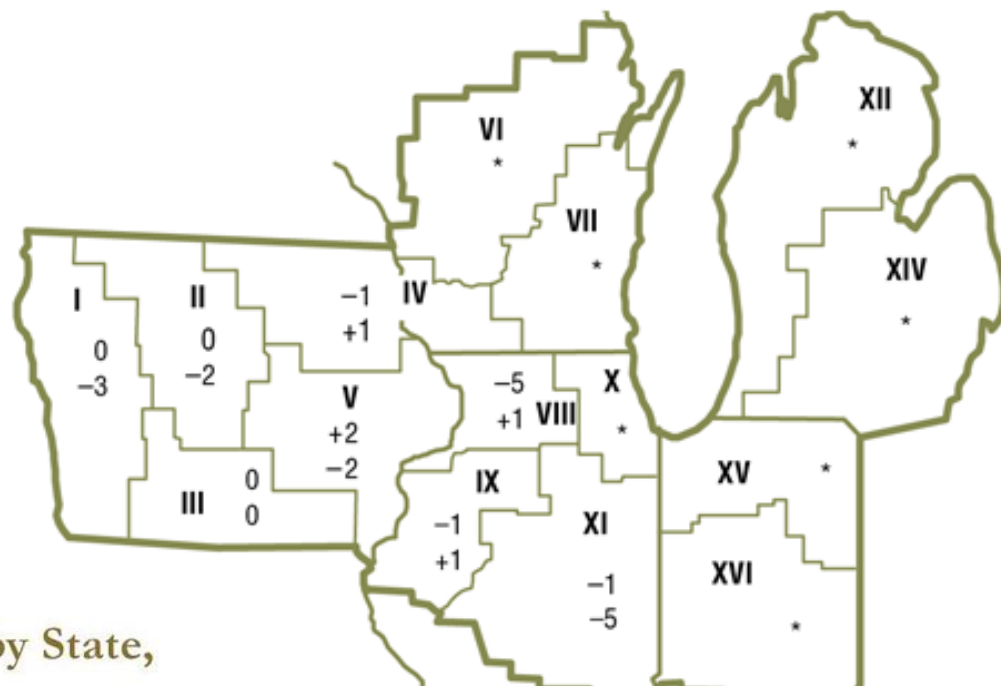


Table 1: Tenth District Farmland Value by State, Fourth Quarter 2016

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

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

Realtor Land Institute
March 2017 Iowa Survey
+0.9% since Sept 16

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

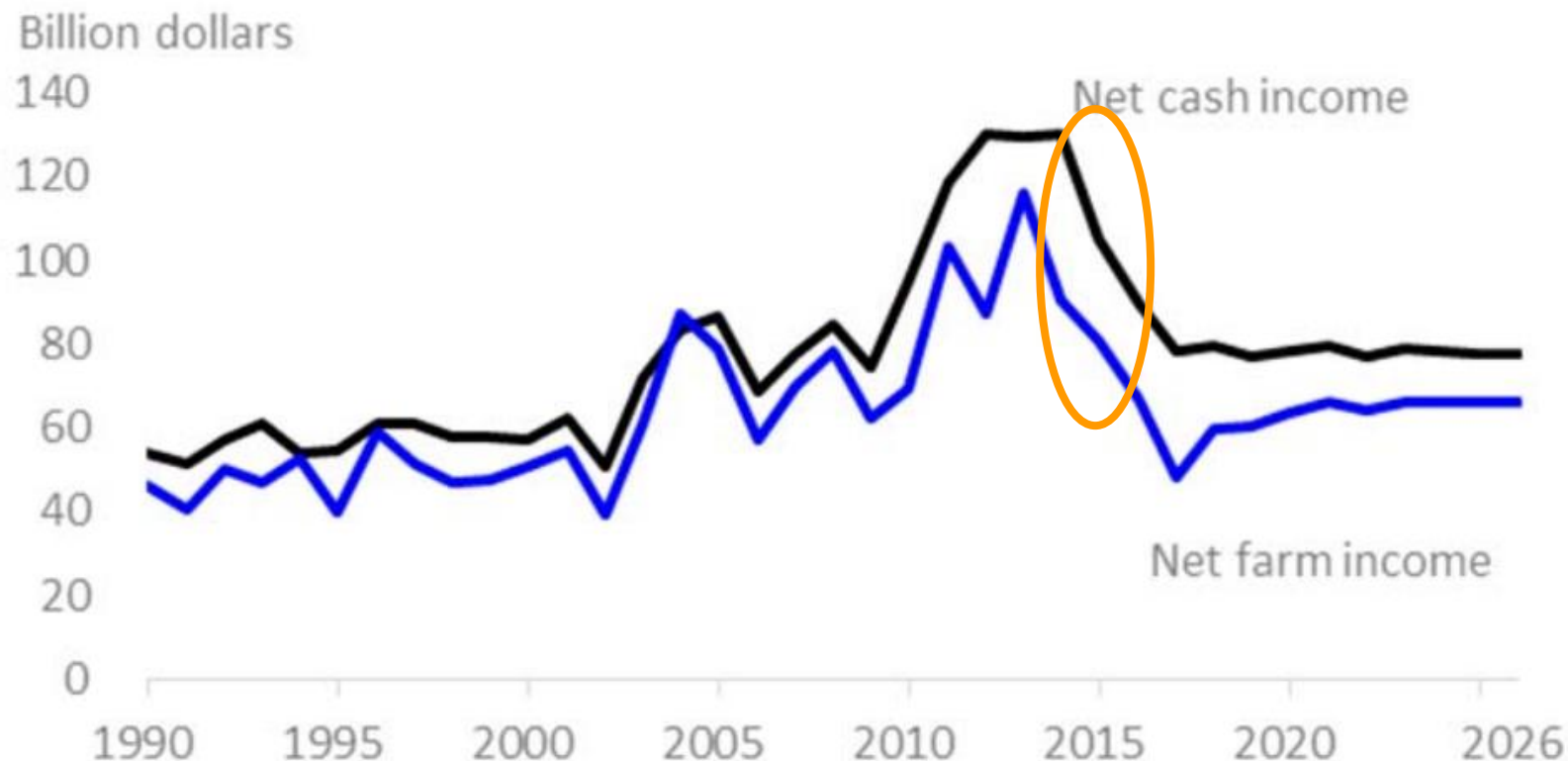


CARD

Center for Agricultural and Rural Development

US Farm Income 1990-2026

U.S. farm income indicators



Key things to watch

Interest rate hikes: SPEED & MAGNITUDE MATTERS

Possible trade tensions and negotiations (China, Mexico)

2018 Farm Bill Discussions

Possible Changes in tax policies

- Estate tax reforms; step-up basis
- Income tax: section 179, bonus depreciations
- State ownership law

Ag Policy News

-21% budget cuts for USDA

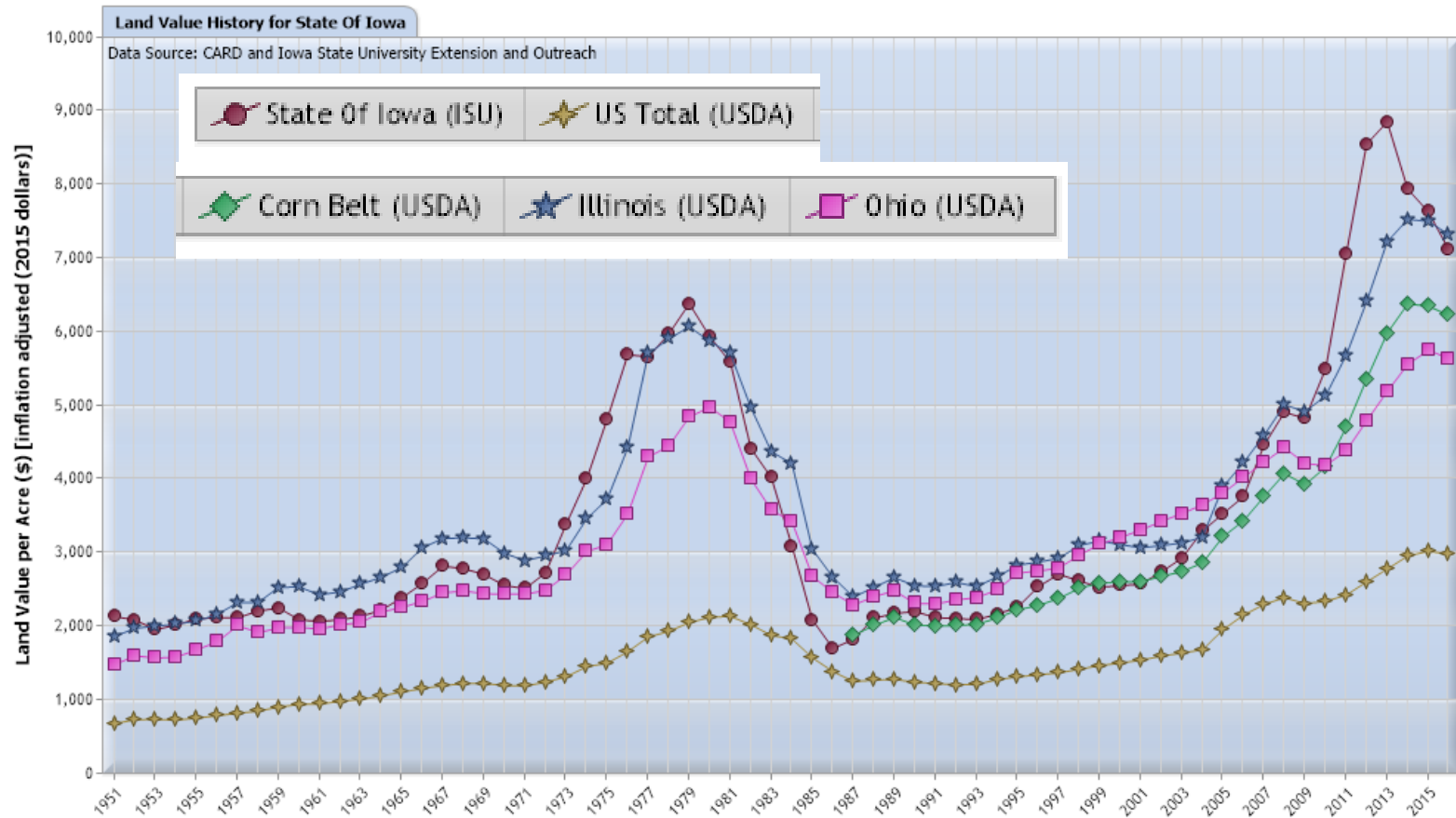
USDA Secretary Perdue just confirmed this Monday

The House and Senate Ag Committees have begun their exploratory hearings for the 2018 Farm Bill, but no firm policy declarations have been made.

What little we have on ag policy comes from the President's Executive Orders and the Budget: withdraw TPP, review "WOTUS" rule, omnibus report on significant trade deficit

Iowa Farmland Value Portal

twitter #ISUlandvalue



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

Thank You!

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Slides available online at

<http://www2.econ.iastate.edu/faculty/zhang>

Appendix

[2018 Farm Bill](#)

[2017 USDA Budget](#)

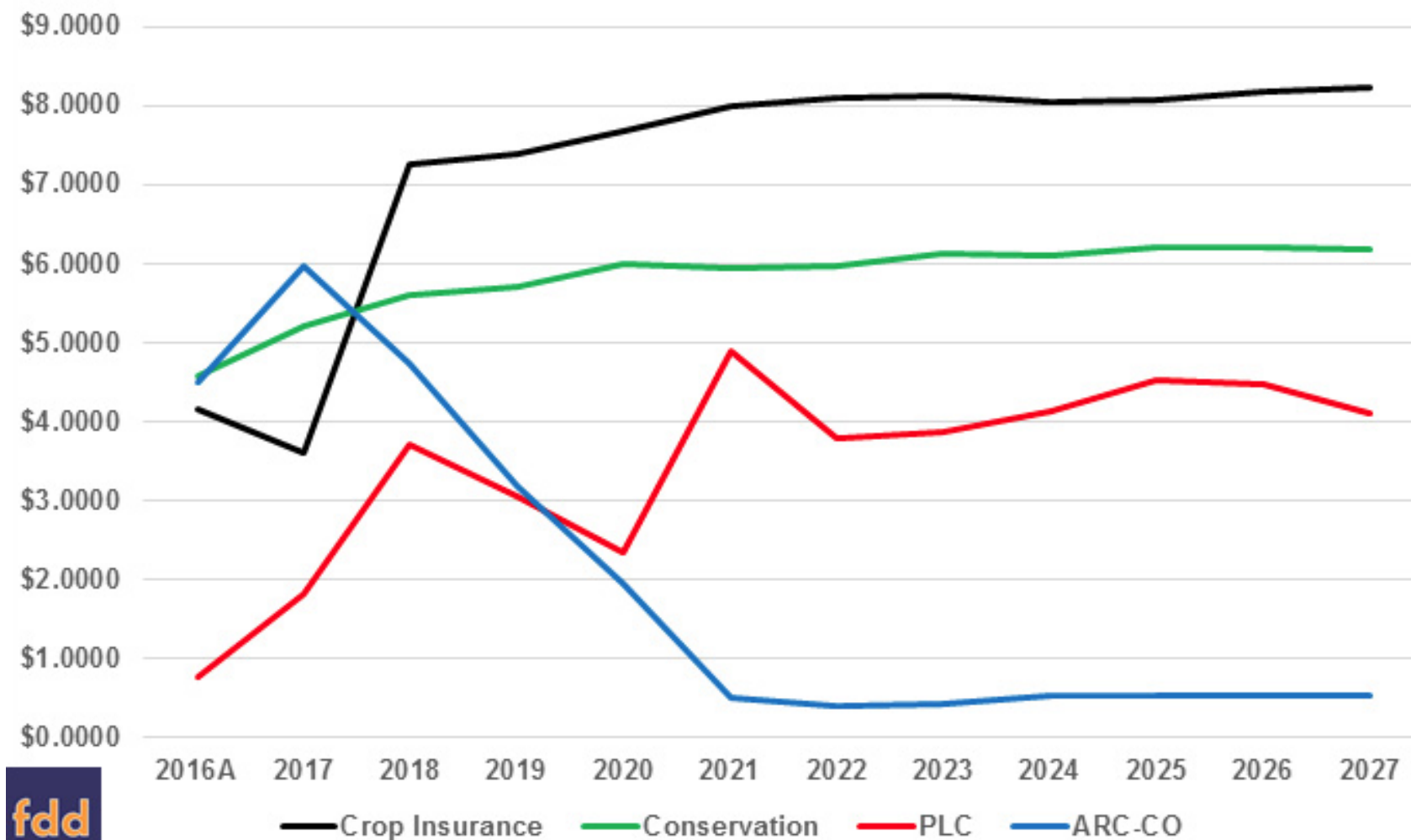
[Meat & Crop Prices and Returns](#)

[Interest Rate Dot Plot](#)

[Farmland Supply](#)

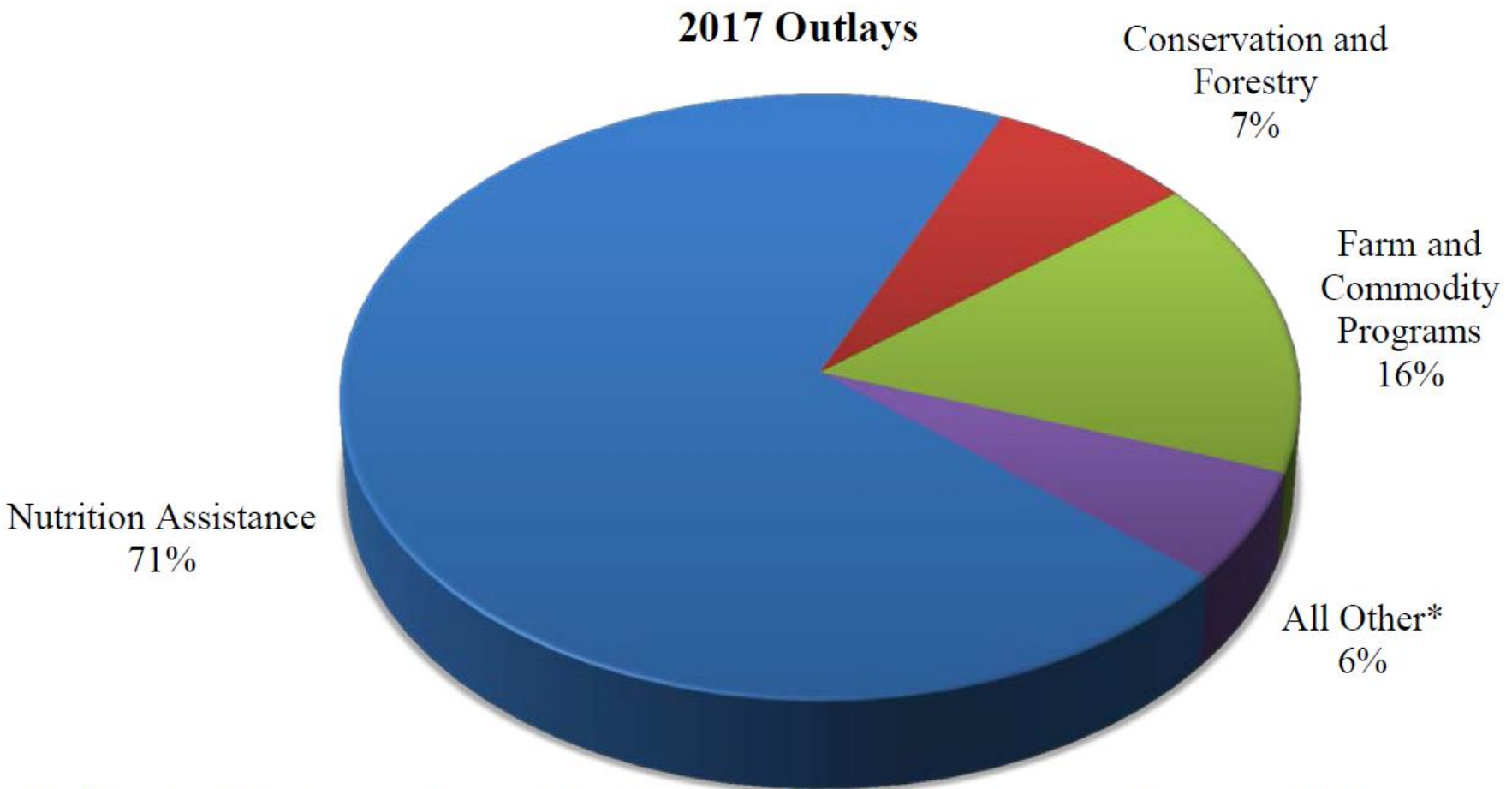
Farm Bill Program Spending Forecasts

Figure 2. CBO Outlays (\$Billions)



fdd

USDA's Budget – 2017 Outlays



*Includes Rural Development, Research, Food Safety, Marketing and Regulatory, and Departmental Management

USDA's 2017 Budget

Budget Authority
(Dollars in Millions)

Agency / Program	2015 Enacted	2016 Estimate	2017 Budget
FARM AND FOREIGN AGRICULTURAL SERVICES			
Farm Service Agency:			
Discretionary Programs.....	\$1,608	\$1,599	\$1,616
Discretionary Emergency Programs.....	12	114	0
Mandatory Programs.....	44	47	47
Commodity Credit Corporation Programs (mandatory).....	2,175	20,545	12,812
Total, Farm Service Agency.....	3,839	22,305	14,474
Risk Management Agency:			
Discretionary Programs.....	81	83	96
Mandatory Programs.....	7,767	7,858	7,575
Total, Risk Management Agency.....	7,848	7,941	7,671
NATURAL RESOURCES AND ENVIRONMENT			
Natural Resources Conservation Service:			
Discretionary Programs.....	862	867	860
Discretionary Emergency Programs.....	79	137	0
Mandatory CCC Programs.....	3,184	3,123	3,885
Total, Natural Resources Conservation Service.....	4,125	4,126	4,745

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Extension and Outreach

Source: USDA 2017 Budget



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USDA's 2017 Budget

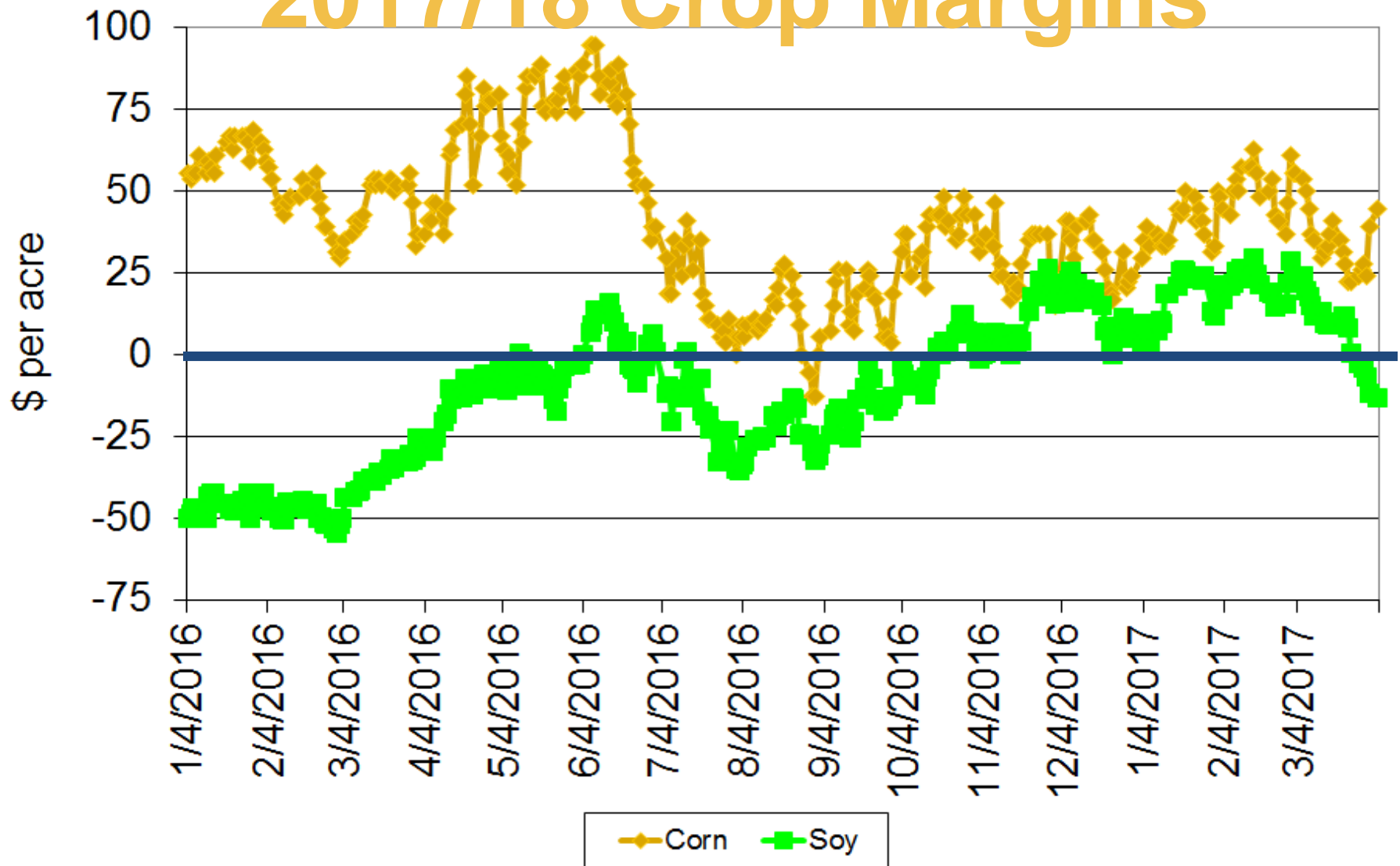
Budget Authority
(Dollars in Millions)

Agency / Program	2015 Enacted	2016 Estimate	2017 Budget
RESEARCH, EDUCATION, AND ECONOMICS			
Agricultural Research Service:			
Discretionary Programs.....	1,178	1,356	1,256
Mandatory Programs.....	30	30	30
Total, Agricultural Research Service.....	1,208	1,386	1,286
National Institute of Food and Agriculture:			
Discretionary Programs.....	1,295	1,331	1,379
Mandatory Programs.....	142	171	505
Total, National Institute of Food and Agriculture.....	1,436	1,502	1,884
Economic Research Service:			
Discretionary Programs.....	85	85	91
National Agricultural Statistics Service:			
Discretionary Programs.....	172	168	177
Total, Research, Education, and Economics.....	2,901	3,141	3,438

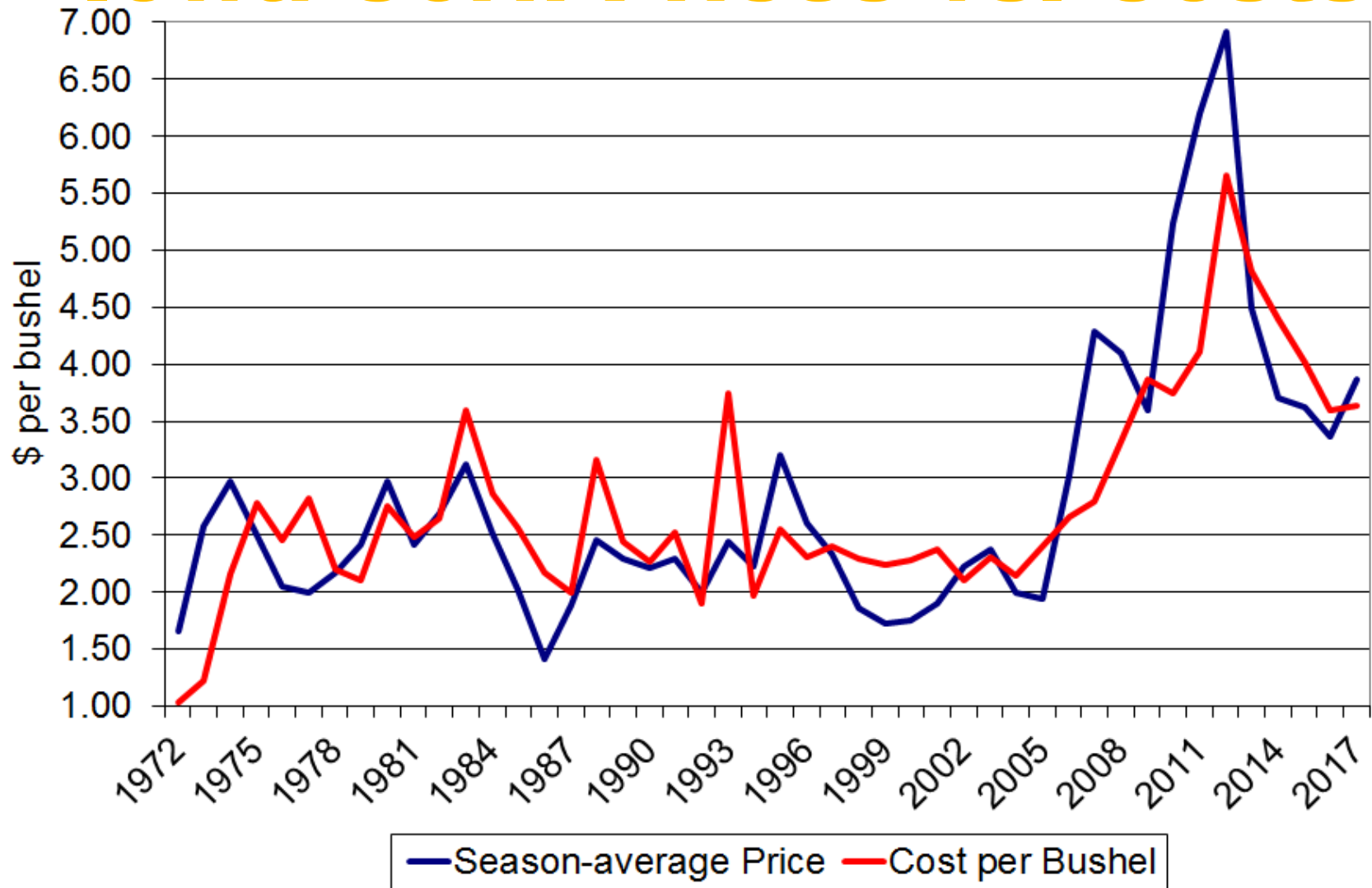
U.S. Meat Production & Prices

	2016 estimate	2017 forecast	Change from February 9	Change from 2016
Production	<i>Billion pounds</i>			
Beef	25.21	26.25	0.25	1.04
Pork	24.94	26.11	-0.07	1.17
Broilers	40.70	41.53	--	0.83
Turkey	5.98	6.09	-0.04	0.10
Total meat	97.60	100.74	0.15	3.14
Prices	<i>Dollars/cwt</i>			
Steers	120.86	117.88	5.88	-2.99
Hogs	46.16	44.63	1.13	-1.53
	<i>Cents/lb</i>			
Broilers	84.3	85.9	1.1	1.5
Turkey	117.1	106.6	-0.4	-10.5

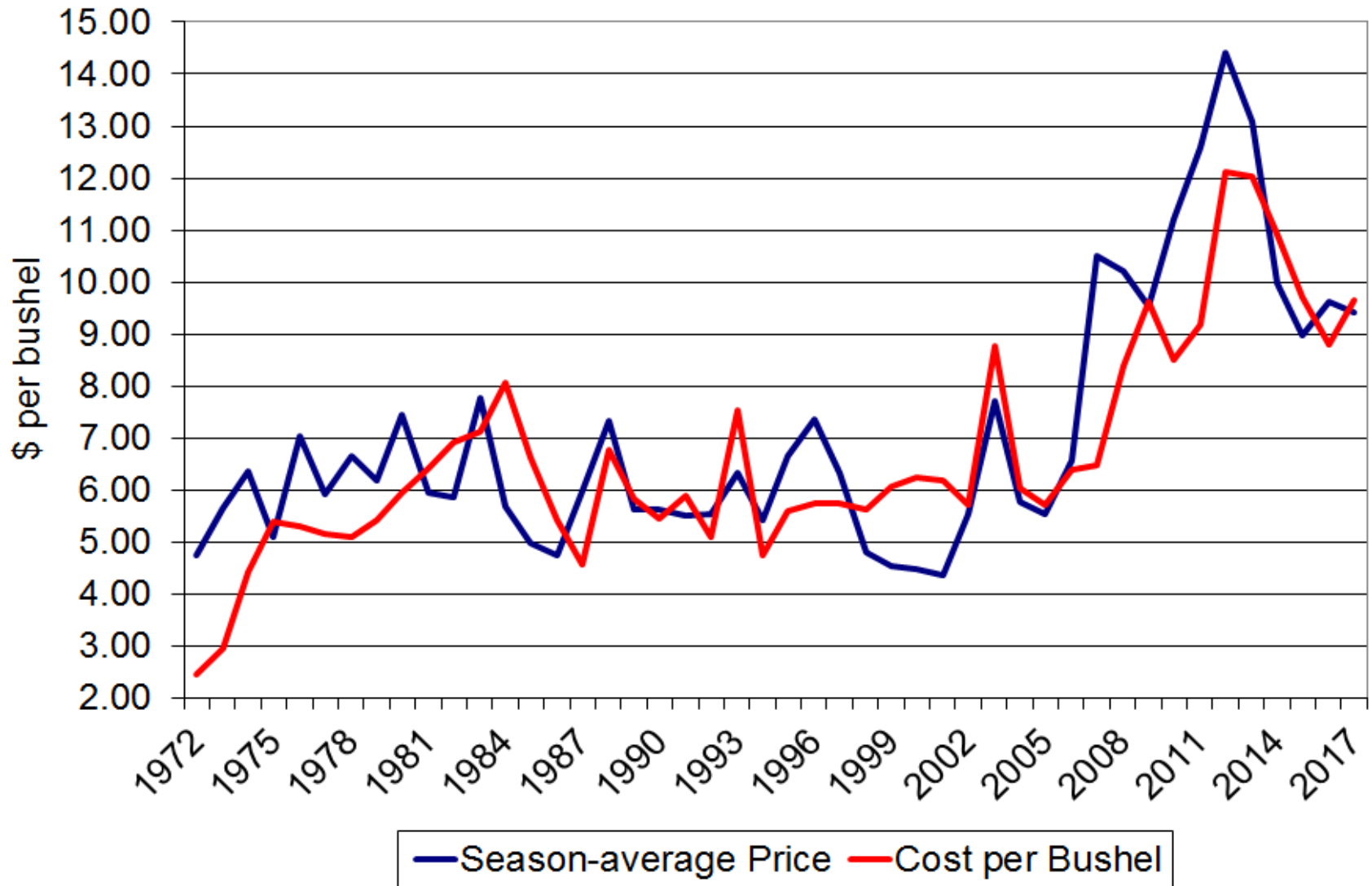
2017/18 Crop Margins



Iowa Corn Prices vs. Costs

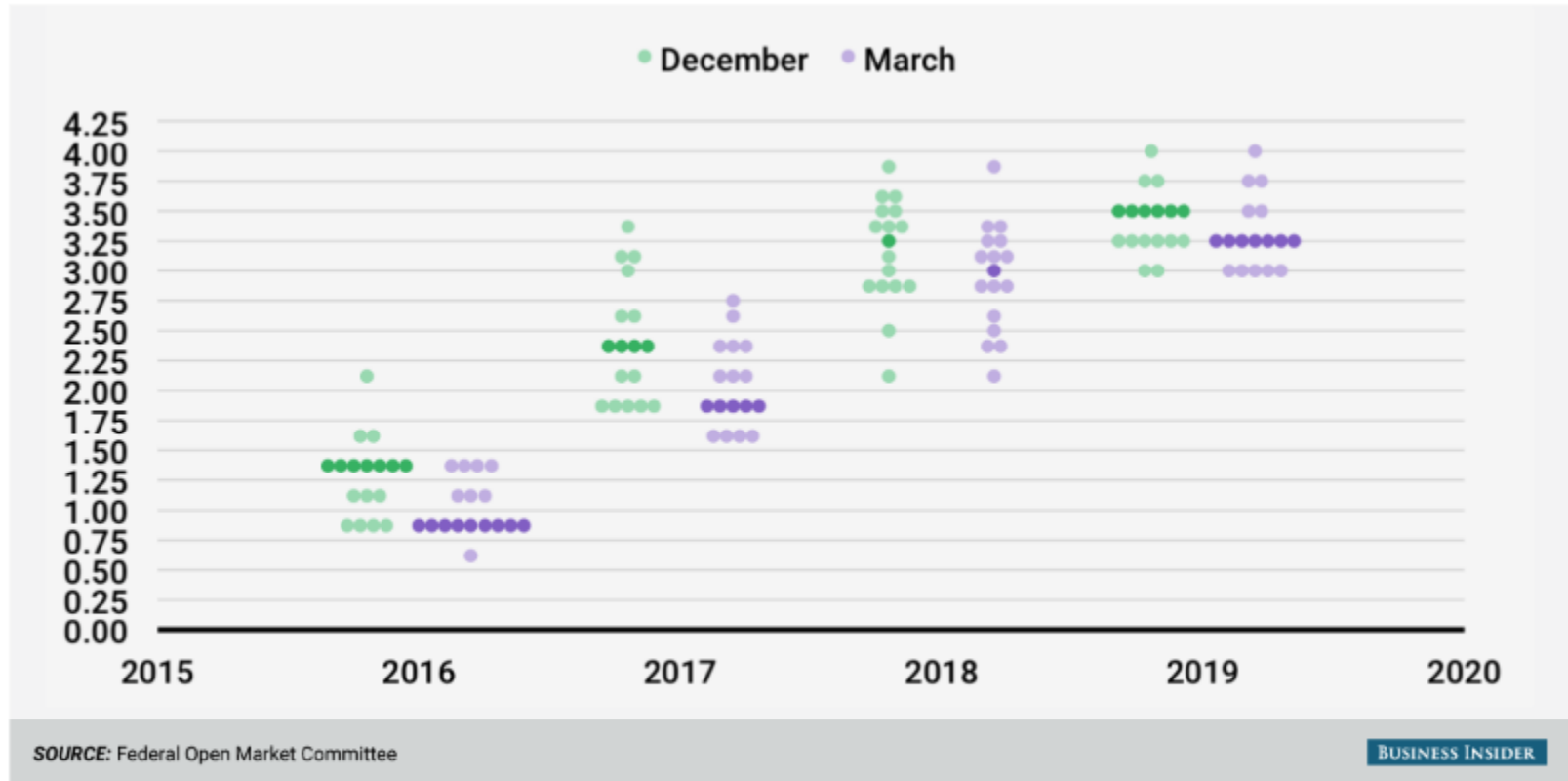


Iowa Soybean Prices vs. Costs



Expect at least two interest rate hikes in 2017

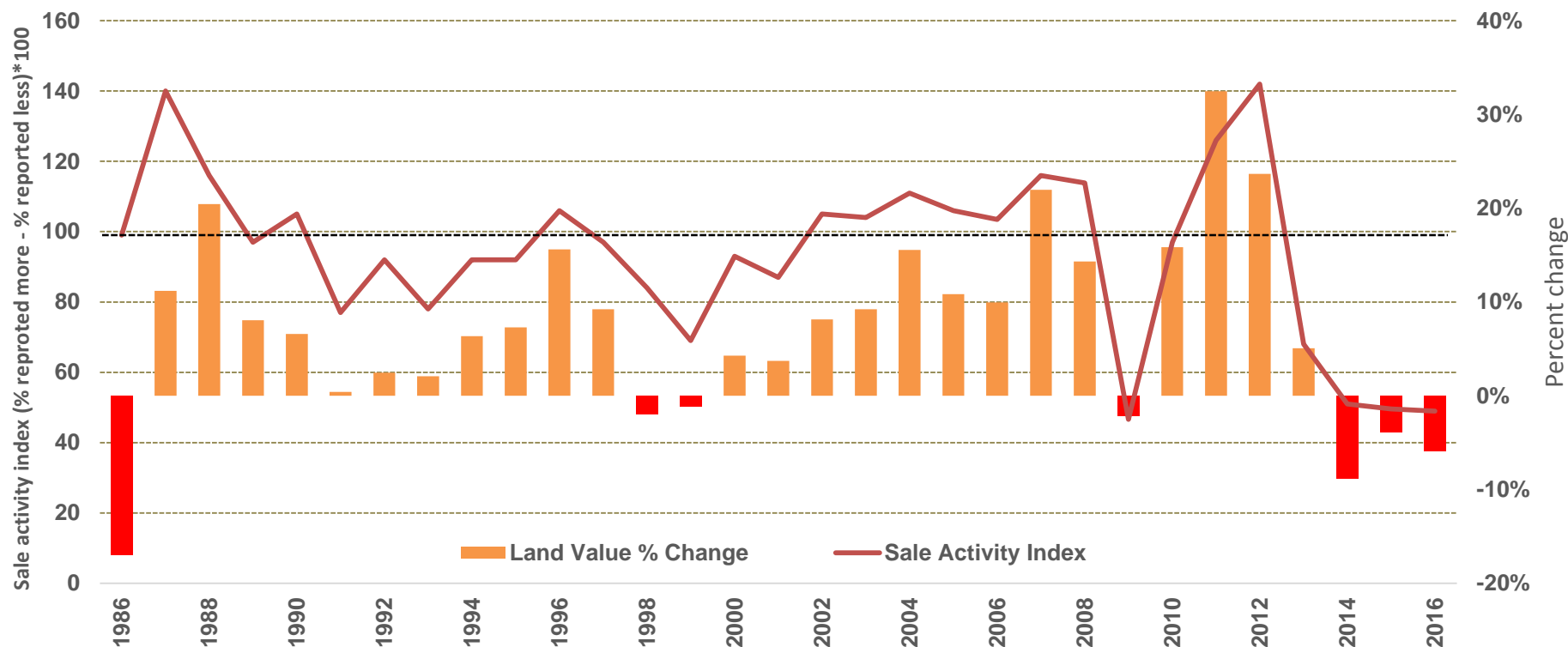
What the Fed Reserve thinks the interest rate should be



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

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



Appendix

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