Golden Eras and Farm Crisis: Are We Going to See a Replay of 1920s or 1980s Farm Crisis?

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The new Mike Duffy since Aug 2015

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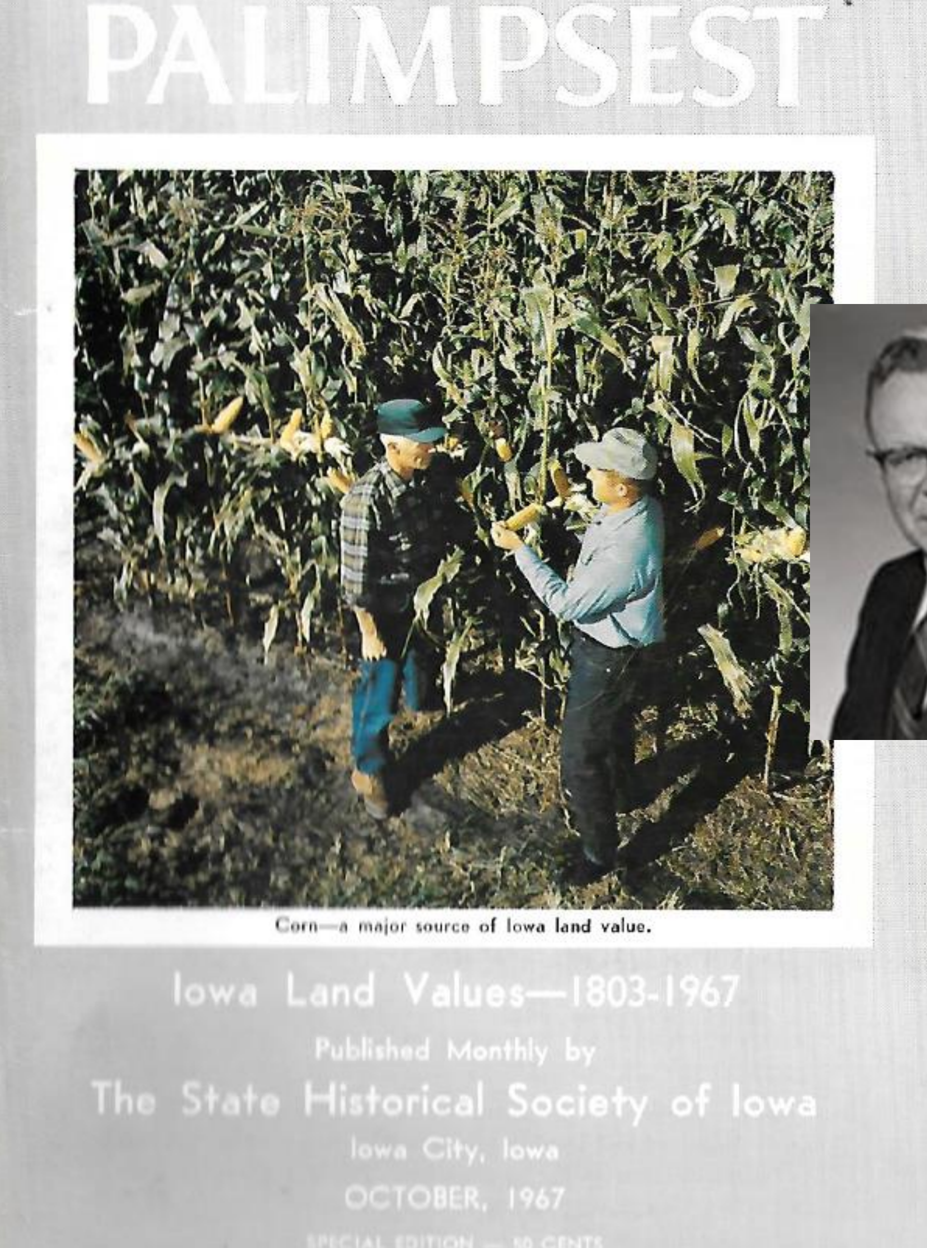

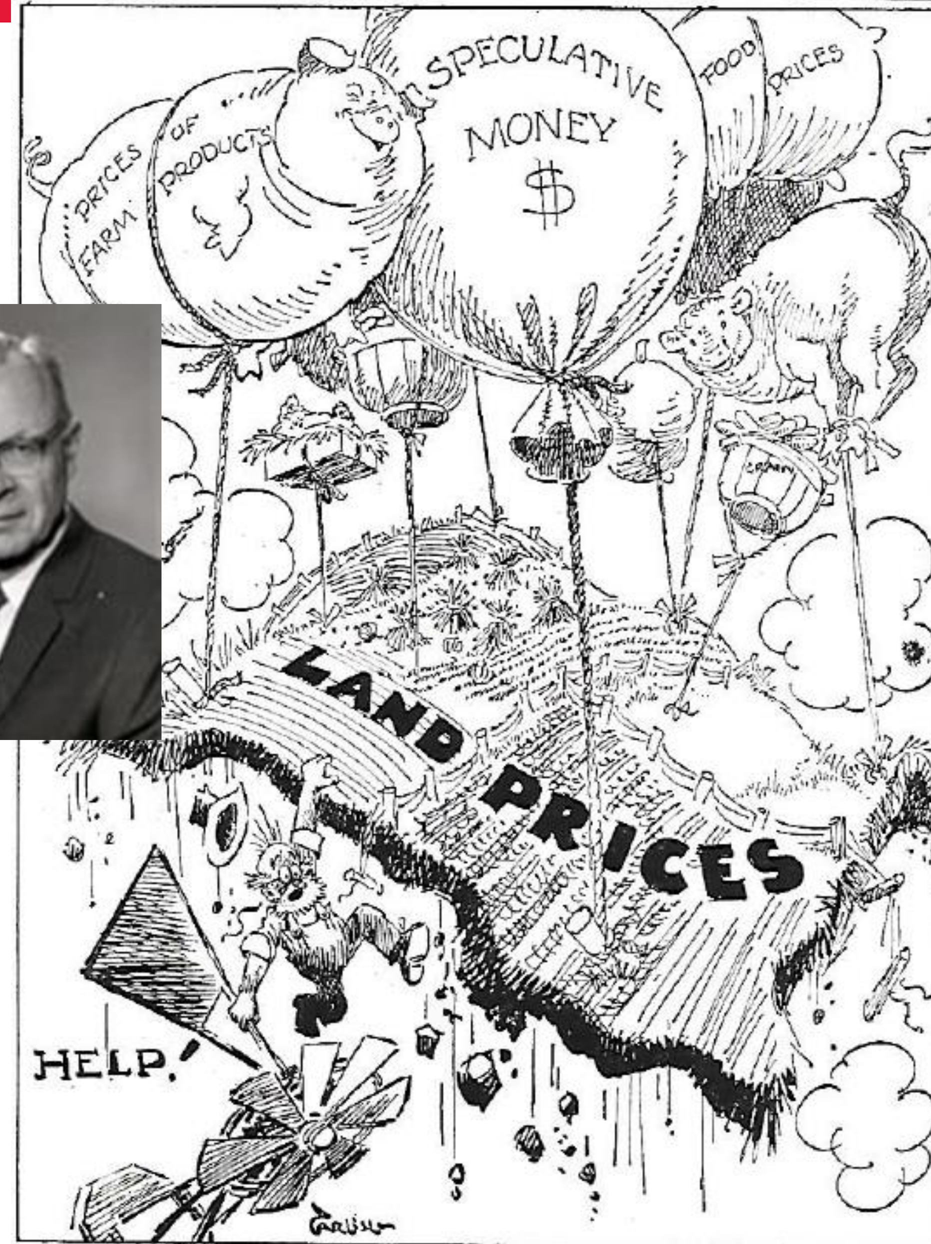

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Source: Dr. William Murray 1967

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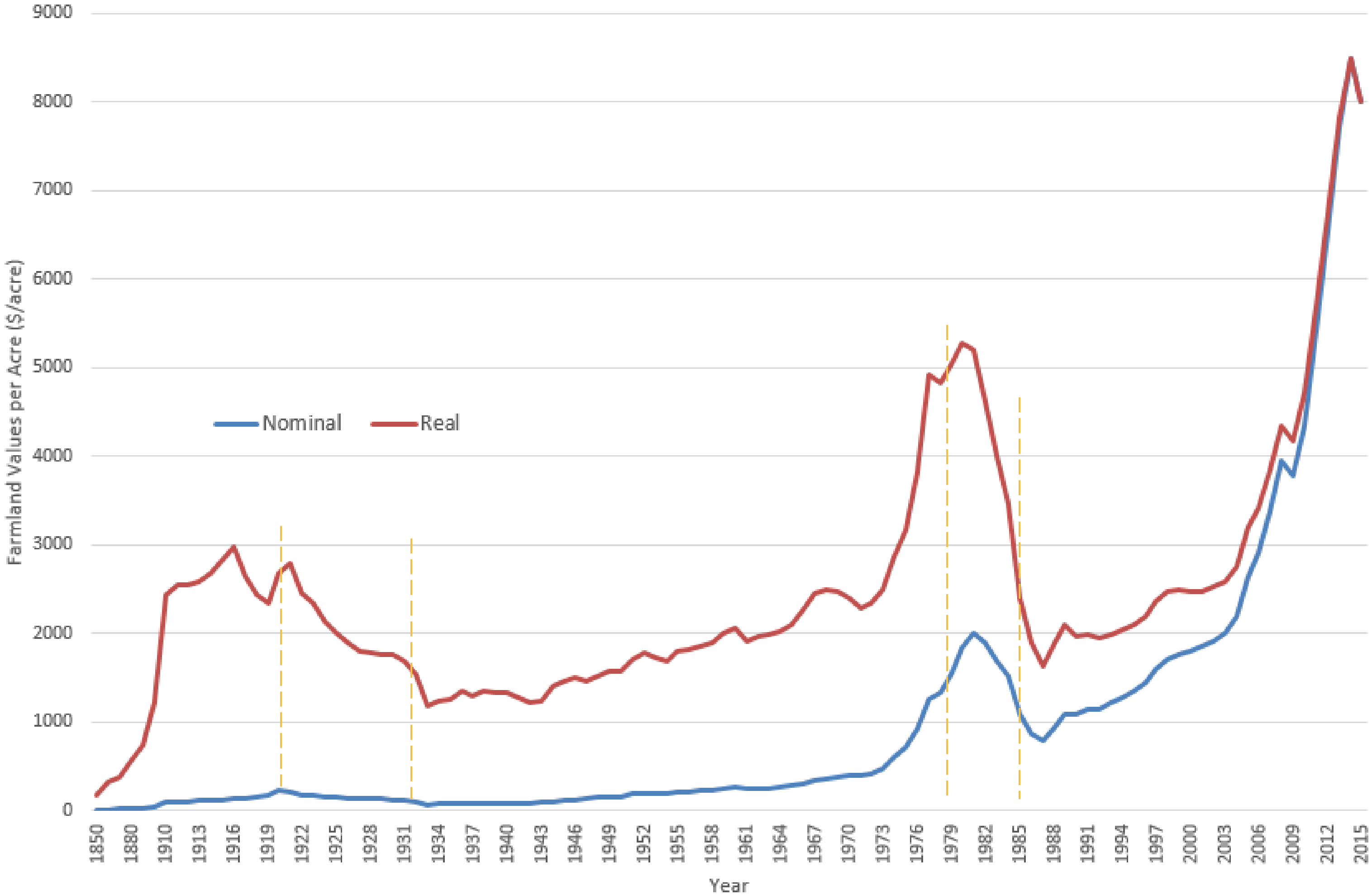
Iowa Ag Real Estate Values 1850-2015



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Source: USDA-NASS; Ag Census

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What happened in the 1920s? And why do we care??

- Rising corn prices: \$.30/bu in 1900 to \$.60/bu in 1914
- New record for farmland values and investment, speculation → land boom: a farmer who bought at \$43/acre in 1900 saw the value at \$124/acre in 1914
- A sharp, unexpected decline in corn prices in 1919-1920: \$2/bu in 1919 summer to \$.41/bu in 1921
- Land buyers fail to pay off mortgages and farm mortgage foreclosures rose drastically in the 1920s, and then continue to rise following the Great Depression
- **Two Depressions: a long, drawn-out decline**

Source: Murray 1967
Rajan Ramcharan AER 2015

Outline

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

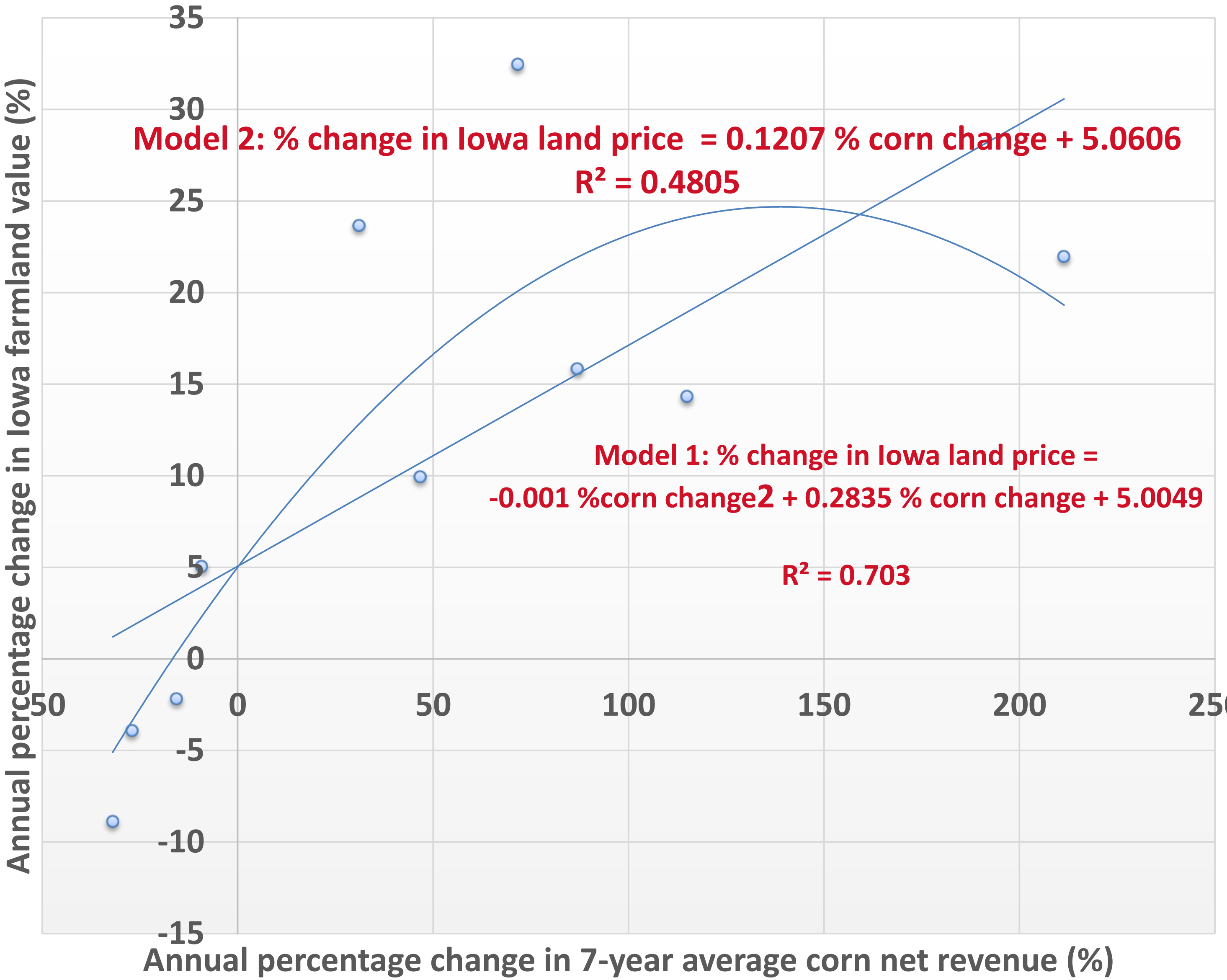
Positive 1: Real Income Accumulation 2003-2013

Average % change in inflation-adjusted values per year			
		Golden Eras	
	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%

Source: USDA-ERS,
Ag DM C2-70
Zhang and Beek 2016

Positive 1: Income

Average Corn Return Changes vs. Land Value Changes 2005-2015



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Source: Chad Hart

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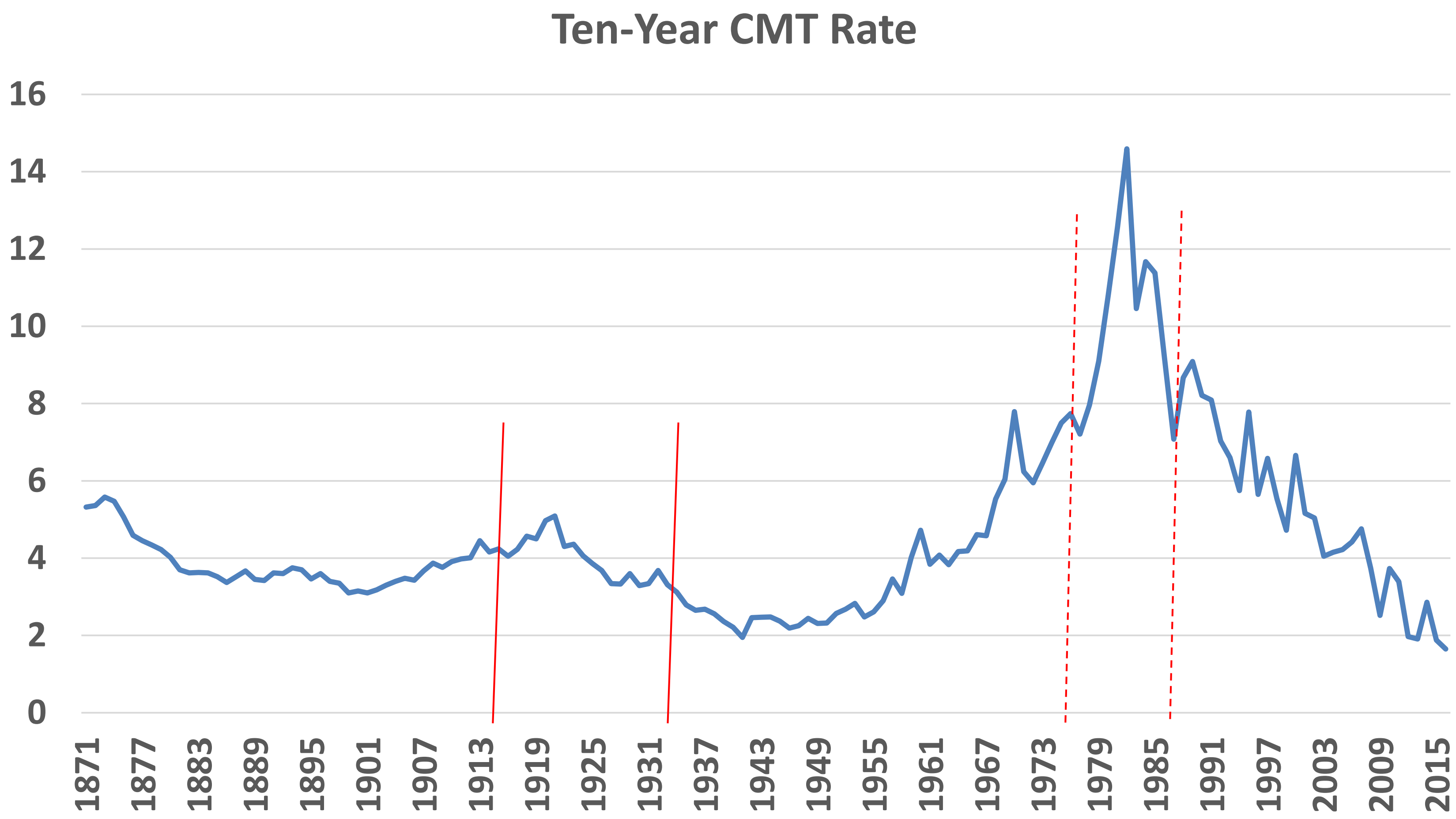
Positive 2: Historically low interest rate



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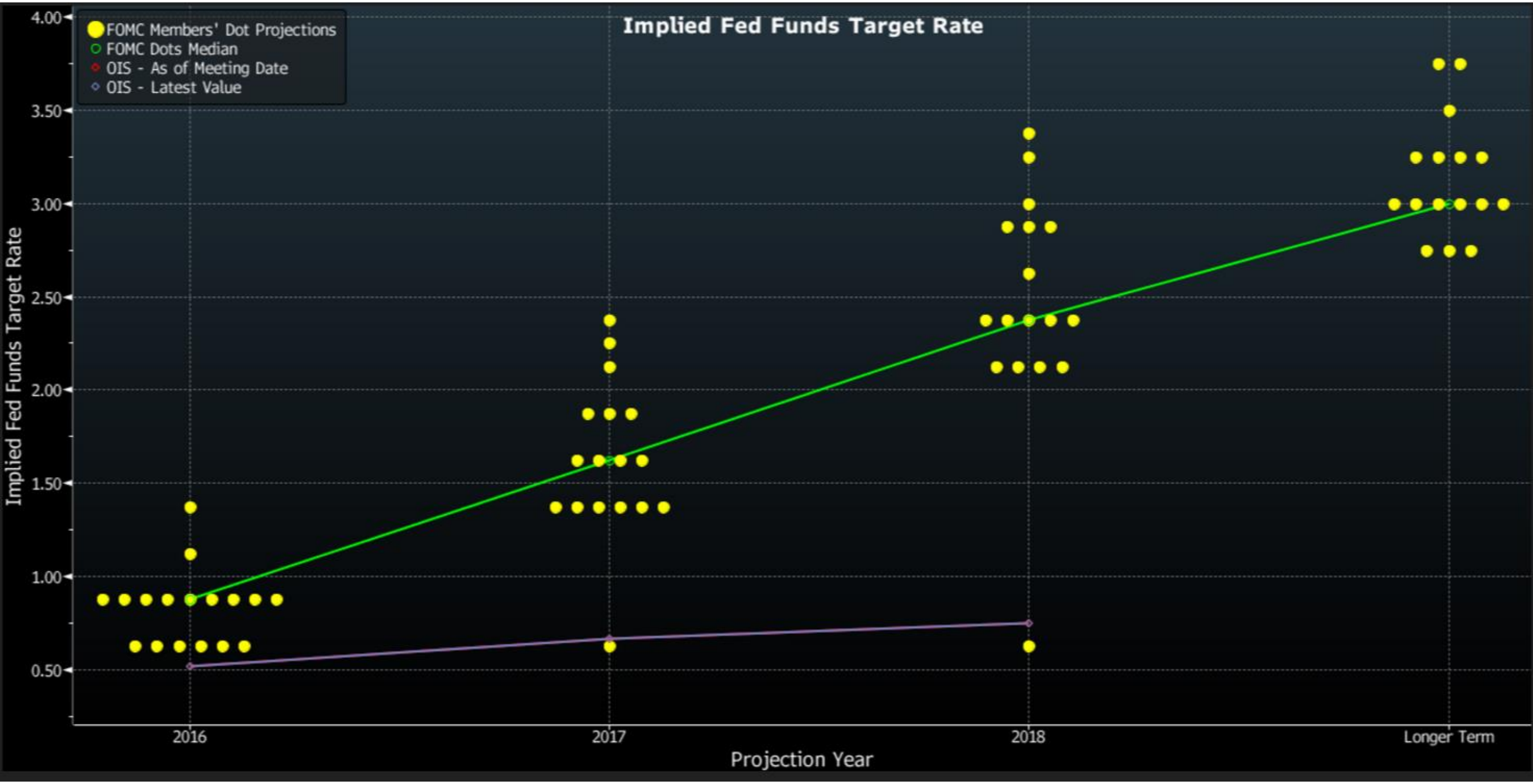
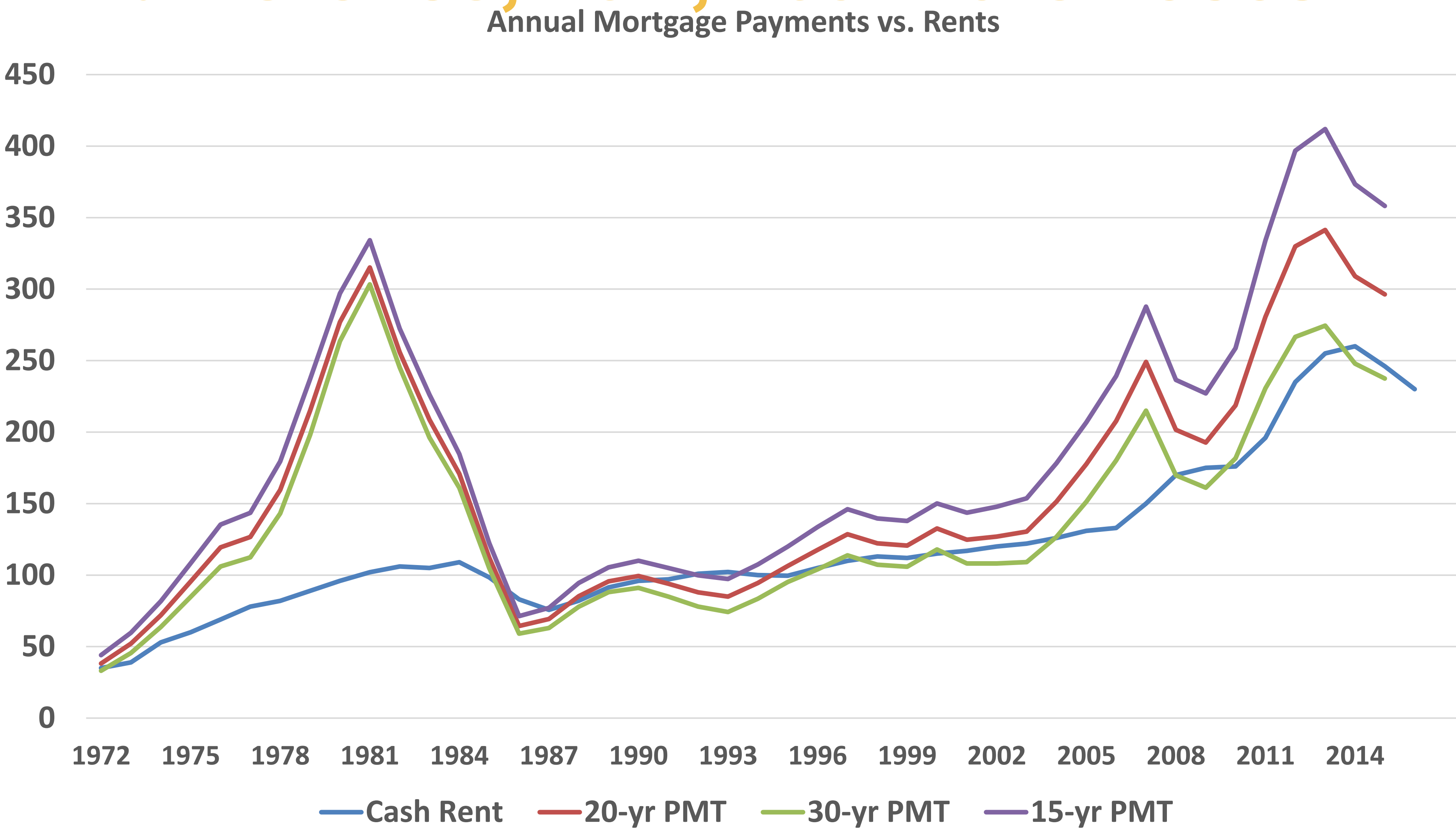


Positive 3: Prudence in Ag Lenders/Regulators

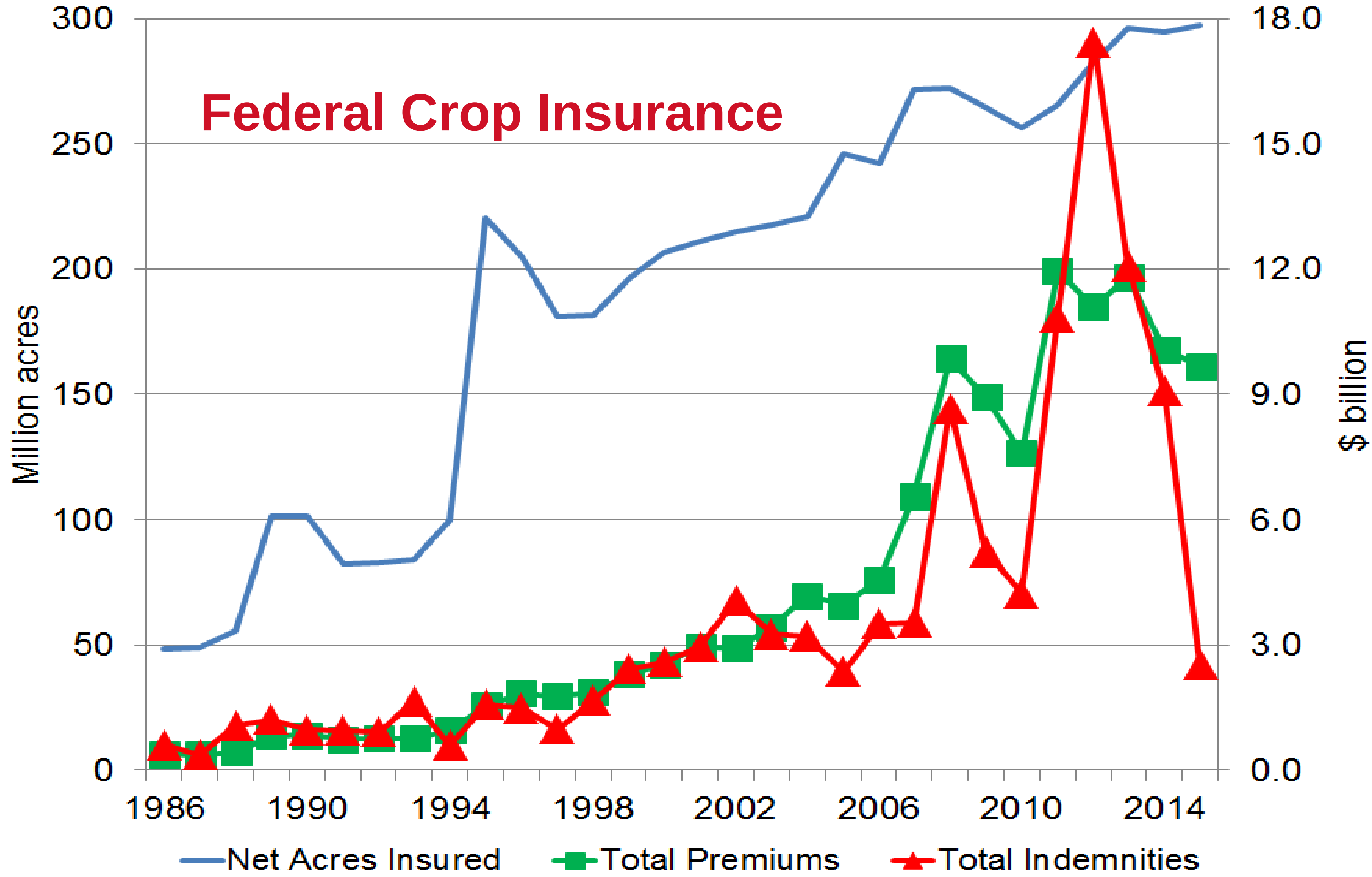
- Banking Regulations
  - More stringent, frequent stress-test
  - BASEL III, liquidity requirements for banks
  - (Ron Hansen – Iowa Division of Banking Superintendent) walk into this "with eyes wide open"
- Changes in Loan Practices (FCS, Iowa)
  - Before 1987: loan to value ratio is 85%
  - 1987-2008: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

Source: Jim Knuth, FCS

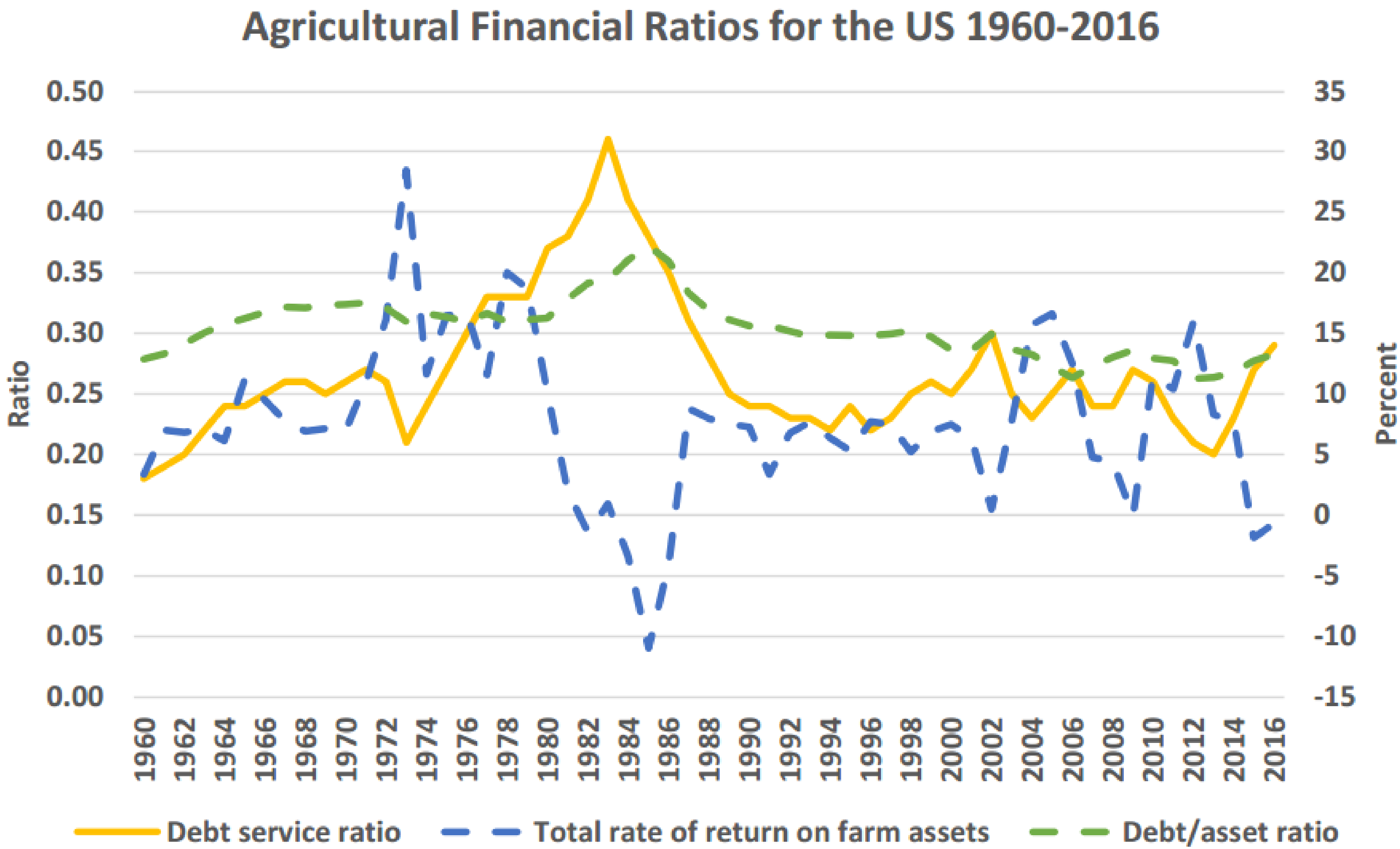
Debt restructuring could make a difference, now, not in the 1980s



Positive 4: Stronger Govn't Safety Net



Concern 1: Rising ag debt



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Source: Federal Reserve

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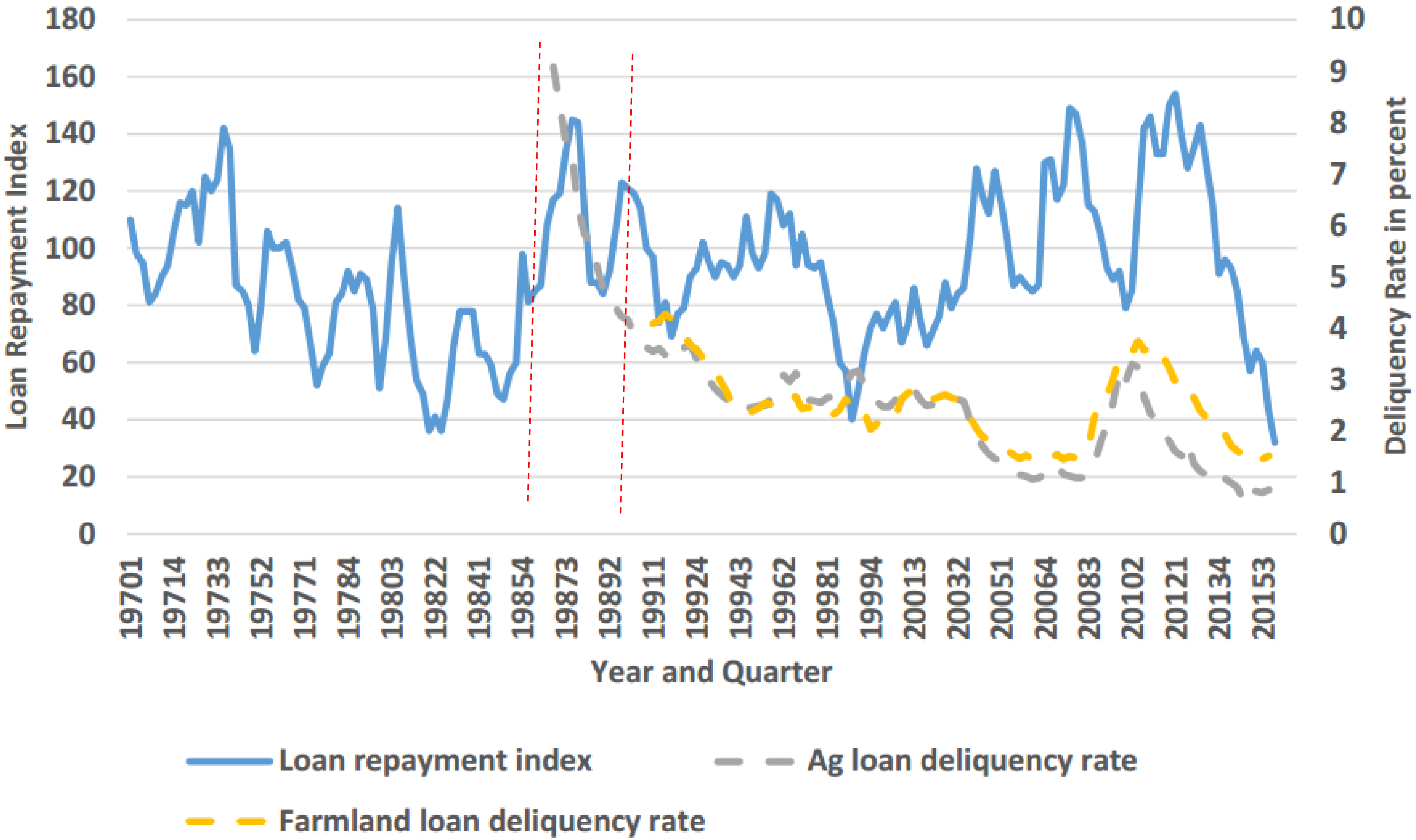
Loan Repayment Index vs. Loan Deliquency Rates 1970 - 2015



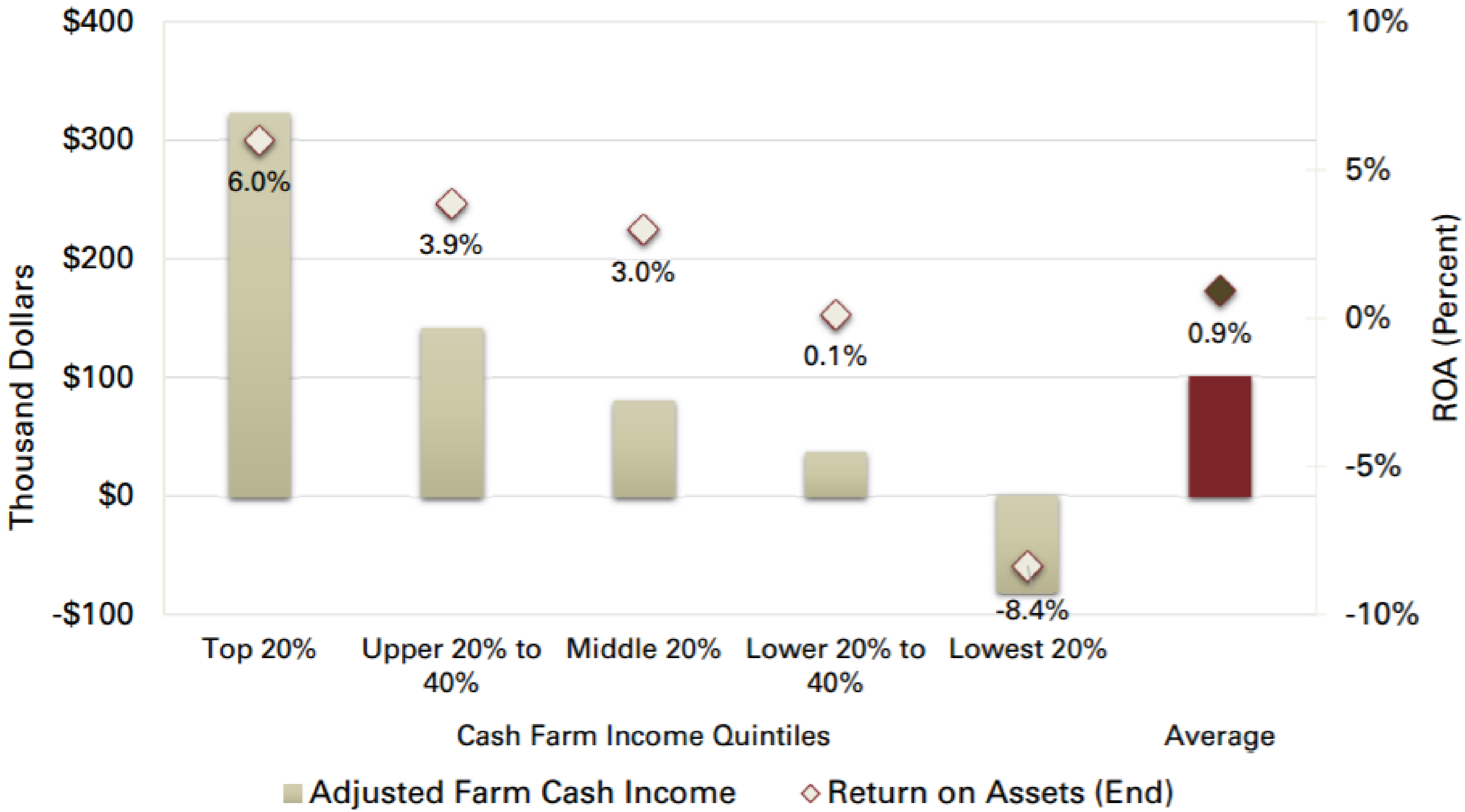
Concern 1: Rising Ag Debt

Debt to Asset Ratios – Iowa FBA (316 farms)

	Jan 2015		Dec 2015	
	% Farms	Avg DTA	% Farms	Avg DTA
Vulnerable (DTA > 60%)	19	0.7	22.5	0.77
Caution (DTA: 30-60%)	38	0.4	37	0.44
Strong (DTA <30%)	44	0.1	40.5	0.15

Concern 1: Rising Ag Debt

Figure 1. 2015 Adjusted farm cash income (AFCI) and return on assets (ROA), by AFCI Quintiles



Concern 2: More Reliance on Ag Exports and World Economy

	Ag Exports ($ bn)	Ag Exports / Ag Production	Ag Exports/US Exports
1920s	1.94	15%	42%
1980s	35.6	23%	11%
2010-2016	133	32%	10.5%

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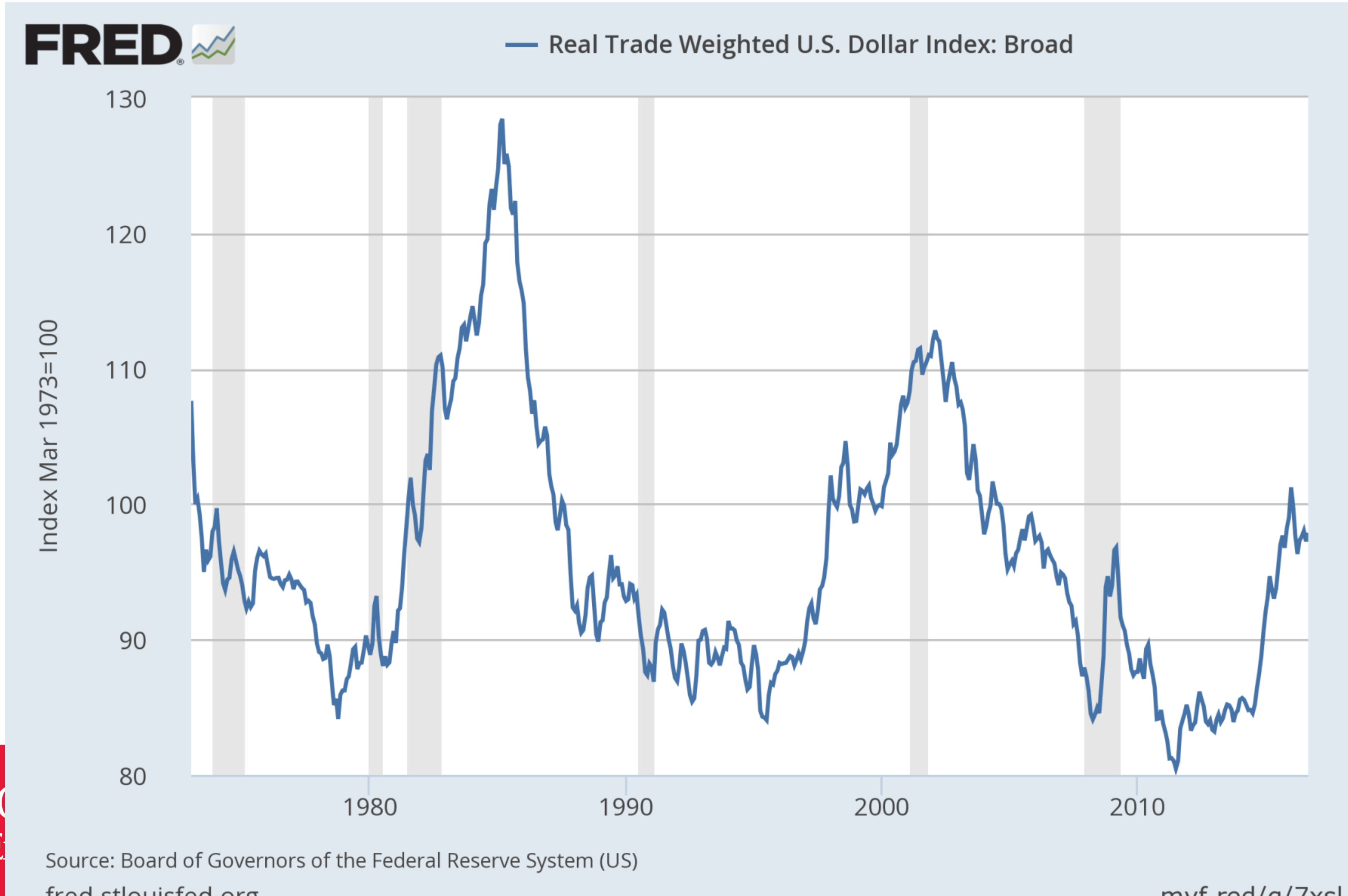
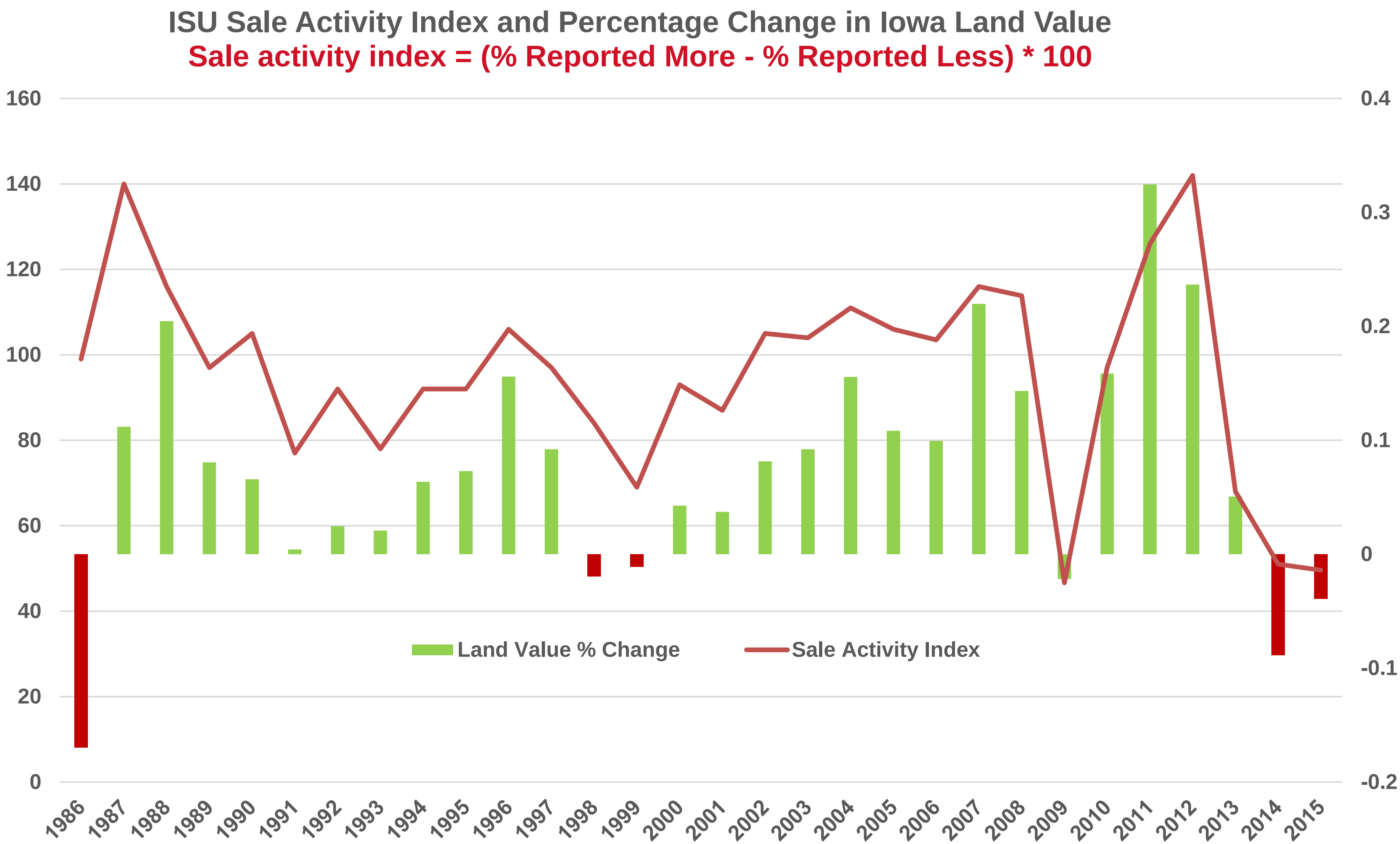


Concern 3: Uncertainty in Farmland Supply



Source: ISU Land Value Survey
FCS, Ag Decision Maker

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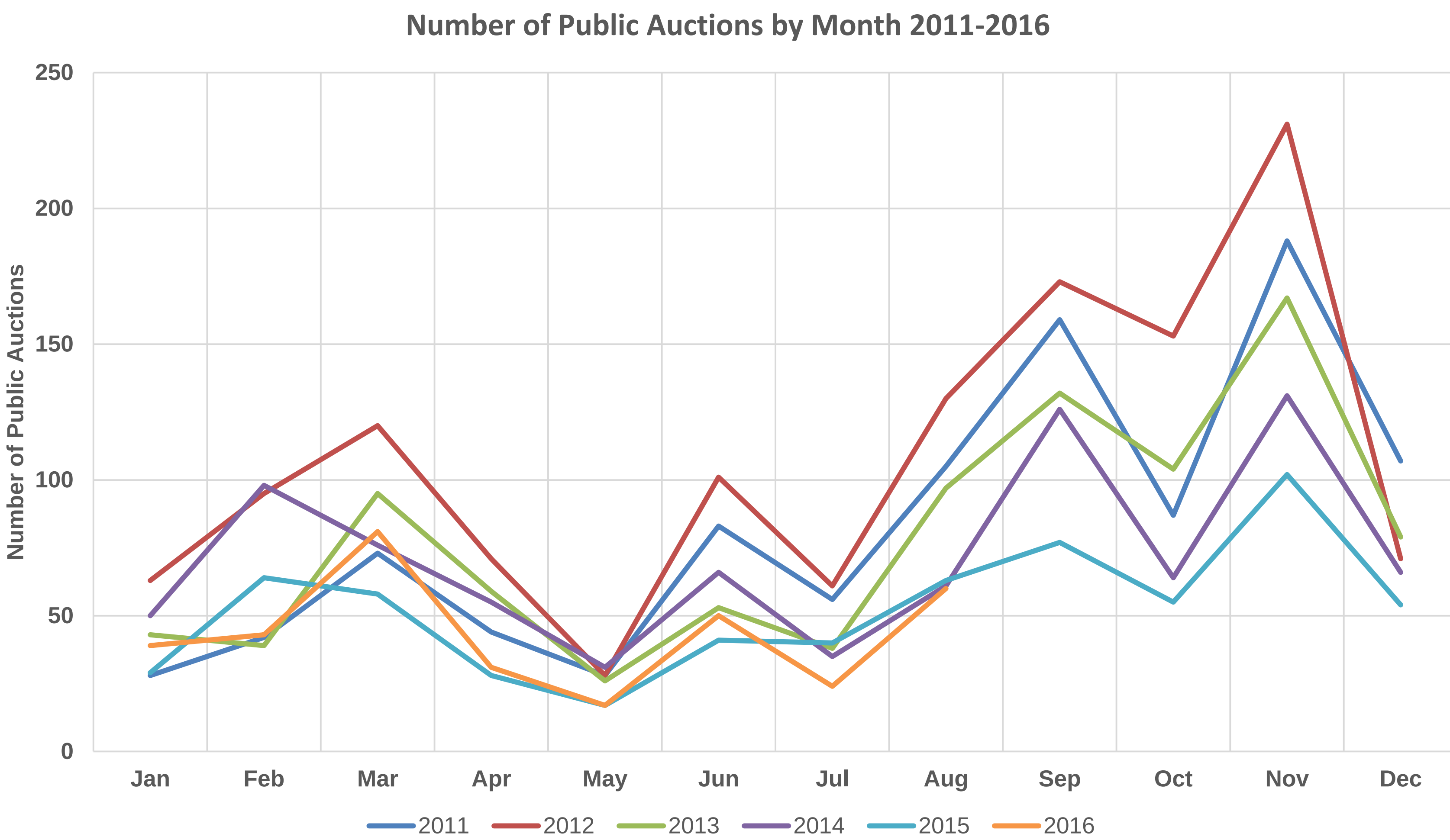

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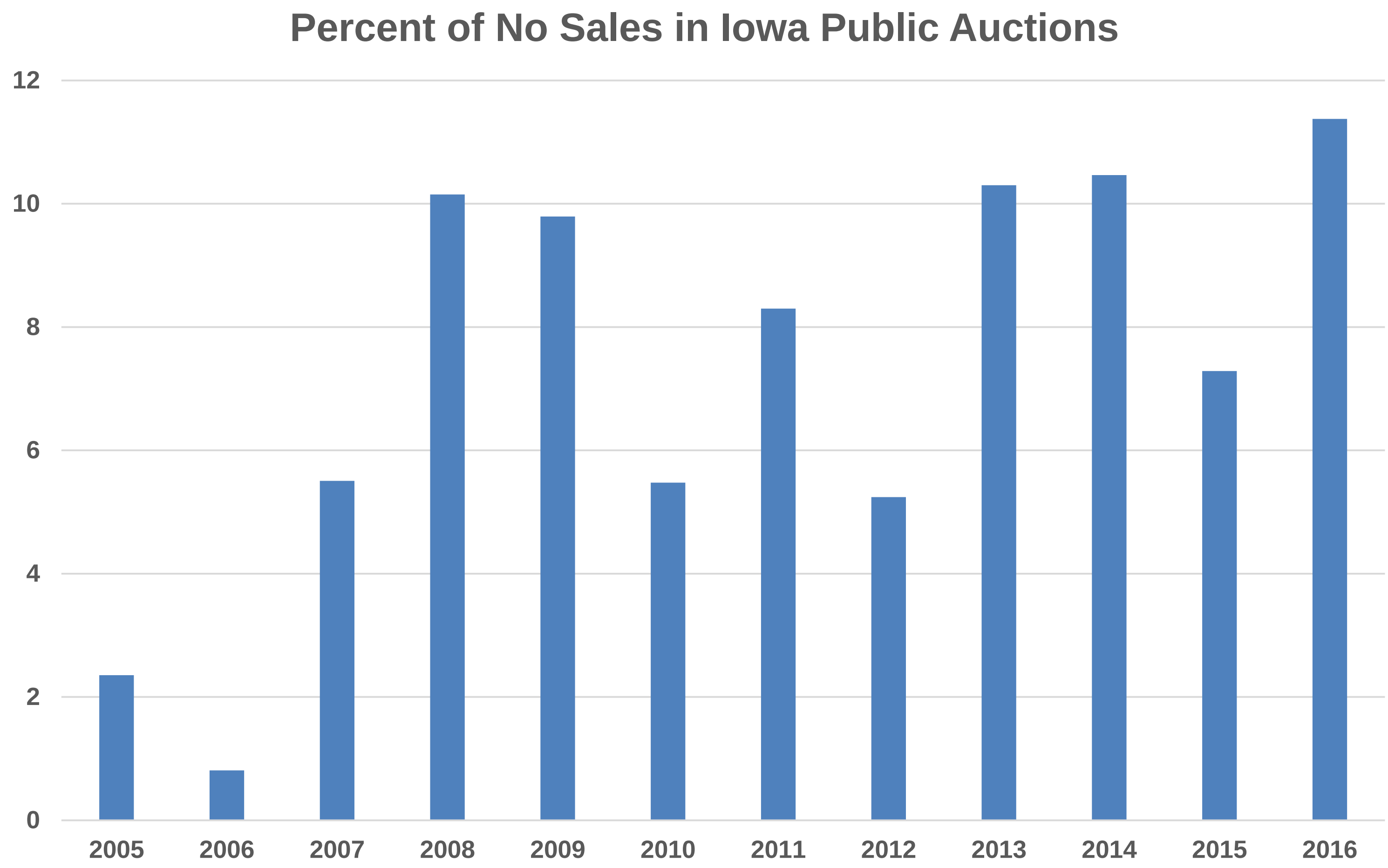

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Farmland Values Predictions in the Next Year as of Nov 2015

District	Increase 5% or more	Increase 0-5%	Stay the same	Decrease 0-5%	Decrease 5-10%	Decrease 10% or more
			PERCENT			
Northwest	3	9	28	36	19	6
North Central	0	2	16	38	44	2
Northeast	0	2	20	38	36	5
West Central	2	2	22	44	26	4
Central	0	0	13	48	33	6
East Central	2	2	18	30	40	9
Southwest	2	2	21	40	24	10
South Central	0	3	10	33	41	13
Southeast	0	0	17	47	33	3
IOWA	**1**	**3**	**19**	**39**	**32**	**6**

Farmland Values Predictions in Five Years as of Nov 2015

District	Increase 5% or more	Increase 0-5%	Stay the same	Decrease 0-5%	Decrease 5-10%	Decrease 10% or more
			PERCENT			
Northwest	16	**18**	**20**	16	16	14
North Central	16	12	10	17	**22**	**22**
Northeast	7	**22**	15	10	**22**	**24**
West Central	**20**	20	16	14	16	12
Central	**22**	**21**	19	8	19	11
East Central	9	19	17	19	19	19
Southwest	**18**	15	21	10	13	**23**
South Central	12	12	15	12	**32**	18
Southeast	6	14	26	14	17	**23**
IOWA	**14**	**17**	**17**	**14**	**19**	**18**

Conclusion

- Farmland market and ag sector will continue to soften, probably in a long slow process as in the 1920s, but now farmers are better suited to weather it out
- But unlikely to have as widespread and sudden collapse as in the 1980s
- Beginning farmers with high leverage, rented acres and higher prod/family expenses might get hit harder

Thank You!

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A New, Interactive Iowa Farmland Value Portal

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Iowa Farmland Value Portal

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Iowa Farmland Value Portal BETA

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: State of Iowa ▾

Select result format: ◉ dollar value ○ annual percentage change ○ farmland value indexes (state only)

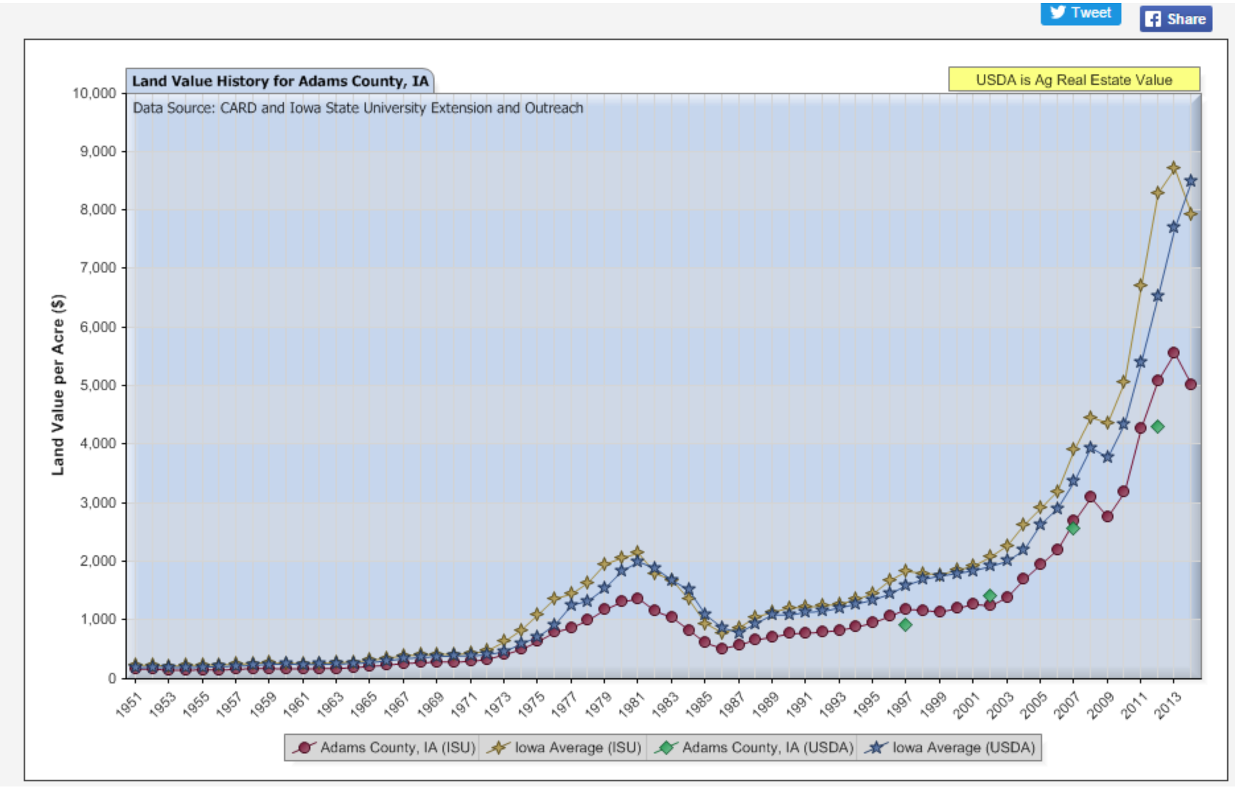
Select data sources: ☑ ISU Iowa Land Value Survey ☐ USDA National Agricultural Statistics Service
☐ REALTORS Land Institute ☐ Federal Reserve Bank of Chicago

Years: 1951 ▾ *through* 2014 ▾

☐ Show Values

☐ Show Iowa Average ☐ Show District Average

Iowa Farmland Value Portal



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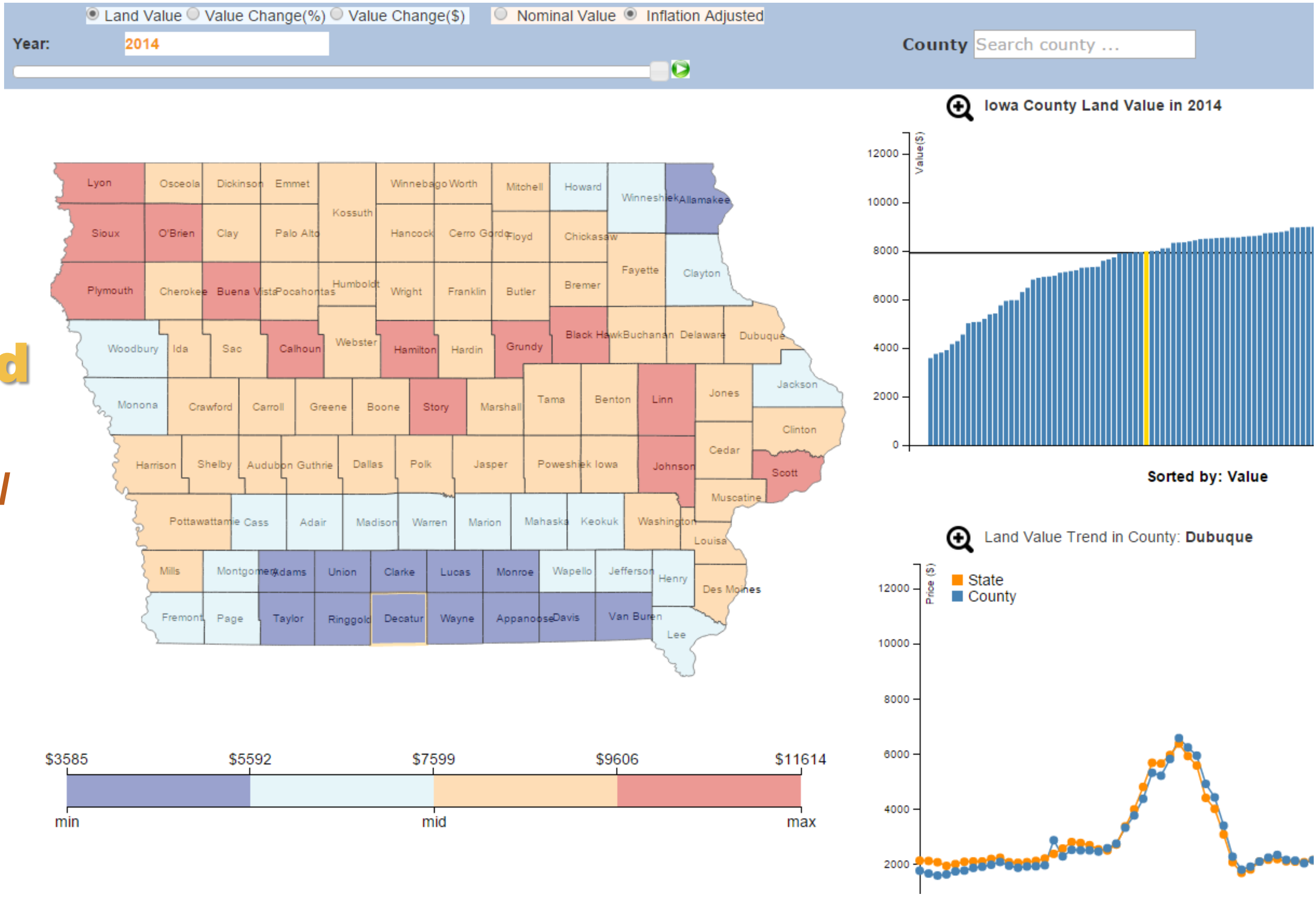

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