

# Update on Iowa Farmland Market & U.S.-China Trade War

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Farmland Owner Workshop

Altoona, Iowa, February 15, 2019

# A Quick Introduction: Dr. Wendong Zhang

- Grown up in a rural county in NE China
- Attended college in Shanghai and Hong Kong
- Ph.D. in Ag Econ in 2015 from Ohio State
- 2012 summer intern at USDA-ERS on farm economy and farmland values
- Research and extension interests:

**land value/ownership** [www.card.iastate.edu/farmland/agriculture](http://www.card.iastate.edu/farmland/agriculture) and the environment

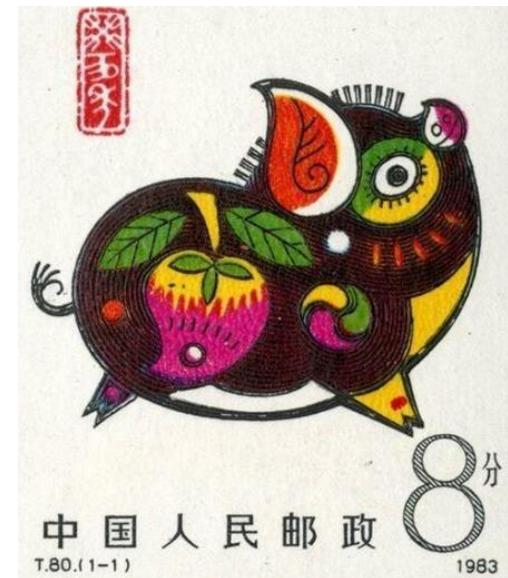
**China Ag center** [www.card.iastate.edu/china](http://www.card.iastate.edu/china)

## Chinese New Year 2019

CHINESE ZODIAC

# Year of the Pig

猪 (Zhū)



**Pigs have a beautiful personality and are blessed with good fortune in life.**

**Recent years of the Pig are:** 1935, 1947, 1959, 1971, 1983, 1995, 2007, 2019

Rat Ox Tiger Rabbit Dragon Snake Horse Goat Monkey Rooster Dog Pig

# #1: Ag is comparative advantage for US, not for China

Figure 1. Number of farmers in Chinese provinces compared to Iowa

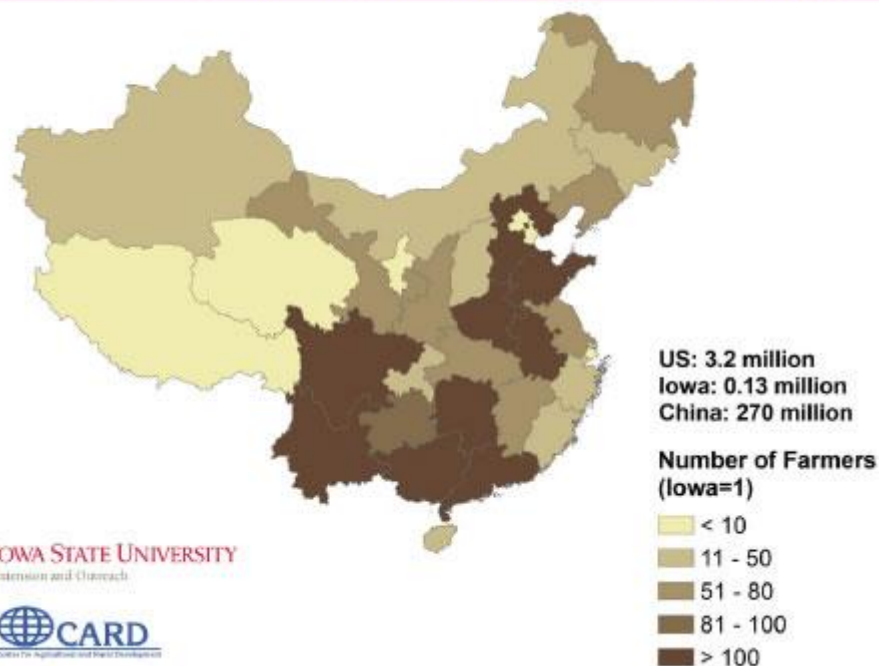
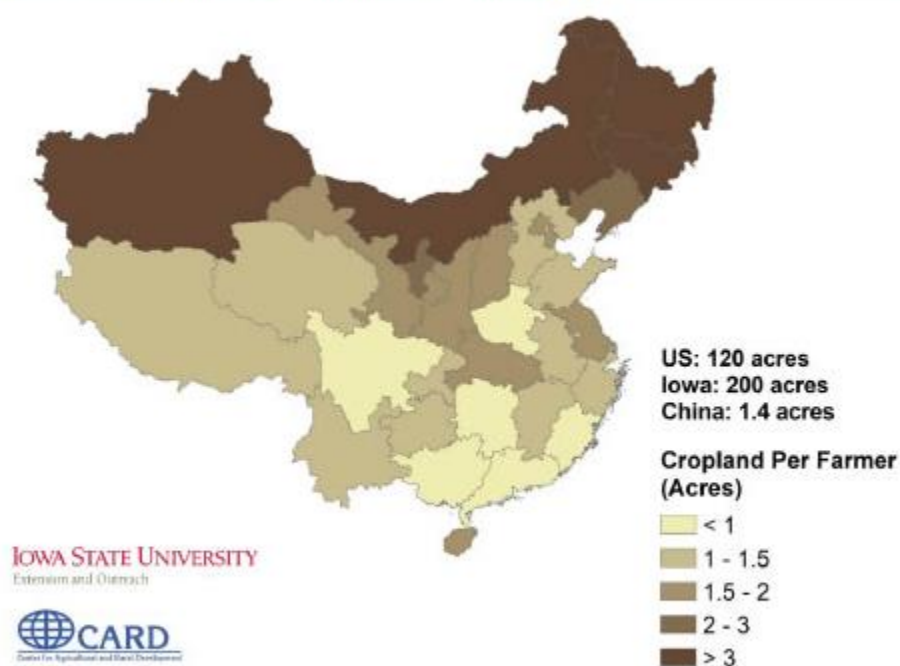
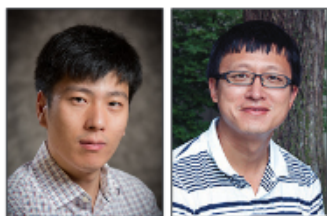


Figure 2. Crop land per farmer in China in acres



*Because crop land per farmer is so small in China, using Iowa as the unit here would create too many decimal points. We use acres instead.*



## Navigating the Chinese agricultural economy through the lens of Iowa

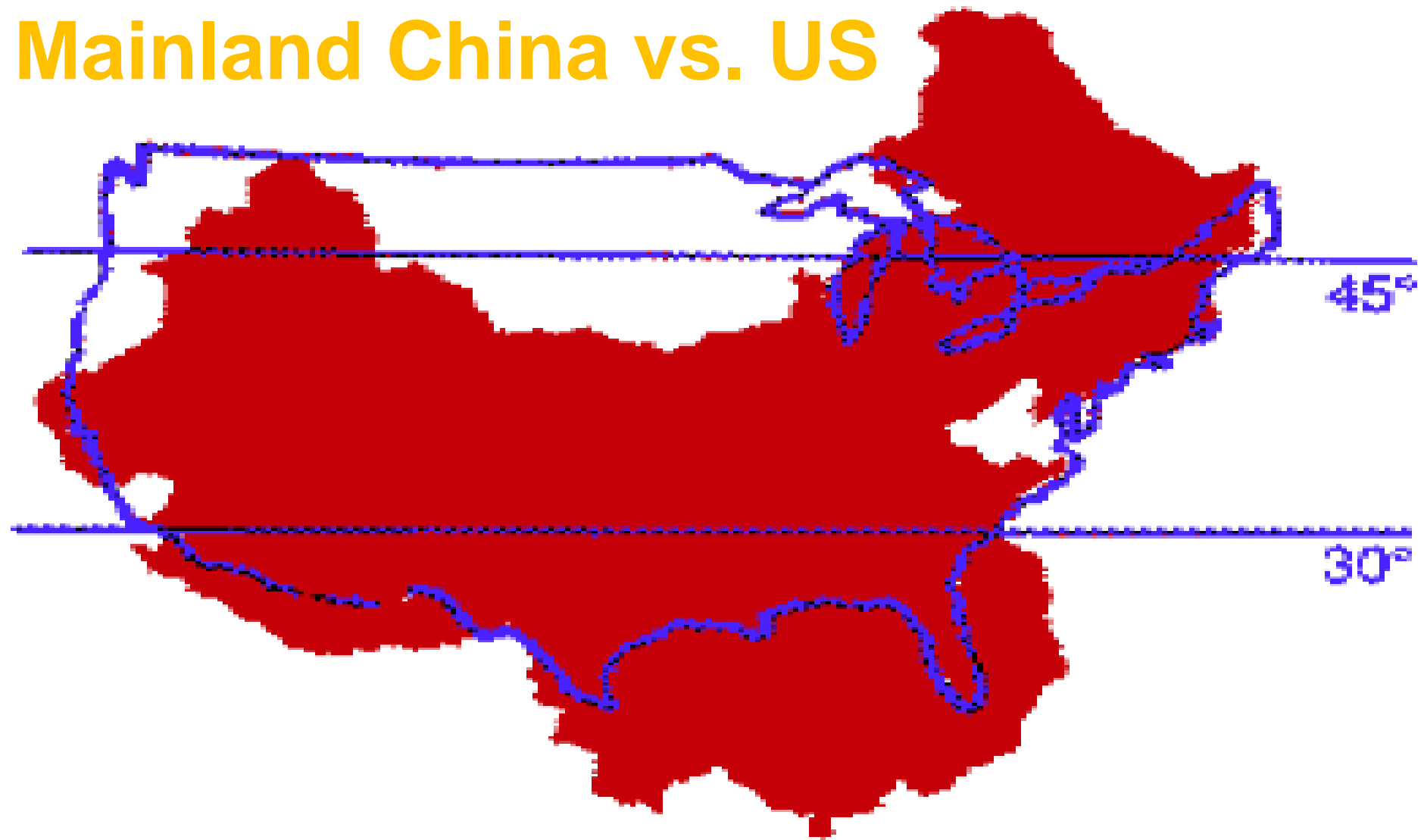
By Wendong Zhang, extension economist, 515-294-2536, [wdzhang@iastate.edu](mailto:wdzhang@iastate.edu); Minghao Li, postdoctoral researcher, Center for Agricultural and Rural Development, Iowa State University

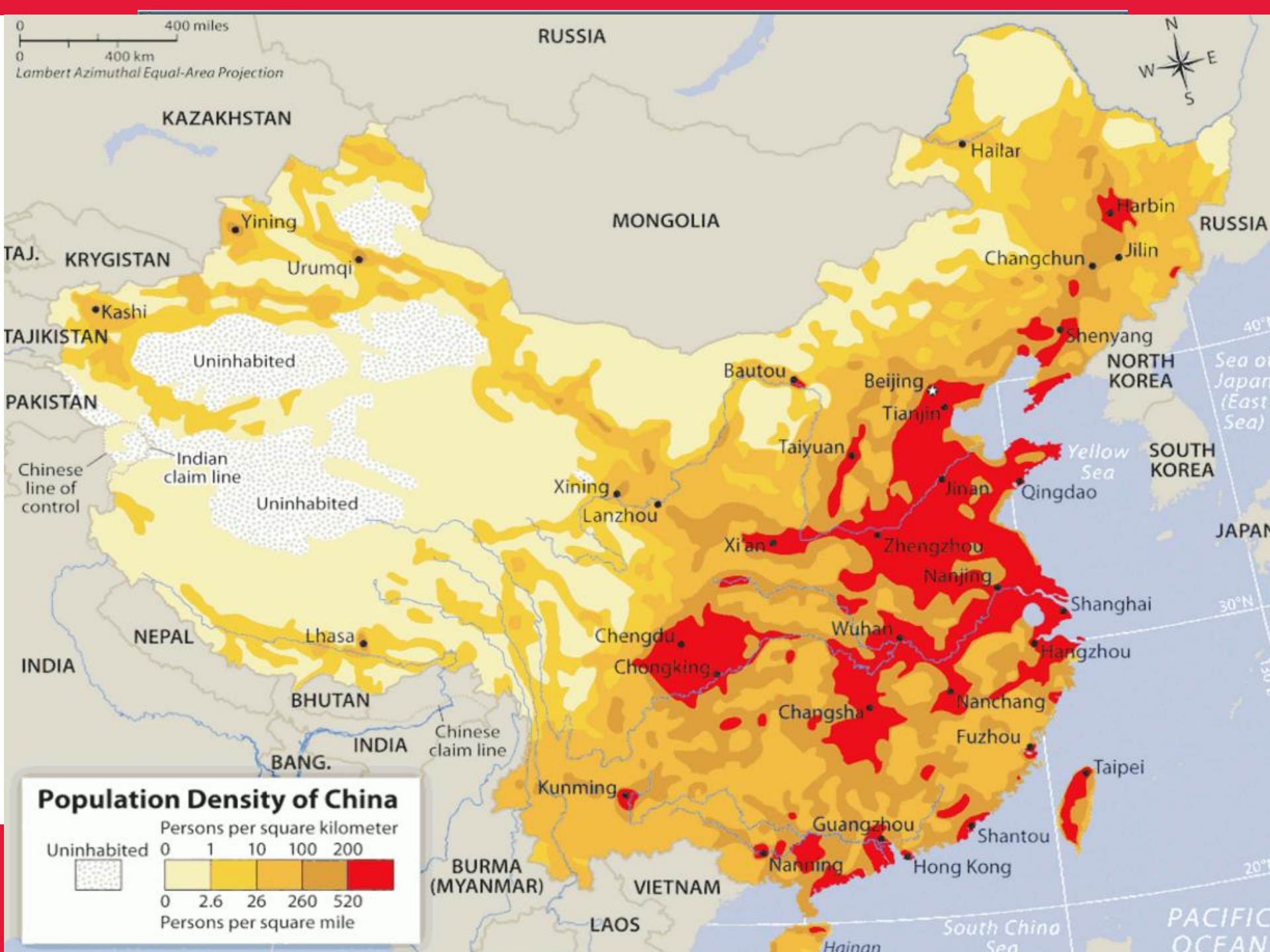






# Mainland China vs. US







# U.S., China launch high-level trade talks amid deep differences



U.S. Trade Representative Robert Lighthizer (2ndR) speaks across from China's Vice Premier Lie He (L) during the opening of US-China Trade Talks in the Eisenhower Executive Office Building at the White House in

## Xi Jinping and Donald Trump 'may meet in Da Nang, Vietnam' at the end of February

 **South China Morning Post**

- Source familiar with discussions says the two sides are considering a meeting in the coastal city on February 27 and 28
- The presidents are expected to continue pushing to resolve the trade dispute between the two nations

A breakthrough deal was unlikely this week as both sides may wait to reveal their best offers, said Erin Ennis, senior vice president of the U.S.-China Business Council.

"I don't think there's going to be any big outcome," Ennis said of the talks. "Hopefully they make some good progress that will set them up to be able to get to completion at the end of the 90 days."

But the Chinese side would likely have to bring to the table a new offer that goes significantly beyond its previous offers to significantly increase purchases of U.S. goods, including soybeans, energy and manufactured goods.

China is fast-tracking that new law, with the country's largely rubber-stamp parliament likely to approve it in March.

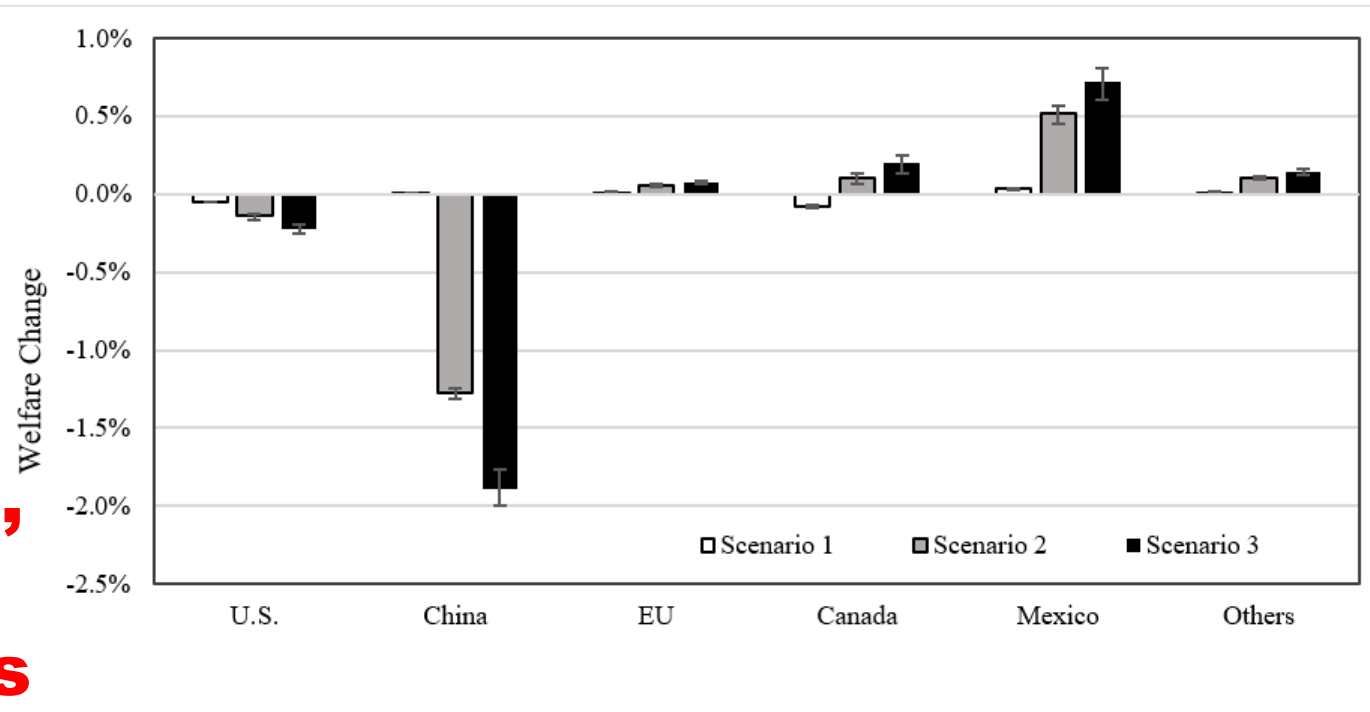
A crucial component of any progress in the talks, according to top Trump administration officials, is agreement on a mechanism to verify and "enforce" China's follow-through on any reform pledges that it makes. This could maintain the threat of U.S. tariffs on Chinese goods for the long term.



Minghao Li, Edward J. Balistreri, Wendong Zhang

December 2018 [18-WP 587]

Figure 1. Welfare changes in selected countries.



Scenario 2: Tariff increases in scenario 1 and additional tariff increases between the United States and China, including the \$50 billion round and the \$200 billion/\$60 billion round of tariff increases. The scenario reflects the current tariffs (as in October 2018).

Scenario 3: Tariff increases in scenario 1 and 2, and additional tariff increases that are scheduled to happen at the end of 2018, i.e., the U.S. tariffs on \$200 billion Chinese products will increase by another 15%, and China's retaliatory tariffs will increase by 0~15%.

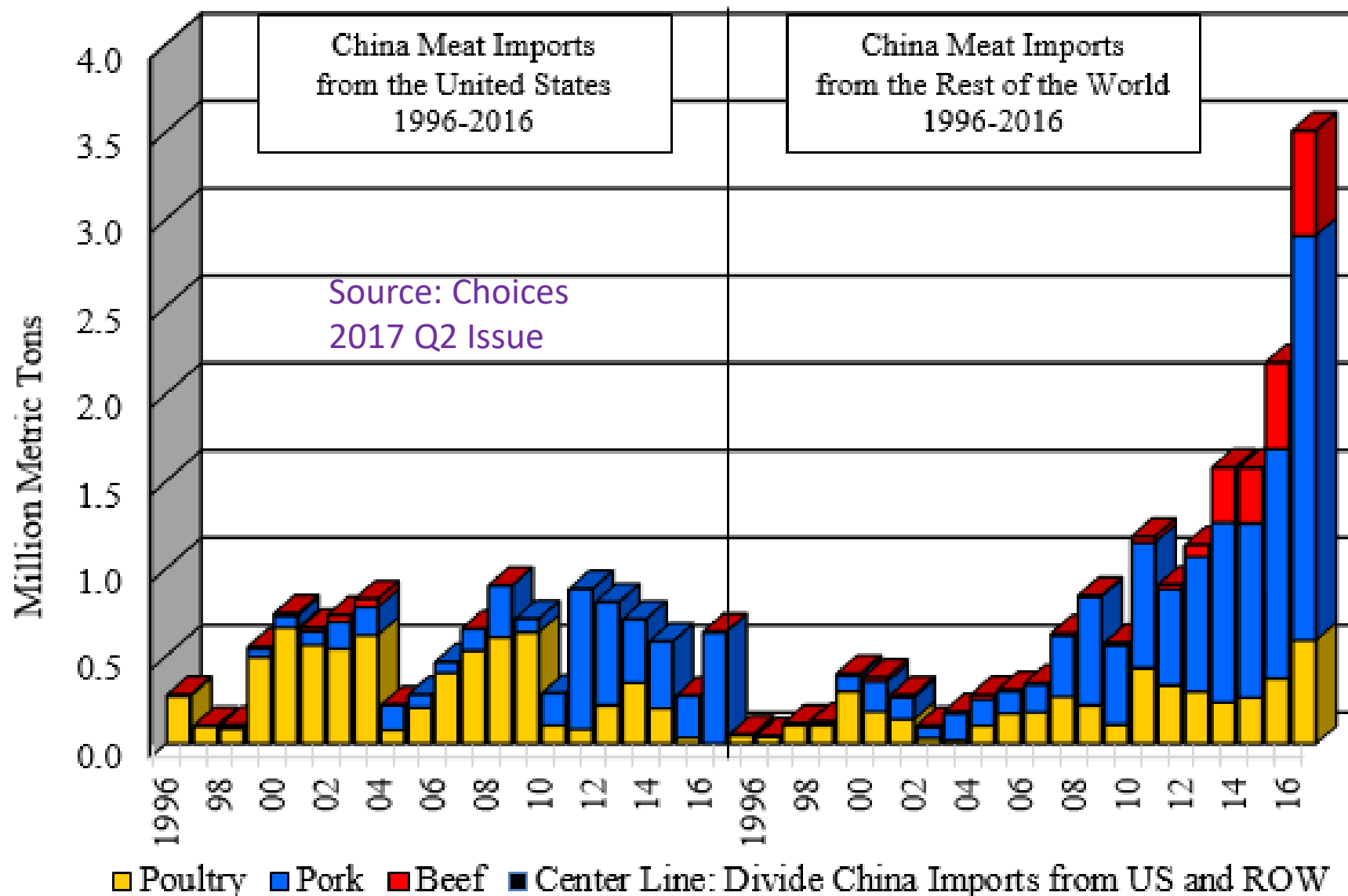
**#2:**  
**Why China**  
**decided to**  
**talk?**  
**China**  
**suffers**  
**greater**  
**economic**  
**Loss overall,**  
**but also for**  
**US ag states**  
**like Iowa**

September 2018  
18-PB 25

## The Impact of the 2018 Trade Disruptions on the Iowa Economy

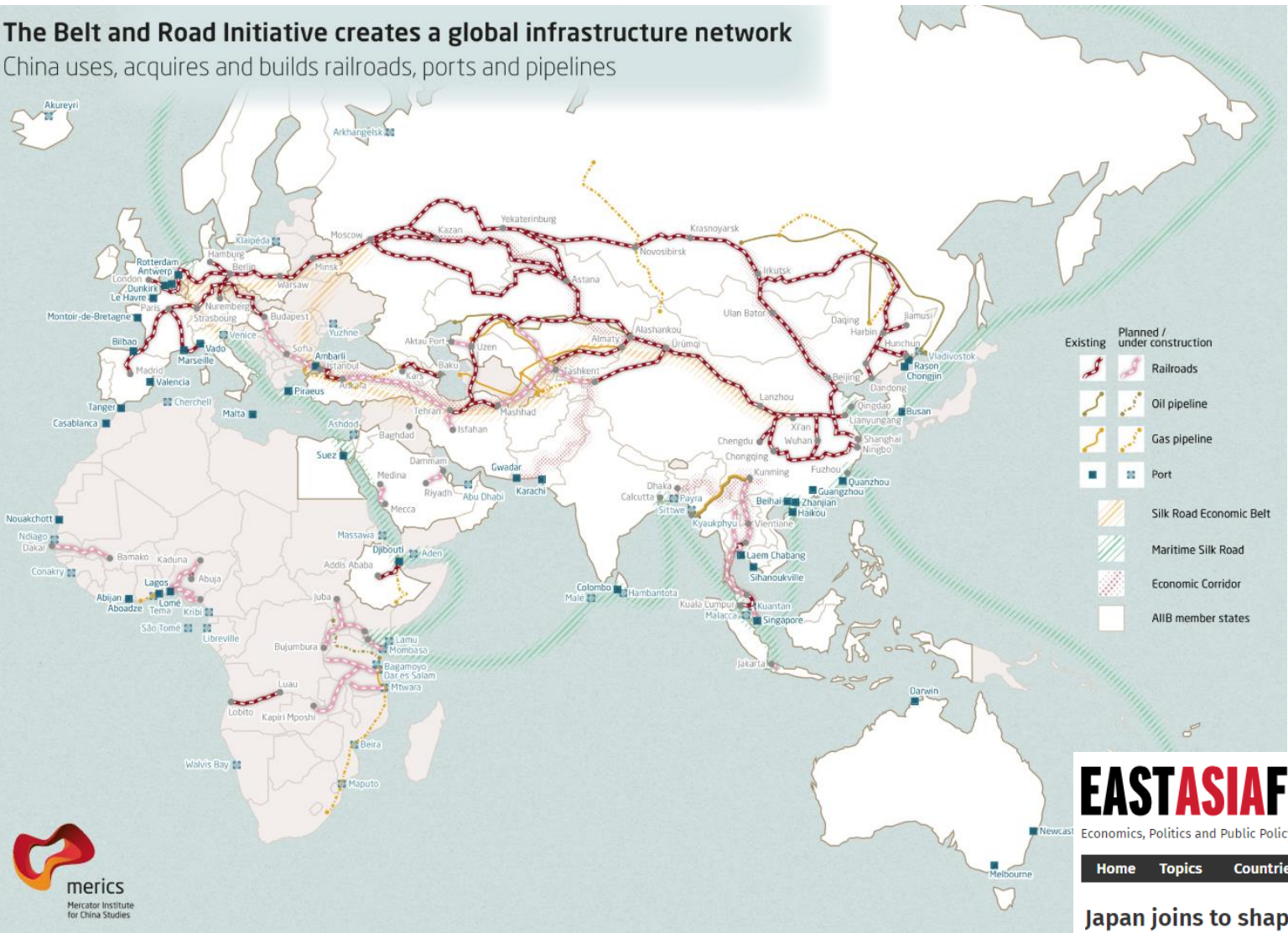
- Overall losses in **Iowa's Gross State Product** are calculated to be \$1 to \$2 billion (off of a Gross State Product of \$190 billion).
- Overall losses to Iowa's **Soybean** industry of \$159 to \$891 million, with an average revenue loss across all models of \$545 million (Iowa soybeans are a \$5.2 billion industry).
- Overall losses to Iowa's **Corn** industry of \$90 to \$579 million, with an average revenue loss across all models of \$333 million (Iowa corn is an \$8.5 billion industry).
- Overall losses to Iowa's **Pork/Hog** industry of \$558 to \$955 million, with an average revenue loss across all models of \$776 million (the Iowa pork/hog industry is a \$7.1 billion industry).
- A 2% drop in **Ethanol** prices resulting in approximately \$105 million in lost revenues to Iowa ethanol producers.
- Revenue losses in these industries translate into **additional lost labor income** across the state. Labor income declines from the impacts to the corn, soybean, and hog industries range from \$366 to \$484 million without federal offsets and \$245 to \$364 million with federal offsets.
- Iowa **tax revenue losses** (personal income and sales taxes) range from \$111 to \$146 million. Federal offsets would reduce tax losses to \$75 to \$110 million.

# US Loses Market Share as China Increases Meat Imports from the World





**The Belt and Road Initiative creates a global infrastructure network**  
 China uses, acquires and builds railroads, ports and pipelines



# China's Belt and Road Initiative

**EASTASIAFORUM**  
 Economics, Politics and Public Policy in East Asia and the Pacific

Home Topics Countries Contributors Quarterly About

**Japan joins to shape China's Belt and Road**  
 28 October 2018  
 Author: Shiro Armstrong, ANU



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# Statement of the United States Regarding China Talks

— ECONOMY & JOBS | Issued on: January 31, 2019

The talks covered a wide range of issues, including: (1) the ways in which United States companies are pressured to transfer technology to Chinese companies; (2) the need for stronger protection and enforcement of intellectual property rights in China; (3) the numerous tariff and non-tariff barriers faced by United States companies in China; (4) the harm resulting from China's cyber-theft of United States commercial property; (5) how market-distorting forces, including subsidies and state-owned enterprises, can lead to excess capacity; (6) the need to remove market barriers and tariffs that limit United States sales of manufactured goods, services, and agriculture to China; and (7) the role of currencies in the United States-China trading relationship. The two sides also discussed the need to reduce the enormous and growing trade deficit that the United States has with China. The purchase of United States products by China from our farmers, ranchers, manufacturers, and businesses is a critical part of the negotiations.

The two sides showed a helpful willingness to engage on all major issues, and the negotiating sessions featured productive and technical discussions on how to resolve our differences. The United States is particularly focused on reaching meaningful commitments on structural issues and deficit reduction. Both parties have agreed that any resolution will be fully enforceable.

While progress has been made, much work remains to be done. President Donald J. Trump has reiterated that the 90-day process agreed to in Buenos Aires represents a hard deadline, and that United States tariffs will increase unless the United States and China reach a satisfactory outcome by March 1, 2019. The United States looks forward to further talks with China on these vital topics.



**CARD**

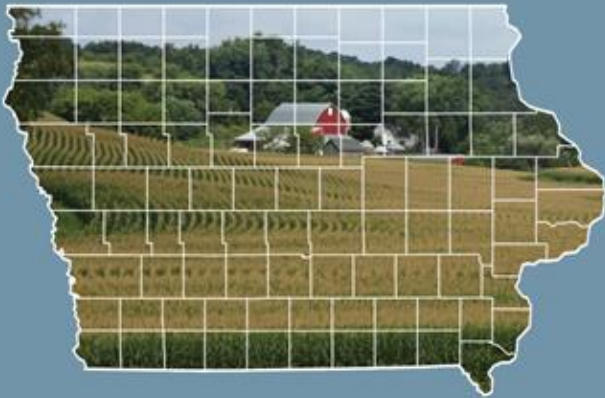
Center for Agricultural and Rural Development

# **Key Messages (on Ag Decision Maker): Understand Contemporary China!**

- 1. Ag is not China's comparative advantage**
- 2. China suffers more economically, but retaliate on ag states like Iowa**
- 3. Trade war makes China further diversify away from US**
- 4. Trade war exposes early strategic misjudgments and growing mistrust**
- 5. China is a country of rapid change**
- 6. Chinese economy and relations with US at inflection points**
- 7. Chinese producers and consumers increasingly think and act like Americans**



Iowa Farmland Ownership and  
Tenure Survey, 1982-2017:  
**A Thirty-Five Year Perspective**



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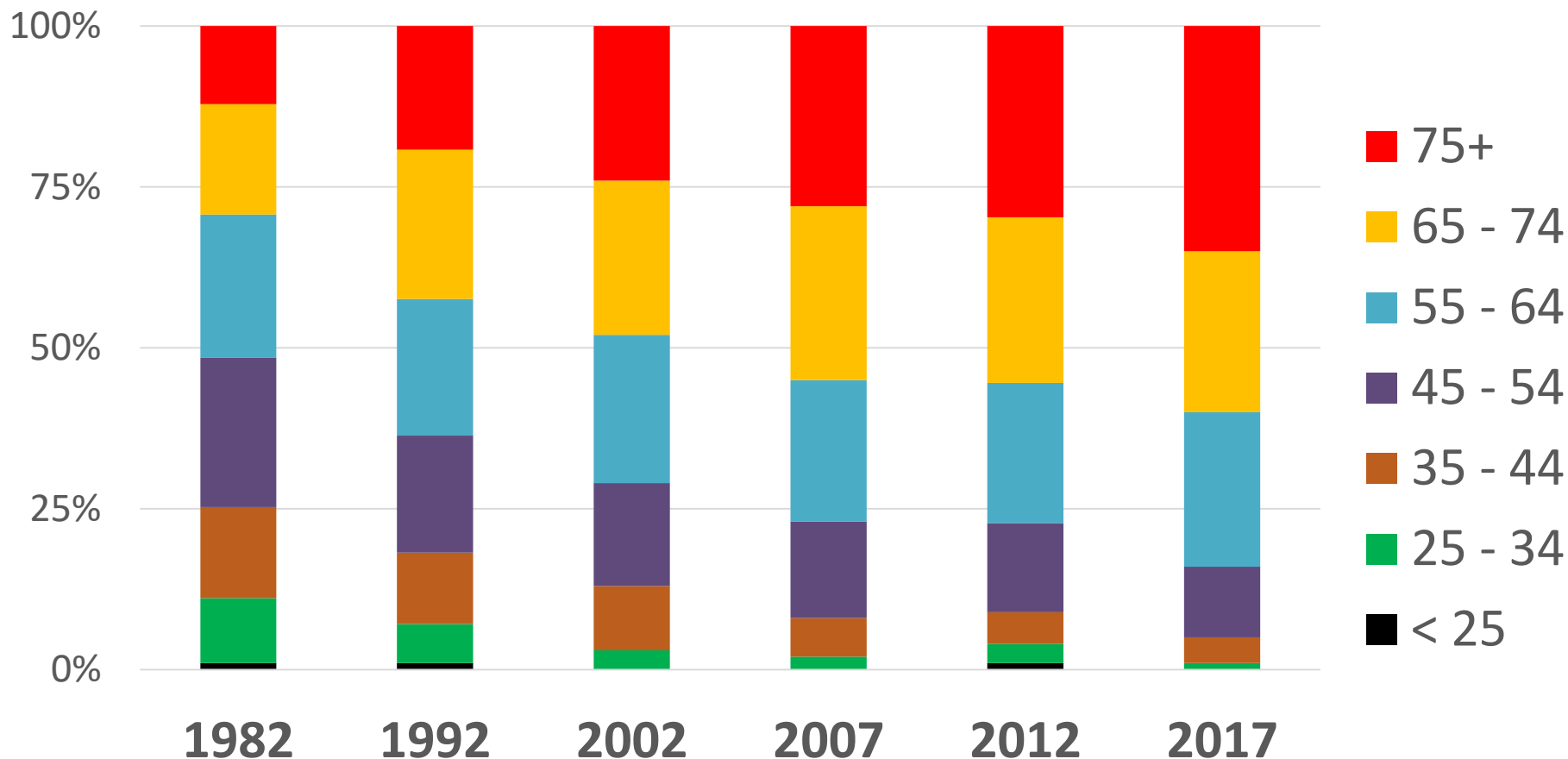
IFA 1883 / August 2018

- 82% of Iowa land is debt-free
- 60% of land owned by owners 65+ years old, one-third of land owned by 75+ years old, 13% of land owned by women landowner 80+ years old
- Ownership continues to shift from sole ownership to trusts and corporations
- 53% of Iowa land rented out – mainly cash rent
- 34% of Iowa land owned by landlords with no farming experience, 23% of land owned by retired farmers who do not currently farm
- 29% of Iowa land owned primarily for family/sentimental reasons

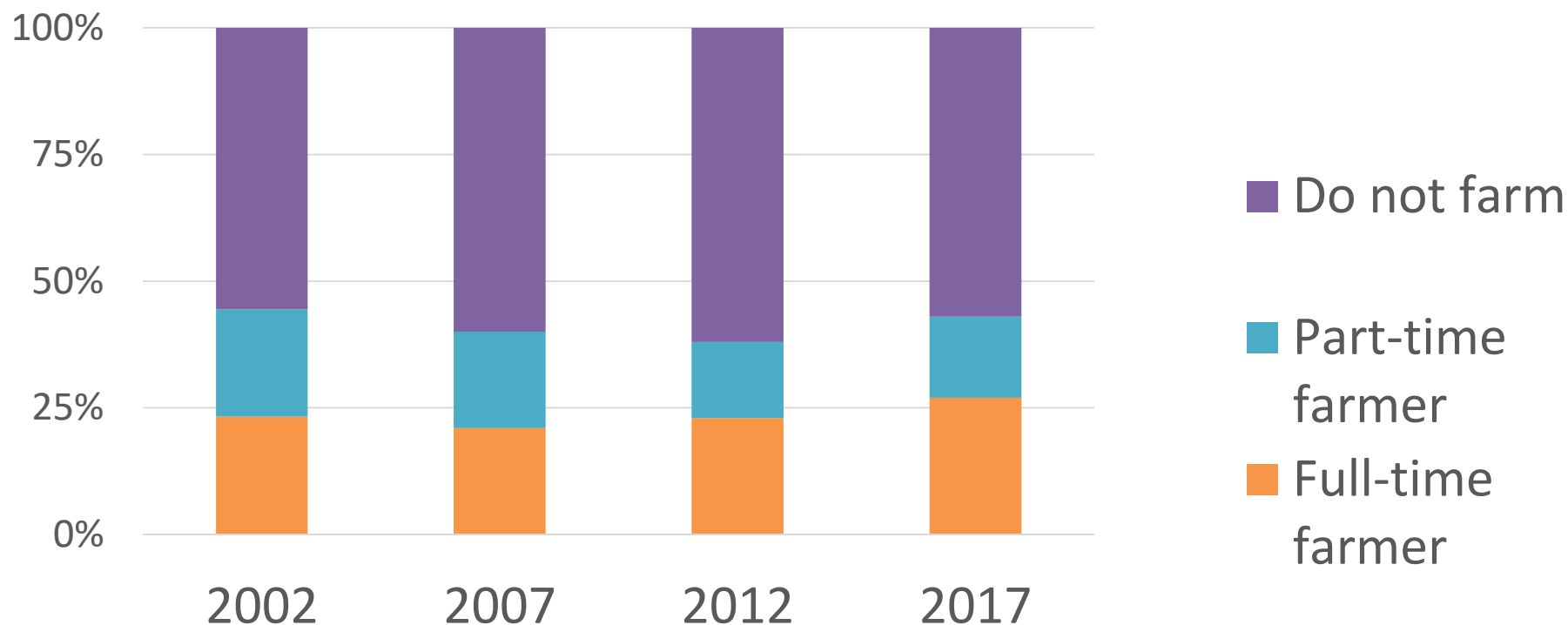
**(\$5 each print copy!)**

**<https://store.extension.iastate.edu/product/6492>**

# Percentage of Farmland by Age of Owner



# Percentage of Iowa Farmland by Farming Status of Owner



**2017: 57% of land owned by owners who do not farm; of these, 34% land owned by owners with no farming experience and 23% by retired farmers**



# Percent of Land and Owners Using Various Conservation Practices 2017

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	Owners	Acres
No till	21%	27%
Cover crops	5%	4%
Buffer strips	3%	3%
Pond or sedimentation basin	1%	2%

---

# Percent of Owner Willing to Help Tenant Adopt Cover Crops by Type 2017

	Pay for a portion of cost to plant cover crops	Lower rent for tenants who plan to plant cover crops	Longer lease for tenants who plan to plant cover crops
Yes	20%	10%	5%
No	25%	7%	9%
Maybe	16%	1%	3%

# 2018 IOWA LAND VALUE

**\$7,264**  
**Nov 2018**



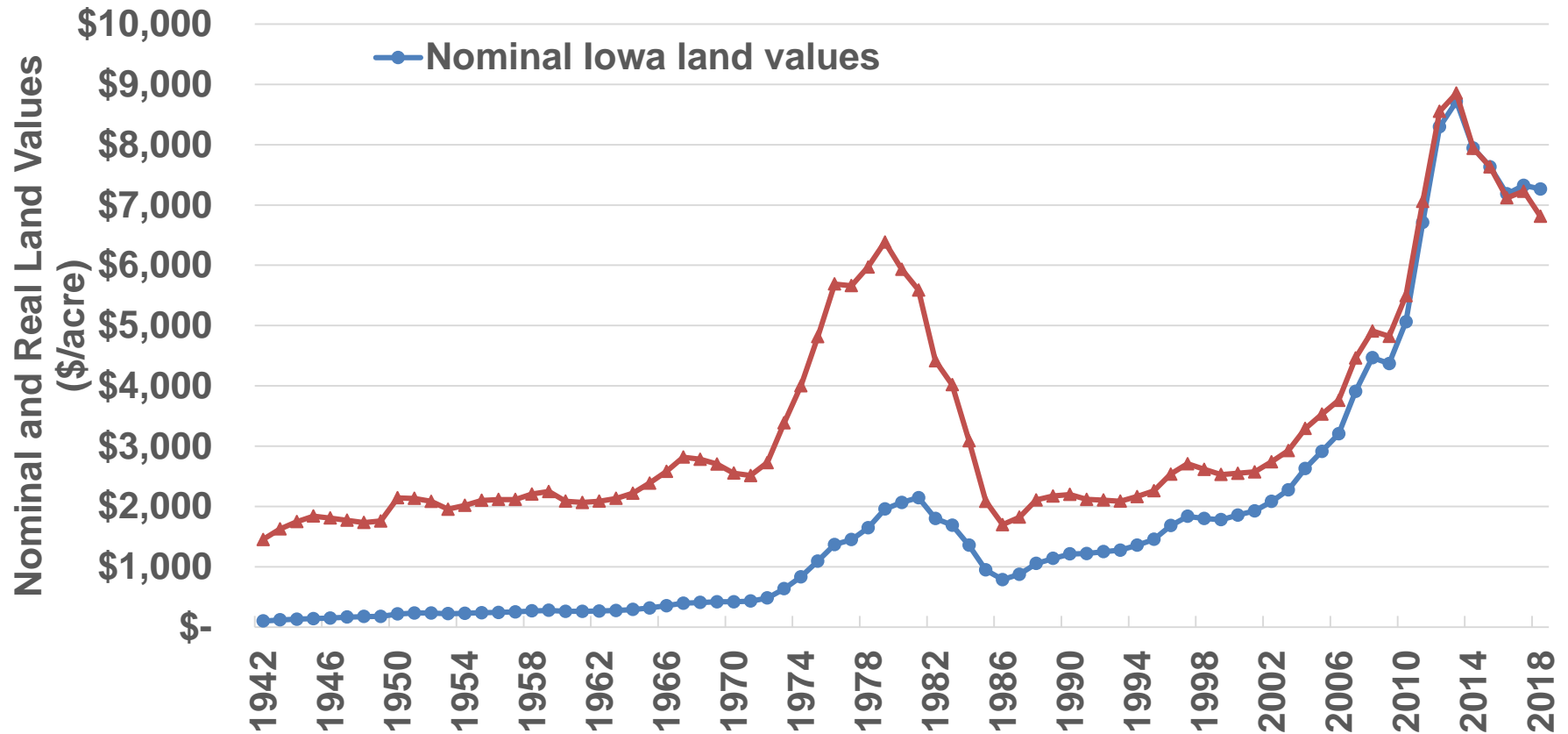
down 0.8%  
down \$62

**Double Downward Pressure**

**Land Value = income / interest rate**

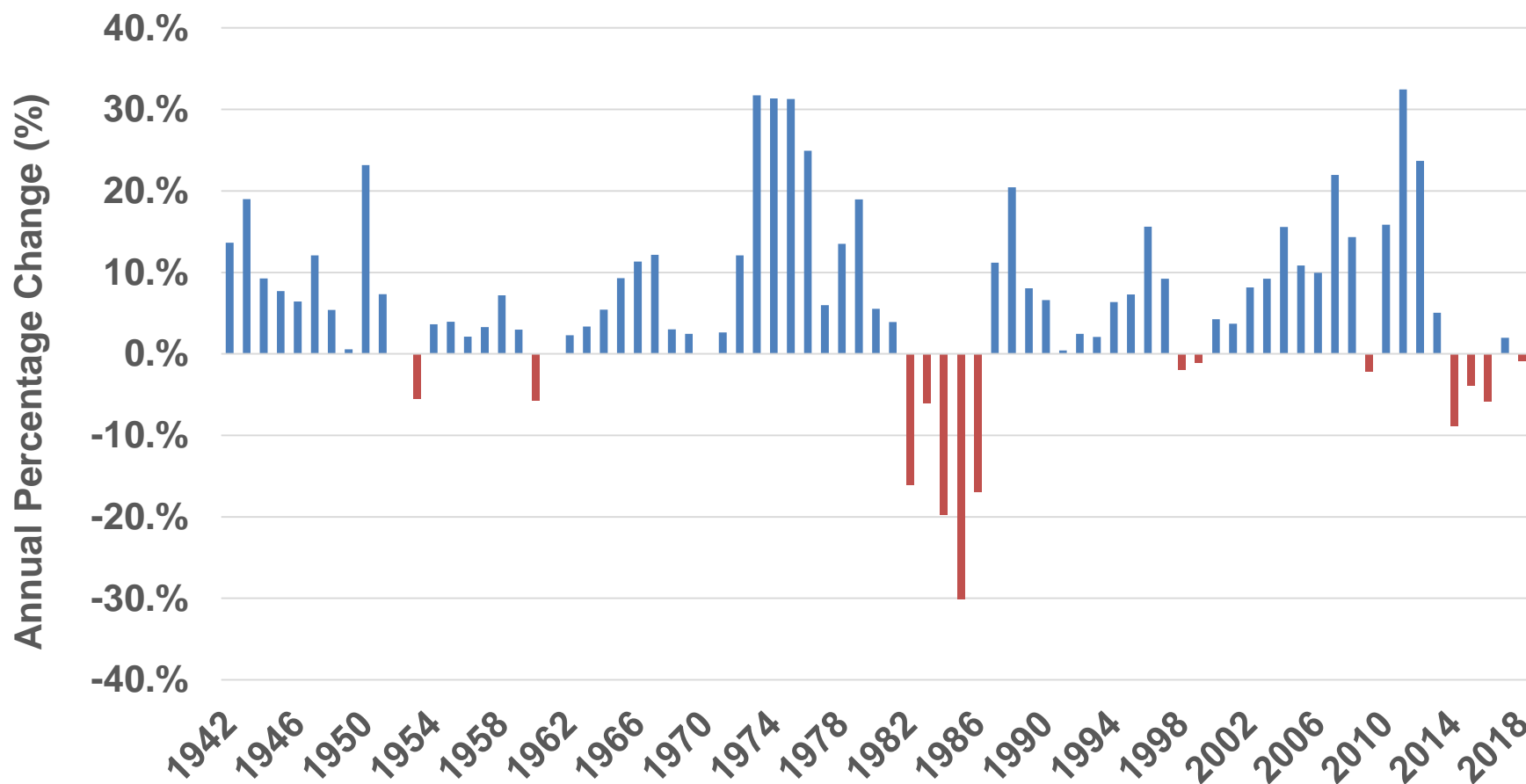
# AVERAGE VALUES

all farmland 1941–2018



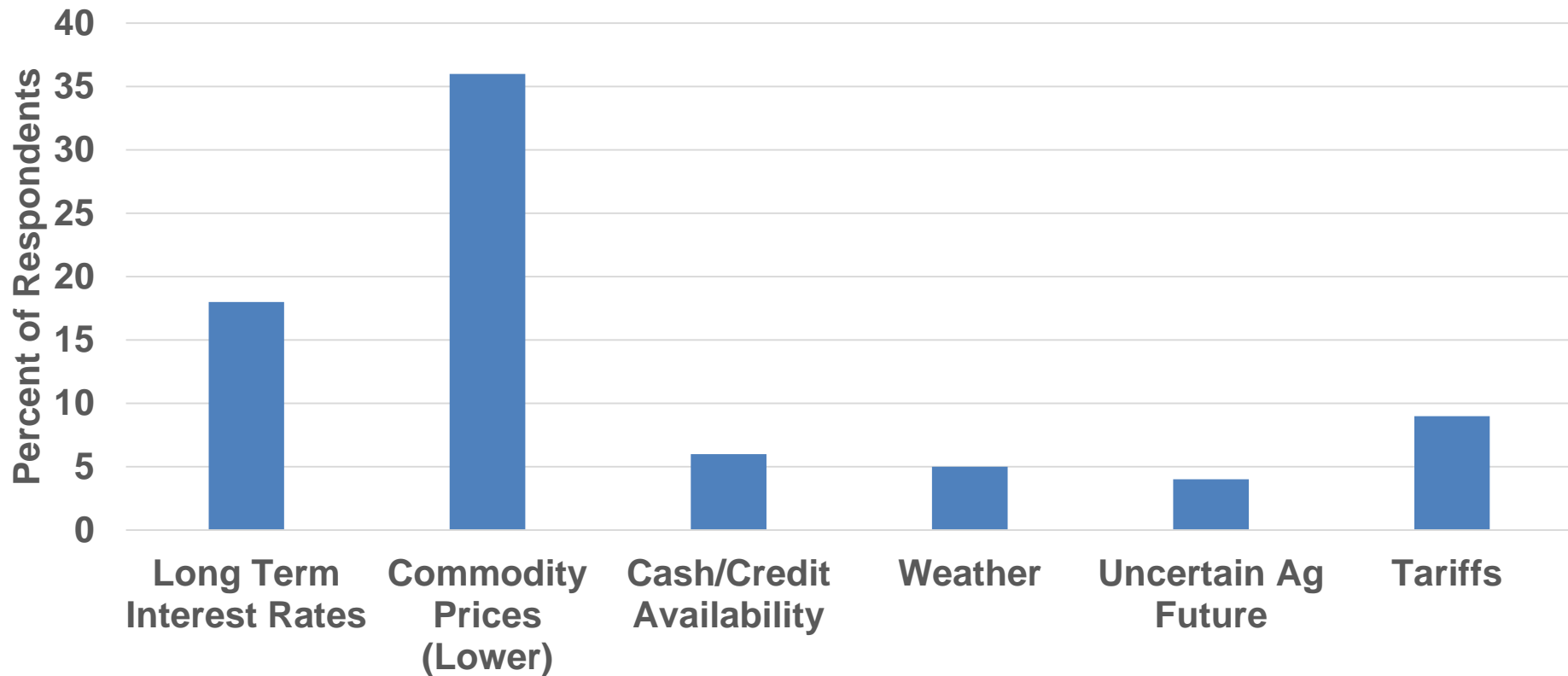


# % Change in Nominal Iowa Farmland Values 1942-2018

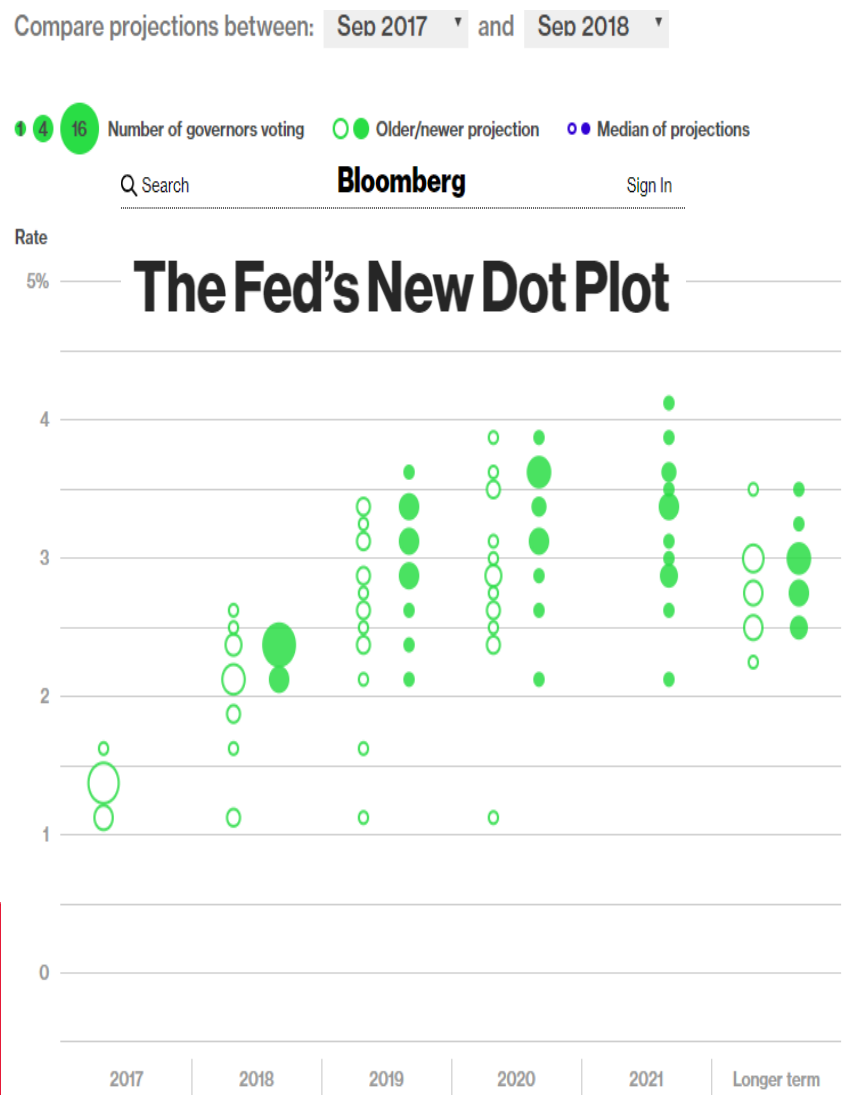
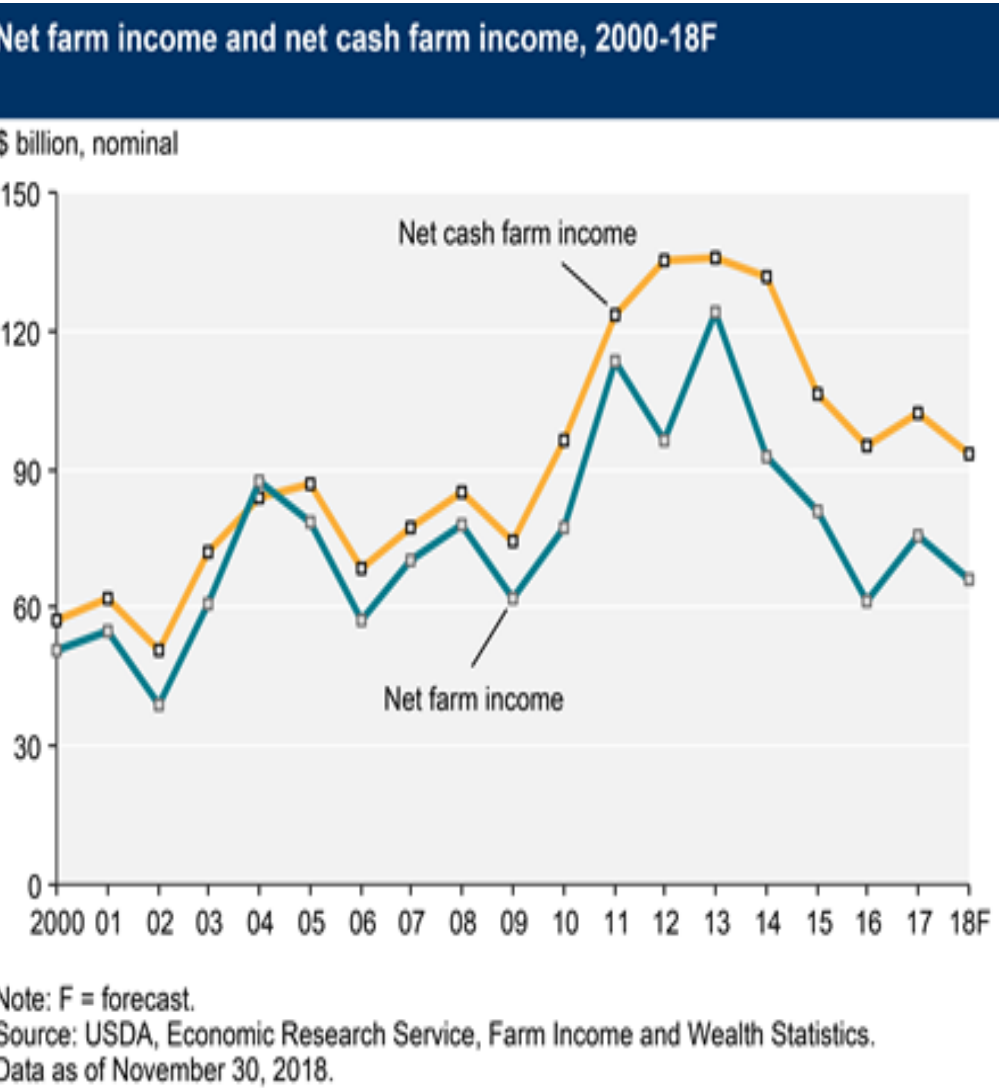


# Major Negative Factors Affecting Iowa Farmland Market, 2018

Negative Factors, 2018 (Percent)



# Lower farm income and higher interest rates put downward pressures on land values



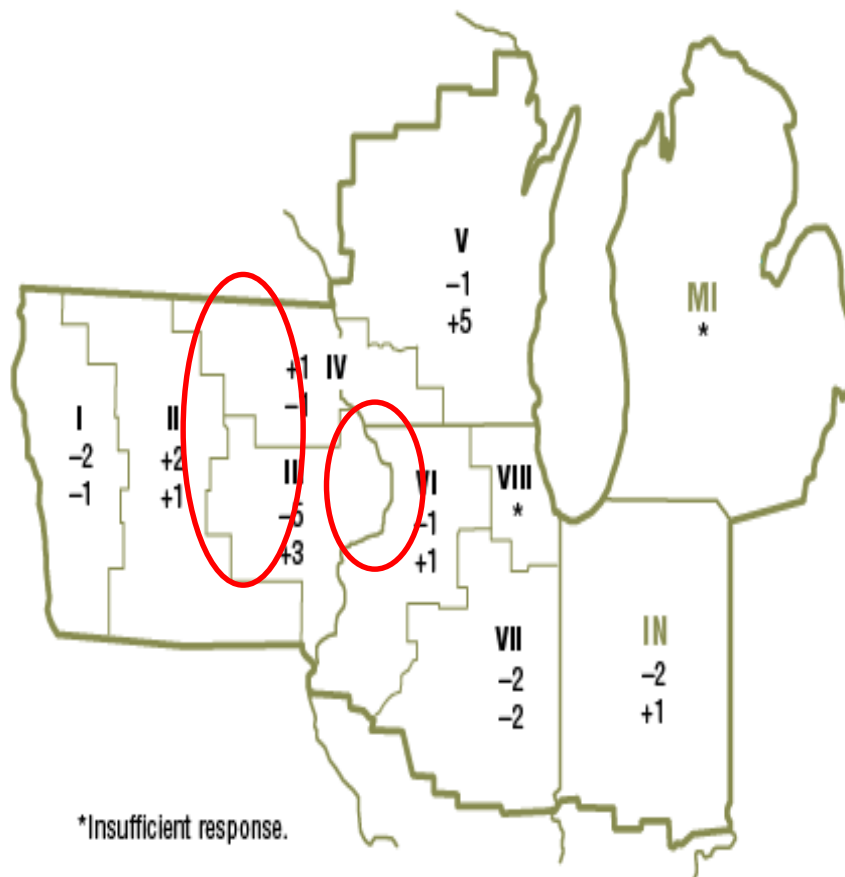
# ISU Survey Results Echo Other Surveys

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

Top: July 1, 2018 to October 1, 2018

Bottom: October 1, 2017 to October 1, 2018

	July 1, 2018 to October 1, 2018	October 1, 2017 to October 1, 2018
Illinois	-1	-1
Indiana	-2	+1
Iowa	-1	+1
Michigan	*	*
Wisconsin	-1	+4
Seventh District	-1	+1





# Indiana and Illinois both show recent declines

**2018**

**Illinois**

**Land Values**

		% Change		
		6/17-6/18	6/17-12/17	12/17-6/18
		%	%	%
Indiana	Top	1.6%	1.7%	-0.1%
	Average	2.1%	2.5%	-0.4%
	Poor	2.4%	3.1%	-0.7%
	Transition <sup>2</sup>	19.1%	15.1%	3.5%
	Recreation <sup>3</sup>	-4.9%	-4.4%	-0.5%

**Table 1. Estimates of Land Price, Beginning & Ending of 2017**

Productivity	Date		Percent Change
	Jan. 1, 2017	Dec. 31, 2017 \$ per acre	
Excellent	11,000	10,600	-4%
Good	9,600	9,100	-5%
Average	7,900	7,600	-4%
Fair	5,900	5,800	-2%

**2018 INDIANA FARMLAND VALUES  
UP, DOWN, & SIDEWAYS**

# Land Values by District and Quality, Nov 2018

District	Average Value	% Change	High Quality	% Change	Medium Quality	% Change	Low Quality	% Change
Northwest	\$9,311	-0.8%	\$10,767	-0.6%	\$8,548	-0.1%	\$6,018	-3.2%
North Central	\$7,789	-0.2%	\$8,699	-0.4%	\$7,214	-0.1%	\$5,161	-2.0%
Northeast	\$7,543	0.0%	\$9,198	0.5%	\$7,116	-1.7%	\$5,056	1.8%
West Central	\$7,413	0.5%	\$8,834	-0.5%	\$6,935	1.6%	\$4,720	0.8%
Central	\$7,899	-2.4%	\$9,313	-2.7%	\$7,341	-1.1%	\$4,932	-1.2%
East Central	\$8,004	-2.6%	\$9,768	-1.3%	\$7,452	-2.9%	\$4,911	-7.4%
Southwest	\$6,060	0.0%	\$7,738	2.2%	\$5,671	-1.5%	\$3,790	-3.7%
South Central	\$4,329	3.8%	\$6,055	2.5%	\$4,244	4.0%	\$2,953	4.6%
Southeast	\$6,619	-3.6%	\$9,063	-4.3%	\$6,353	-3.0%	\$3,656	-3.0%
Iowa Avg.	\$7,264	-0.8%	\$8,863	-0.8%	\$6,805	-0.7%	\$4,609	-1.7%

# Local Land Supply and Demand Explain Variations in Land Market

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

# Land Values by County, 2018



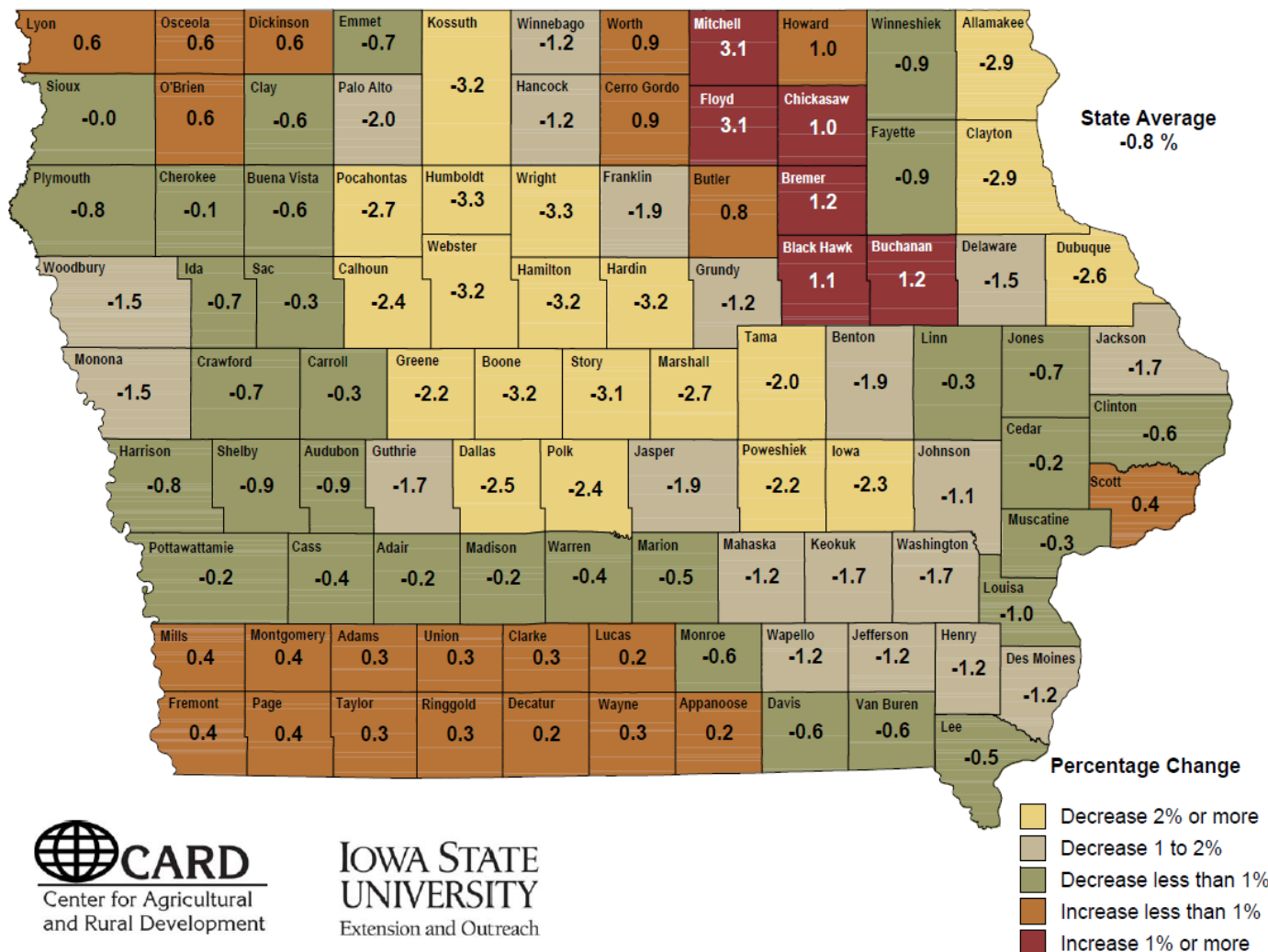
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### Dollar Values

- |   |                    |
|---|--------------------|
|  | \$5,000 or less    |
|  | \$5,000 to \$7,000 |
|  | \$7,000 to \$8,000 |
|  | \$8,000 to \$9,000 |
|  | \$9,000 or more    |

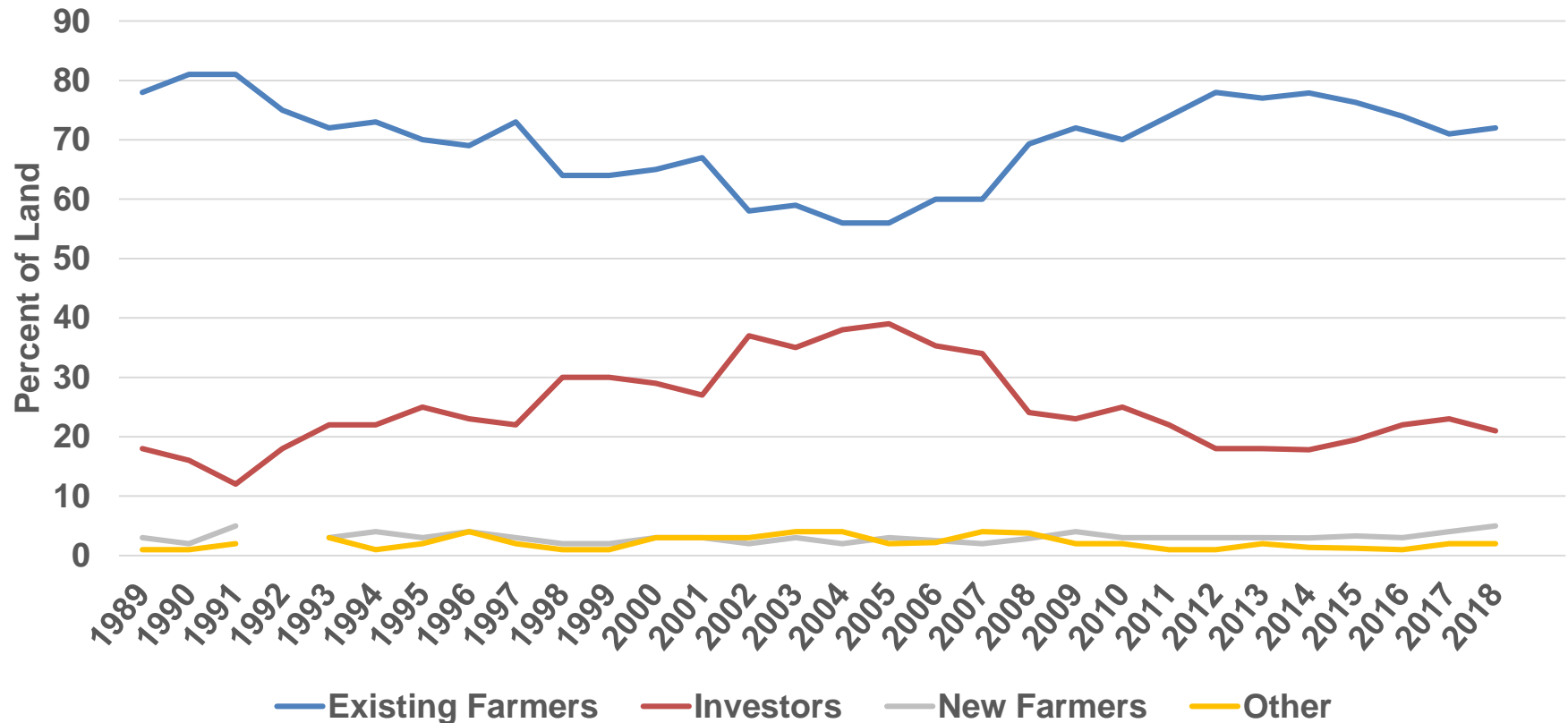


# Percentage Change in Iowa Land Values 2017 to 2018



**Percent  
Changes  
in Land  
Values  
from Nov  
2017**

# Iowa Farmland Purchases by Buyer Types 1989-2018



# Thank You!

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