

Outlook for Farmland Price and Evaluation of Determinates of Farmland Prices

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Values of major stock indices reached pre-COVID levels. What will stock prices be one year from now?

- Substantially lower
- Lower
- About the same
- Higher
- Substantially higher



Topics

1. Current levels of cash rents
2. Current farmland price
3. Determinants of Farmland Prices – Or why farmland prices can remain stable even if cash rents decline or increase

Friday, September 4th

Outlook for Farmland Prices and Rents: Results of an Illinois Society Survey

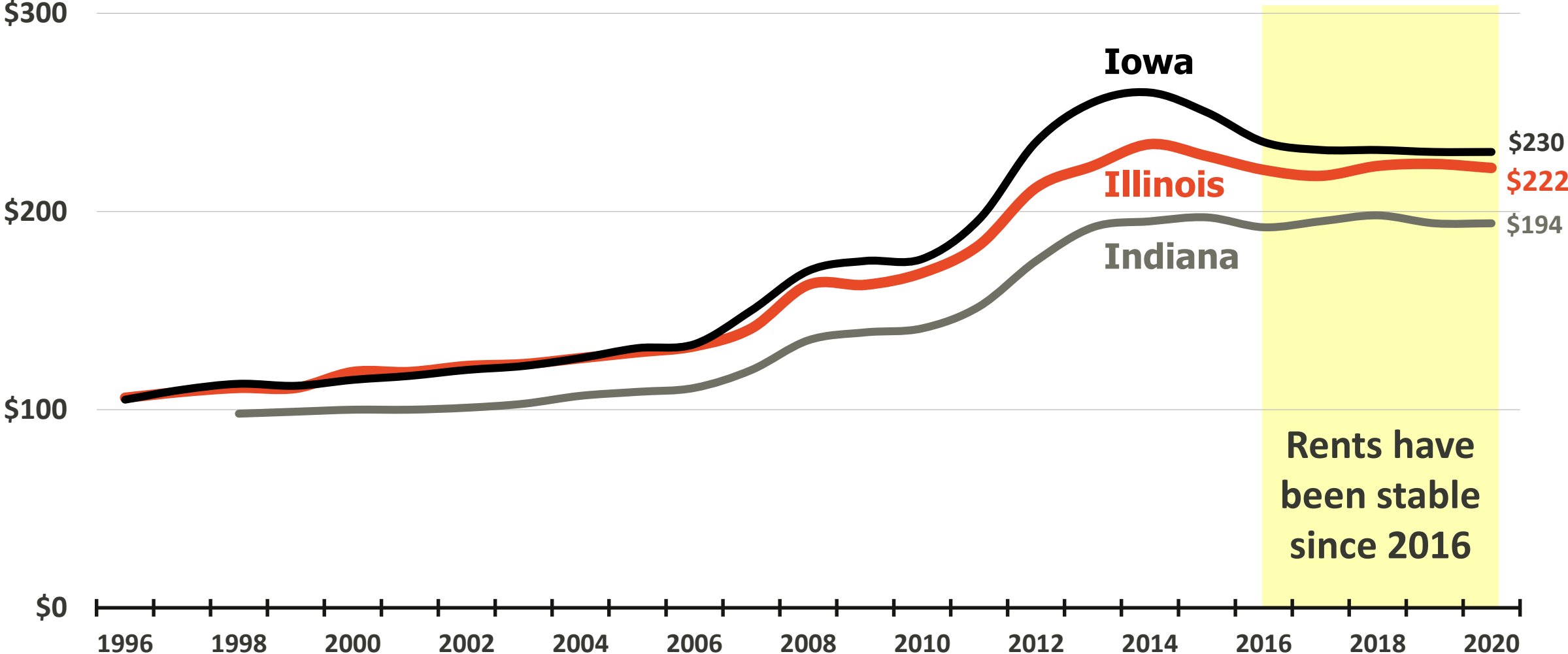
by Luke Worrell, Bruce Sherrick & Gary Schnitkey

Outlook for farmland prices and rents will be presented from results of an annual mid-year survey conducted jointly by the Illinois Society of Professional Farm Managers and Rural Appraisers and the University of Illinois. Topics include farm price outlook for the remainder of 2020, rental outlook for 2021, and outlook over the next five-years. Information will be useful as farmland markets enter the rent-setting season.

Current levels of cash rents



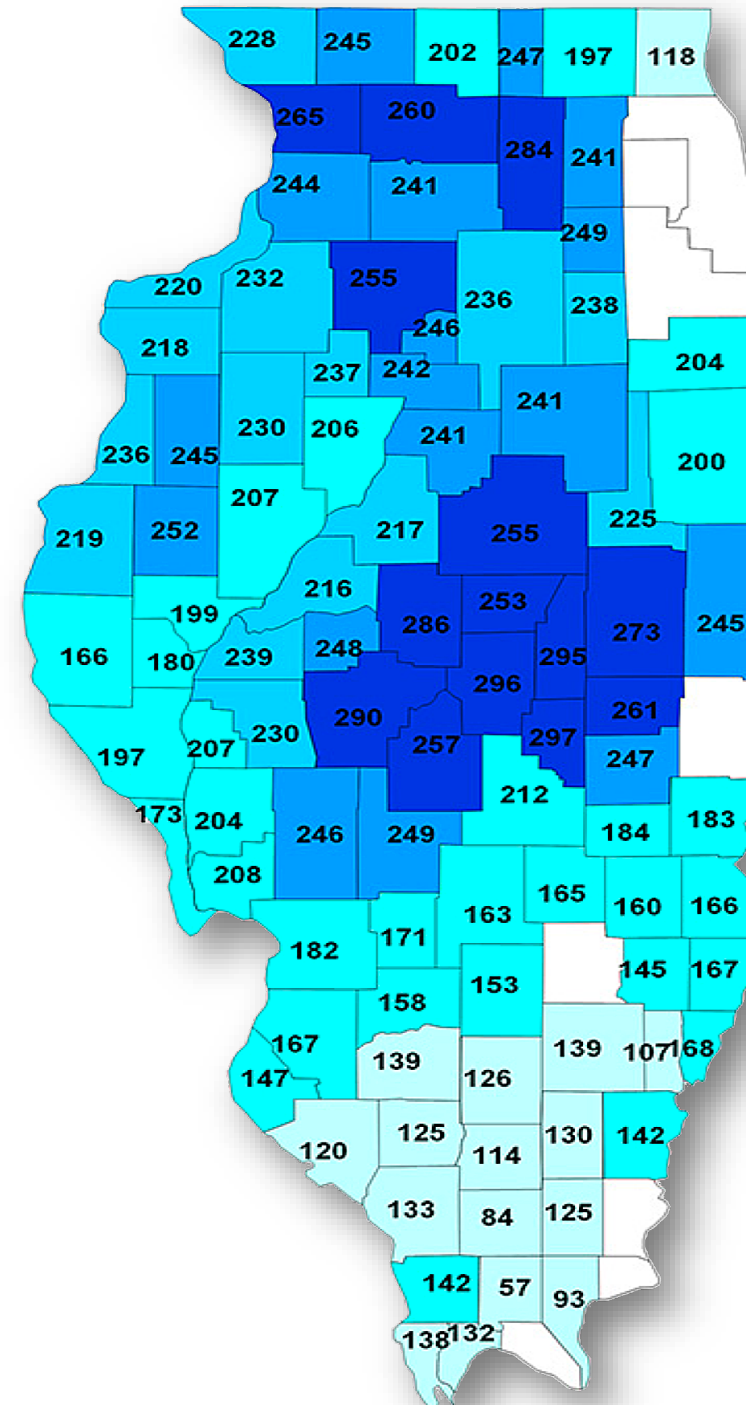
Average Cash Rents in Illinois, Indiana, and Iowa



Source: National Agricultural Statistical Service

Average Cash Rents in Illinois from NASS for 2019

We have not seen a lot
of movement in cash
rents in recent years



Illinois Society of Professional Farm Managers and Rural Appraisers indicate very slight decreases in 2020 cash rents

Land Productivity	Rent in \$/acre	
	Actual 2019 Rent	Expected 2020 Rent
Excellent	302	298
Good	261	254
Average	212	205
Fair	170	167

Values represent rents on professionally managed farmland

Agricultural returns suggests **lower cash rents**, but cash rents are sticky

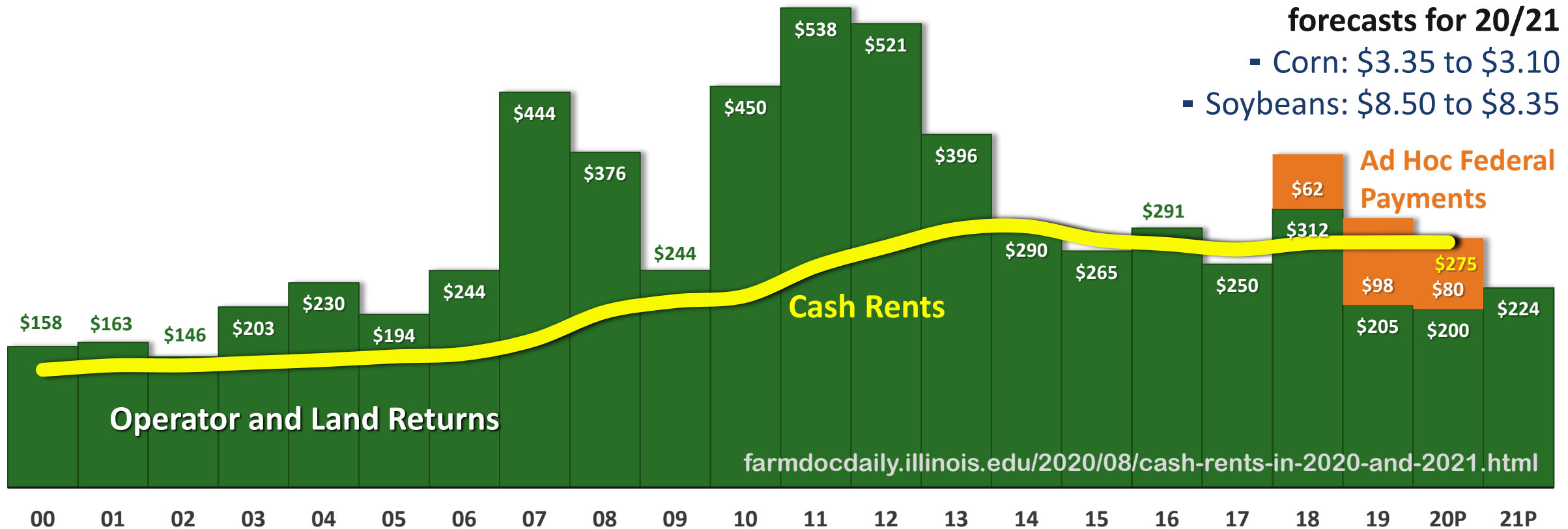
Operator and Land Returns and Cash Rents, High-Productivity Farmland in Central Illinois, 2000 to 2021P.

Ad hoc payments helped to achieve break-even returns in 2019 and 2020***

Flat rents and other costs

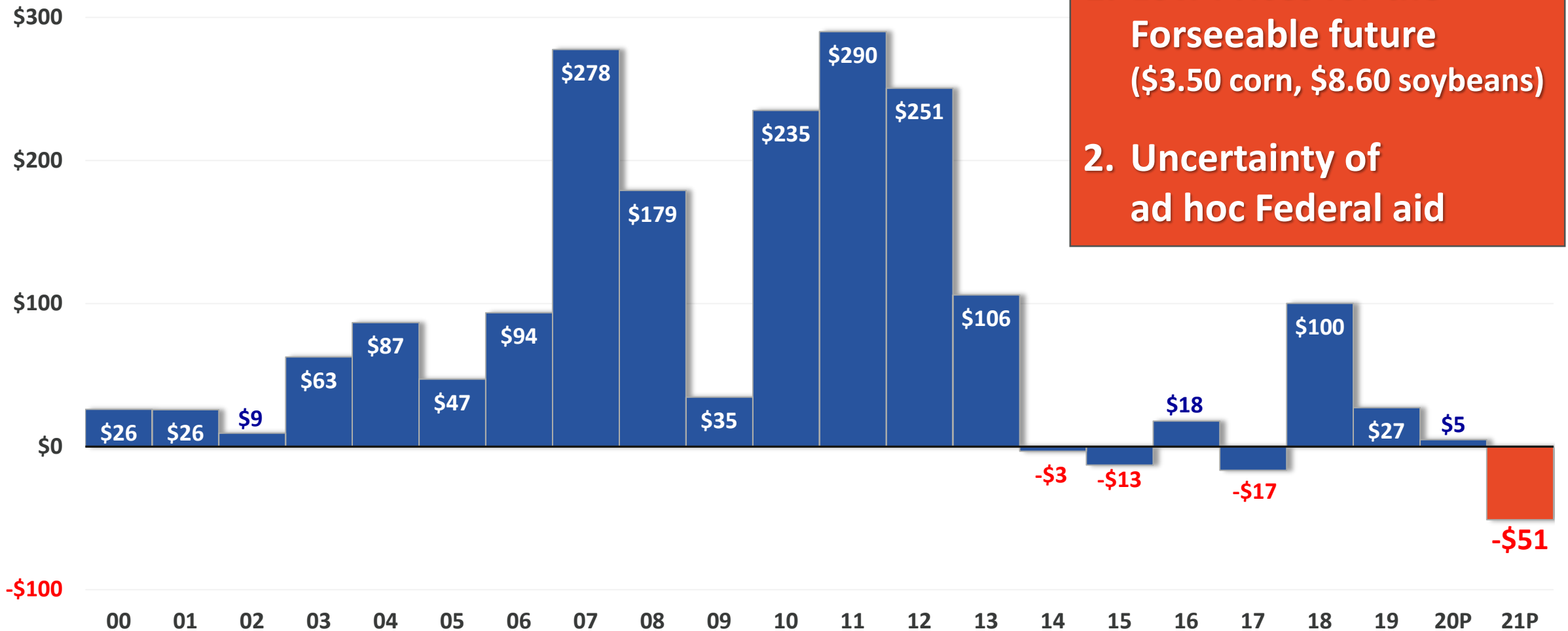
July vs. August USDA MYA price forecasts for 20/21

- Corn: \$3.35 to \$3.10
- Soybeans: \$8.50 to \$8.35



farmdocdaily.illinois.edu/2020/08/cash-rents-in-2020-and-2021.html

Farmer Return on Average Cash Rent Farmland in Central Illinois, 2000 to 2021P



1. Low Prices for the foreseeable future (\$3.50 corn, \$8.60 soybeans)
2. Uncertainty of ad hoc Federal aid

Lease types

- 1. Share rent:** share in revenue (crop revenue and govt't programs) and direct costs (seed, fertilizer, pesticides, drying, storage, crop insurance)
- 2. Cash rent:** farmer pays landowner for right to farmland, farmer receives all revenue and pays all expenses, except land costs (property tax)
- 3. Variable cash rent:** cash rent varies with crop revenue
- 4. Custom farming:** landowner pays for field operations, bears all costs, receives all revenue

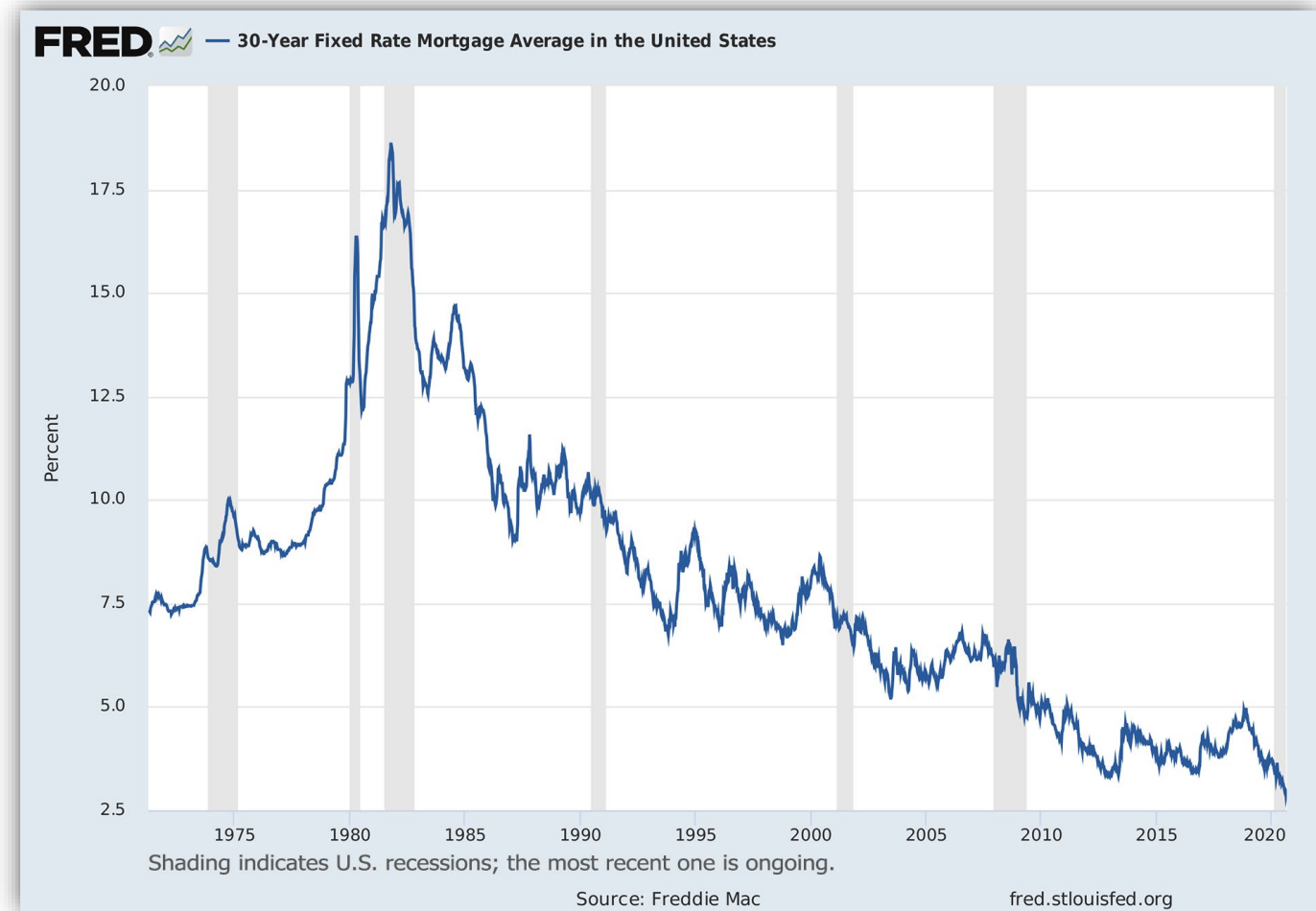
Variable Cash Leases (Parameters for Higher Productivity Farmland)

- **Base cash rent** (paid no matter what) -- \$200 per acre
- Pay a higher cash rent if crop revenue plus MFP times a rent factor exceed the **base cash rent**
- Rent factor (**33% for corn** and 40% for soybeans)
- **Yield is from the farm**, **Price is average on Wednesday** from an agreed spot from Spring to Fall

Yield = 210 bushels per acre, **Price = \$3.60**, **Rent factor = .33**,
Rent = 210 x \$3.60 x .33 = \$250 (Higher than \$200, \$50 plus)

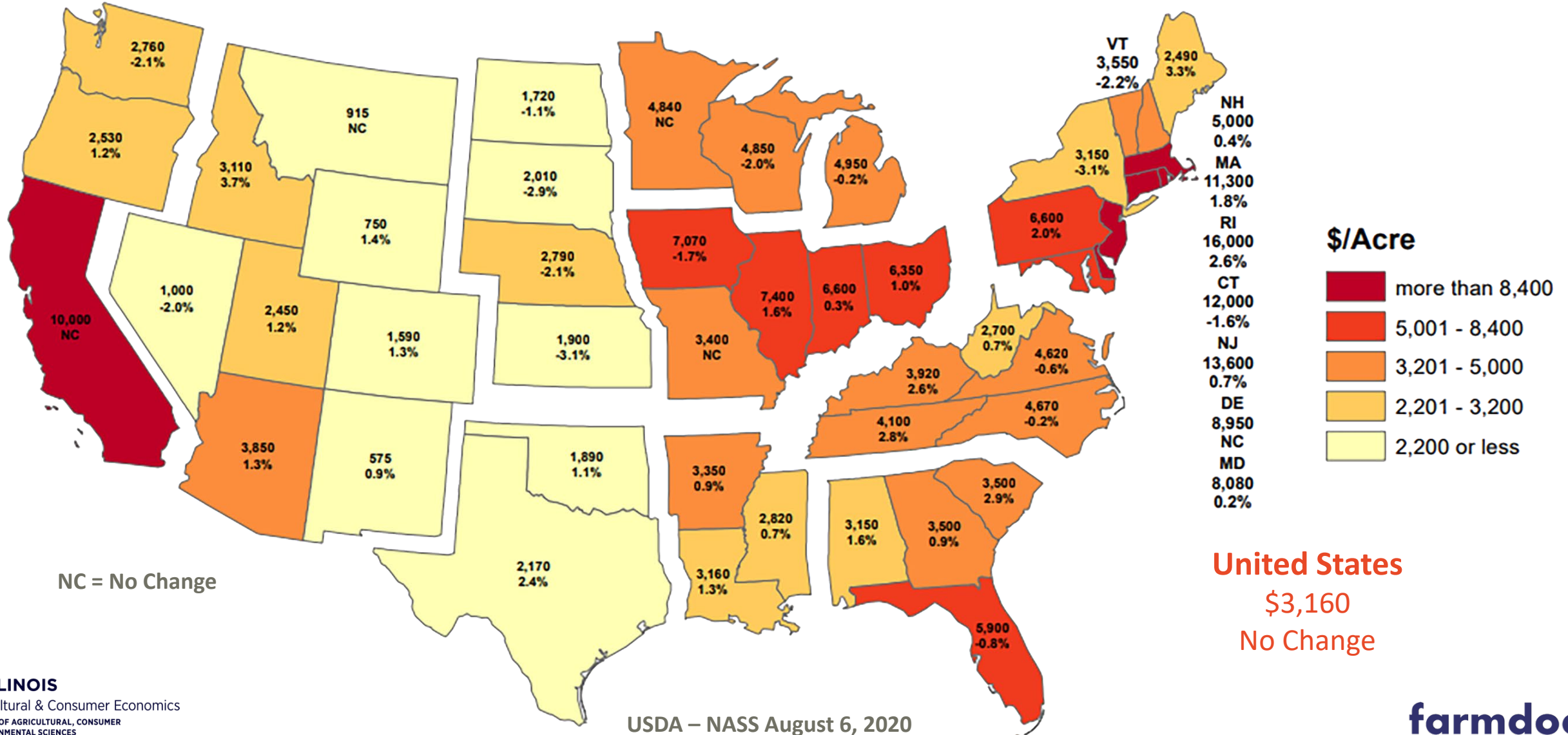
What will interest rates be a year from now compared to today?

- Lower
- About the same
- Higher
- Substantially higher



2020 Farm Real Estate Value by State

Dollars per Acre and Percent Change from 2019



Determinants of Farmland Prices

**Why prices can remain stable or increase even if cash rents decline*

**How to make sense of relatively slow moving values*

**Major issues for the future*

Background

Farmland is what it earns:

Higher cash rents would be expected to result in higher farmland prices

Farmland also is what it can be discounted at:

Discount rates are fundamentally related to interest rates. Lower interest rates result in higher farmland price

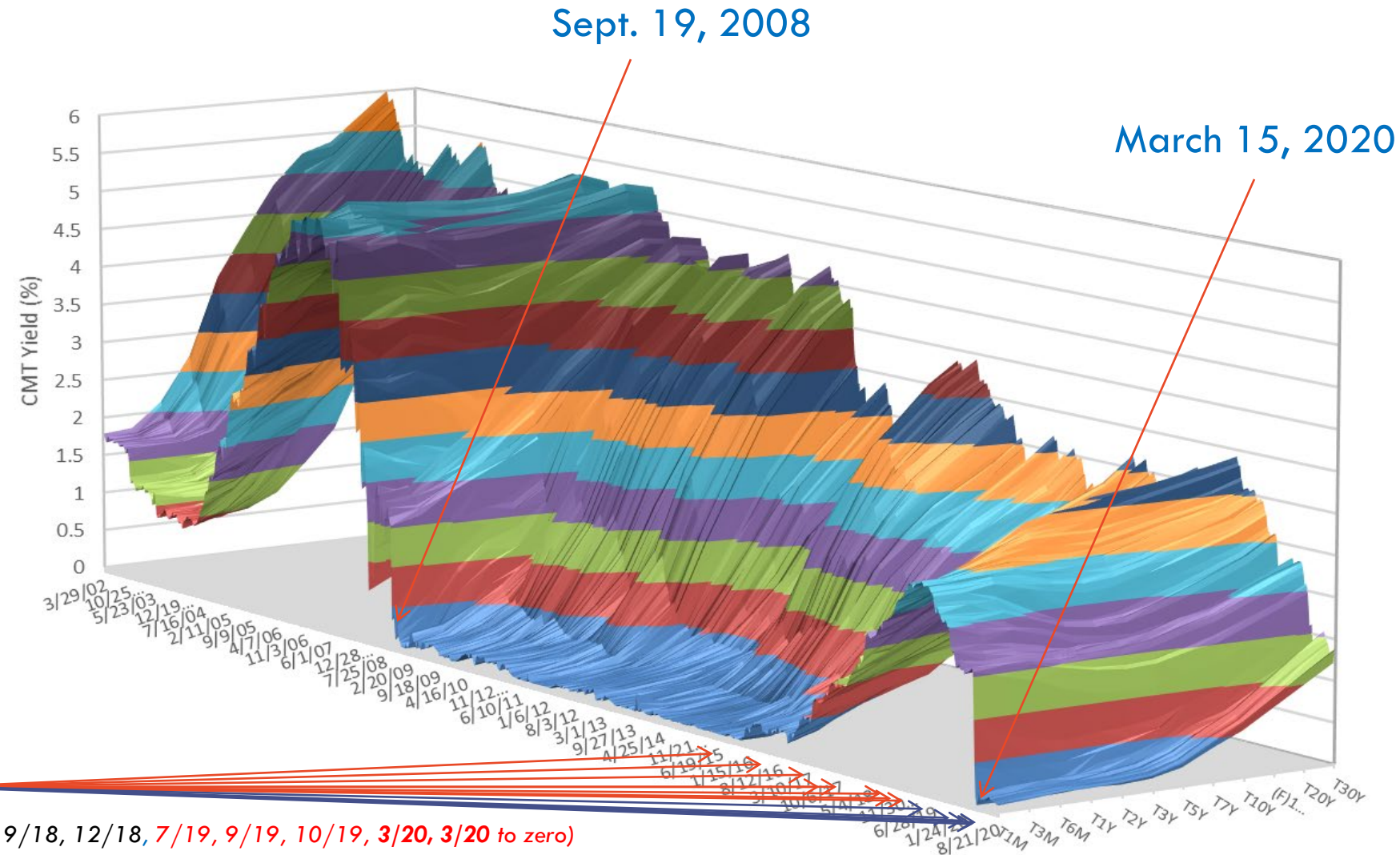
Ten-year Constant Maturity Treasury Rate



Understanding Farmland Values...Capitalization rates and CMTs

Yield Curve Jan. 2002 – August 2020 (weekly)

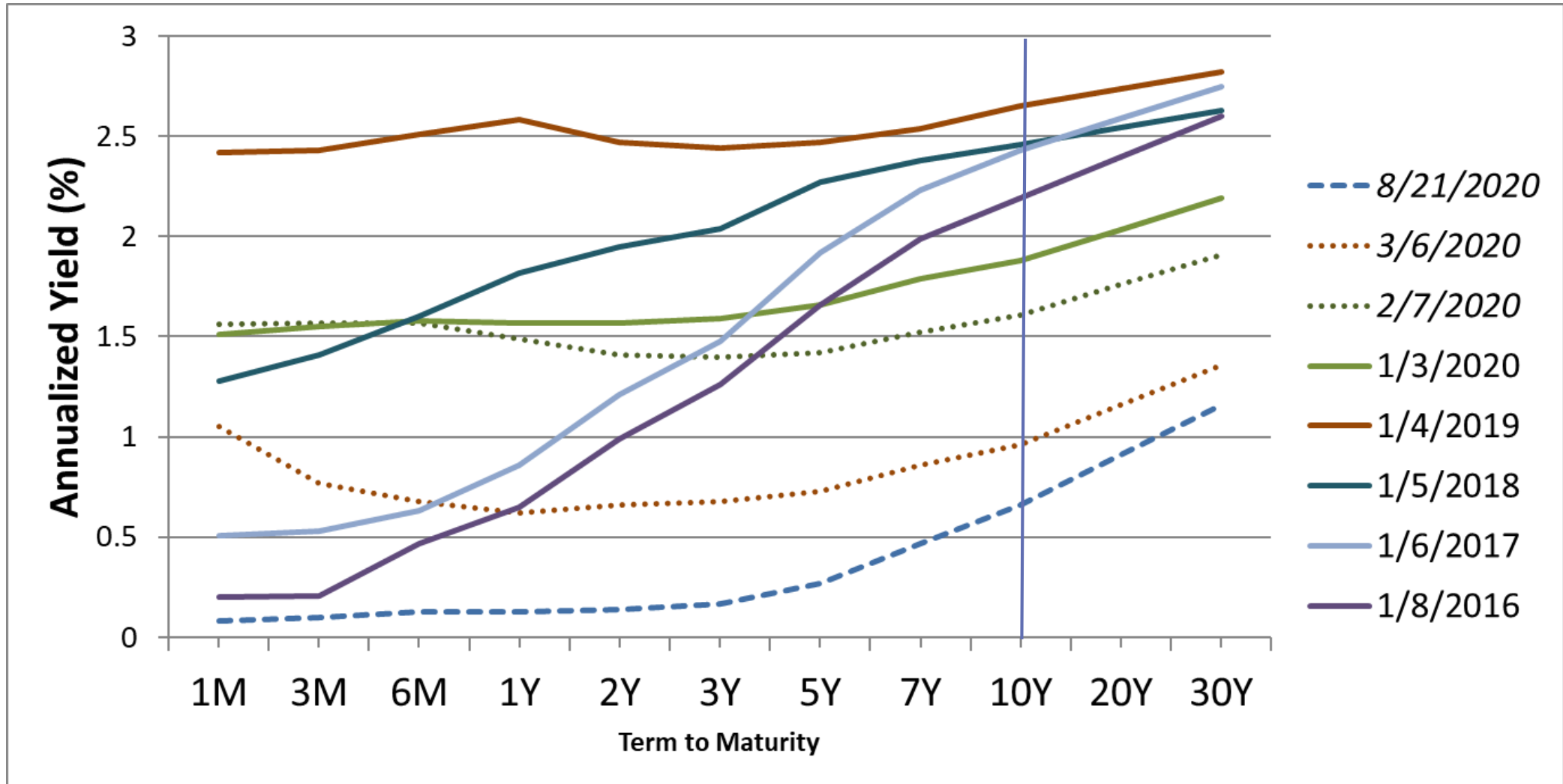
- Flat, low rate curve again
- Low inflation expectation
- Credit spreads increased
- Large Fed OMC and fed. spending interventions
- Target rate = 0%
- Impact on long duration inflation sensitive assets like farmland?



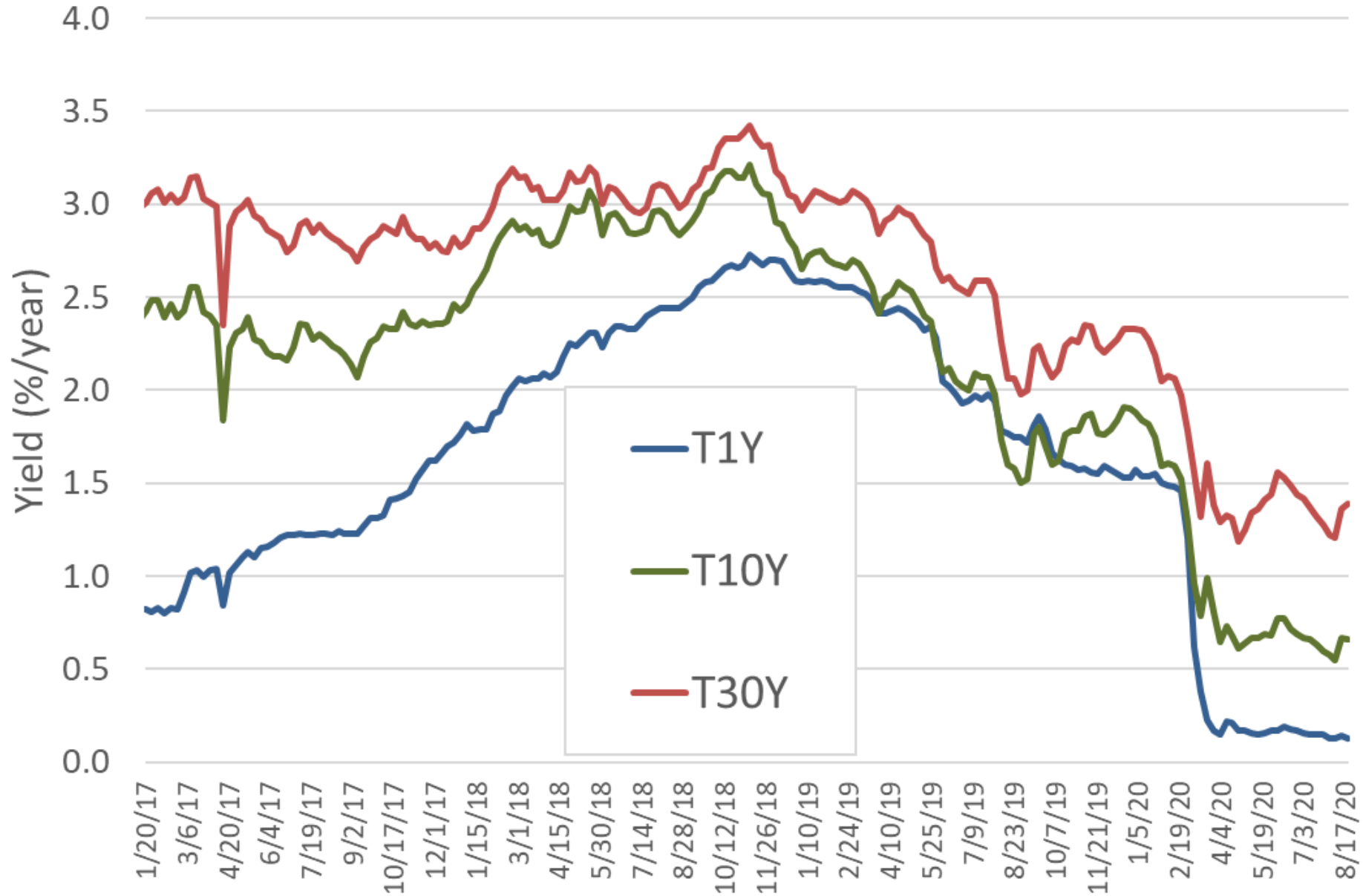
Recent FOMC Rate hikes | cuts

11/15, 12/16, 3/17, 6/17, 12/17, 3/18, 6/18, 9/18, 12/18, 7/19, 9/19, 10/19, 3/20, 3/20 to zero)

Capitalization/Treasury rates (Federal Reserve)



30 yr 10 yr and 1 yr CMT yields



Capitalized Value

A very simple (and reasonably accurate) capitalization formula

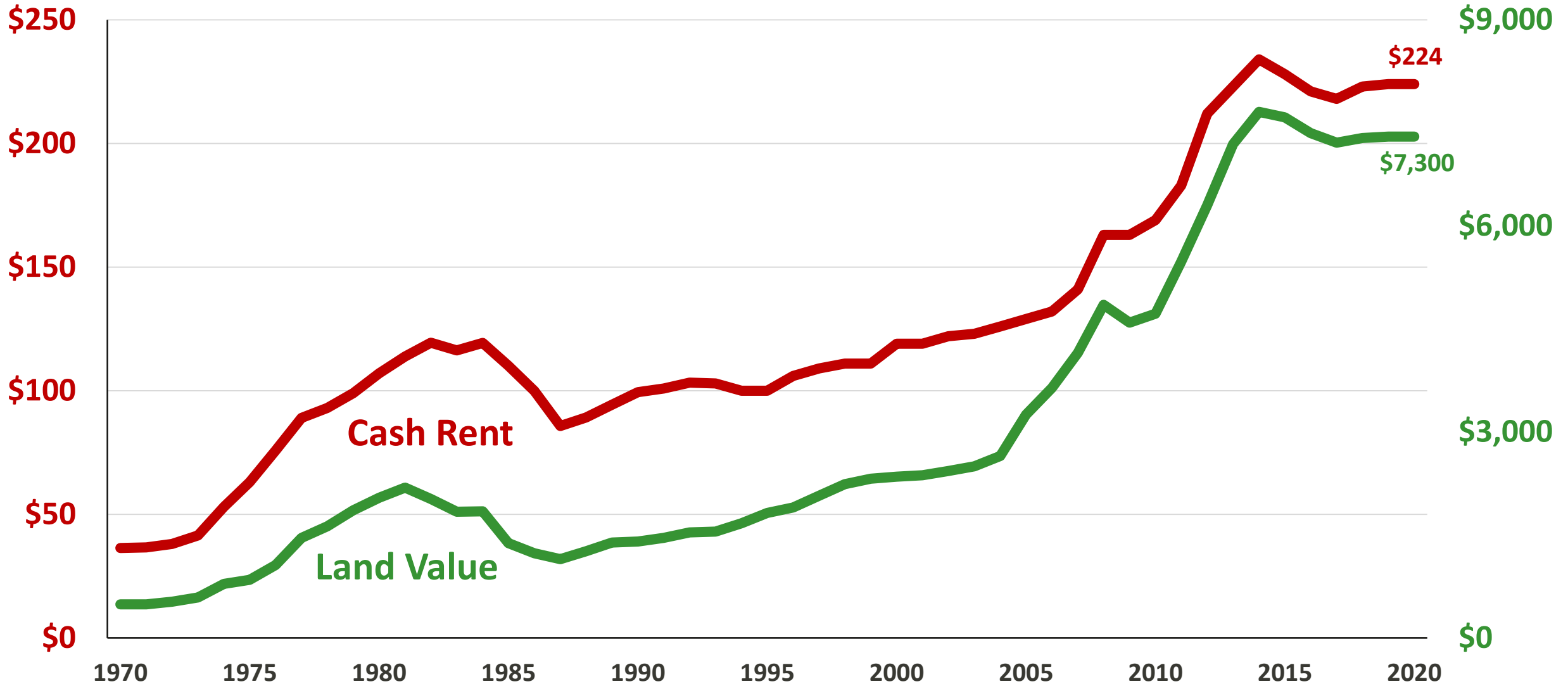
$$\textit{Capitalized Value} = \frac{\textit{Cash Rent}}{10 - \textit{Year CMT Rate}}$$

Cash rent = \$225 per acre

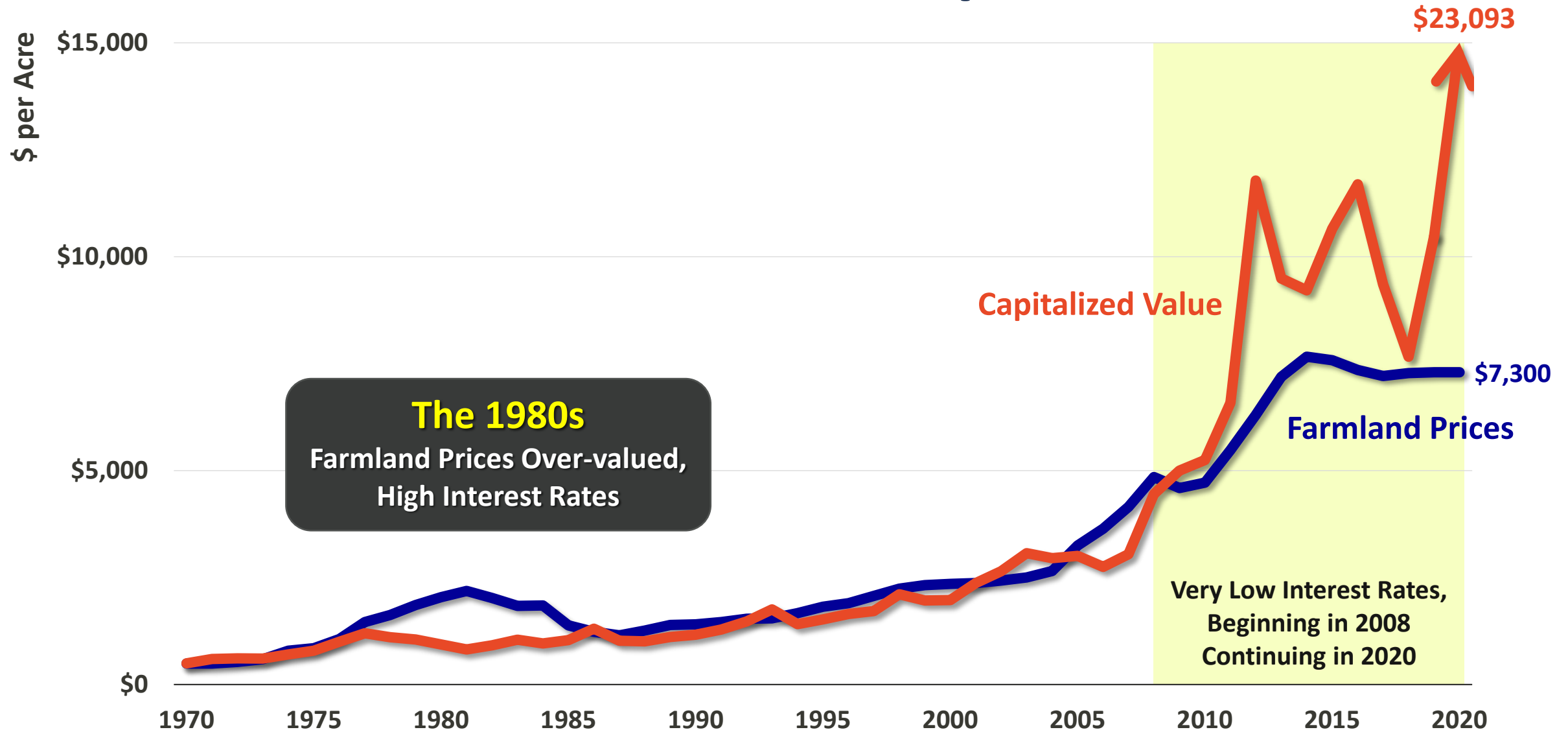
10-Year Rate = 3%

Capitalized value = \$7,500 = \$225 / .03

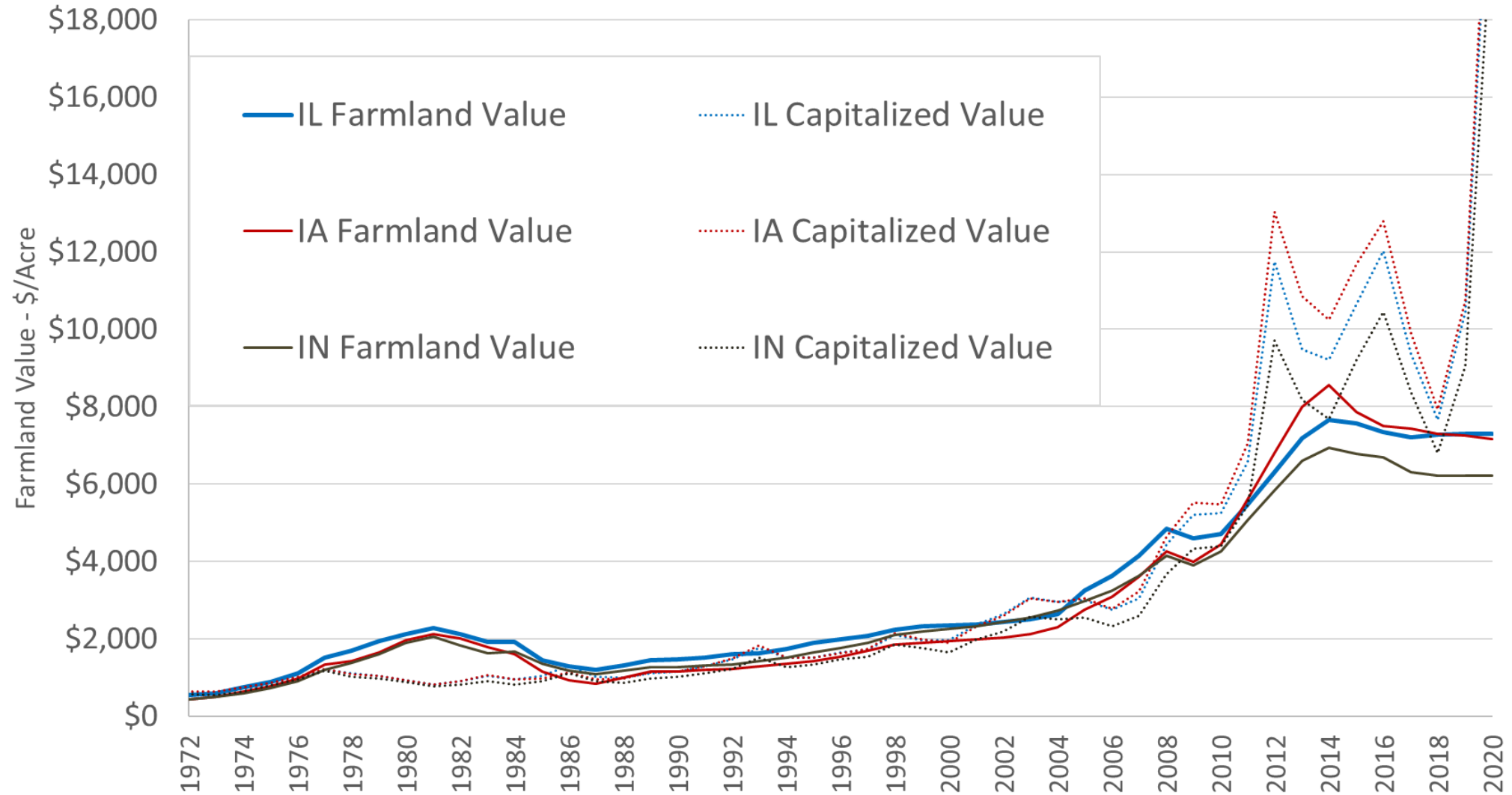
Cash Rents and Land Values, Illinois (\$ per Acre)



Illinois Farmland Prices and Capitalized Values

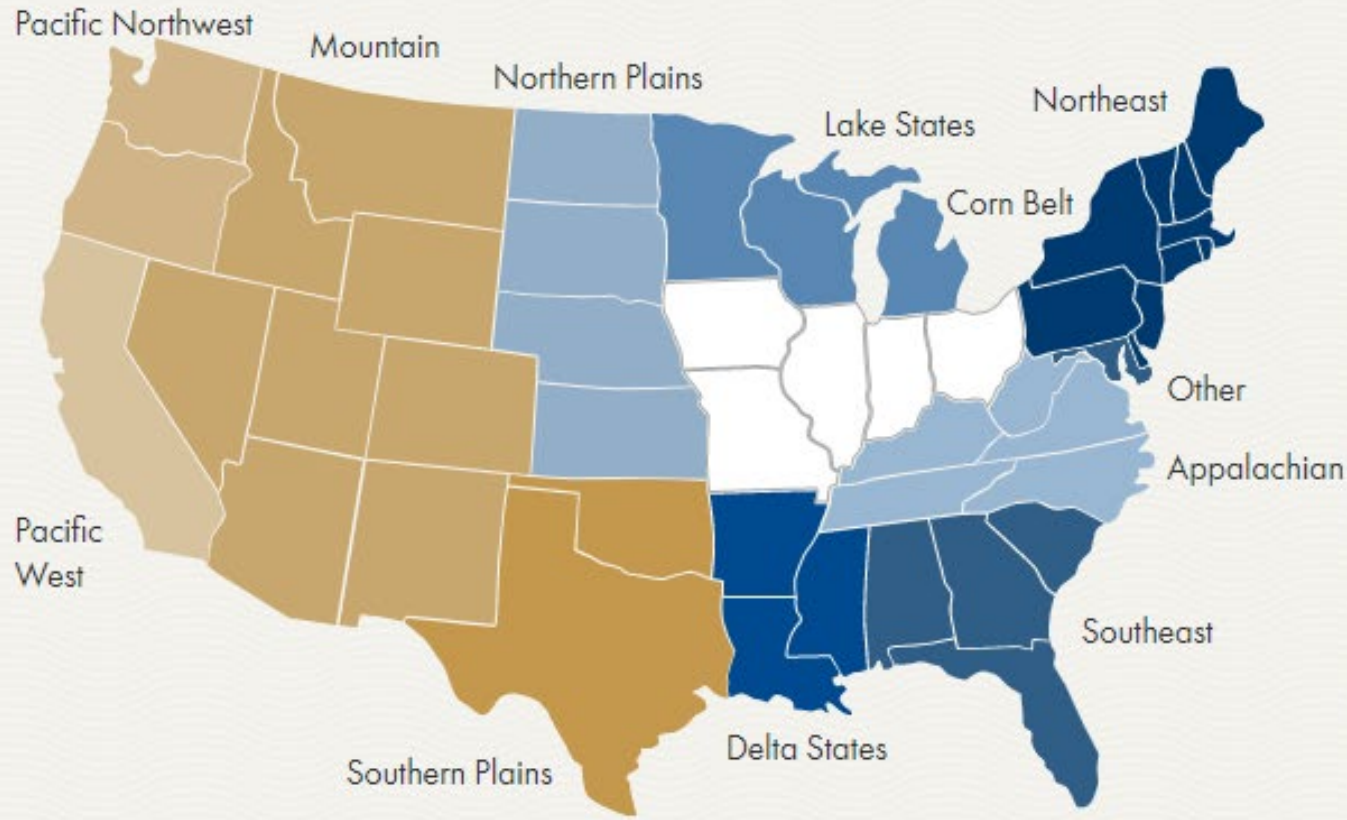


Implied Farmland Values – Income Capitalization



Capitalized Values Compared to Actual Prices

- Early 1980s were only period when actual values substantially exceeded values that incomes would support.
- Divergence between capitalized values and market values indicate beliefs about future discount rates and income potential
- More concerned with **overvalued** prices when farmland prices are above capitalized values
- Current values can be rationally explained, but “balance” between income and value changes is less stable in low rate environments.
- Alternative investments have slower dissipation of credit spreads – farmland returned to safe implied rating fairly quickly, volatility of alternative equity investments is higher
- Thin-market support for asset class remains. Difficult to find “deal flow.”
- Uncertainty about future income buffeted by government policy responses.



Total Market Value:
\$1,303,301,992.00

FILTER BY PROPERTY TYPE



0.84%

3Q2019

1.89%

4Q2019

0.14%

1Q2020

0.97%

2Q2020

3.88%

One year from now, do you believe farmland prices will:

- increase by more than 10%
- increase by 5-10%
- stay within 5% of current
- decline by 5-10%
- decline by more than 10%

Upcoming webinars

Friday August 28st

Where are we at Financially on Illinois Farms

by Brad Zwilling , Gary Schnitkey and Nick Paulson

Overall, the financial positions of Illinois farms are still strong, but erosion has occurred on many farms. Up to this point, most of that erosion has come in the form of reductions in working capital. Debt-to-asset positions have eroded only slightly. Non-declining asset values contribute to the relatively small declines in debt-to-asset positions. Some farms are more at risk, including those that have more cash rent farmland. Also, younger farmers tend to have worse situations than older operators.

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Questions?

Please continue to submit questions during this part of the webinar



Bruce Sherrick

Gary Schnitkey

The screenshot shows the farmdoc website homepage. At the top, there is a navigation bar with the Illinois logo and the text "ILLINOIS". To the right of the logo are links for "Our Sites: farmdoc farmdocDAILY Farm Policy News" and a search icon. Below the navigation bar is a large green banner image of a cornfield. The word "farmdoc" is written in large white letters on the banner. Below the banner, there are links for "Market Prices", "Sections", "Tools", "Publications", "Webinars/IFES", "Sponsors/Donate", and "About Us". Underneath the banner, it says "EDUCATIONAL PARTNERS: Dept of ACE FBFM EXTENSION". To the right of the banner, there are social media icons for Twitter, Facebook, Instagram, YouTube, and LinkedIn, with the text "Connect on Social Media". Below the social media icons is a "Subscribe for Daily Email Updates" button. The main content area has an orange background. On the left, there is a "FAST Farm Analysis Solution Tools" logo. To the right of the logo, there is a "Farm Projection Tool" section with the date "July 21, 2020" and a description: "This program calculates per-acre budgets for different crops and a whole farm budget and includes breakevens. Projected financial statements and return sensitivities are available. The effects of farm level crop...". Below the description is a "Read More" button. On the right side of the orange area, there is a "Corporate Sponsor" section with the TIAA logo and "Center for Farmland Research". Below that is a "Platinum Sponsor" section with the COMPEER FINANCIAL logo. Below that is another "Platinum Sponsor" section with the FARM CREDIT ILLINOIS logo and the tagline "Helping Farm Families Succeed". Below that is a "Platinum Sponsor" section with the GROWMARK logo. Below that is a "Platinum Sponsor" section with the www.ilcorn.org logo. At the bottom of the orange area is a "See all sponsors" button. Below the orange area is a white box with a dropdown arrow and the text "See the Latest News on Social Media". At the bottom of the page, there is a section titled "Visit farmdoc Sections" with two images: a green tractor pulling a red combine harvester in a field, and a close-up of corn plants in a field.

See the Latest News on Social Media

Visit farmdoc Sections

