

## Perspectives on Conservation and Leased Farmland

AAIA Annual Meeting  
10/27/18  
Portland, Oregon

Bruce J. Sherrick, Ph.D.  
TIAA Center for Farmland Research,  
University of Illinois



Advancing Farmland Markets through Research and Information

**farmdoc**DAILY

TIAA

Center for  
Farmland Research



ILLINOIS



iFAR



## TIAA Center for Farmland Research

Advancing Farmland Markets through Research and Information

Goals: improve accuracy and understanding of asset class, and to provide unbiased research and useful tools for those involved with farmland investments.

Tools and articles at:

<http://farmdocdaily.illinois.edu/>

<http://farmland.illinois.edu/>

TIAA

Center for  
Farmland Research

ILLINOIS

## Balance Sheet of Ag Sector -- US

Table 1. Selected Balance Sheet Characteristics of US Agricultural Sector

	1970	1980	1990	2000	2010	2013	2015	2017
	<i>(\$ millions, except ratios - source ERS-USDA)</i>							
<b>Farm Assets</b>	<b>278,823</b>	<b>1,000,422</b>	<b>840,609</b>	<b>1,203,215</b>	<b>2,170,832</b>	<b>2,776,110</b>	<b>2,909,653</b>	<b>3,074,869</b>
Real Estate	202,418	782,820	619,149	946,428	1,660,114	2,251,002	2,395,363	2,556,932
Non Real Estate	76,405	217,602	221,459	256,787	510,718	525,108	514,290	517,937
<b>Farm Debt</b>	<b>48,501</b>	<b>162,432</b>	<b>131,116</b>	<b>163,930</b>	<b>278,931</b>	<b>315,332</b>	<b>356,738</b>	<b>389,965</b>
Real Estate	27,238	85,272	67,633	84,724	154,065	185,161	208,769	242,418
Non Real Estate	21,263	77,160	63,483	79,206	124,865	130,172	147,969	147,547
<b>Equity</b>	<b>230,322</b>	<b>837,990</b>	<b>709,493</b>	<b>1,039,285</b>	<b>1,891,902</b>	<b>2,460,777</b>	<b>2,552,915</b>	<b>2,684,904</b>
<b>Selected Indicators</b>								
Debt/Equity	21.1%	19.4%	18.5%	15.8%	14.7%	12.8%	14.0%	14.5%
Debt/Assets	17.4%	16.2%	15.6%	13.6%	12.8%	11.4%	12.3%	12.7%
Real Estate/Equity	87.9%	93.4%	87.3%	91.1%	87.7%	91.5%	93.8%	95.2%
Real Estate/Assets	72.6%	78.2%	73.7%	78.7%	76.5%	81.1%	82.3%	83.2%
Real Estate D/Total D	56.2%	52.5%	51.6%	51.7%	55.2%	58.7%	58.5%	62.2%

## Ag Sector Balance Sheet structure Issues

- Farmland represents 83% of farm assets, majority individually owned
- 40%+ of land leased to tenant. 60%+ row crops in major regions and increasing. Differences by crop and by owner type matter greatly.
- Low aggregate leverage (approx. 13% D/A) and RED lower share
- Absence of active **equity** market limits ability to make investments
  - Much of benefit of investment in conservation practices accrues to landowner
  - Difficult to monetize
  - Options to use lease contracts that recognize increased asset values of interest
- Early stage “financialization” and greater direct recognition of linkages

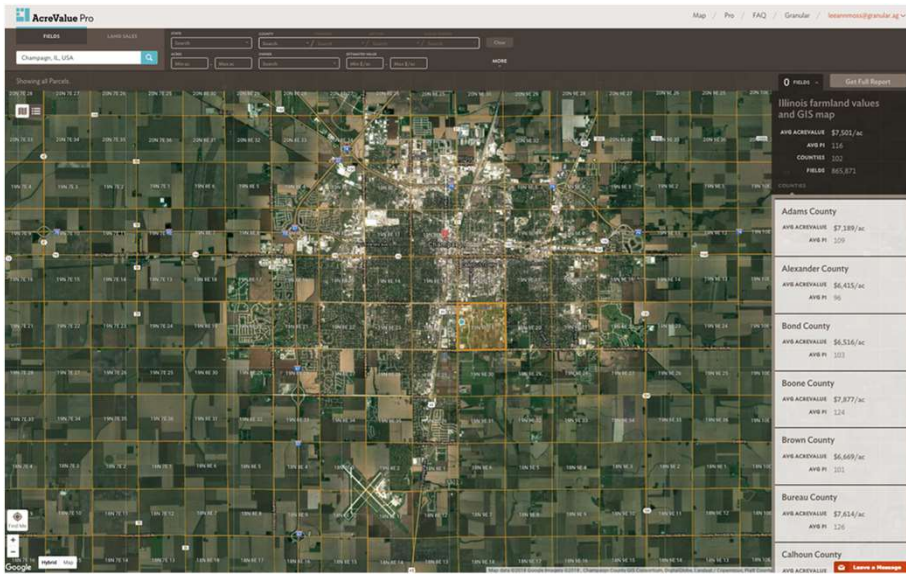
## Some factors and trends to consider—

- Rental shares increasing, largely to flex cash and related
- Financialization increasing, reporting requirements differ
- Societal concerns about ESG, food channel information, and production attributes increasingly transmitted to production level
- Lenders increasingly concerned about exposure
- Firms Actively engaging to avoid other risks
  - Ex: Head of Sustainability
  - Third party certifications
  - Responsible Investing Standards, Conservation Task Forces – defined practices and responsibilities to clarify intersections of “returns” vs. stewardship

## *Difficulties remain, but awareness and initial experiments*

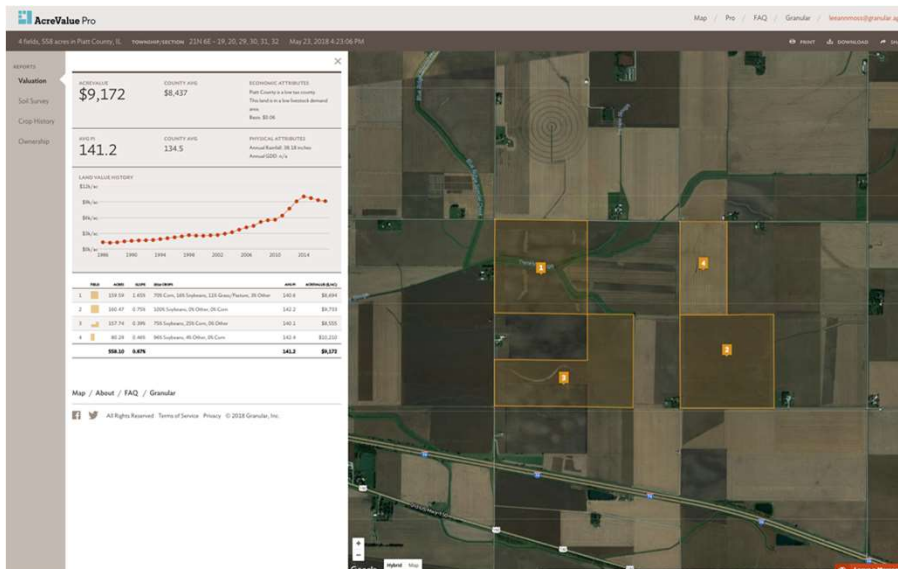
- Cover crops, pollinator, tillage strips – who pays, tenant impact?
- Rotation and tillage requirements for soil health – informal to formal
- BMP beyond crop insurance w/o violating management independence
- Edge of field investments and capturing externalities
- Shared Appreciation preferred shares
- Sustainable Farming Funds
- Rental payments that depend on CEC, organic matter, replacement+ beginning to emerge, limited usage.
- Technologies to better track and understand land markets exploding
  - AcreValue (rental marketplace potential) CDL uses improved, etc.

# Value Estimates and Soil Quality



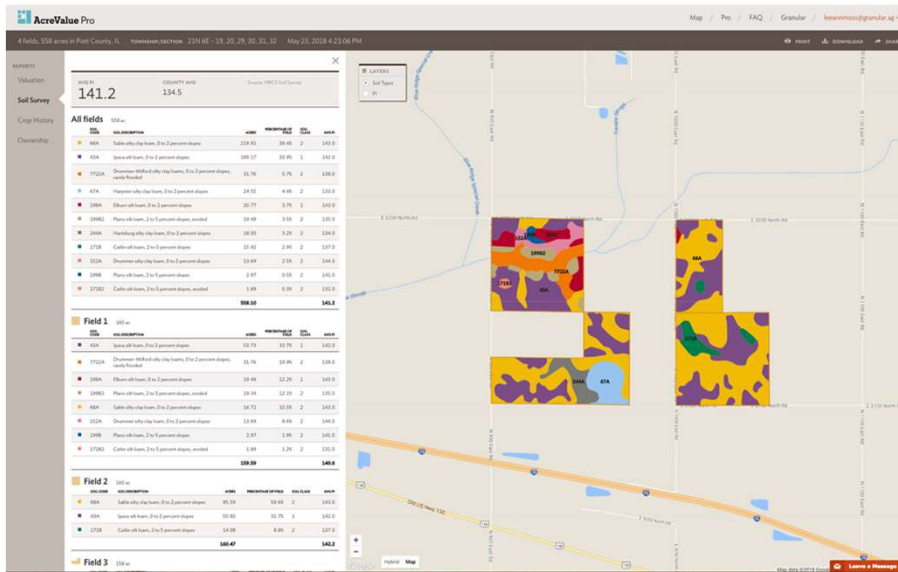
Factors Impacting Farmland Markets

# Comparing Four Nearby Fields



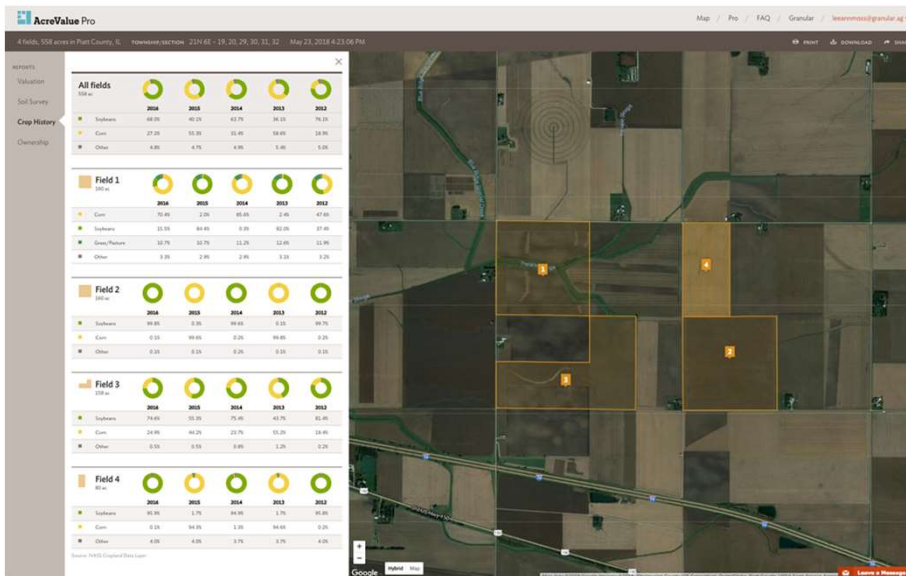
Factors Impacting Farmland Markets

# Soil Map and Productivity



Factors Impacting Farmland Markets

# Crop / Land Use History



Factors Impacting Farmland Markets