

# What's Ahead for Farmland Trends? How do Young Farmers Fit In?

Tomorrow's Top Producer Seminar

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## Agenda

- Where we are
- What might be ahead
- How do young farmers fit in?

## We Are

- In the midst of an almost unprecedented boom in farmland values
- In the midst of a substantial period of profitability for row-crop farming operations
- The above results are due to dramatic improvement in ag fundamentals
- Operating in a world full of risk

## In Real Terms, Today's Farmland Value Increases are on Par with those of the 70's

Region	Nominal Change Annualized Growth Rate	Real Change and Annualized Growth Rate
<u>Iowa</u>	-----Percent-----	
1971-1981	399	122
	17.4	8.3
2001-2011	248	176
	13.3	10.7
<u>Illinois</u>		
1971-1981	343	97
	16.1	7.0
2001-2011	149	97
	9.6	7.0
<u>Indiana</u>		
1971-1981	381	114
	17.0	7.9
2001-2011	104	62
	7.4	4.9

<sup>a</sup> Iowa farmland values from the Iowa State Farmland Survey (Duffy). Indiana, Illinois, and U.S. Values from National Agricultural Statistics Service. Real values calculated using the CPI index.

## What Drives Value?

- General idea of purchasing capital assets
  - Obtain the rights to future earnings for a price less than the real earnings that it will produce
- Capital asset values are determined by *EXPECTATIONS* of the level of future earnings and their present value
  - Earnings are difficult to forecast
  - Interest rates and inflation drive present values and are equally difficult to forecast

It is very difficult to know when expectations are misinformed

## A Simple Model of Farmland Values

The income capitalization model:

$$\text{Farmland Value} = \frac{\text{Income}}{\text{discount rate (\%)} - \text{growth rate (\%)}}$$

Important points:

↑ Income    →    land value    ↑  
 ↑ Discount rate    →    land value    ↓  
 ↑ Income growth rate    →    land value    ↑

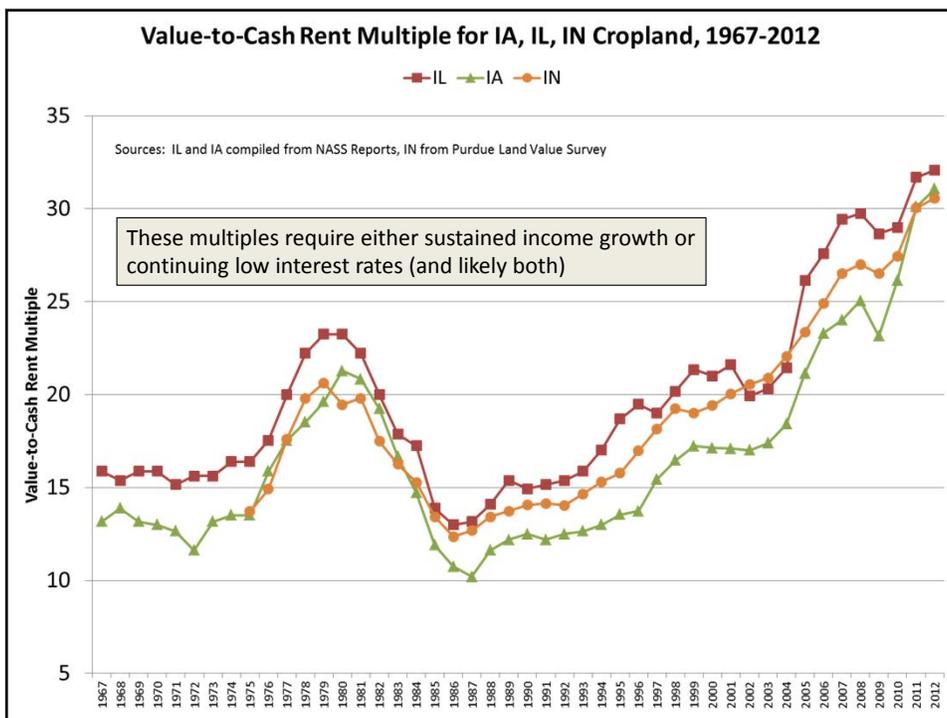
5% discount rate less 1% growth = 4% “cap rate”

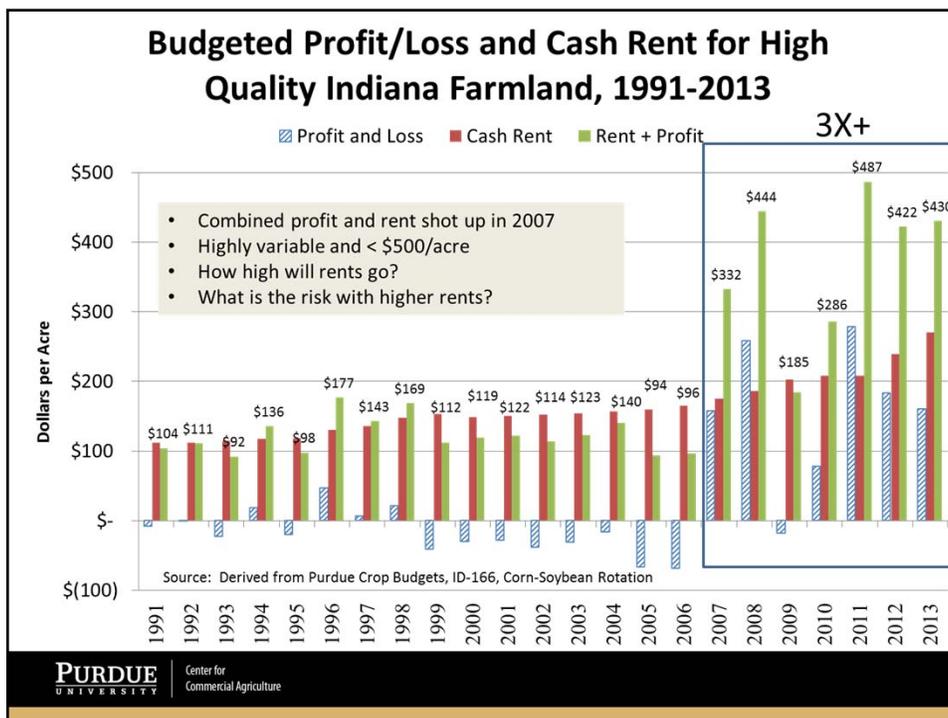
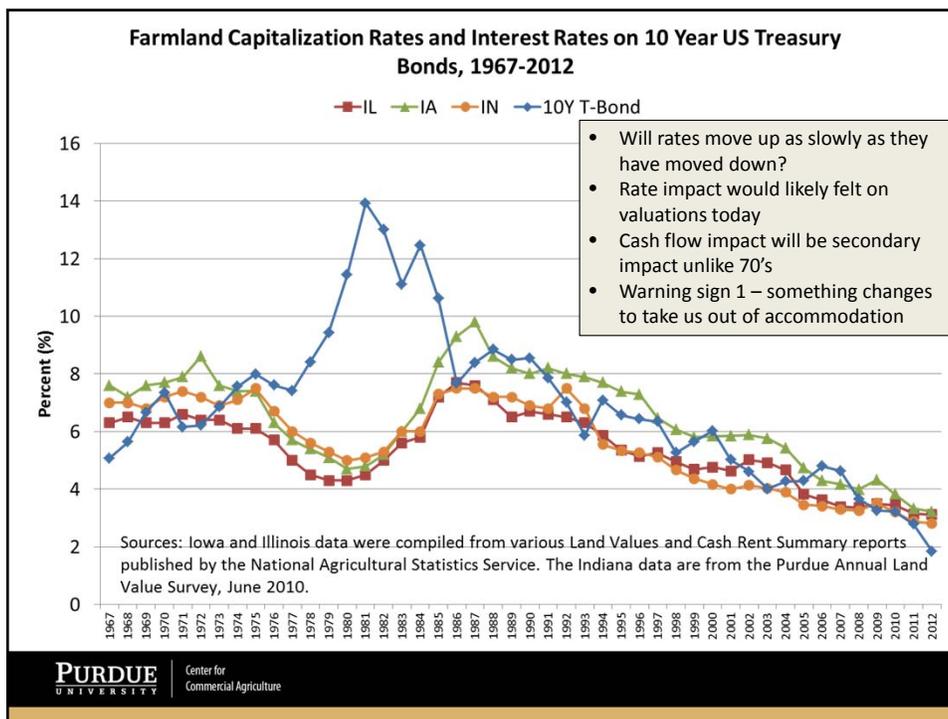
Cash rent multiple is the inverse of the cap rate (25 @4%)

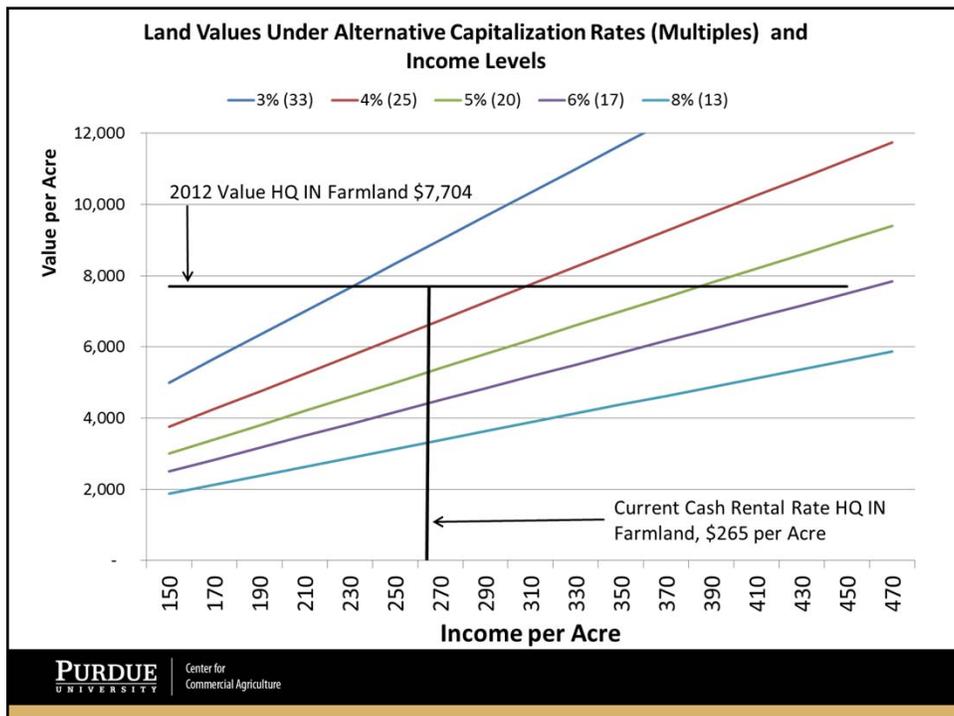
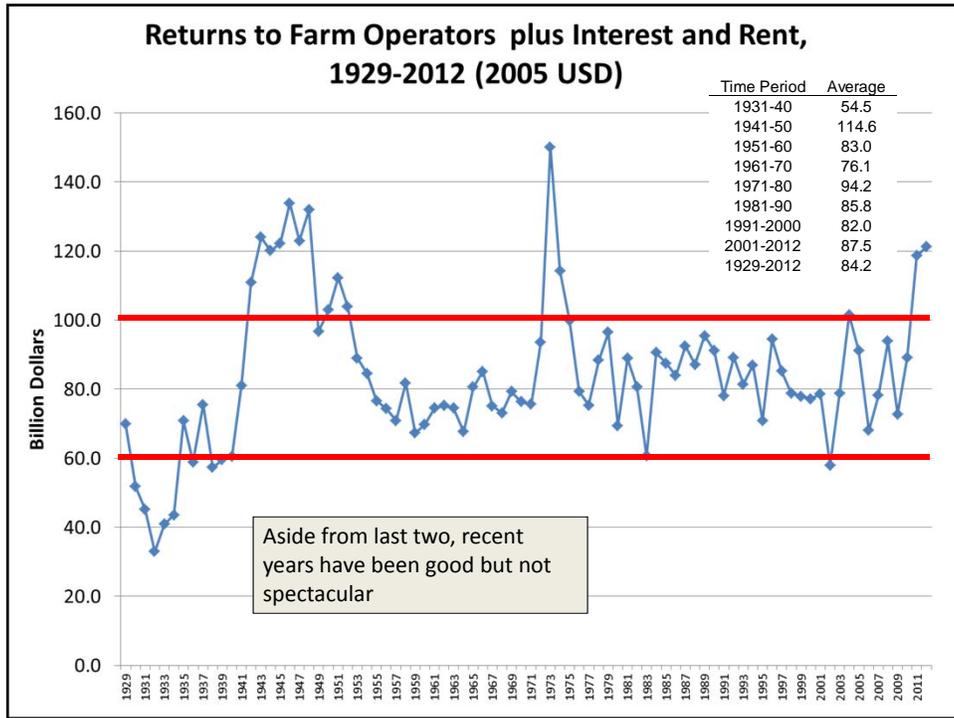
## Types of Shocks which Alter Farming Profitability

- Demand driven: Expansion of demand which calls for more output at all price levels
  - For example, biofuels and income growth and food demand in emerging markets
  - Persistent demand growth can substantially increase land values and capital investment
- Supply induced: Supply contraction where less is available at all price levels
  - Short-term weather shocks do not typically impact fixed asset values
  - Inability of supply to keep up with normal demand expansion. If true could lead asset value increases

Current situation is complicated by interaction of both impacts **and** extremely low interest rates which make future income more valuable







## Cap Rate Risk

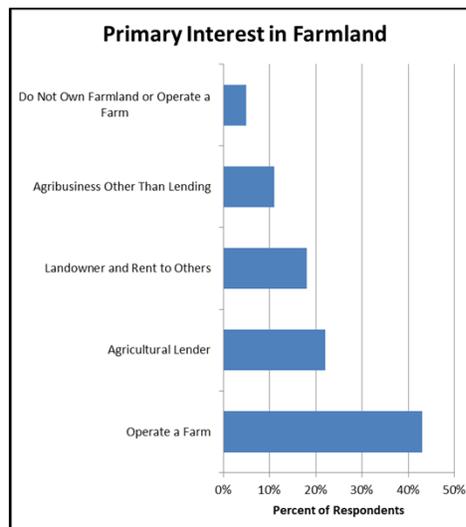
- Monetary policy change = cap rate ↑
- Economic recovery = cap rate ↑
- Inflation = cap rate ↑
- Increased volatility/risk = cap rate ↑
- Slowing income growth in ag = cap rate ↑

## What Do Landowners Think?

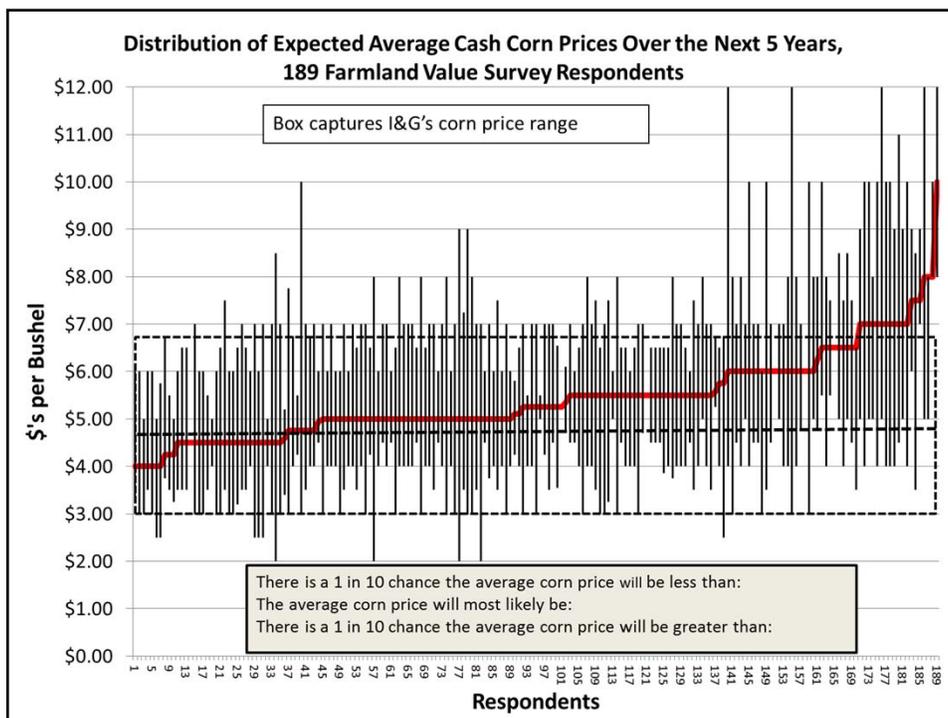
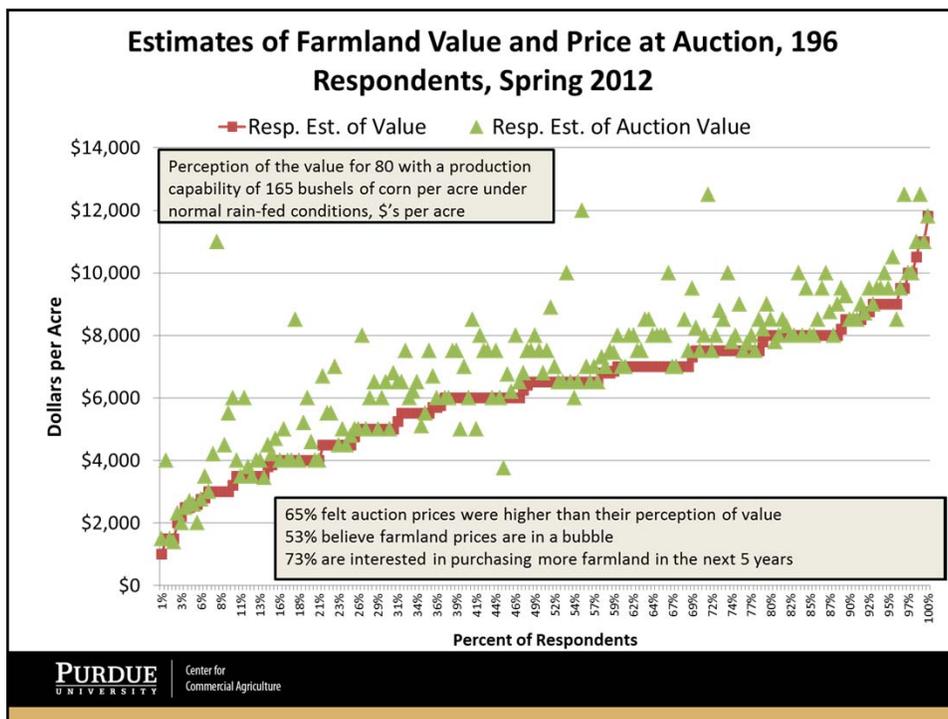
- Current values are dependent upon continuation of low interest rates and high farm returns over variable costs
- Conducted an internet survey in Spring 2012
  - What do farmland investors think about future
    - Farmland prices
    - Cash rents
    - Crop prices

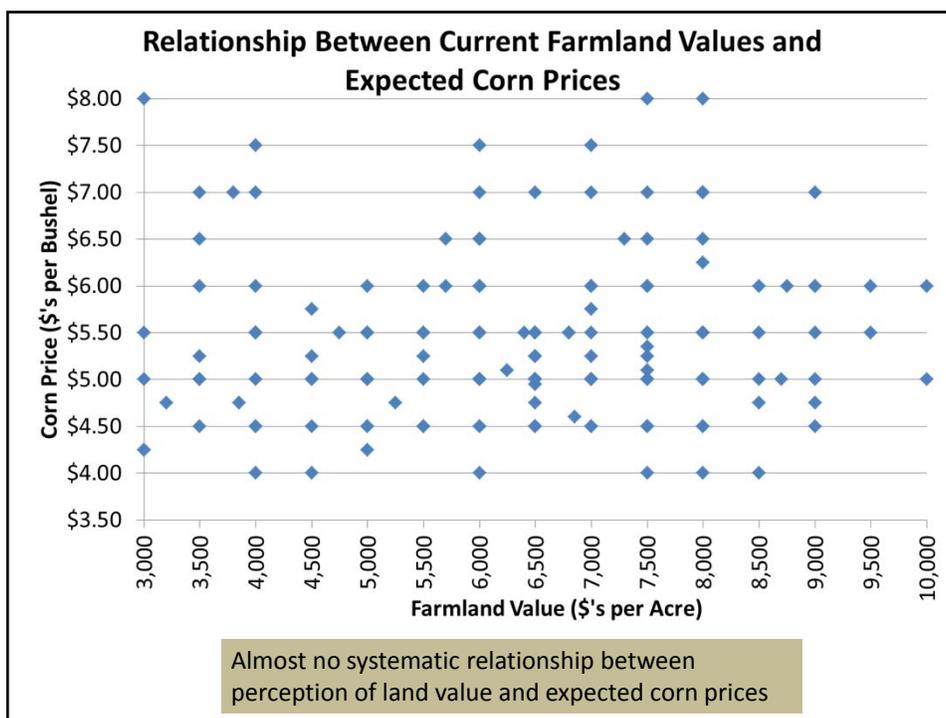
## The Respondents

- Individuals in CCA database with interest in farmland and farming
- 246 complete responses (28%)
- 73% owned farmland
- 74% want to purchase more farmland in the next 5 years
- Median acres
  - owned = 500
  - rented from others = 1,200
  - rented to others = 240



Respondents asked to consider:  
 80 Acres of Farmland with a production capability of 165 bushels of corn per acre under normal rain-fed conditions





## Final Thoughts

- Tremendous volatility in the ag marketplace
- For crop farmers it has been all favorable
  - How good are you at managing risk? (It has been easy so far)
  - How exposed are you to other's risk management activities? Volatility creates winners and losers
  - How are you managing costs?
  - What about non-land capital investment?
  - When need for operating capital comes it will be substantial and much larger than before the boom

## Final Thoughts

- Times in row-crop are very good
  - It is conceivable they could get better
  - It is also conceivable they could be worse
  - It is very difficult to predict what takes us out of this cycle, but credit can magnify the outcome either way
- How favorable is the current risk/return tradeoff for farmland?

## What Does it Mean for Young Farmers?

- DO invest in:
  - Operational excellence
  - Building management capacity
  - Building knowledge of the economics of your business
  - Building relationships
  - Assets that have the highest return
- Don't:
  - Misallocate scarce capital – (overpay for fixed assets or buy at any cost)
  - Bank on the next five years being as profitable as the last five

## Overall Financial Lessons

### **Basic Financial Observations**

- Do not be afraid of debt or avoid at all costs
- Use debt in moderation
- Understand the economics of your business
- Cash flow determines value
- Do not be paralyzed by analysis and complication
- Take good opportunities when they are available

## Basic Financial Observations

- Avoid proposed opportunities where proposer has only upside (align incentives)
- Address financial trouble early and honestly
- Clearly understand risk and return trade-offs
- Don't underestimate the power of compound growth and long-term savings/investing

## Basic Financial Observations

- Seek advice, but take responsibility for making your financial future
- Invest in yourself
- Invest in those around you