

# **Indiana Farmland Values and Cash Rents Continue Downward Adjustments**

**Craig Dobbins, Professor & Extension Economist**

**Michael Langemeier, Professor, Center for Commercial Agriculture**

**Mike Boehlje, Professor, Center for Commercial Agriculture**

**PURDUE**  
UNIVERSITY

Center for  
Commercial Agriculture

Indiana Farmland Values Webinar  
August 17, 2016

# Land Values

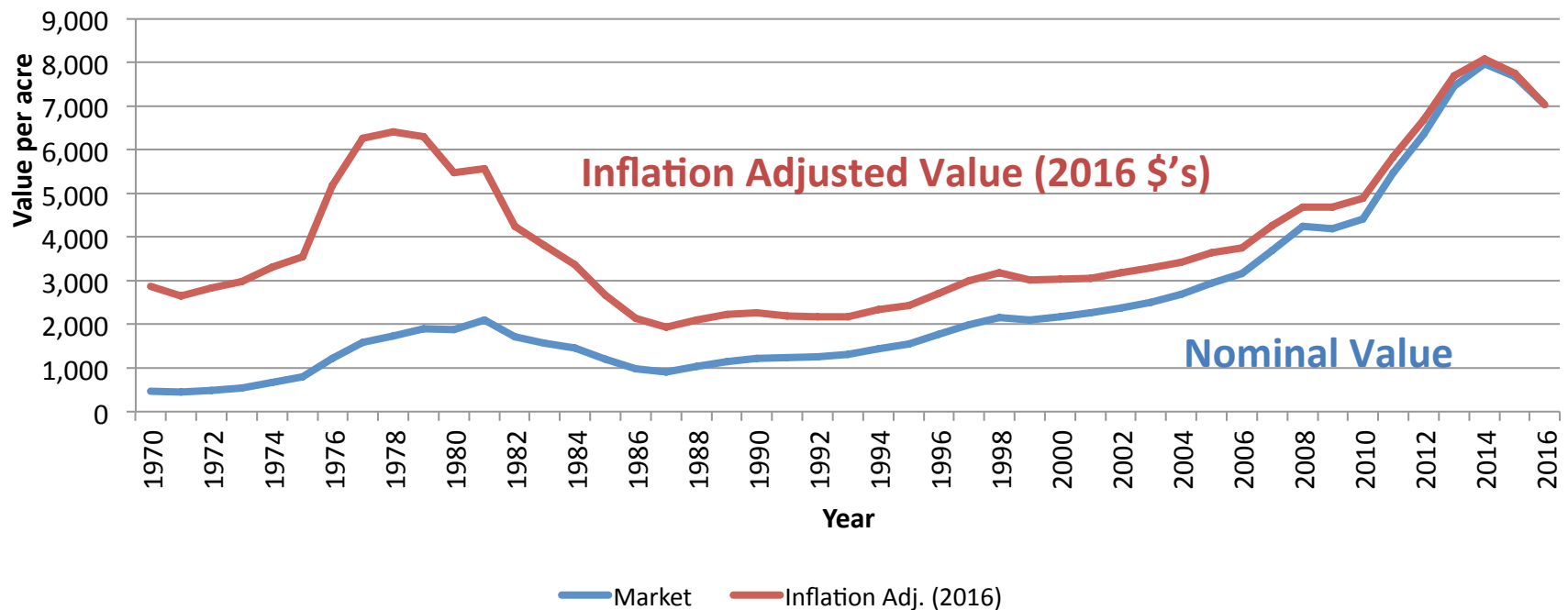
# Purdue Farmland Value Survey Process

- Survey conducted annually since 1970
  - Rural Appraisers, Ag Lenders, Farm Managers, Farmers
- Ask for land values in
  - December '15, June '16, and December '16
  - Responses for top, average, and poor quality land
- Ask for current cash rent
- Ask for long-term corn yield to garner productivity information

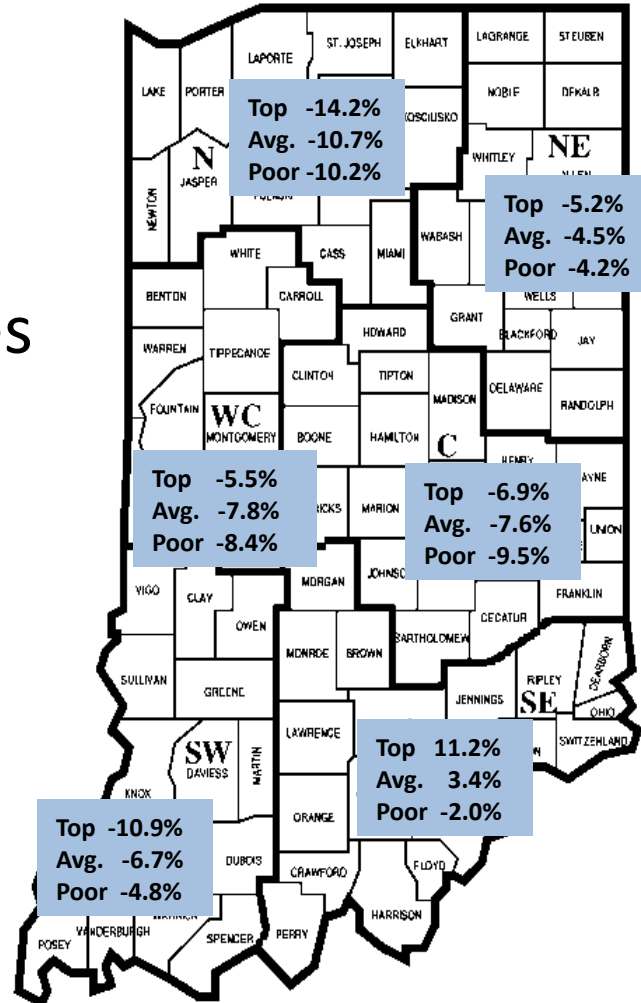
# Indiana Farmland Values 2016 Survey Results

Land Quality	Yield (Bu./A)	Value (\$/A)		Percent Change
		2015	2016	
Top	198	\$9,266	\$8,508	-8.2%
Average	166	\$7,672	\$7,041	-8.2%
Poor	134	\$5,863	\$5,353	-8.7%

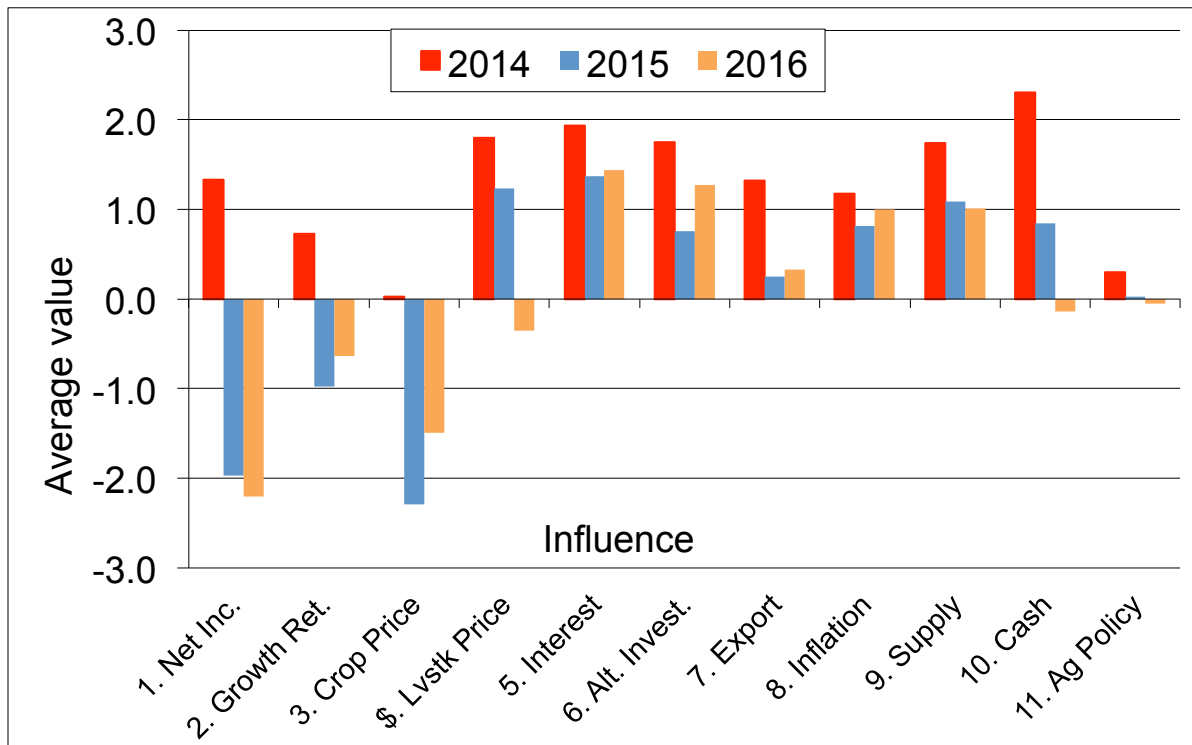
# Indiana Farmland Values 1970 – 2016, Average Quality Land



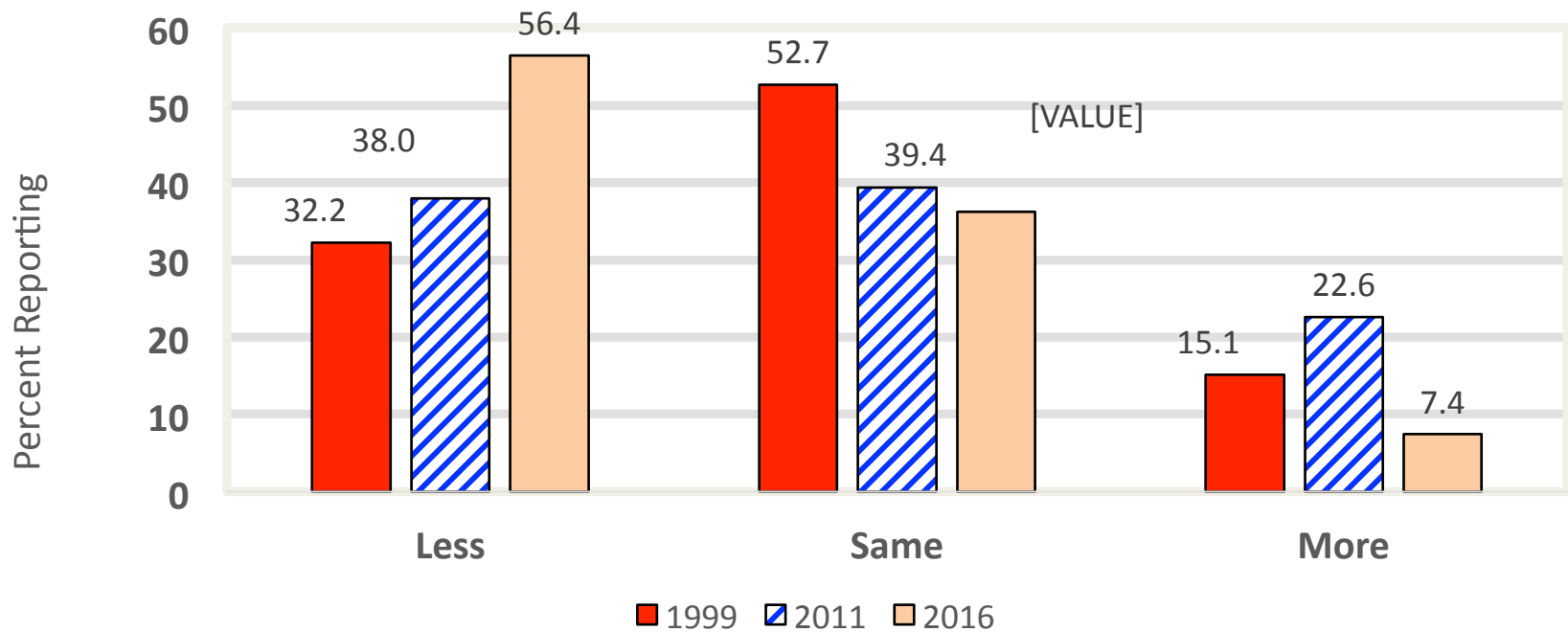
# Regional Farmland Value Changes



# Survey Respondents View of Land Value Drivers



# Land on Market Today Compared to Year Ago





## 2016 Land Value Change Actual and Forecast

Land Quality	12/2015 – 6/2016 (Actual)	6/2016 – 12/2016 (Forecast)
Top	-5.2%	-1.9%
Average	-4.6%	-2.2%
Poor	-5.6%	-2.1%

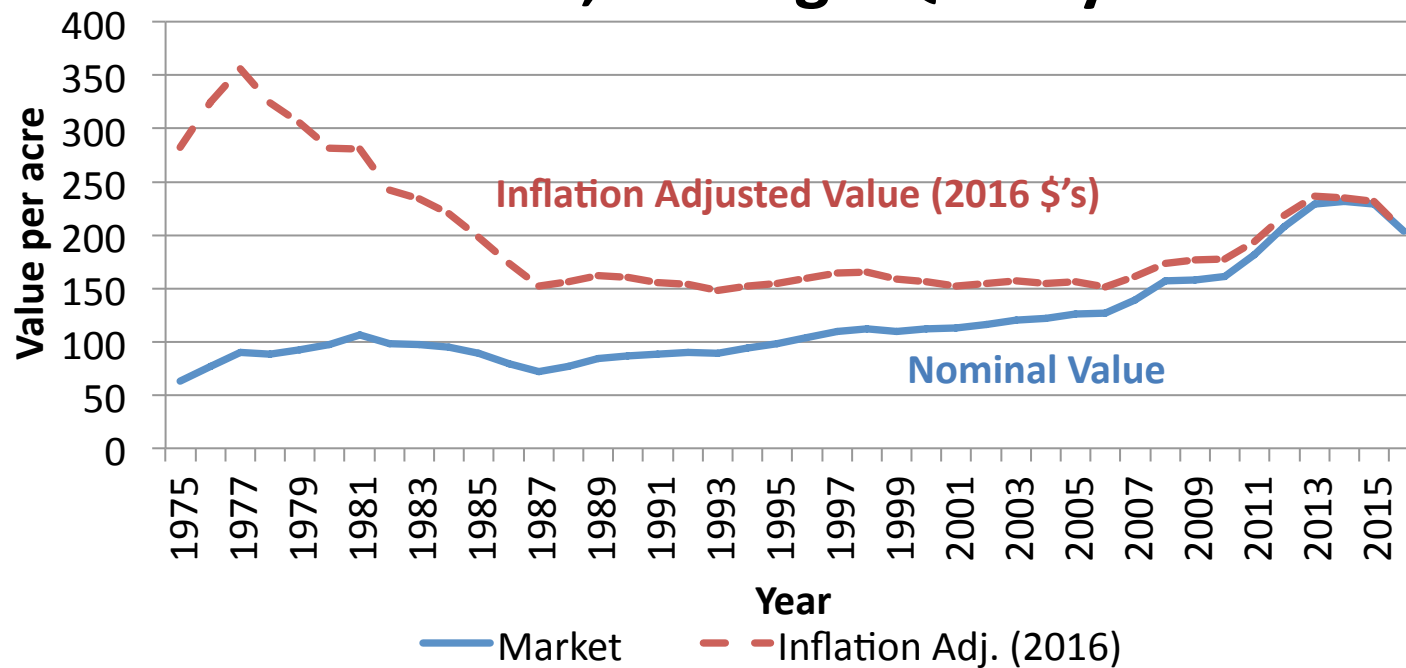
# Cash Rents

# Indiana Cash Rent 2016 Survey Results

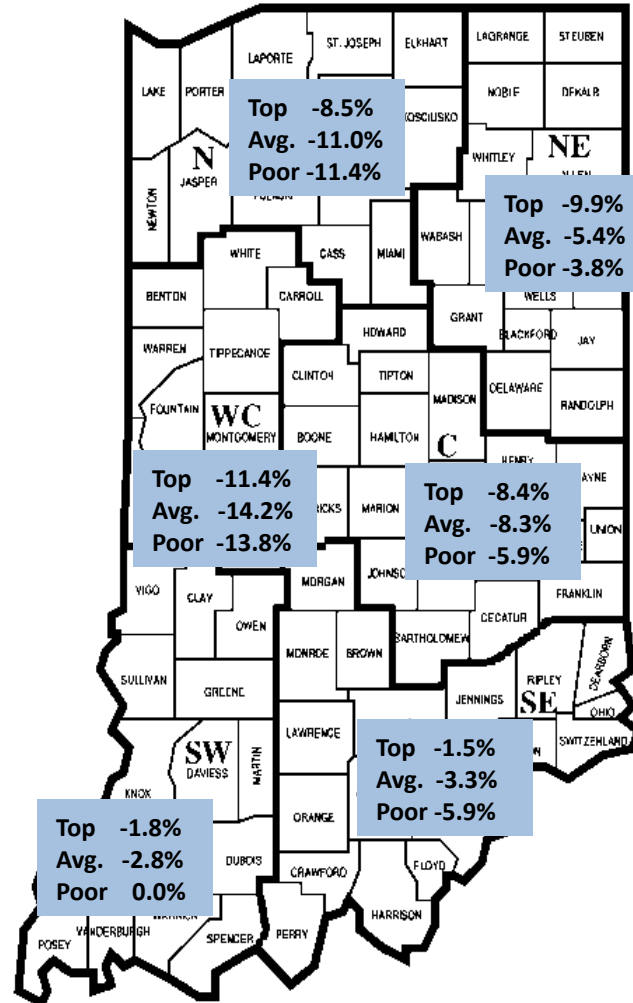
Land Quality	Yield (Bu./A)	Value (\$/A)		Percent Change
		2015	2016	
Top	198	\$285	\$257	-9.8%
Average	166	\$229	\$204	-10.9%
Poor	134	\$175	\$157	-10.3%

# Indiana Farmland Cash Rent

## 1975 – 2016, Average Quality Land



# Regional Farmland Cash Rent Changes



# Short-Term Expectations

- Cash Rent in 2017

Change	% Respondents	Average % Change
Higher	3%	8.8%
No Change	40%	0.0%
Lower	57%	-8.3%

# Cash Rents and Land Values in the Corn Belt

- Iowa (2013 to 2016)
  - Cash rents declined 15%
  - Land values declined 25%
- Illinois (2013 to 2015)
  - Cash rents declined 12%
  - Land values declined 17%
- Indiana (2014 to 2016)
  - Cash rents declined 12%
  - Land values declined 12%

# Long-Term Expectations

## Cash Rent and Land Values



# Possible Pressures on Cash Rents and Land Values

- **Cash Rents**
  - Relatively low earnings for corn and soybeans
- **Land Values**
  - Decline in cash rent
  - Increase in long-term interest rates
  - Increase in inflation
  - Increase in risk premium for the farming sector
  - Relatively high P/rent ratio

# Income – Value Link

$$\text{Farmland Value} = \frac{\text{Farmland Income}}{\text{Capitalization Rate (\%)} - \text{Income Growth Rate (\%)}}$$

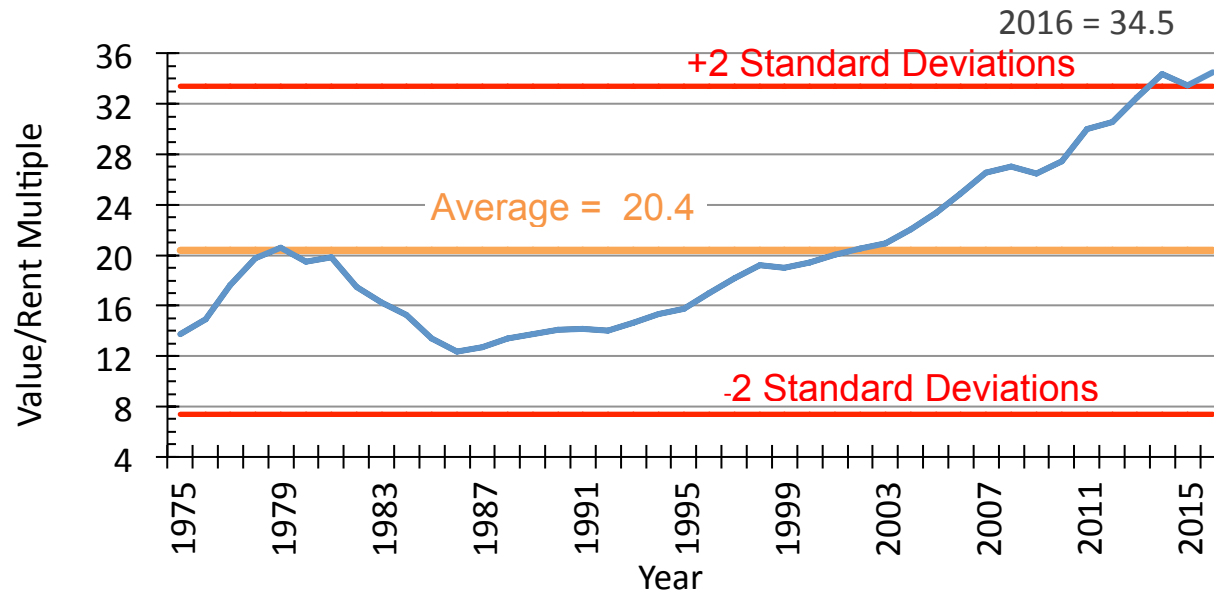
Income = net return to farmland ownership

Capitalization rate = interest rate & risk premium

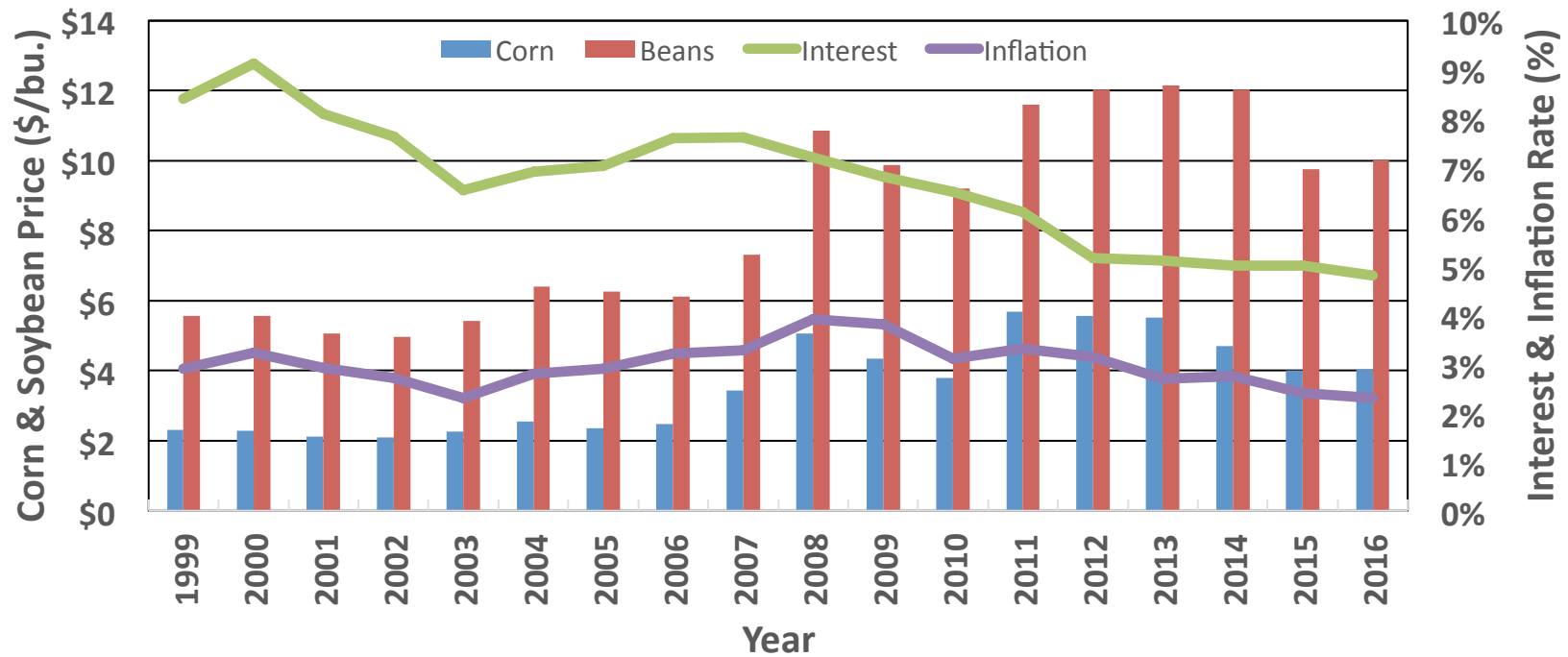
Growth rate = growth rate in farmland value income

$$\frac{\text{Farmland Value}}{\text{Farmland Income}} = \frac{1}{\text{Capitalization Rate (\%)} - \text{Income Growth Rate (\%)}}$$

# Land Value to Income Multiplier 1975-2016, Average Quality Land



## 5-Year Expected Average Values for Corn, Soybeans, Interest Rates & Inflation, By Survey Year



# 5-Year Forecast By Survey Respondents

Where do you expect farmland prices to be in 5 years?

Direction	% Respondents	Change
Increase	35%	7.6%
No change	29%	0.0%
Decrease	36%	-9.5%
<b>Overall</b>	<b>100%</b>	<b>-1.0%</b>

# Summary

- Indiana farmland values declined 8.2% to 8.7% from June '15 to June '16 – Second year of decline
- Declines of 1.9% to 2.2% are expected in last half of 2016
- Over the next 5-years, respondents expect Indiana farmland values to decline 1% but there are significant differences of opinion
- Cash rents declined 9.8% to 10.9% in 2016
- 2017 rents flat or lower

# Summary

- The value-to-income multiple remains at historic high of 34.5
- Strengths of farmland market
  - Interest rates, good investment, supply, inflation expectations
- Weaknesses of farmland markets
  - Farm incomes, commodity prices, cash position

**To read the full report  
Visit Our Web Site by typing  
Purdue Center for Commercial Ag  
in your search engine**

**PURDUE**  
UNIVERSITY

Center for  
Commercial Agriculture

Indiana Farmland Values Webinar  
August 17, 2016



**Join Us for our next Webinar on  
August 23, 2016; 10:00 am EDT**

**Putting a Value on Sweat Equity  
in the Farm Business**

**PURDUE**  
UNIVERSITY

Center for  
Commercial Agriculture

Indiana Farmland Values Webinar  
August 17, 2016