

2015 Crop Insurance Decisions

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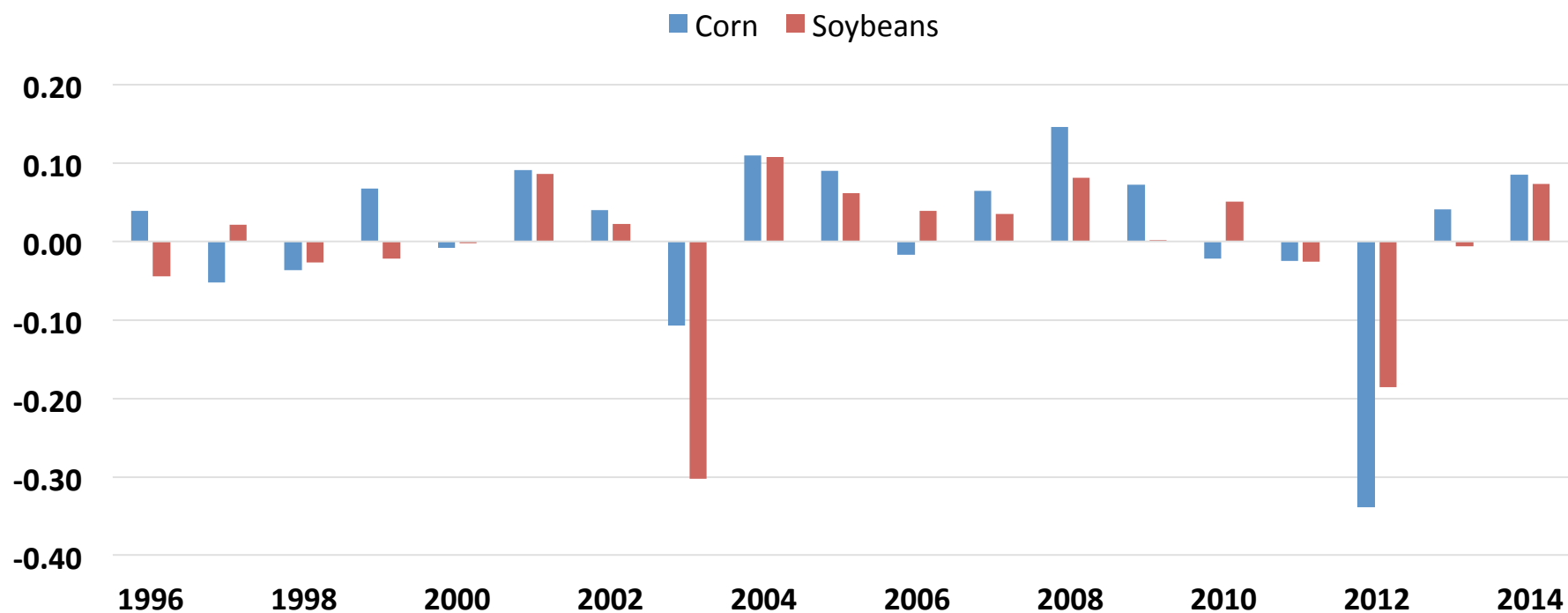
Outline of Presentation

- Crop Revenue Risk
- Crop Insurance Products
- Yield and Revenue Guarantees
- Example

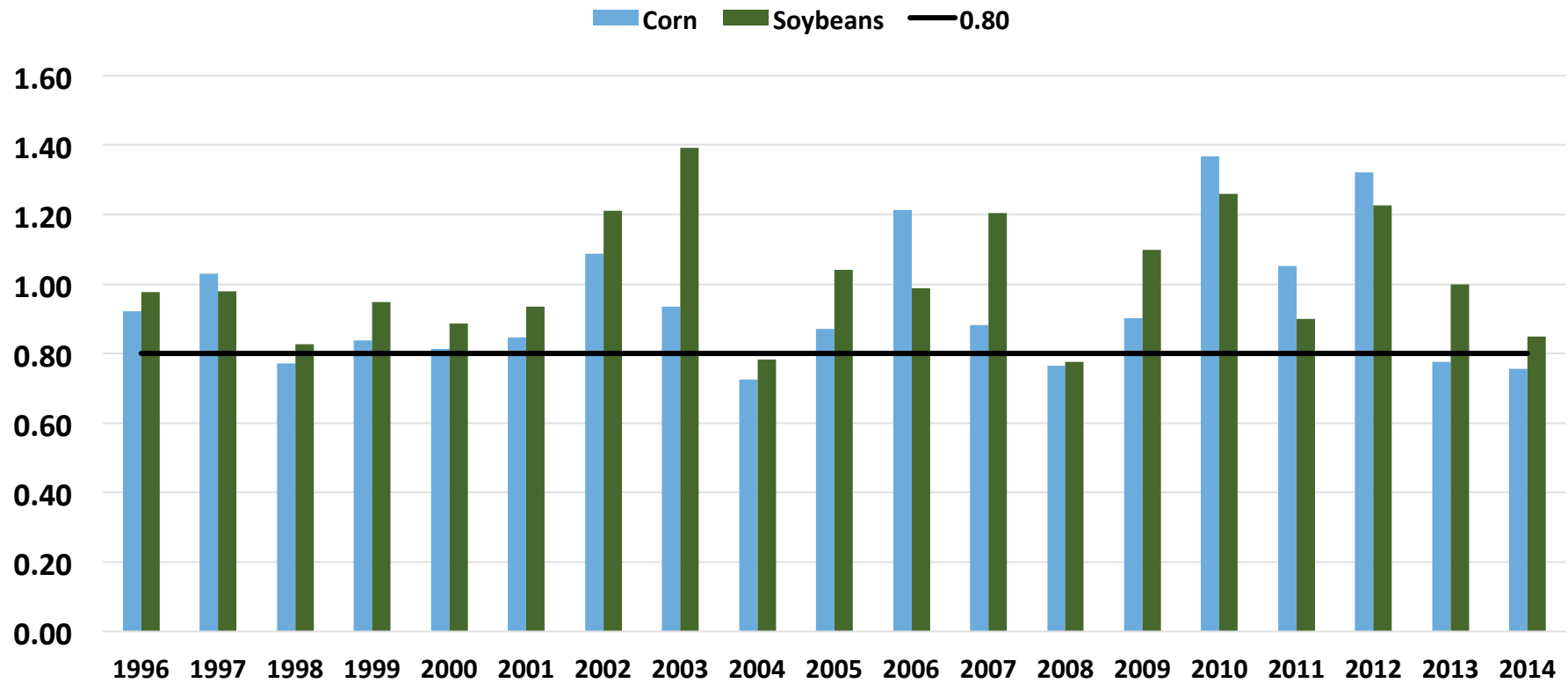
Crop Revenue Risk

- Crop revenue risk can result from:
 - Price variability
 - Yield variability
 - Relationships between price and yield

Annual Deviations from Trend Yields White County, Indiana



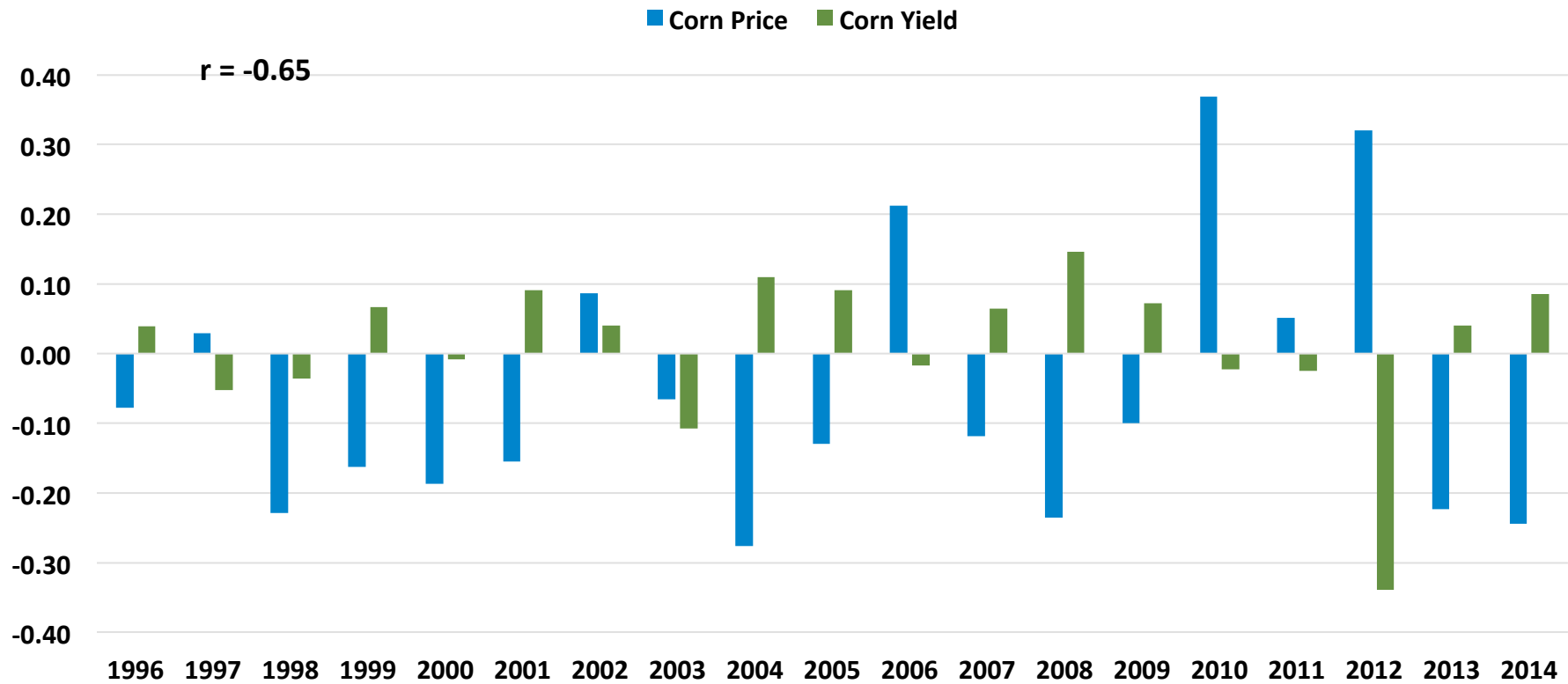
Ratio of Harvested to Projected Crop Insurance Prices



Crop Revenue Risk

- In the Corn Belt, price and yield tend to move in opposite directions (i.e., negatively correlated)
- This effect is referred to as the “natural hedge”
- The negative correlation between price & yield reduces revenue risk on Corn Belt farms

Deviations in White County, IN Corn Prices and Yields



Crop Insurance Products

Definitions

➤ Basic Units

- ❖ All of one crop in a county for a specific share of production
 - ❖ All owned and cash rent land for one crop in one county is a basic unit
 - ❖ Each share rent landowner arrangement would be a separate basic unit

➤ Optional Units

- ❖ Divisions of basic units based on township section

➤ Enterprise Units

- ❖ Addition of all basic units in one county for a single crop

Potential Products

- **Yield Policies**

- AYP = area yield protection
 - Insures against county-wide production loss (based on county yield)
 - Policy protection = dollar amount of protection per acre x net acres
 - 70 to 90% coverage levels
- YP = yield protection
 - Insures against production loss (based on individual farm yield)
 - Yield protection guarantee =
APH approved yield x coverage level x projected price
 - 50 to 85% coverage levels

Potential Products

- **Revenue Policies**

- ARPwHPE = area revenue with harvest price exclusion
 - Insures against county-wide revenue loss (based on county revenue)
 - Policy protection = county yield x coverage level x projected price
 - 70 to 90% coverage levels
- RP-HPE = revenue protection with harvest price exclusion
 - Insures against revenue loss due to decrease in price, low yield, or combination of these (based on individual farm revenue)
 - Revenue protection guarantee =
APH approved yield x coverage level x projected price
 - 50 to 85% coverage levels

Potential Products

- **Revenue Policies - continued**

- ARP = area revenue protection
 - Insures against county-wide revenue loss (based on county revenue)
 - Policy protection = county yield x coverage level x greater of projected price or harvest price
 - 70 to 90% coverage levels
- RP = revenue protection
 - Insures against revenue loss due to increase or decrease in price, low yield, or combination of these (based on individual farm revenue)
 - Revenue protection guarantee = APH approved yield x coverage level x greater of projected price or harvest price
 - 50 to 85% coverage levels

Definitions

➤ Projected Price

- ❖ Based on settlement prices for futures contracts during February
- ❖ 2013: Corn = \$5.65 and Soybeans = \$12.87
- ❖ 2014: Corn = \$4.62 and Soybeans = \$11.36
- ❖ **2015: Corn = approx. \$4.20 and Soybeans = approx. \$9.85**

➤ Harvest Price

- ❖ Based on settlement prices for futures contracts during October
- ❖ 2013: Corn = \$4.39 and Soybeans = \$12.87
- ❖ 2014: Corn = \$3.49 and Soybeans = \$9.65

Yield and Revenue Guarantees

Crop Insurance Guarantees

- **Yield Protection**

- Trend Adjusted Yield = 178
- Yield Guarantee = $178 \times 0.80 = 142.4$

- **Revenue Protection**

- Projected Price = \$4.20
- Revenue Guarantee = $178 \times 4.20 \times 0.80 = \598

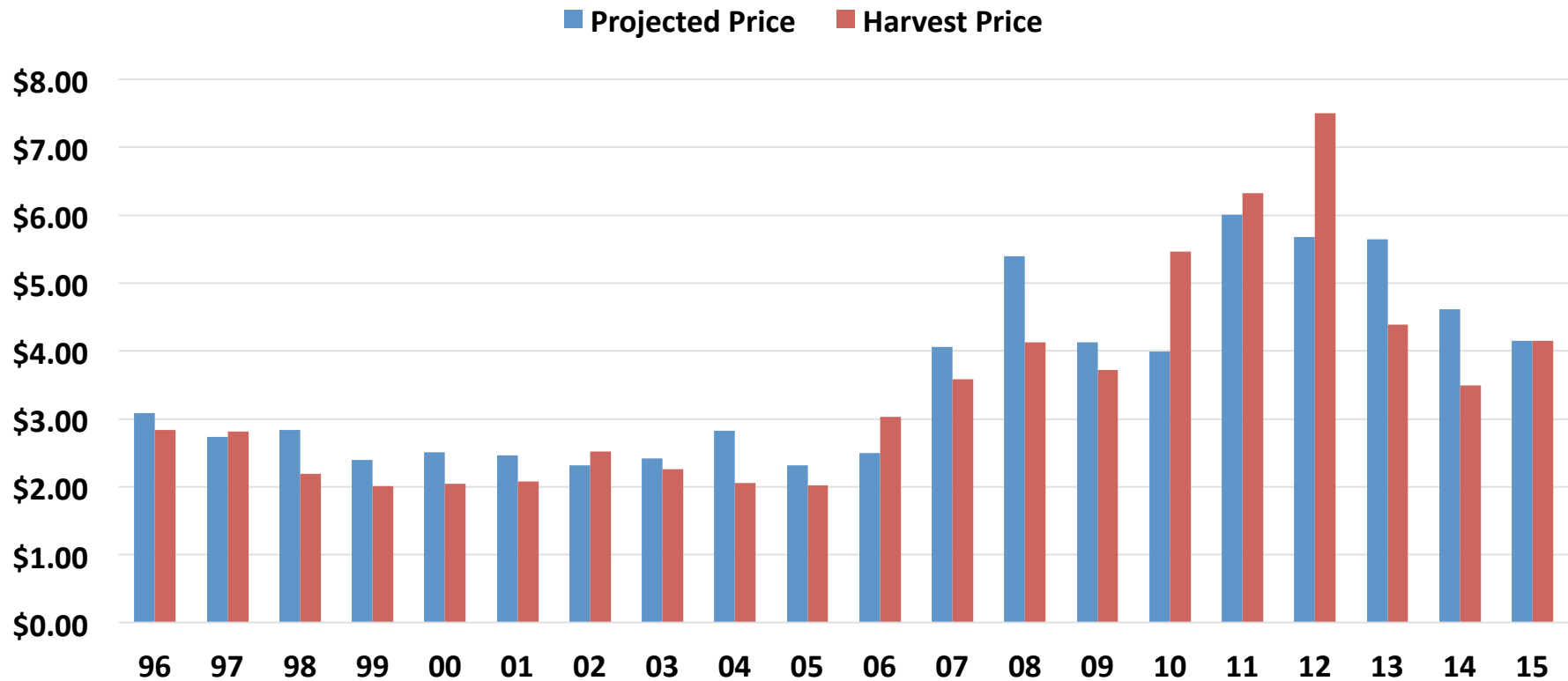
Crop Insurance Example

White County, IN

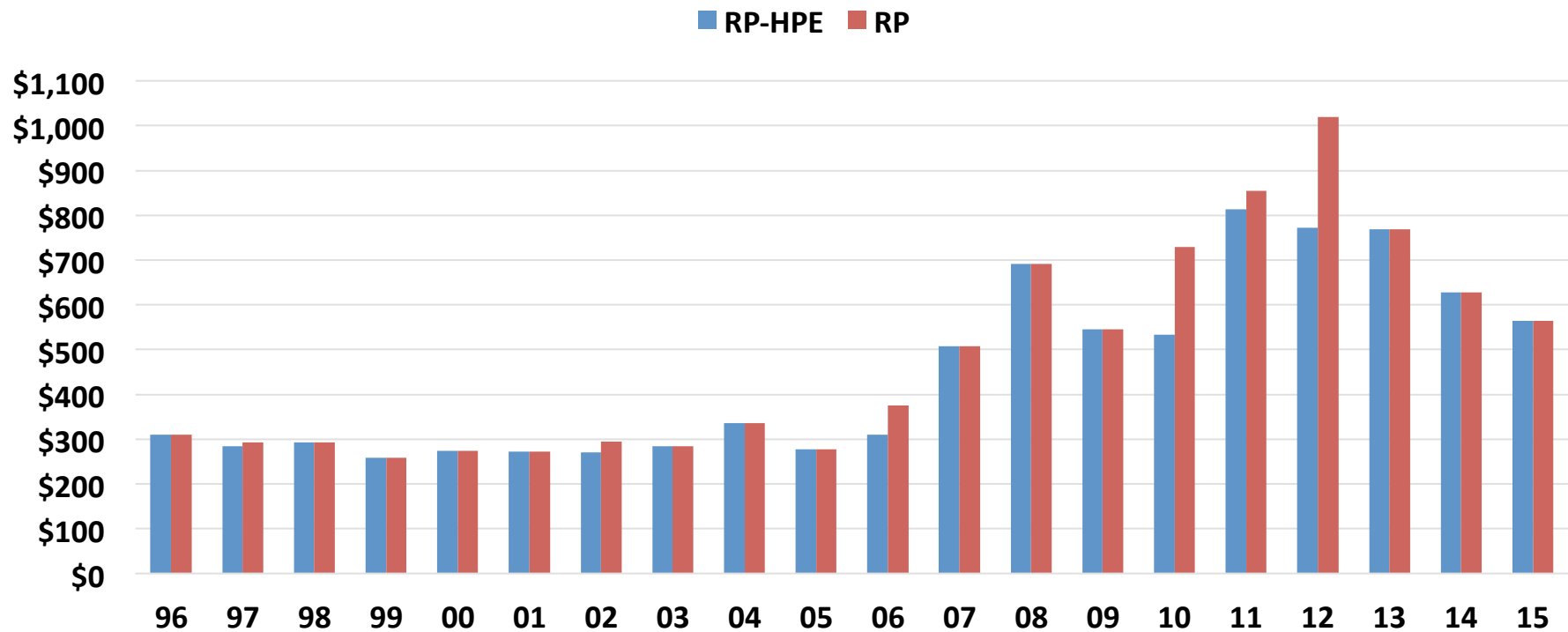
University of Illinois Web Site

- FAST Tools – farmdoc
 - www.farmdoc.illinois.edu/fasttools

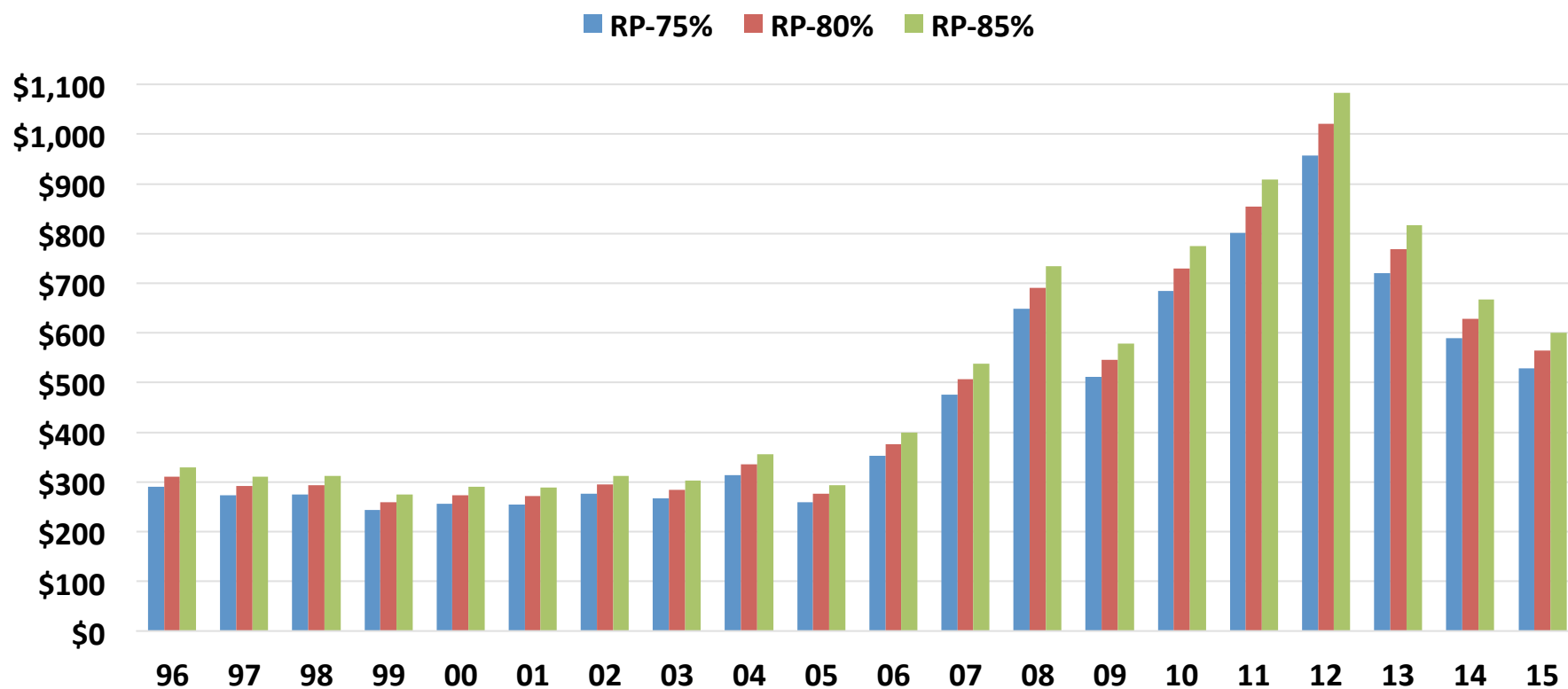
Projected and Harvest U.S. Corn Prices, Revenue Protection Products



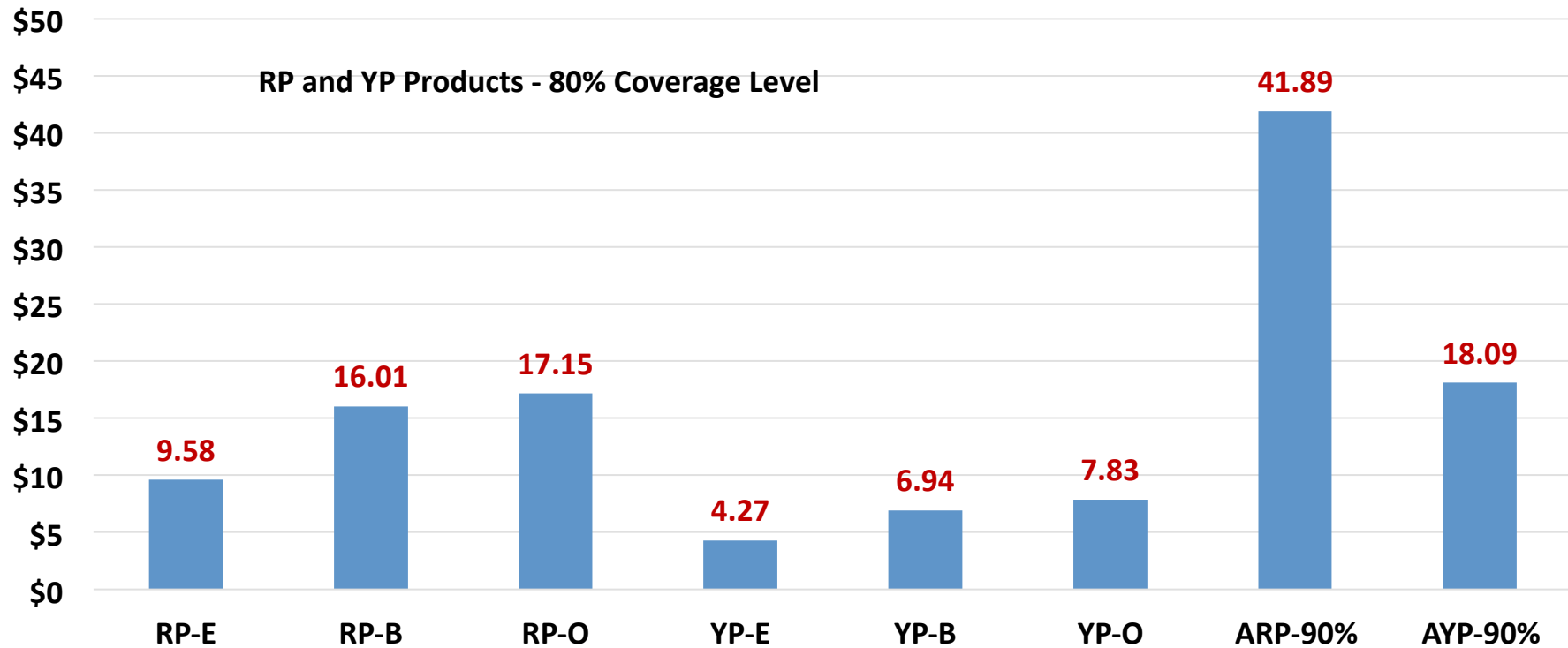
Revenue Protection Guarantees, 80% Coverage Corn in White County, IN



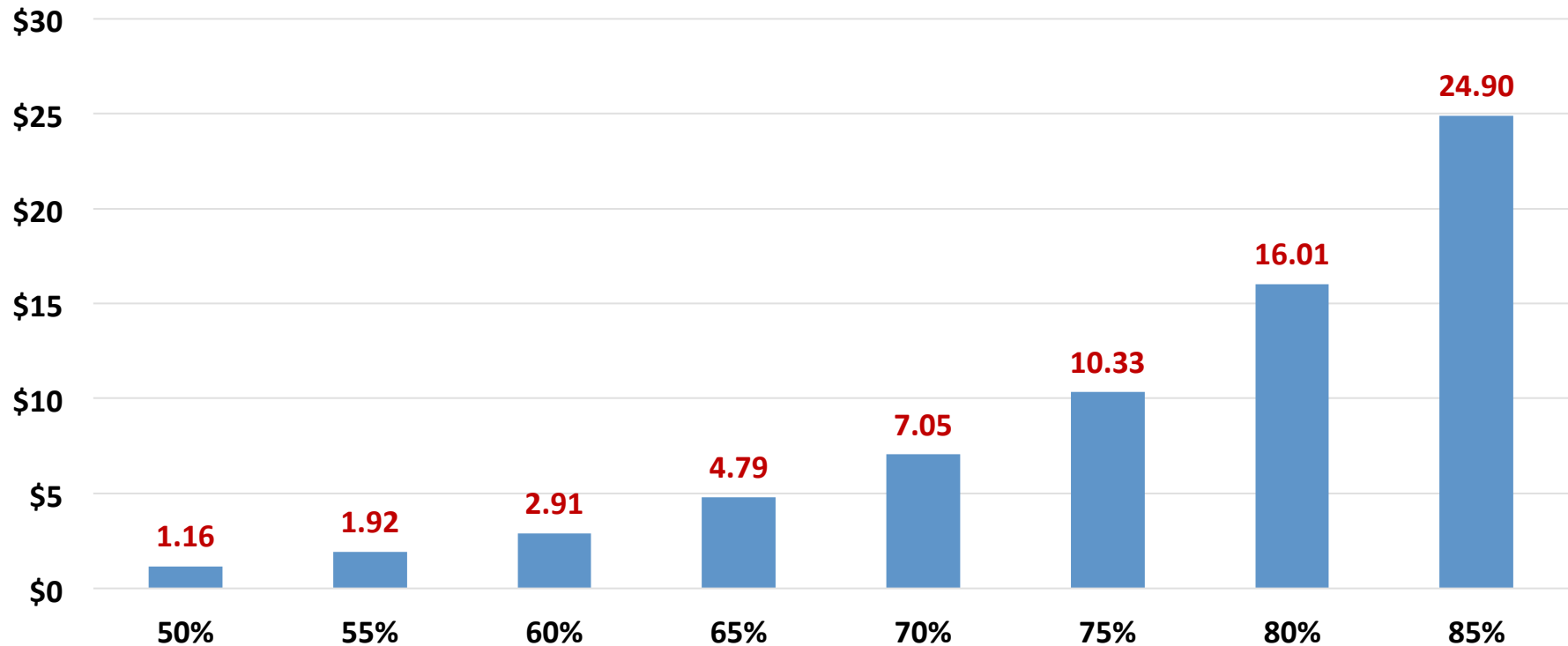
Revenue Protection Guarantees, Corn in White County, IN



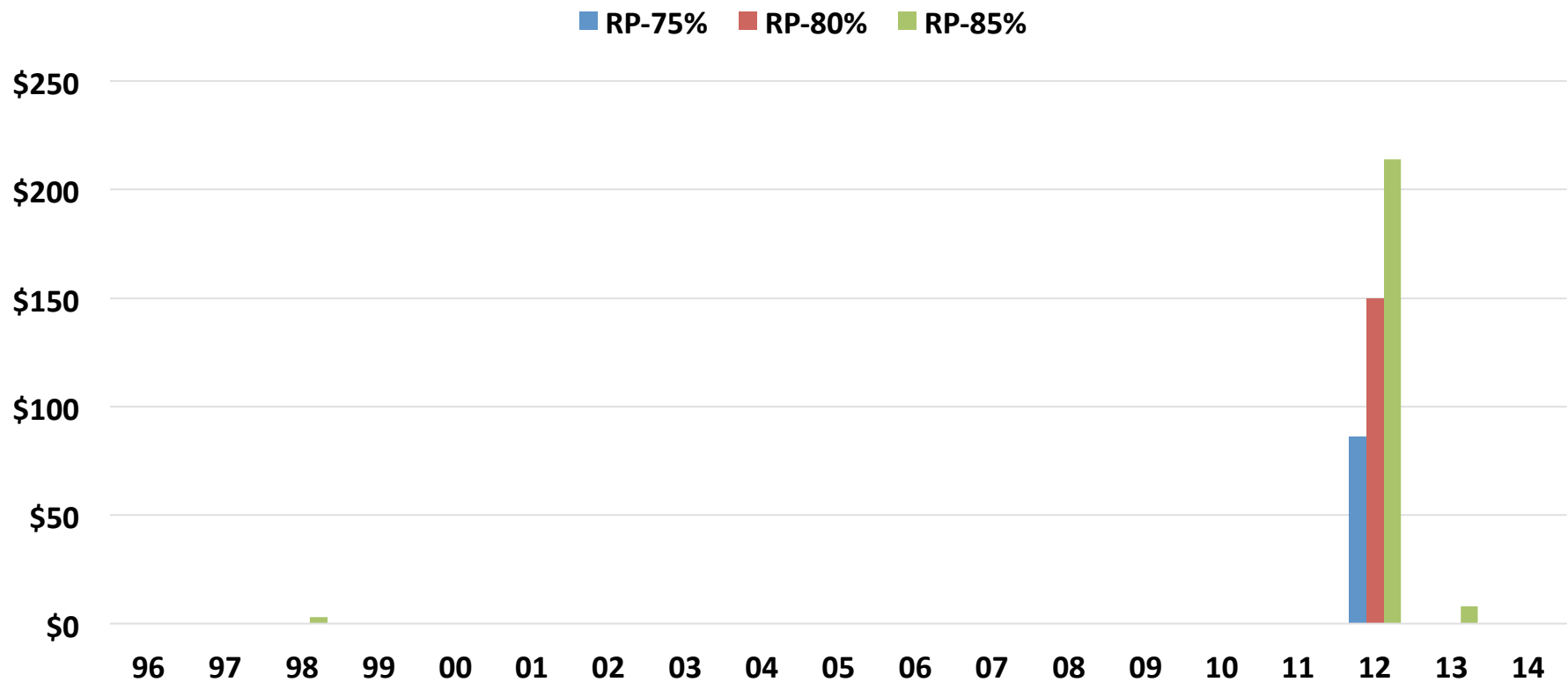
2015 Crop Insurance Premiums, Various Products Corn in White County, IN



2015 Crop Insurance Premiums, Revenue Protection Coverage Levels Basic Units, Corn in White County, IN



Estimated Payouts, Revenue Protection Products, White County, IN Corn



iFarm Crop Insurance Payment Evaluator

- **Case Farm Information**
 - Average Yield = 178 & 10% of years with yields below 151
- **Frequency of Payment**
 - YP at 80% Coverage Level = 8.9%
 - RP at 80% Coverage Level = 19.5%
- **Estimated Net Average Cost of Insurance**
 - YP at 80% Coverage Level = (1.66)
 - RP at 80% Coverage Level = (3.59)