

MAKING YOUR 2023 CROP INSURANCE DECISION PODCAST

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Center for Commercial Agriculture

Key Crop Insurance Terms

✓ Crop Insurance Units:

1. Enterprise: addition of all basic units in one county for a single crop
2. Basic: all of one crop in a county for a specific share of production is insured separately
3. Optional: each farm and crop is insured separately

✓ Revenue Protection:

1. Insures against revenue loss due to change in price, low yield, or combination of these two items (based on individual farm revenue)
2. Revenue protection guarantee =
Trend Adjusted or APH approved yield **X** coverage level **X** greater of projected price or harvest price

✓ Projected Price:

- Based on settlement prices for future contracts during February

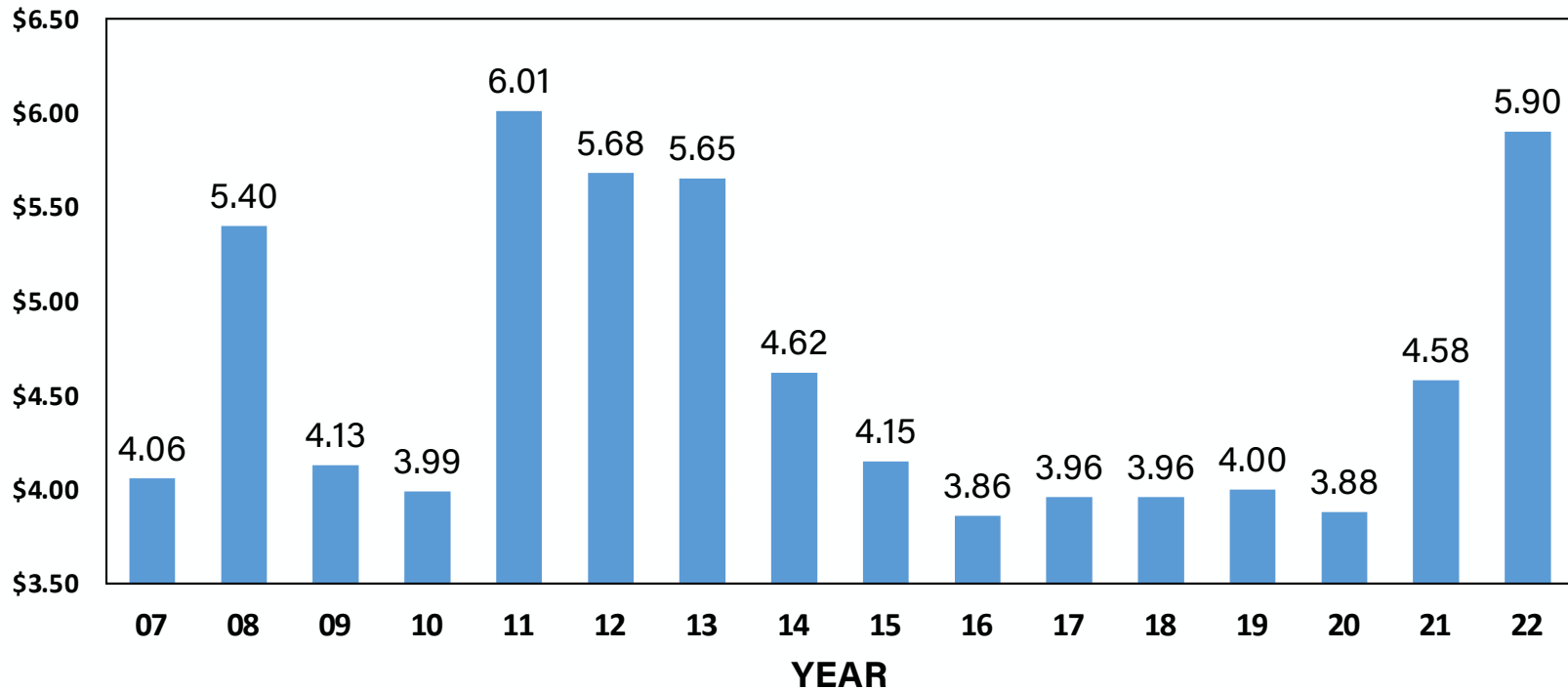
✓ Harvest Price:

- Based on settlement prices for futures contracts during October

2023's Price Guarantee Won't Be Available Until March 1st ... But Average Up Through 2/23/23 = \$5.95

Projected (February) Crop Insurance Prices for Corn (\$ per bushel)

Source: USDA-RMA



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Managing Price Risk Using Crop Insurance

Why do most producers purchase revenue insurance?

Crop Insurance does provide a “put option” to help manage downside price risk between spring and fall

2023’s relatively high projected price means the implied put option’s “strike price” is higher than in most years

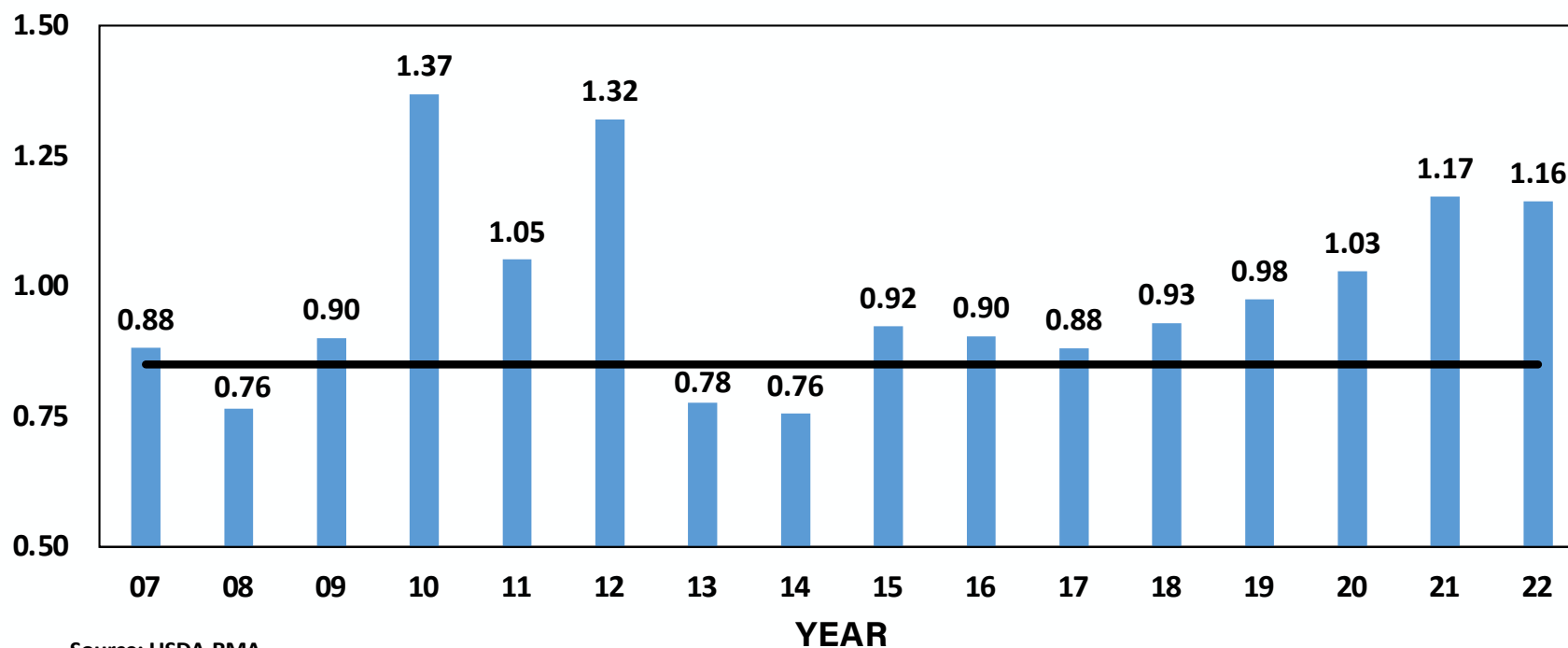
But the “put option” component is only effective (“in the money”) if the harvest price falls by one minus the coverage level

In the case of 85% coverage, that means price has to decline by more than 15% for the put option to be effective

How often does that occur?

Ratio of Harvest to February Crop Insurance Price Fell Below 0.85 in Just 3 of Last 16 Years

RATIO OF HARVEST TO FEBRUARY CROP INSURANCE PRICES FOR CORN , 2007-2022



Source: USDA-RMA



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Comparison of Crop Insurance Bundles for Corn ... Should You Increase Your Coverage Level?

Assumptions (Posey County, Indiana): 1) \$5.95 projected price; volatility = 0.19 2) Farm and county trend yield = 183 3) Projected Price > Harvest Price	Estimated Premium Enterprise Units	Farm-Level Revenue Guarantee	Additional County Revenue Guarantee
RP: 75%	\$16.74	\$817	\$0
$\$11.83 / \$54.00 = 22\% + \$11.83$	\$28.57	\$871	\$0
$\$22.65 / \$55.00 = 41\% + \$22.65$	\$51.22	\$926	\$0
			$+ \$54.00$ $+ \$55.00$

Crop Insurance Endorsements (Additional coverage)

1. Supplemental Coverage Option (SCO):

- SCO provides coverage from 86% to the coverage level of the underlying RP or YP policy
- SCO can only be purchased on acres on which PLC is chosen
- Coverage is based on county yields rather than farm yields
- SCO indemnity payments are capped
 - For example, if we have 85% RP and expected county revenue for corn of \$1,089 (\$5.95 harvest price x trend adjusted county yield of 183), the maximum indemnity payment would be \$10.89 (1% of \$1,089)

Crop Insurance Endorsements, Continued

2. Enhanced Coverage Option (ECO):

- ECO (90% or 95% coverage level) can be purchased as an endorsement to an eligible individual insurance plan such RP or YP
- Coverage extends from the selected level down to 86%, the point where SCO begins to offer coverage
- Coverage is based on county yields rather than farm yields
- A producer can purchase ECO and not SCO, and vice versa
- ECO indemnity payments are capped
 - For example, if we have 85% RP, 95% ECO, and expected county revenue of \$1,089 (\$5.95 harvest price x trend adjusted county yield of 183), the maximum indemnity payment would be \$98 (9% of \$1,089)

Comparison of Crop Insurance Bundles for Corn ... Should You Increase Your Coverage Level?

Assumptions (Posey County, Indiana): 1) \$5.95 projected price; volatility = 0.19 2) Farm and county trend yield = 183 3) Projected Price > Harvest Price	Estimated Premium Enterprise Units	Farm-Level Revenue Guarantee	Additional County Revenue Guarantee
RP: 75%	\$16.74	\$817	\$0
RP: 80%	\$28.57	\$871	\$0
RP: 85%	\$51.22	\$926	\$0
RP: 85%, SCO, and ECO: 90%	\$65.06	\$926	+\$54
RP: 85%, SCO, and ECO: 95%	\$84.55	\$926	+\$108

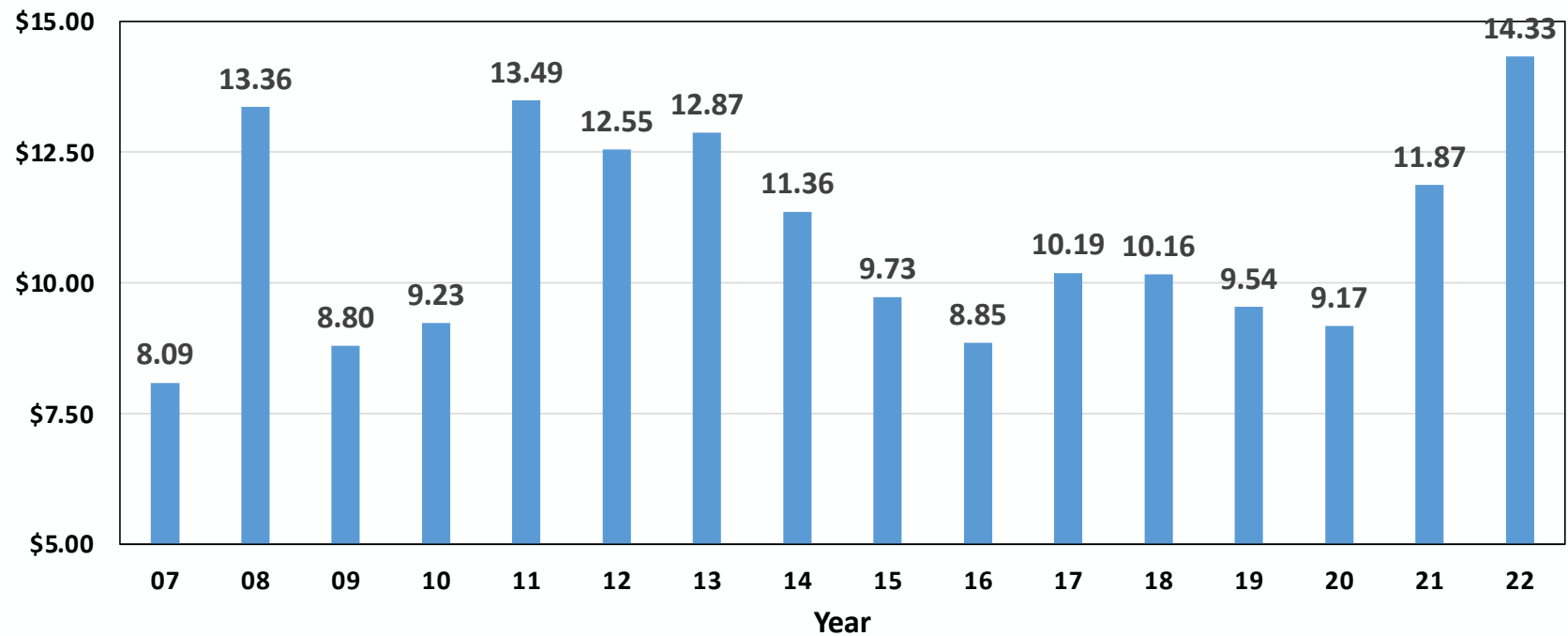
Comparison of Crop Insurance Indemnity Payments for Corn

Assumptions (Posey County, Indiana): \$5.95 projected price; volatility = 0.19 farm and county trend yield = 183	PP = \$5.95 HP = \$5.00 Farm Y = 183 County Y = 183	PP = \$5.95 HP = \$5.95 Farm Y = 145 County = 183	PP = \$5.95 HP = \$6.50 Farm Y = 145 County Y = 145
RP: 75%	\$0	\$0	\$0
RP: 80%	\$0	\$8	\$9
RP: 85%	\$11	\$63	\$69
RP: 85%, SCO, and ECO: 90%	\$11 + \$55	\$63 + \$0	\$69 + \$59
RP: 85%, SCO, and ECO: 95%	\$11 + \$109	\$63 + \$0	\$69 + \$119

2023's Price Guarantee Won't Be Available Until March 1st ... But Average Up Through 2/23/23 = \$13.78

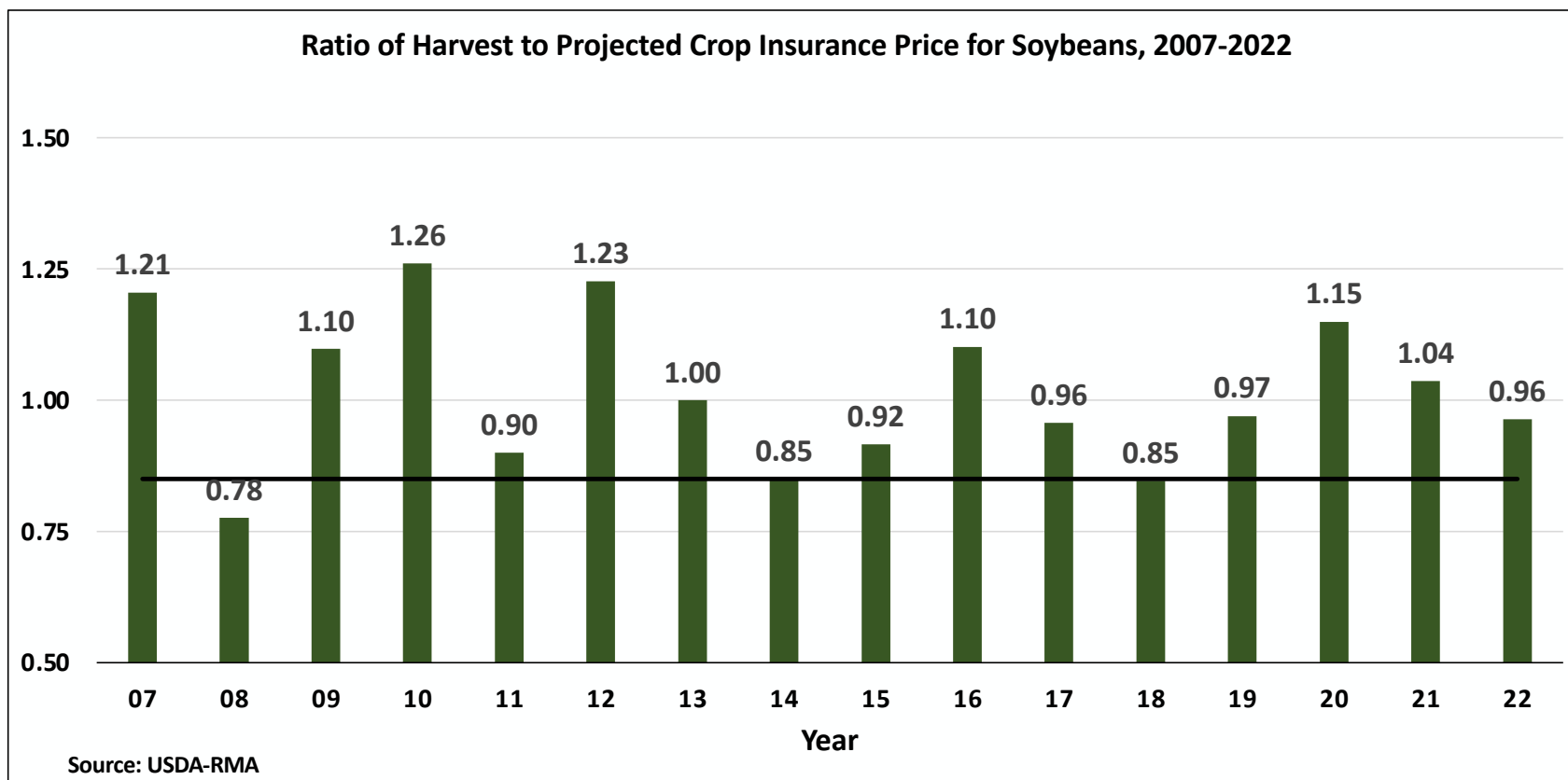
Projected (February) Crop Insurance Prices for Soybeans (\$ per bushel)

Source: USDA-RMA



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Ratio of Harvest to February Crop Insurance Price Fell Below 0.85 in Just 1 of Last 16 Years



Comparison of Crop Insurance Bundles for Soybeans ... Should You Increase Your Coverage Level?

Assumptions (Posey County, Indiana): 1) \$13.78 projected price; volatility = 0.15 2) Farm and county trend yield = 54 3) Projected Price > Harvest Price	Estimated Premium Enterprise Units	Farm-Level Revenue Guarantee	Additional County Revenue Guarantee
RP: 75% \$7.79/\$37.00 = 21% + \$7.79	\$9.04	\$558	\$0
RP: 80% \$14.13/\$38.00 = 37% + \$14.13	\$16.83	\$595	\$0
RP: 85%	\$30.96	\$633	\$0

Comparison of Crop Insurance Bundles for Soybeans ... Should You Increase Your Coverage Level?

Assumptions (Posey County, Indiana): 1) \$13.78 projected price; volatility = 0.15 2) Farm and county trend yield = 54 3) Projected Price > Harvest Price	Estimated Premium Enterprise Units	Farm-Level Revenue Guarantee	Additional County Revenue Guarantee
RP: 75%	\$9.04	\$558	\$0
RP: 80%	\$16.83	\$595	\$0
RP: 85%	\$30.96	\$633	\$0
RP: 85%, SCO, and ECO: 90%	\$38.28	\$633	+\$37
RP: 85%, SCO, and ECO: 95%	\$49.53	\$633	+\$74

Comparison of Crop Insurance Indemnity Payments for Soybeans

Assumptions (Posey County, Indiana): \$13.78 projected price; volatility = 0.15; farm and county trend yield = 54	PP = \$13.78 HP = \$12.50 Farm Y = 54 County Y = 54	PP = \$13.78 HP = \$13.78 Farm Y = 42 County = 54	PP = \$13.78 HP = \$15.25 Farm Y = 42 County Y = 42
RP: 75%	\$0	\$0	\$0
RP: 80%	\$0	\$17	\$18
RP: 85%	\$0	\$54	\$59
RP: 85%, SCO, and ECO: 90%	\$0 + \$0	\$54 + \$0	\$59 + \$41
RP: 85%, SCO, and ECO: 95%	\$0 + \$32	\$54 + \$0	\$59 + \$82

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