

Prices, Profits, and Managing Risk

June 7, 2023

Dr. S. Aaron Smith, Associate Professor and Extension Economist

Department of Agricultural and Resource Economics

University of Tennessee Institute of Agriculture

Email: aaron.smith@utk.edu

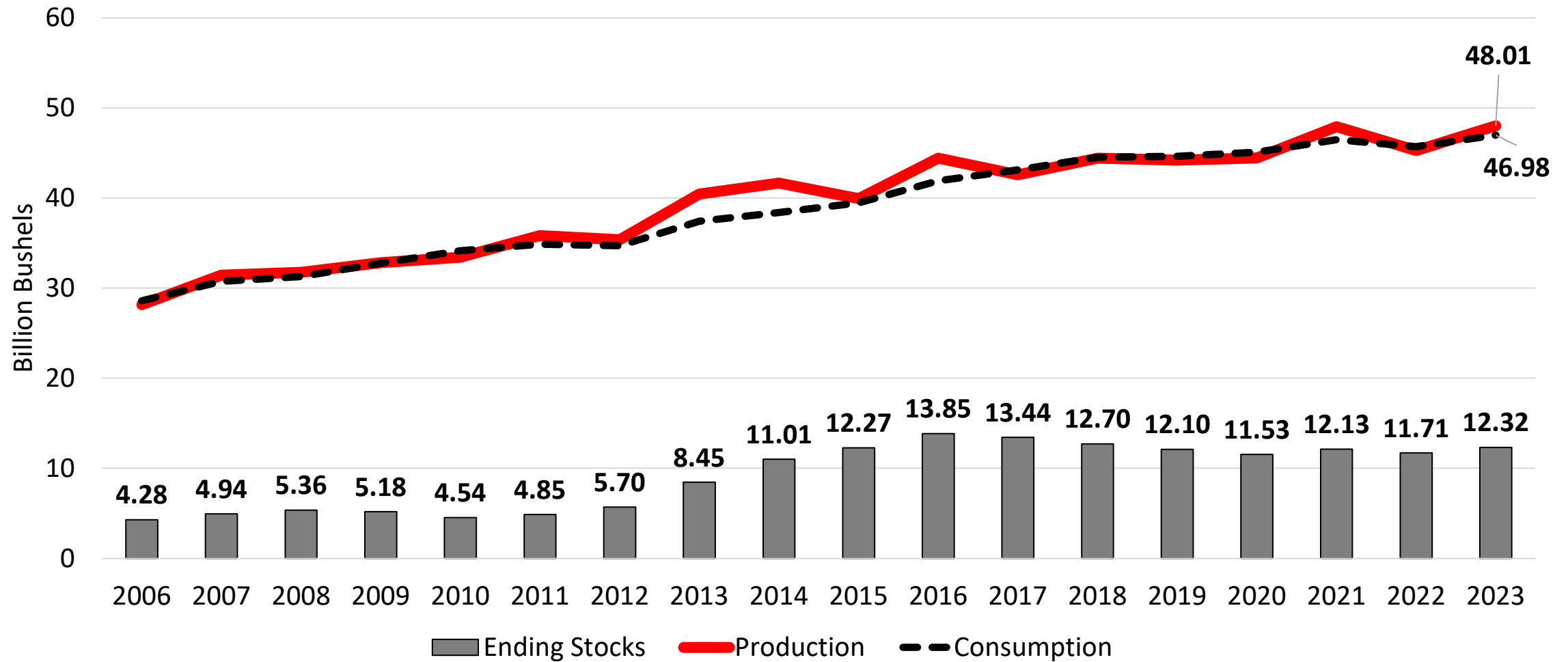
Web Page: <https://cropeconomics.tennessee.edu>

Overview

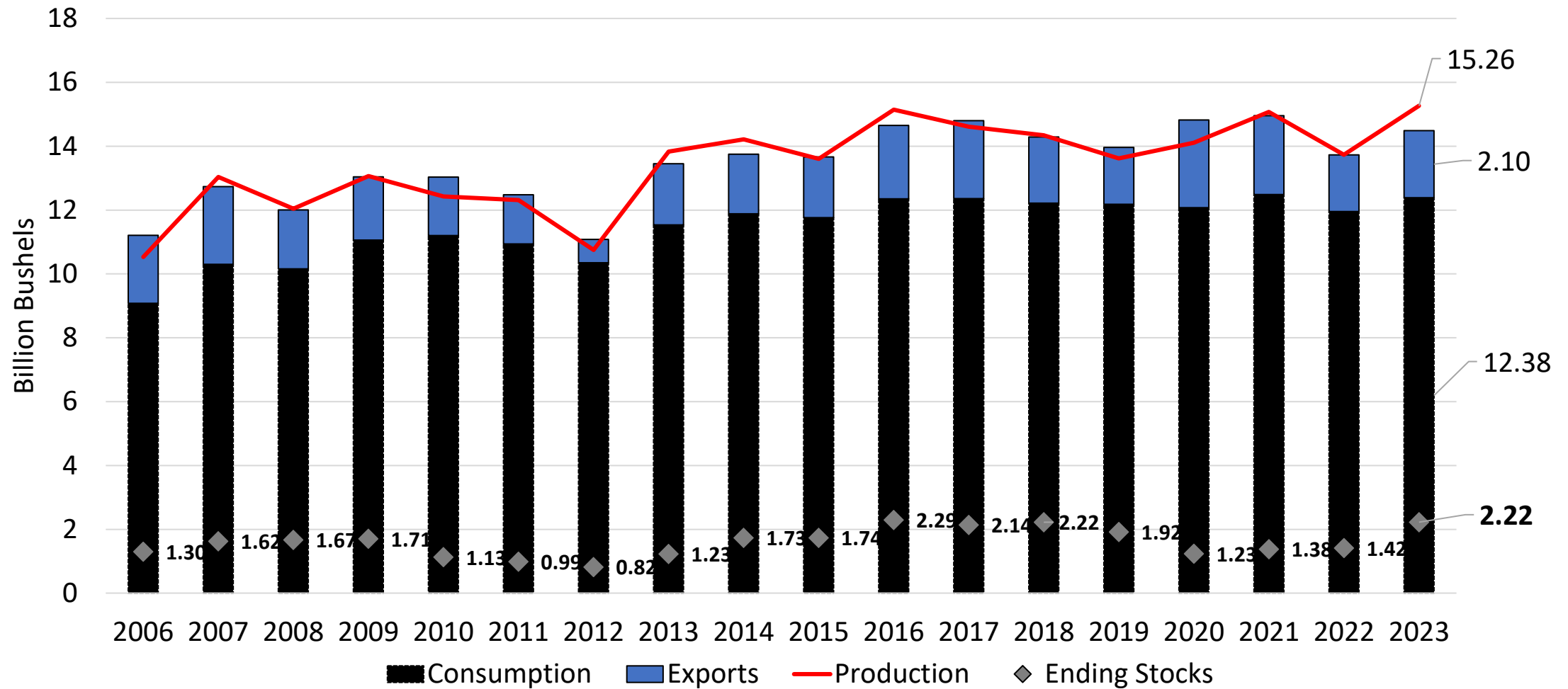
- Supply and demand
- Old crop vs. new crop prices
- Crop insurance coverage / price trigger
- Interest rates and the cost to carry



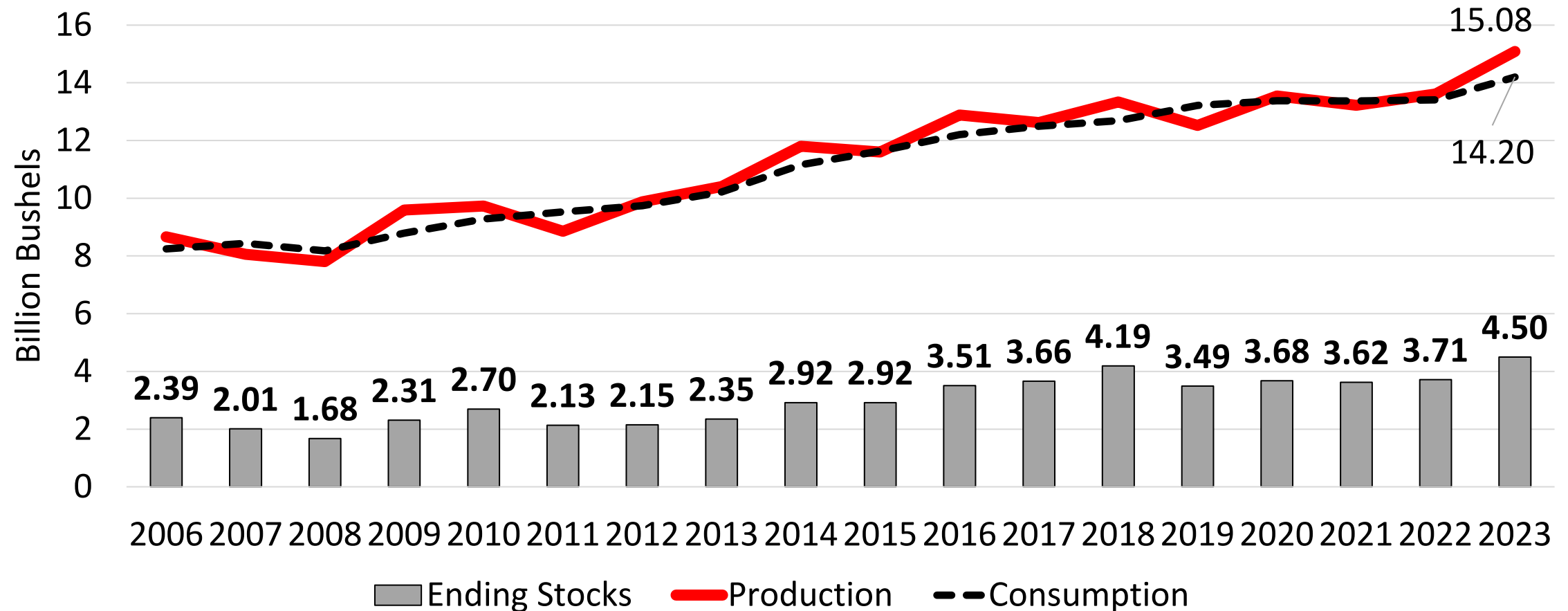
World Corn Production, Consumption, and Ending Stocks, 2006/07 to 2023/24



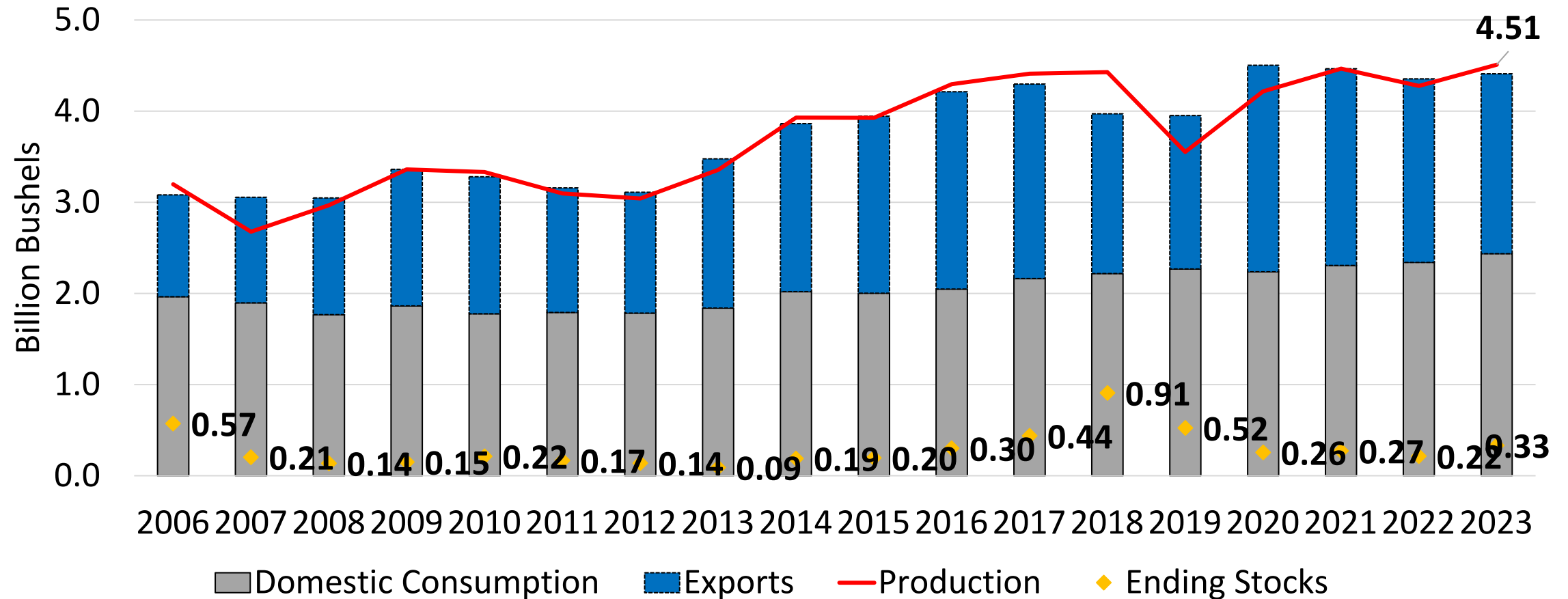
US Corn Production, Consumption, Exports, and Ending Stocks, 2006/07 to 2023/24



World Soybean Production, Consumption, and Ending Stocks, 2006/07 to 2023/24



US Soybean Production, Consumption, Exports, and Ending Stocks, 2006/07 to 2023/24



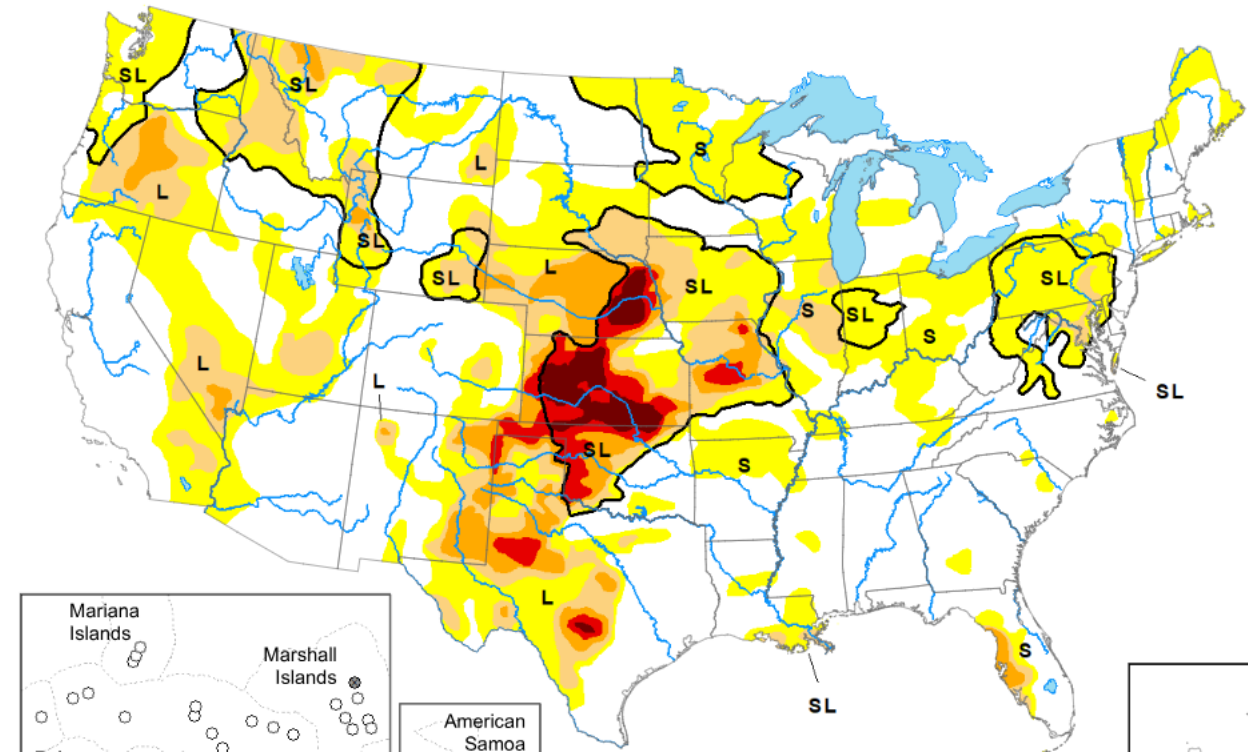
Supply and Demand

- Brazil's record production has more than offset Argentina's drought losses.
- Global economic forces will continue to influence agricultural markets in 2023/24.
- Corn tight old crop stocks. Export sale pace critical for old crop futures price.
- Soybean U.S. and global stocks project higher.
- Planting is complete for most key production areas in the US.
- Weather will dictate price direction.

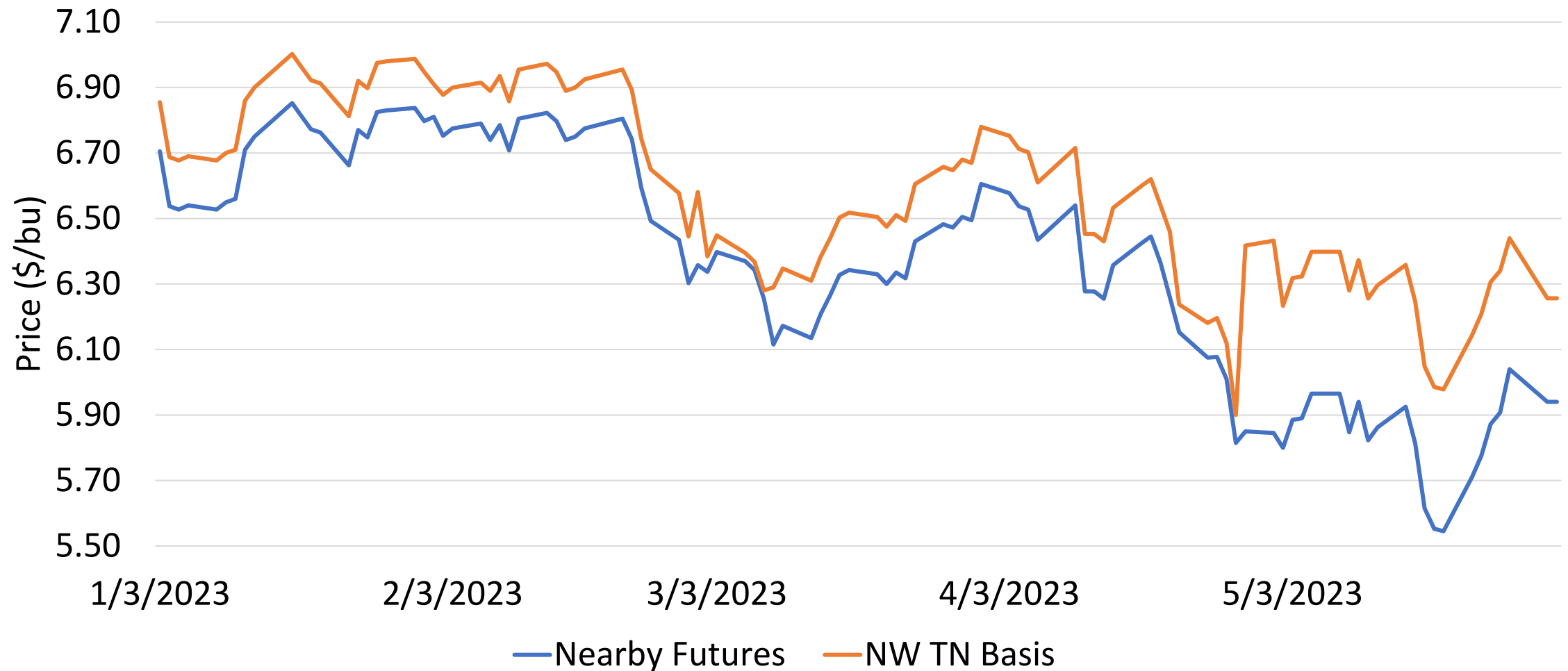
Map released: June 1, 2023

Data valid: May 30, 2023

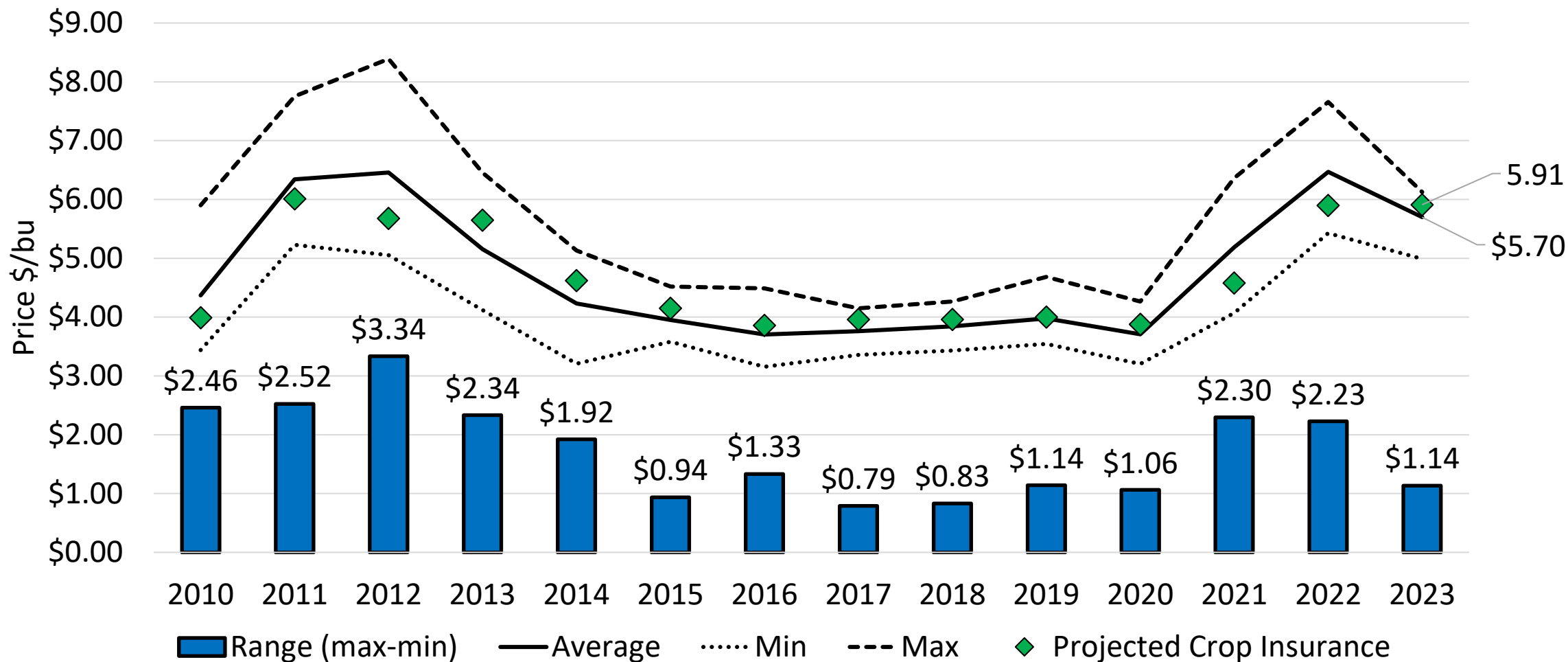
☐ View grayscale version of the map



Nearby Corn Futures and NW TN Basis, Jan 1 to June 1, 2023



December Corn Futures Contract Dec 1 to Expiration, 2010-2023



December Corn Futures




Soybean Nearby Futures

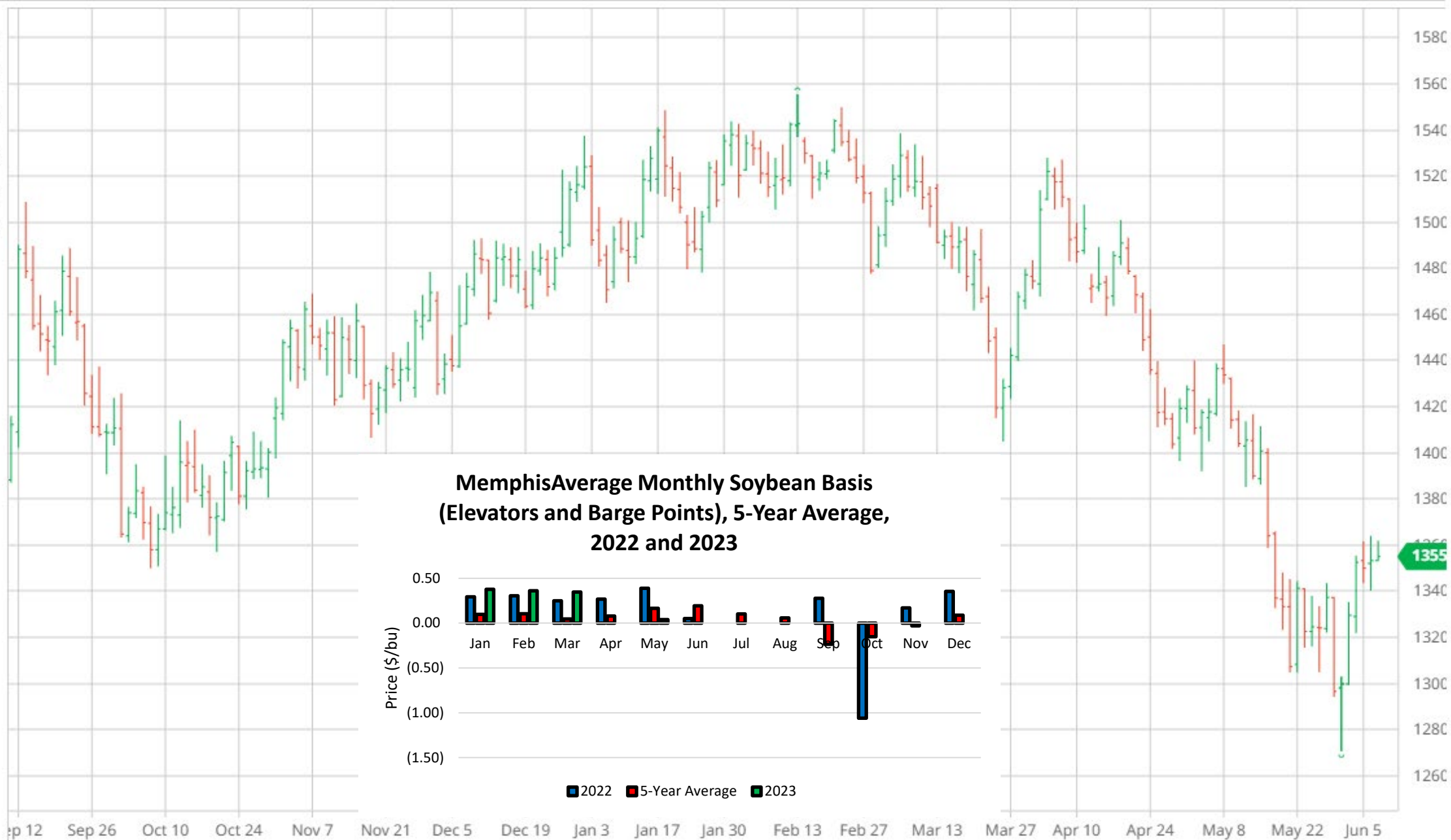
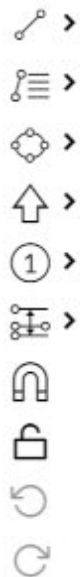
Range: 1D 5D 1M 3M 6M **9M** 1Y 2Y 3Y 5Y 10Y 20Y MAX

Frequency: Daily Nearby ▾

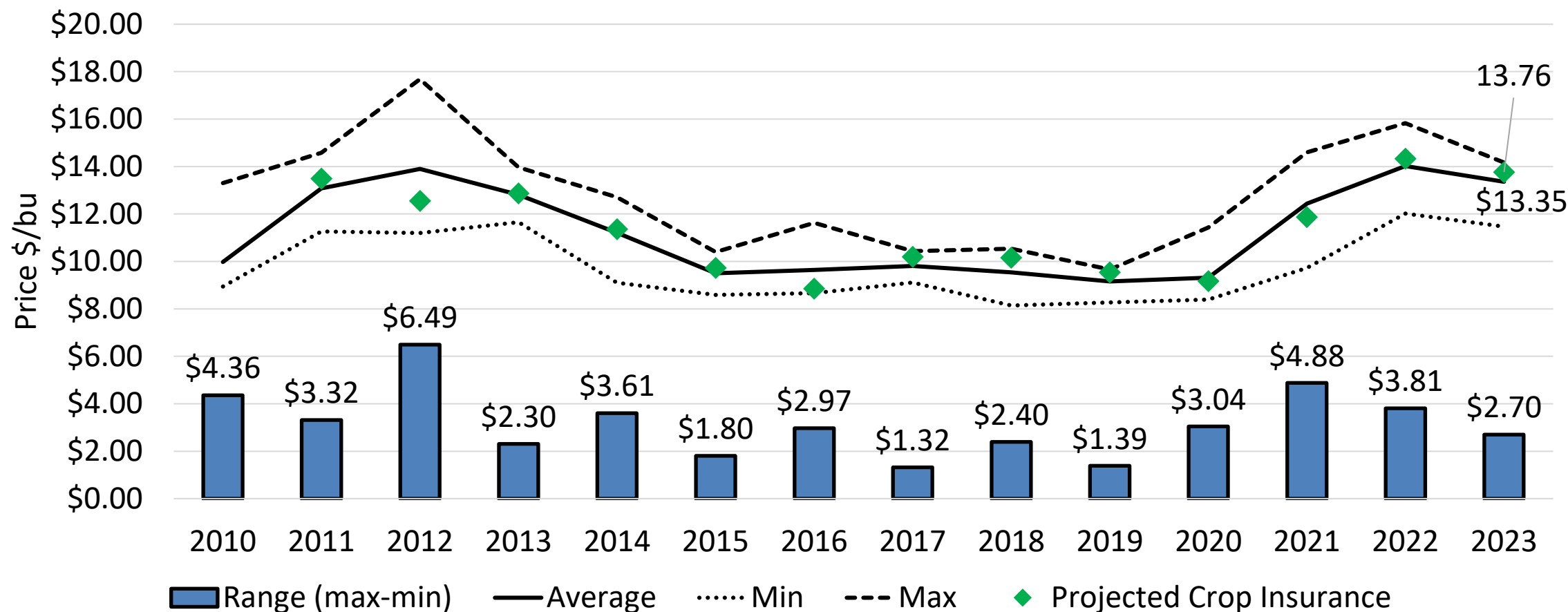
9M ▾

Date: 

 tutorial 



November Soybean Futures and Crop Insurance Price



November Soybean

Range: 1D 5D 1M 3M 6M 9M 1Y 2Y 3Y 5Y 10Y 20Y MAX Frequency: Daily 9M Date:

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Risk Management and Marketing

Crop Insurance

Price Risk Management

Storage

Price Protection



Final Price

Crop Insurance Price Trigger - Corn

- Yield = largely unknown at this point, assume APH
- Buy-up 50-85%, plus companion policies
- Average buy-up in Tennessee 72.8% in 2022
- \$5.91 crop insurance price

Buy-up	Trigger Price
60%	\$3.55
65%	\$3.84
70%	\$4.14
75%	\$4.43
80%	\$4.73
85%	\$5.02

Crop Insurance Price Trigger - Soybean

- Yield = largely unknown at this point, assume APH
- Buy-up 50-85%, plus companion policies
- \$13.76 crop insurance price

Buy-up	Trigger Price
60%	\$8.26
65%	\$8.94
70%	\$9.63
75%	\$10.32
80%	\$11.01
85%	\$11.70

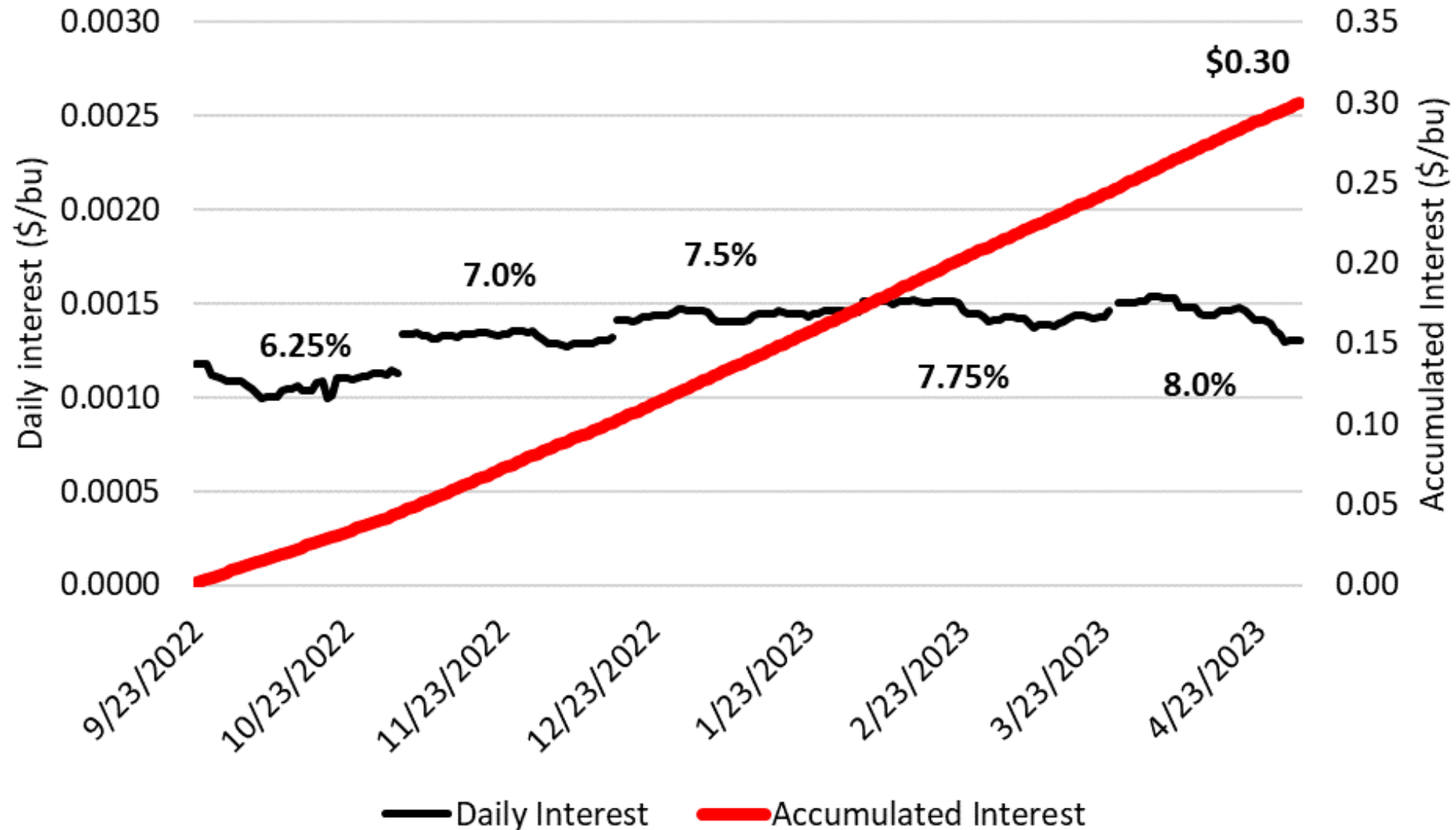
Breaking Down Price Risk

- Cash price for corn of \$6.10
 - \$5.60 futures price (92% of price risk)
 - \$0.50 basis (8% of price risk)
- Buy a \$5.60 May 2024 Put Option for 49 cents setting a \$5.11 futures floor.
- This removes 92% ($\$5.11/\5.60) of the futures price risk (84% of total price).
- Leaves the upside open in futures markets and the flexibility to set basis at a later date.
- Exit the position prior to expiration and recoup remaining time value in the premium.

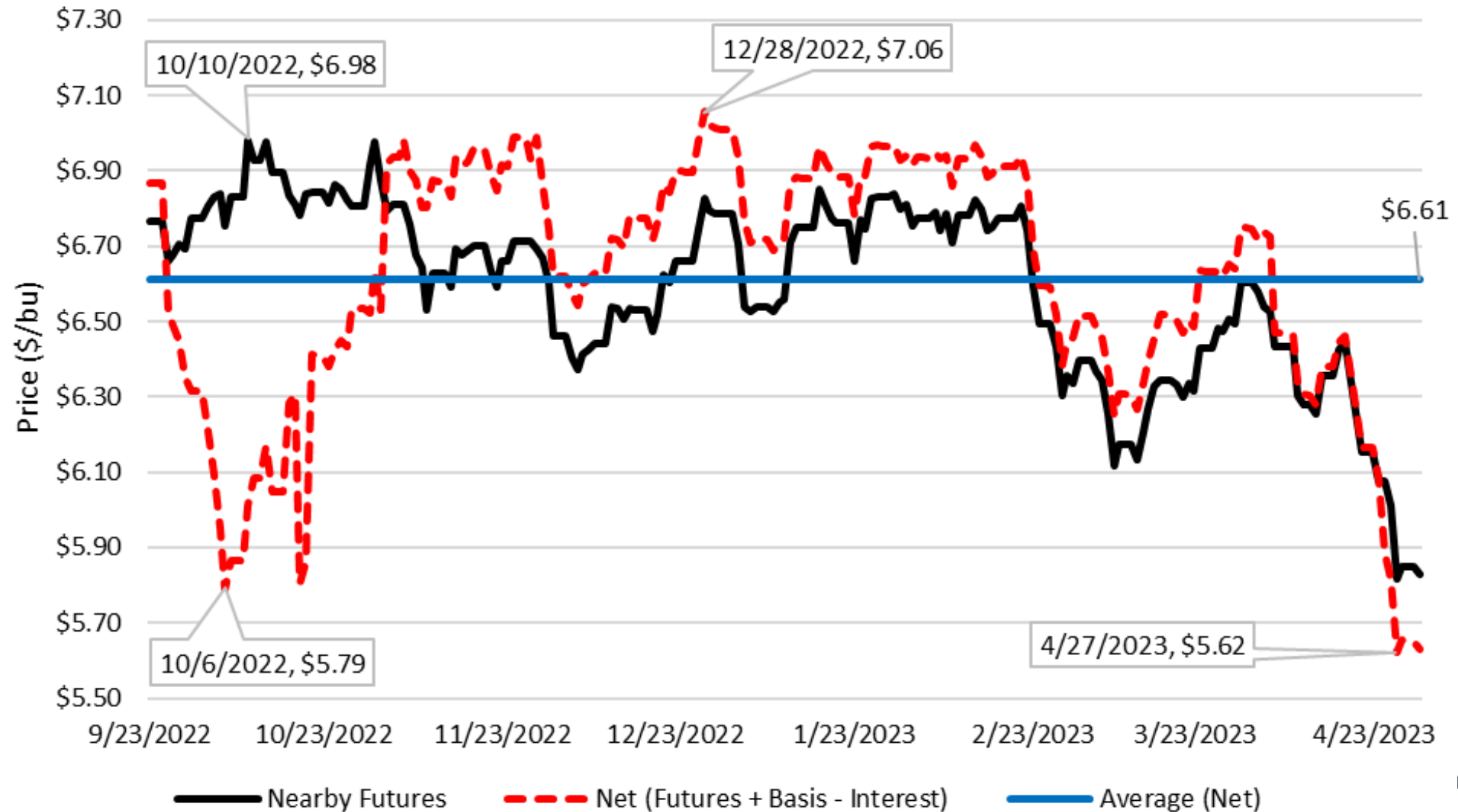
Projected Net Returns, 2023

	<u>Cotton</u>	<u>Soybeans</u>	<u>Corn</u>	<u>Wheat/Soybeans</u>
Yield - Crop Production Report (Tennessee)	1,130	50	175	75 /45
Harvest Price (as of 5/12/2023)	\$0.82	\$12.50	\$5.80	\$6.40/\$12.50
Revenue	\$927	\$625	\$1,015	\$1,043
Variable Expenses	\$630	\$340	\$610	\$675
Returns Over Variable	\$297	\$285	\$405	\$368
Land Costs (Cash Rent - NASS State Average)	\$111	\$111	\$111	\$111
Returns Over Variable and Land Costs	\$186	\$174	\$294	\$257
Fixed Costs (Capital Recovery and Management Labor)	\$195	\$130	\$145	\$245
Returns Over Specified Costs	(\$9)	\$44	\$149	\$12
Breakeven Price at Estimated Yield and Specified Cost	\$0.83	\$11.62	\$4.95	\$7.06/\$12.89

Bank Prime Rate and Daily and Accumulated Interest for Unsold Corn



Nearby Corn Futures Price and Net (Futures + Basis – Interest) Price



Take Home Message

- Global economic uncertainty and geopolitical tensions.
- Input costs are down but are still elevated relative to pre 2021 prices.
- Volatility in prices will likely remain in 2023.
- Bias is for further price weakness (weather contingent)
- Identify price risk and seek mitigating strategies.
- Crop insurance + price risk management + storage.



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THANK YOU