

Crop Insurance and Corn, Soybean, and Cotton Price Outlook

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Crop Insurance Prices, 2021

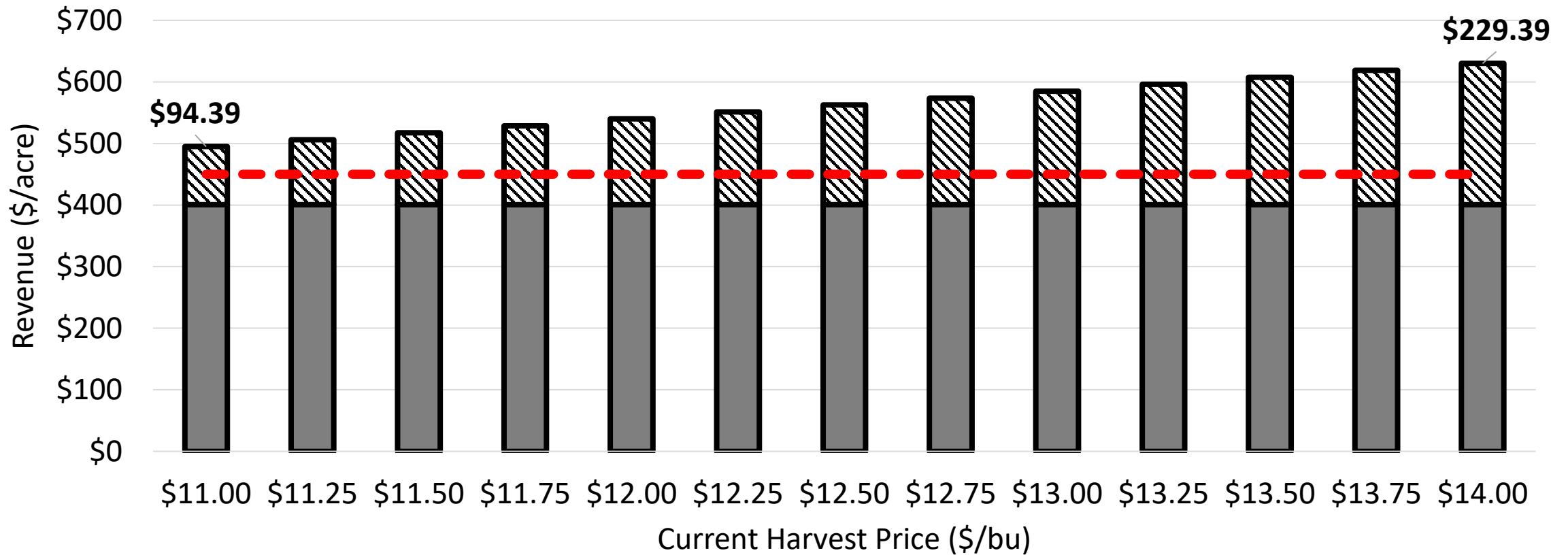
	Projected (Spring) Price	Price Volatility
Corn	\$4.58 (\$3.88)	0.23 (0.15)
Cotton	\$0.83 (\$0.68)	0.20 (0.14)
Soybean	\$11.87 (\$9.17)	0.19 (0.12)
Wheat	\$5.54 (\$4.86)	0.15 (0.16)

- Sales closing March 15.
- Premiums will be higher than last year.
- Revenue guarantees will be higher than last year at the same coverage level.
- Creates a different in-season risk profile than last year.
- Work with a qualified crop insurance agent to determine the most suitable coverage for your operation.

Evaluate Your Crop Insurance Protection

- Soybean Example:
 - Revenue Guarantee = $\$11.87/\text{bu} \times 45 \text{ bu/acre} \times 75\% = \$400/\text{acre}$.
 - Cost of Production = \$450.
- Can I increase my APH?
- Should I increase my buy-up? What is the added premium cost?
- Do I have the correct unit structure?
- What other crop insurance options are available for my operation? (area products, SCO, ECO, trend adjustments, yield exclusion etc.)

Example: Unprotected Revenue Exceeding the Crop Insurance Guarantee



■ Crop Insurance (75%; 45 BPA APH; \$11.87) ▨ Estimated Revenue (45 BPA) - - - Cost of Production (45 BPA)

- **Crop insurance is not a substitute for marketing, it is a compliment in a risk management plan.**
- Crop Insurance should work with your marketing plan to mitigate revenue risk during the growing season.
- Minimum crop insurance protection is known after the sales closing date (can go up with harvest price adjustment).

Cautious Optimism, but Protect Against the Downside

“Doing nothing all season is a strategy. It avoids up-front option premiums and possible futures margin calls. But the cost of this strategy is bearing the risk of lower prices all season. In that sense doing nothing is the ultimate form of speculation.”

John Robinson – Texas A&M

Factors Effecting Supply

Positive for Prices

- Tight US and global ending stocks / low stocks-to-use ratios.
- High prices for many crops make acreage decisions competitive and regional.
- Concerns in South America (second crop corn).
- Reduced Argentina production (soybean).
- Limited number of export competitors.
- Brazil logistics / export market timing.

Negative/Uncertain for Prices

- Planted acres 2021
- 2021 weather – can we grow our way out of a rally in one production cycle?
- Record Brazil production (soybeans)
- Added acres/global production regions - high prices often cure high prices.
- Rising input costs.
- Near record long managed money positions in corn, cotton, soybean, and wheat futures.

Factors Effecting Demand

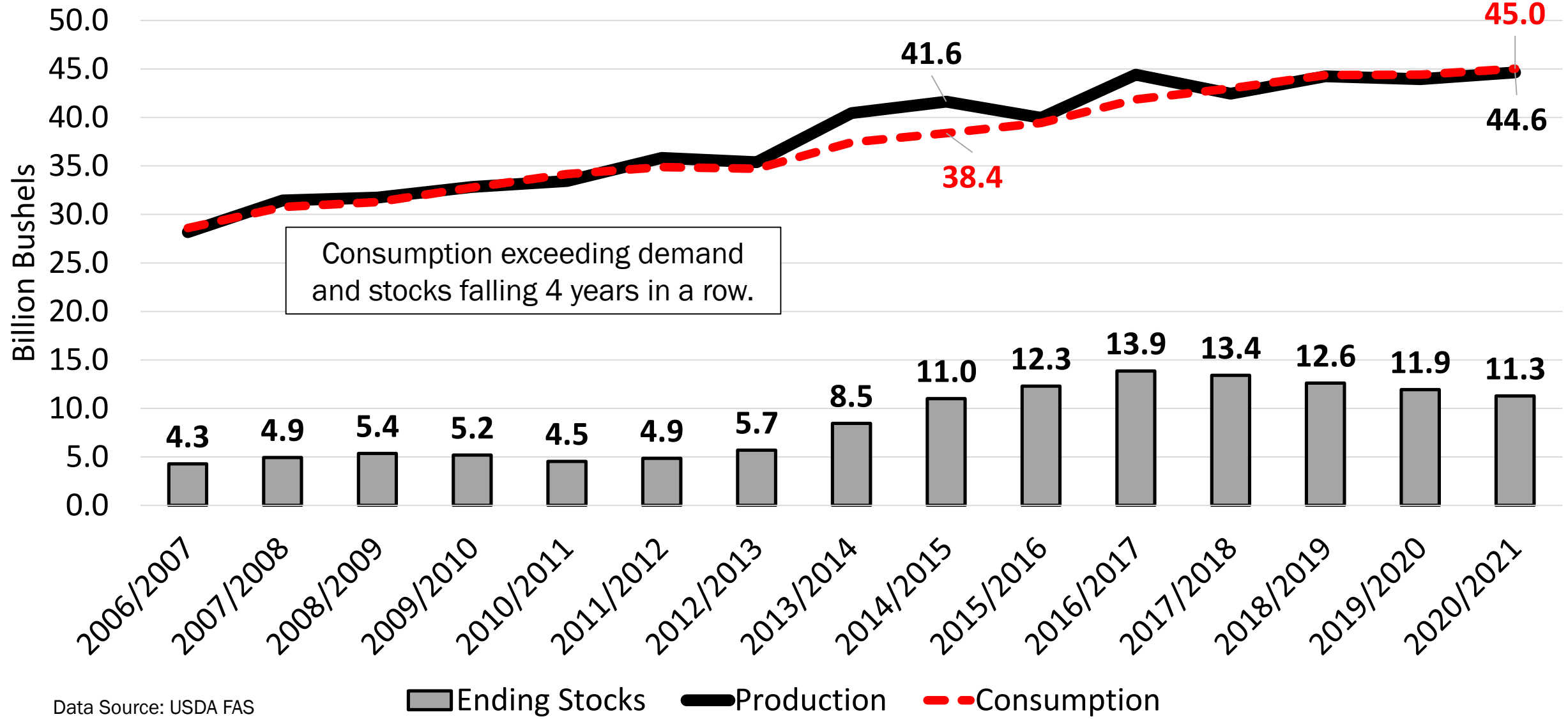
Positive for Prices

- Record US beef, pork, and broiler production forecast for 2021.
- Ethanol bounce back (exports and carbon policy).
- Strong domestic crush.
- Near 5-year low in the US dollar index (stimulates export demand).
- Exports (China purchases) are projected to remain strong in 2021.
- Increased global protein demand/meat consumption.

Negative/Uncertain for Crop Prices

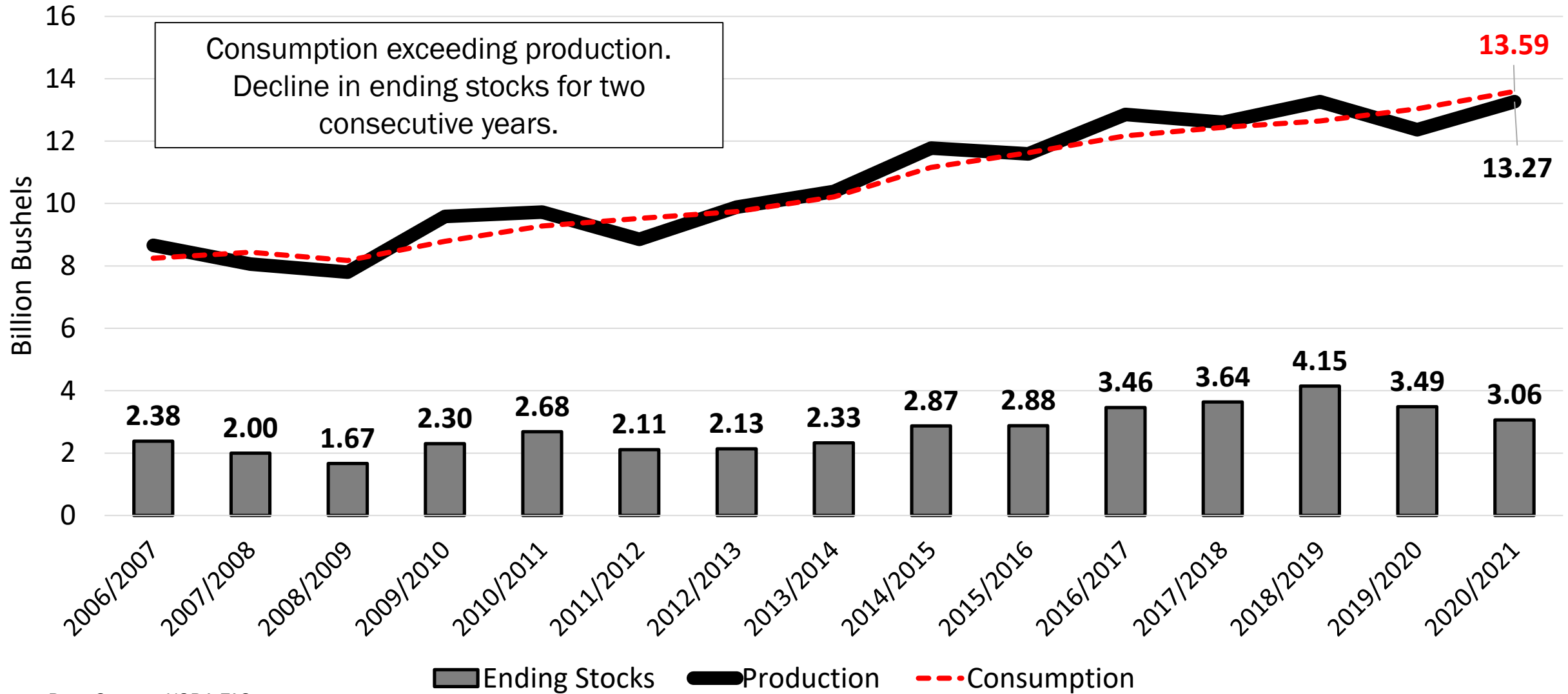
- COVID-19 uncertainty.
- African swine fever other animal infectious disease outbreaks.
- High prices can limit demand and result in substitution.
- China (policy, geopolitics etc.)
- Global economic uncertainty.
- Global / U.S. trade / policy uncertainty.

Global Corn Production, Consumption, and Ending Stocks, 2006-2020



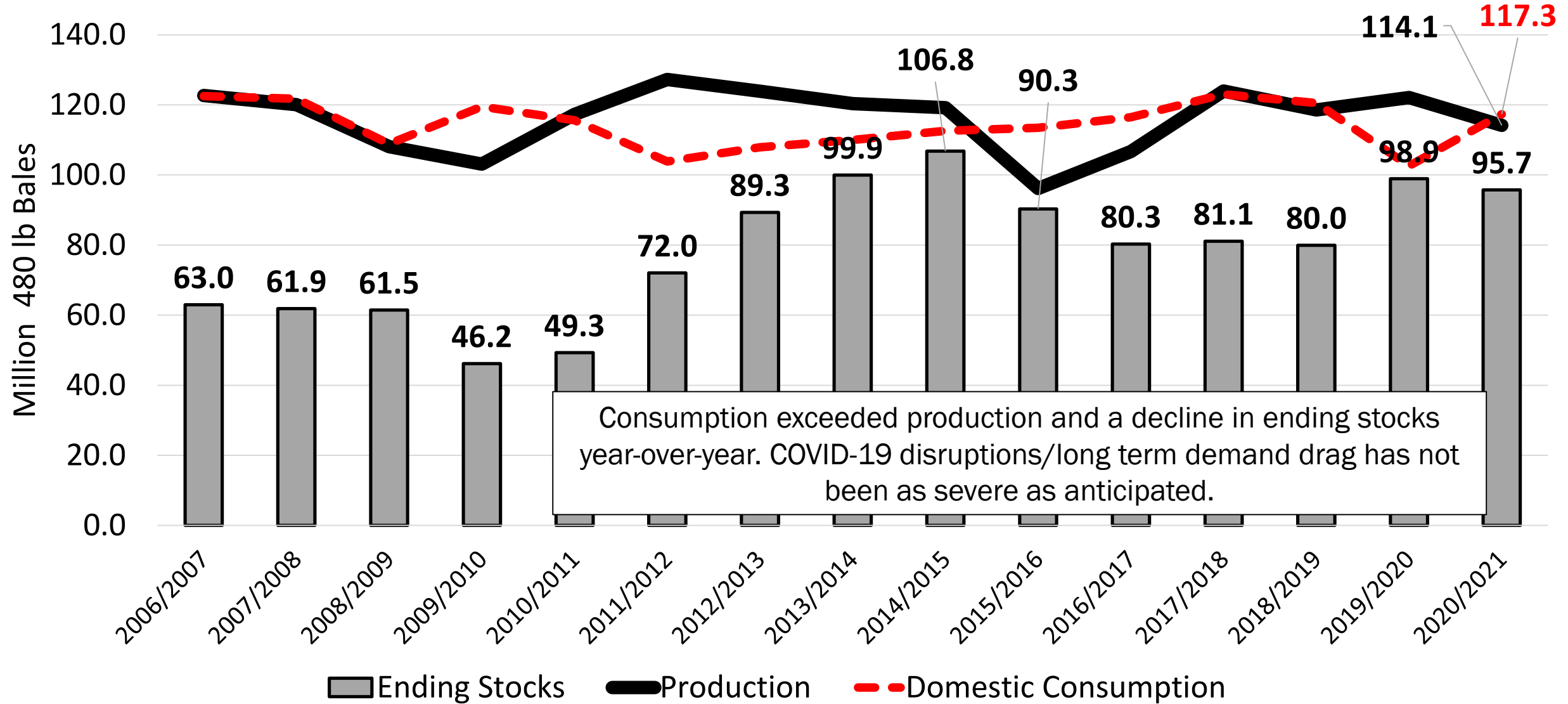
Data Source: USDA FAS

Global Soybean Production, Consumption, and Ending Stocks, 2006/07-2020/21



Data Source: USDA FAS

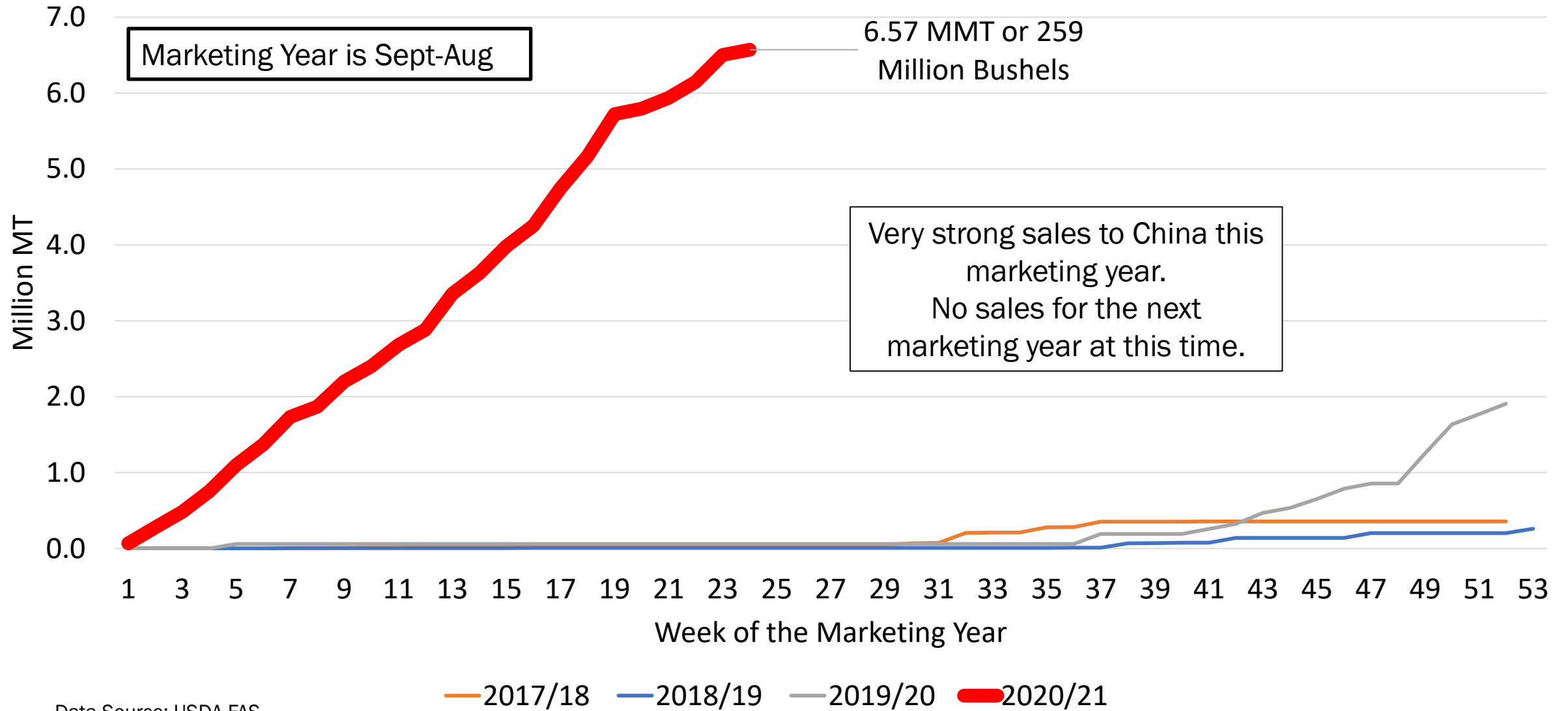
Global Cotton Production, Consumption, and Ending Stocks, 2006-2020



Data Source: USDA FAS

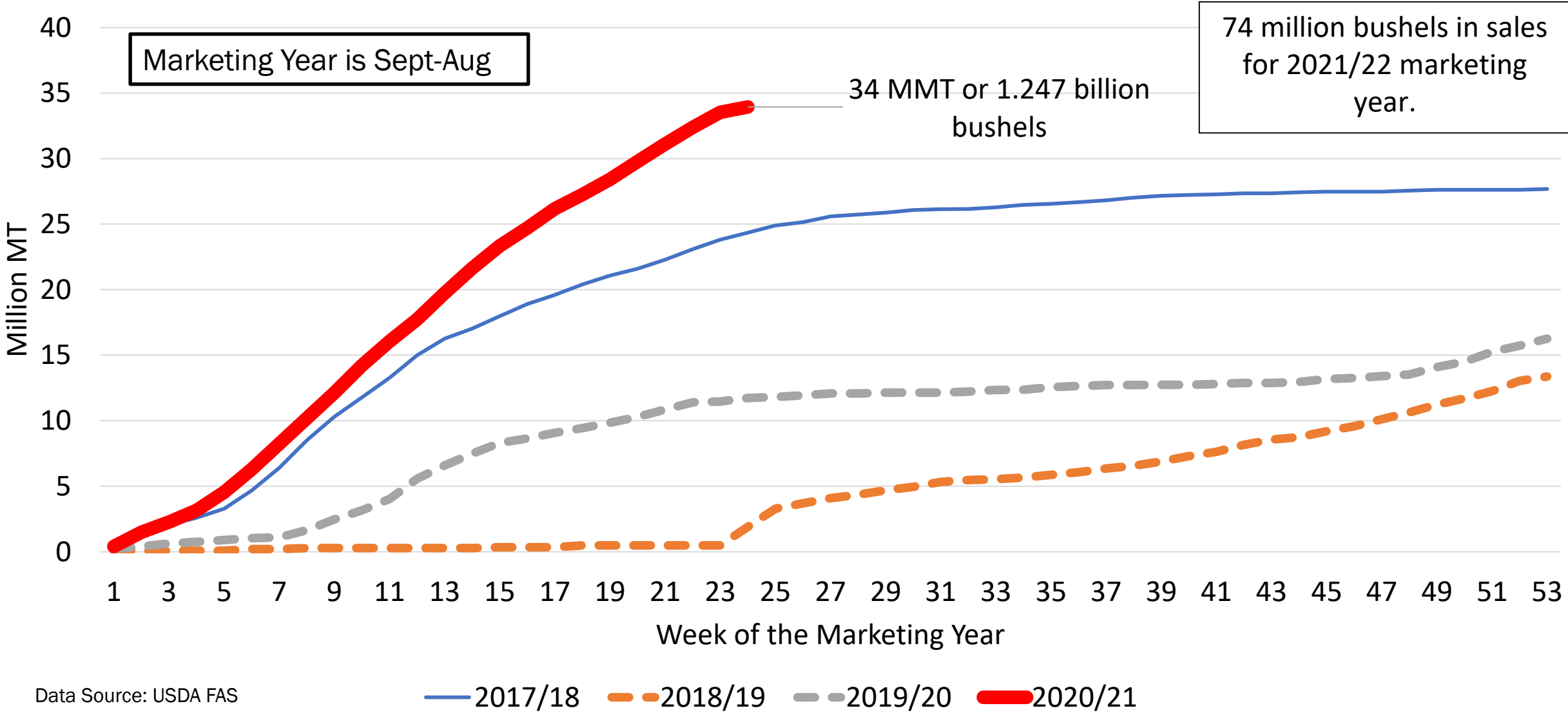
**“IT IS DEMAND THAT MAKES RELEVANT OTHER
FACTORS LIKE PRODUCTION AND STOCKS”**

US Corn Exports to China, 2017/18 to 2020/21



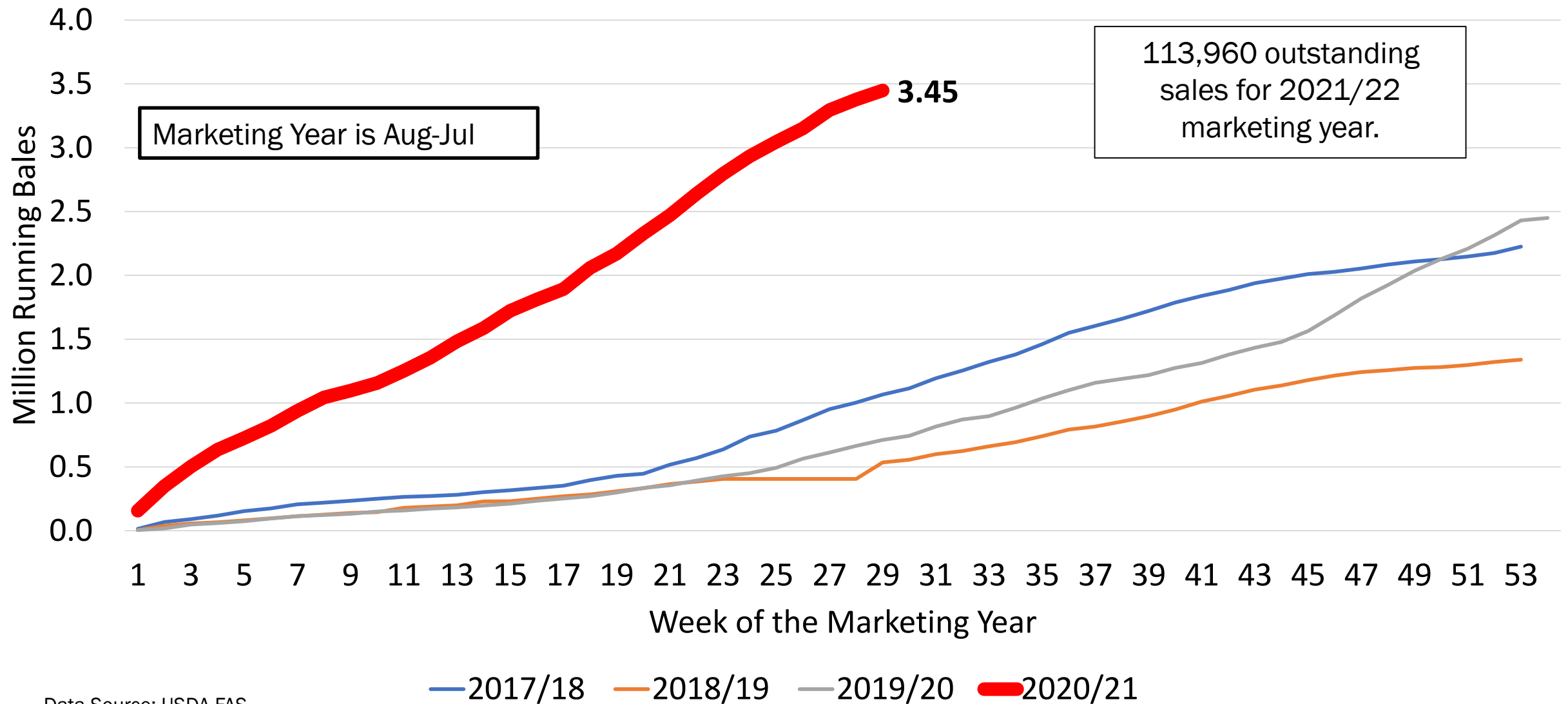
Data Source: USDA FAS

US Soybean Exports to China, 2017/18 to 2020/21



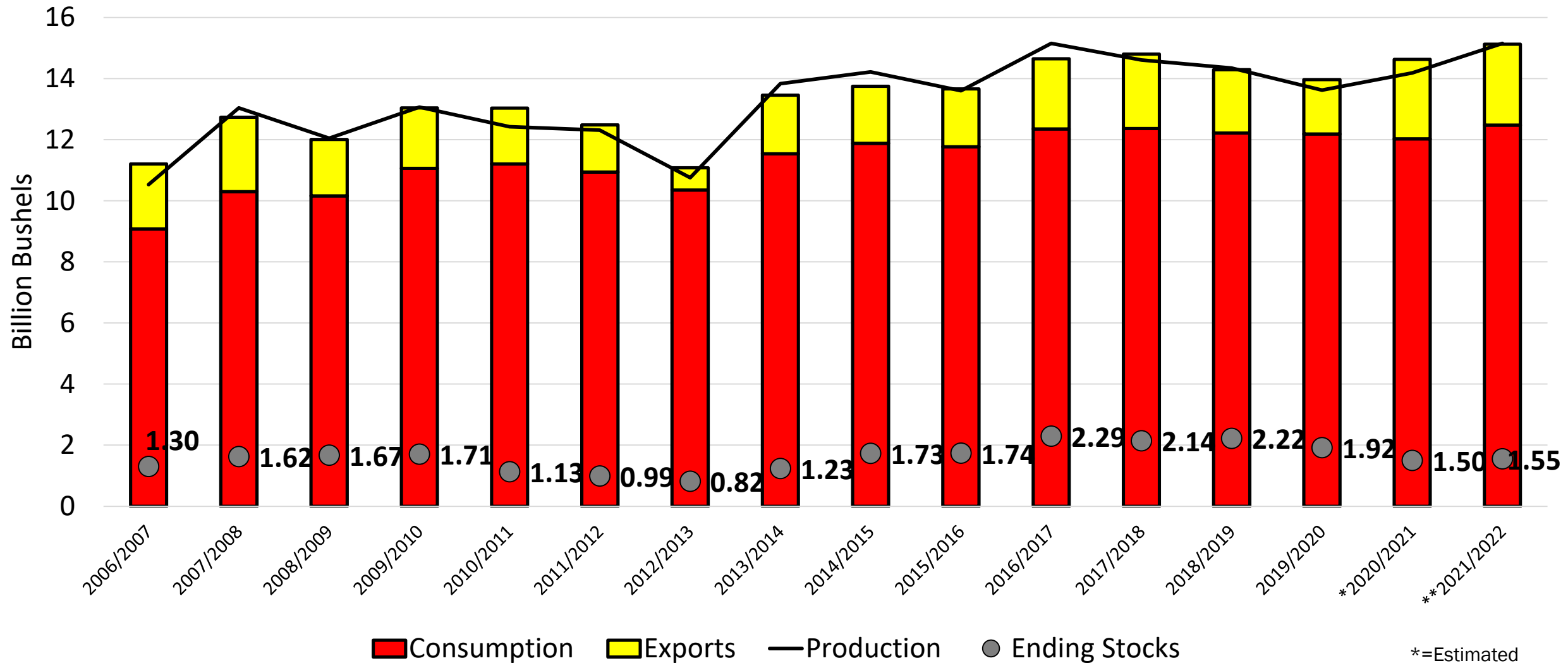
Data Source: USDA FAS

US Cotton Exports to China, 2017/18 to 2020/21



Data Source: USDA FAS

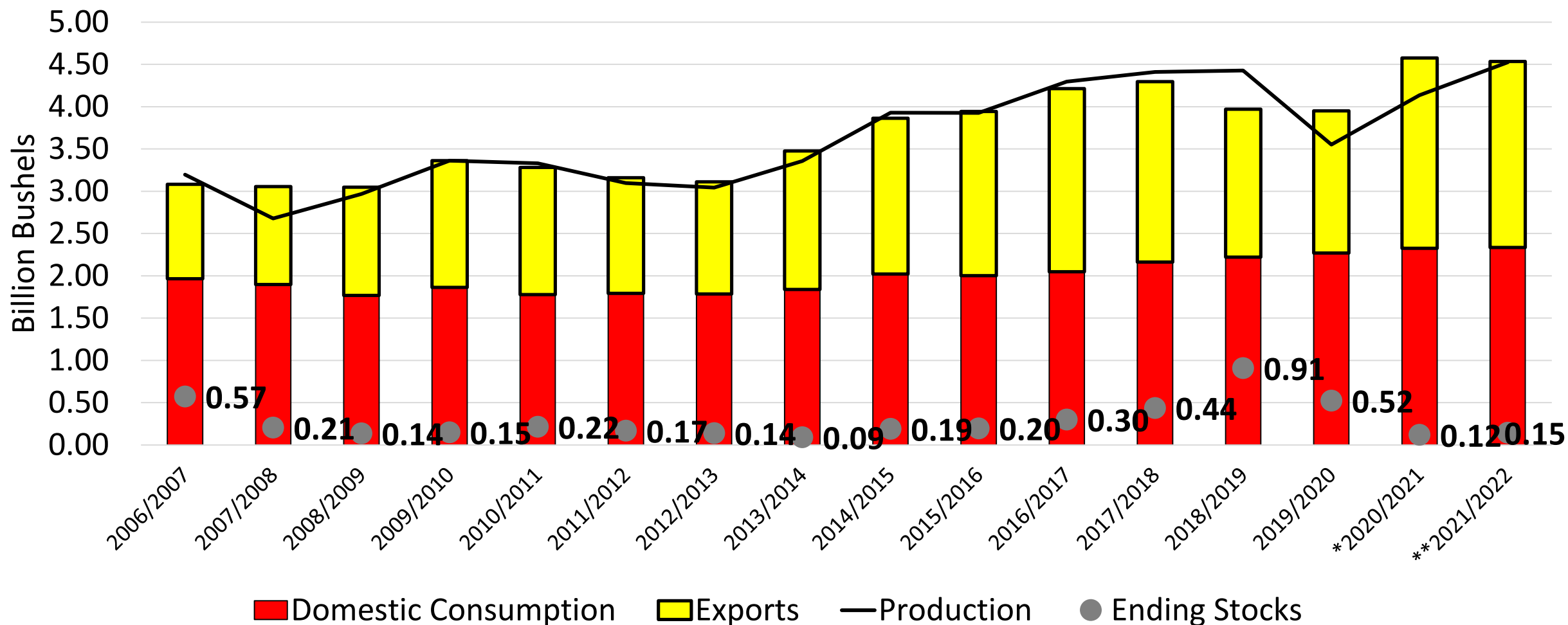
Corn - U.S. Production, Consumption, Exports, and Ending Stocks, 2006-2021



Data Source: USDA FAS and USDA NASS

*=Estimated
**=Projected

Soybeans- U.S. Production, Consumption, Exports, Ending Stocks and MYA Price, 2006/07 to 2020/21

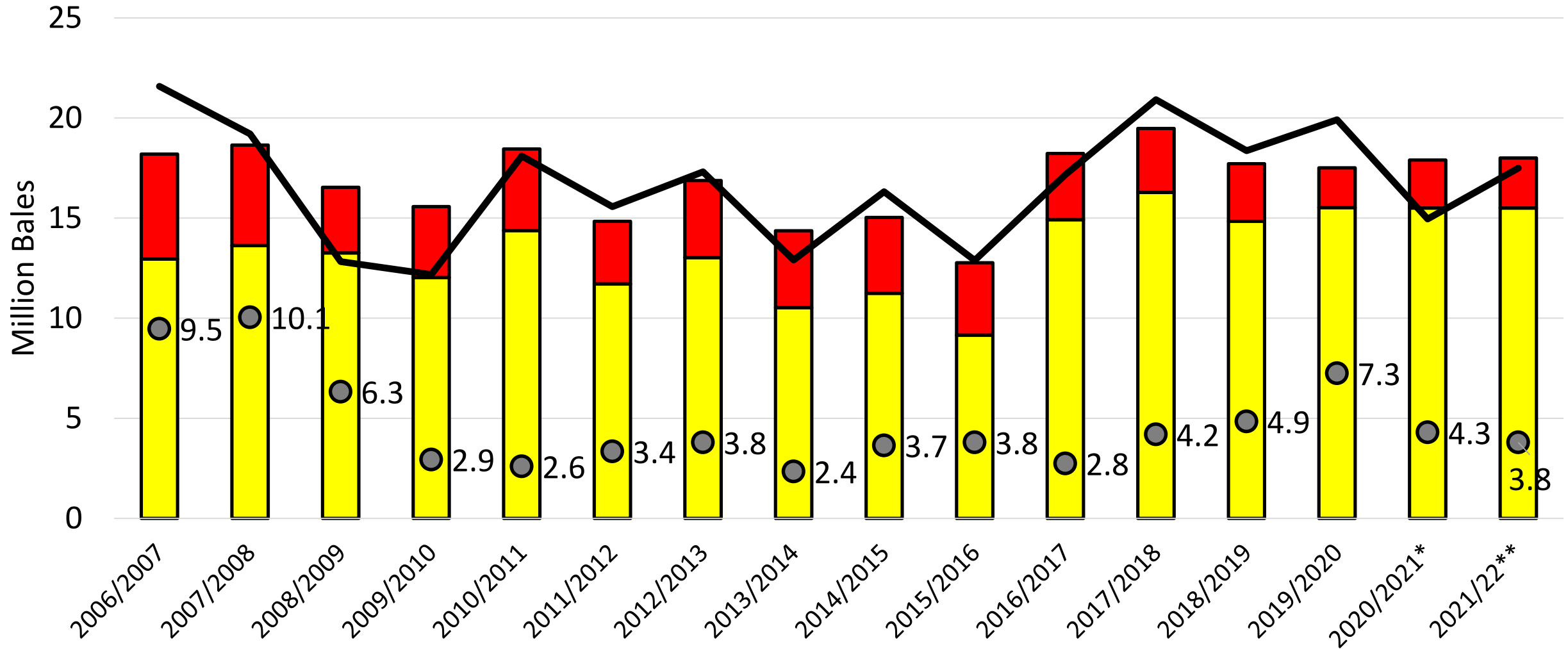


Data Source: USDA FAS and USDA NASS

*=Estimated

**=Projected

Cotton - U.S. Production, Consumption, Exports, and Ending Stocks



Data Source: USDA FAS

Exports

Domestic Consumption

Production

Ending Stocks

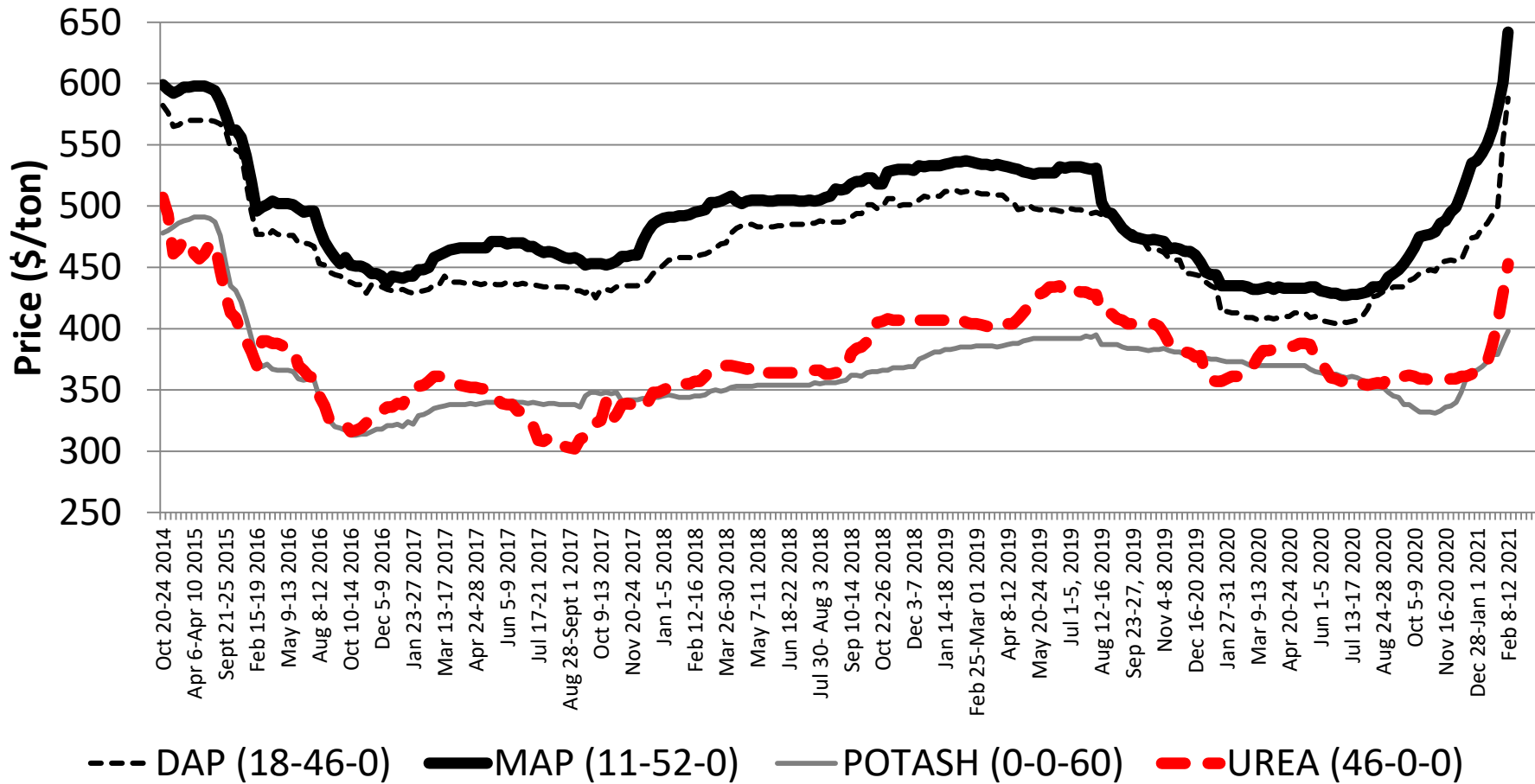
*=Estimated
**=Projected

Projected Planted Acres 2021

- Nationally (USDA Ag Outlook Forum)
 - Soybeans: 90 million acres (+6.9 million)
 - Corn: 92 million acres (+1.2 million)
 - Cotton: 12 million acres (-90,000)
- Tennessee (Aaron)
 - Soybeans: 1.7 million acres (+50,000)
 - Corn: 965,000 acres (+95,000)
 - Cotton: 325,000 acres (+45,000)
- Planting weather / prevented planting will influence crop allocations.
- Incentive to plant for most commodities.

Input Prices on the Rise

Dry Fertilizer Price, 2014-2021



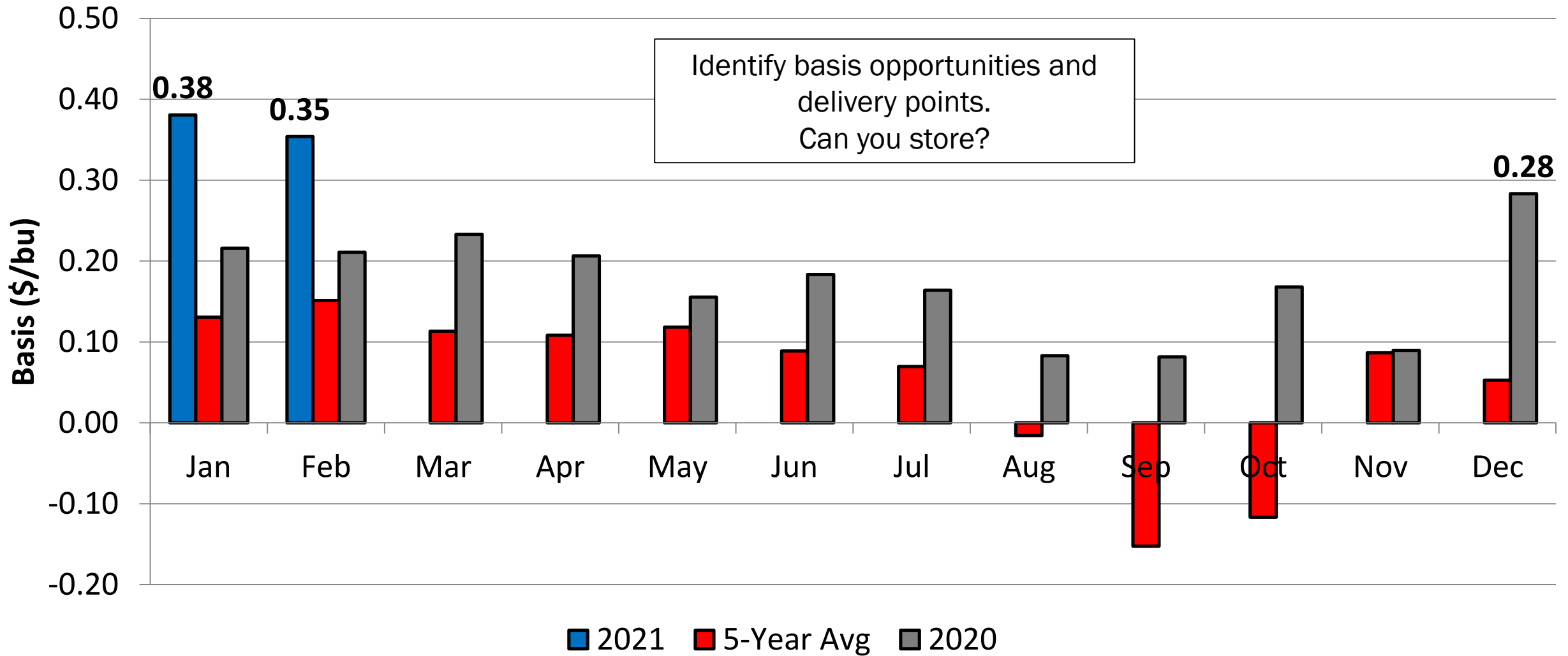
Fertilizer prices highlight the increase but many inputs have moved higher!

December Corn Futures Contract (January 1-Expiration) Compared to MYA Price

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Average	\$4.37	\$6.43	\$6.53	\$5.07	\$4.20	\$3.92	\$3.68	\$3.75	\$3.84	\$3.97	\$3.68	\$4.53
Min	\$3.44	\$5.42	\$5.05	\$4.12	\$3.21	\$3.58	\$3.16	\$3.36	\$3.43	\$3.54	\$3.20	\$4.30
Max	\$5.90	\$7.75	\$8.39	\$5.94	\$5.13	\$4.52	\$4.49	\$4.15	\$4.27	\$4.69	\$4.27	\$4.77
Range (max-min)	\$2.46	\$2.33	\$3.34	\$1.82	\$1.92	\$0.94	\$1.33	\$0.79	\$0.83	\$1.14	\$1.06	\$0.47
MYA	\$5.18	\$6.22	\$6.89	\$4.46	\$3.70	\$3.61	\$3.36	\$3.36	\$3.61	\$3.56	\$4.20	\$4.30

- Examine how the MYA price compares to the harvest futures contract average price and price range.
- 2010-2020 average price range \$1.63 (max-min).
- Make basis adjustments to determine reasonable cash price estimates.

Tennessee Mississippi River Average Monthly Corn Basis (Elevators and Barge Points), 5-Year Average (2015-2019), 2020, and 2021

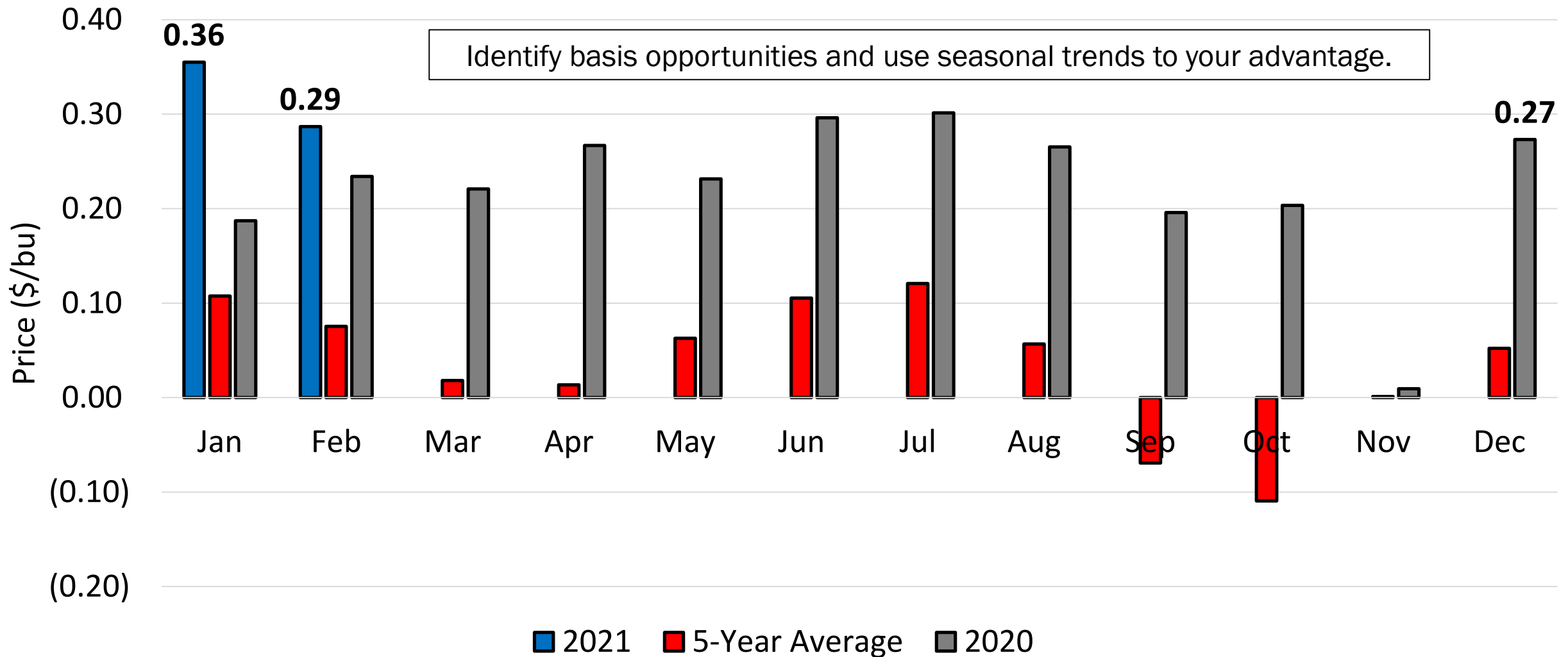


November Soybean Futures Contract (January 1-Expiration) Compared to MYA Price

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Average	\$9.95	\$13.28	\$14.31	\$12.75	\$11.14	\$9.38	\$9.78	\$9.76	\$9.46	\$9.12	\$9.27	\$11.74
Min	\$8.94	\$11.58	\$11.70	\$11.66	\$9.10	\$8.59	\$8.70	\$9.11	\$8.14	\$8.28	\$8.39	\$11.12
Max	\$13.30	\$14.58	\$17.68	\$13.96	\$12.71	\$10.39	\$11.63	\$10.43	\$10.54	\$9.64	\$11.43	\$12.38
Range (max-min)	\$4.36	\$3.00	\$5.98	\$2.30	\$3.61	\$1.80	\$2.93	\$1.32	\$2.40	\$1.37	\$3.04	\$1.26
MYA	\$11.30	\$12.50	\$14.40	\$13.00	\$10.10	\$8.95	\$9.47	\$9.33	\$8.48	\$8.57	\$11.15	\$11.25

- Examine how the MYA price compares to the harvest futures contract average price and price range.
- 2010-2020 average price range \$2.92 (max-min).
- Make basis adjustments to determine reasonable cash price estimates.

Tennessee Average Monthly Soybean Basis (Elevators and Barge Points), 5-Year Average (2015-2019), 2020, and 2021



December Cotton Futures Contract (January 1-Expiration) Compared to MYA Price

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Average	88.0	113.2	79.3	83.8	72.3	63.9	65.3	71.3	80.4	67.6	63.9	80.7
Min	68.7	90.0	65.4	74.8	58.5	60.0	55.7	66.4	74.1	57.8	50.4	75.4
Max	151.2	142.0	97.3	93.3	84.5	67.9	76.7	75.7	93.0	77.4	72.7	87.7
Range (max-min)	82.5	52.0	31.9	18.5	26.0	7.9	21.1	9.3	18.8	19.6	22.3	12.3
MYA Price	81.5	88.3	72.5	77.9	61.3	61.2	68.0	68.6	70.3	59.6	63.2	75.0

- Examine how the MYA price compares to the harvest futures contract average price and price range.
- 2010-2020 average price range 26.9 cents (max-min).
- Make basis adjustments to determine reasonable cash price estimates.

Marketing Strategies that Protect downside but Allow for Price Increases

- Buy puts (with or without premium offsets)
- Forward contract / short hedge buy calls

Closing Comments

- Understand the current market environment and continue to evaluate price projections and yield potential throughout the marketing cycle.
- Evaluate storage capacity relative to anticipated production.
- The amount priced at different times of the year is operation specific but:
 - Have some 2021 production priced prior to planting ~25-50%.
 - Don't price your way out of an extended rally!
 - Its not too early to evaluate 2022 opportunities (\$4.32 ½ and \$10.98 ¾ futures as of 3/2/21).

Tennessee Cash Price Projections

	Old Crop	New Crop
Corn	\$5.00-\$6.50	\$4.25-\$7.00
Cotton	85-94 cents	75-90 cents
Soybeans	\$13.00-\$15.00	\$10.00-\$15.00
Wheat	\$6.00-\$7.25	\$5.50-\$7.50

- Excluding cotton, old crop prices have been moving sideways for 1 ½ months.
- Very early in the 2021 production season, so prices are highly uncertain.
- Expect volatility in old and new crop futures.
- Planted acres will be the next major market mover.

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THANK YOU!

