

Cotton Fundamentals and Outlook

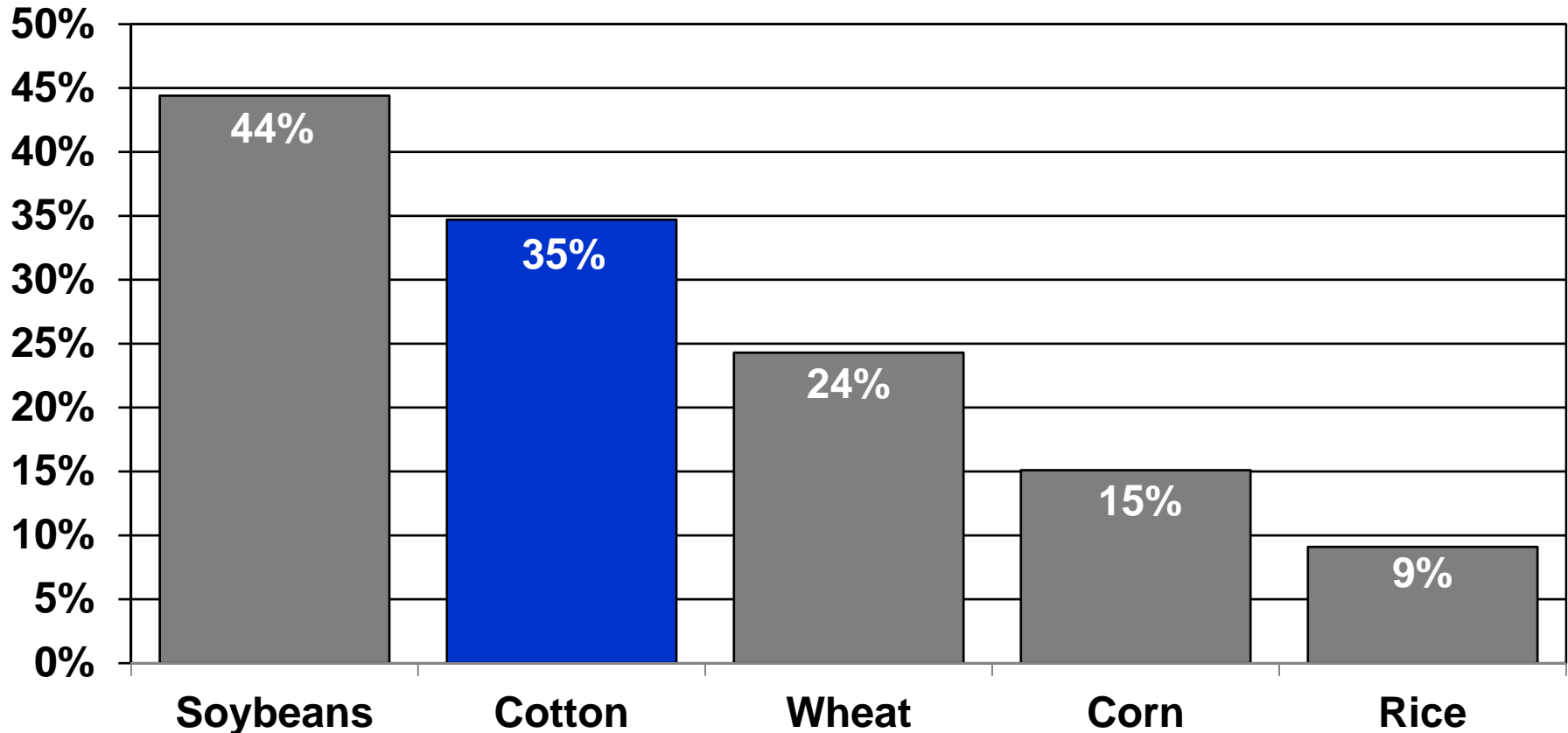
John Robinson
Professor and Extension
Economist-Cotton Marketing
<http://agrilife.org/cottonmarketing/>

Department of Agricultural Economics
Texas A&M AgriLife Extension Service
Texas A&M University
College Station, Texas

TEXAS A&M
AGRILIFE
EXTENSION

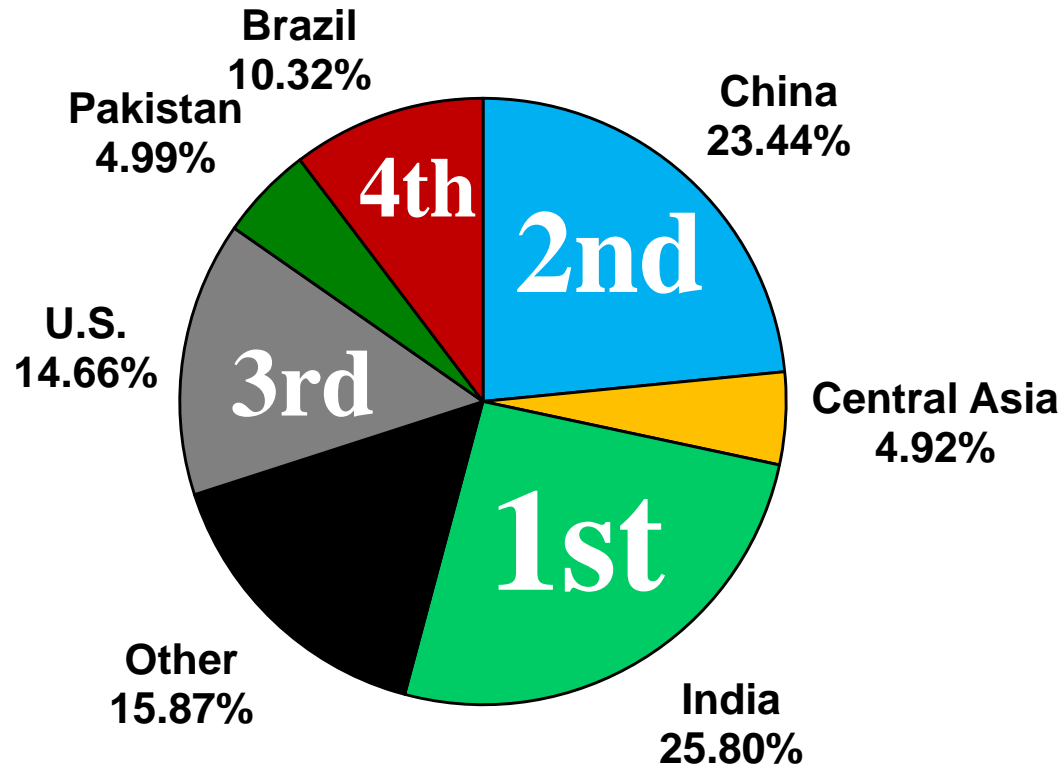
Cotton is a Global Commodity

Percentage of annual U.S. production that is exported (average 2016/17-2020/21)



Source: USDA

Major World Cotton Producers

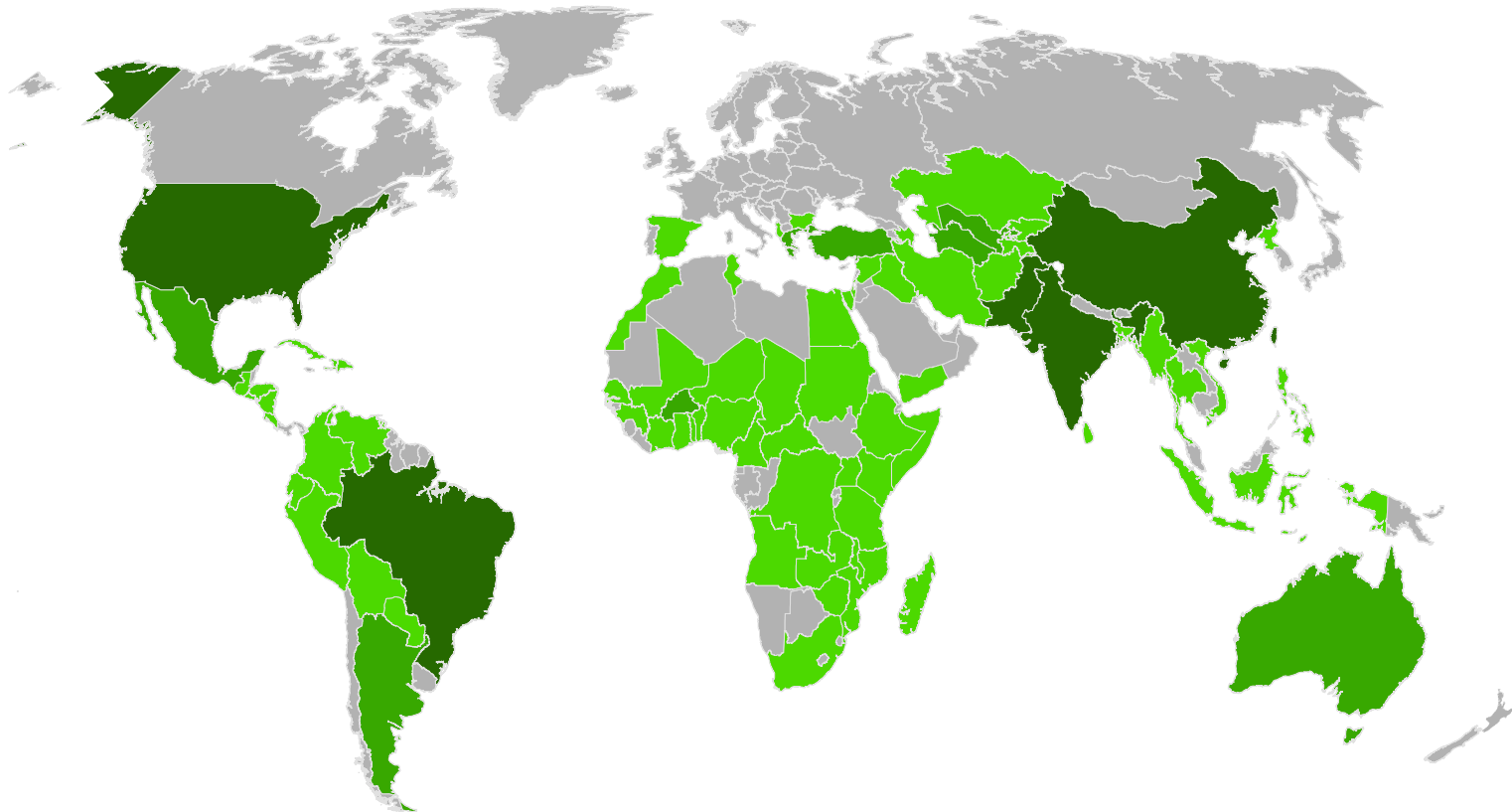


2018/19
Total Production = 116.27
Million 480-Lb. Bales

Source: October 9, 2020 Supply/Demand

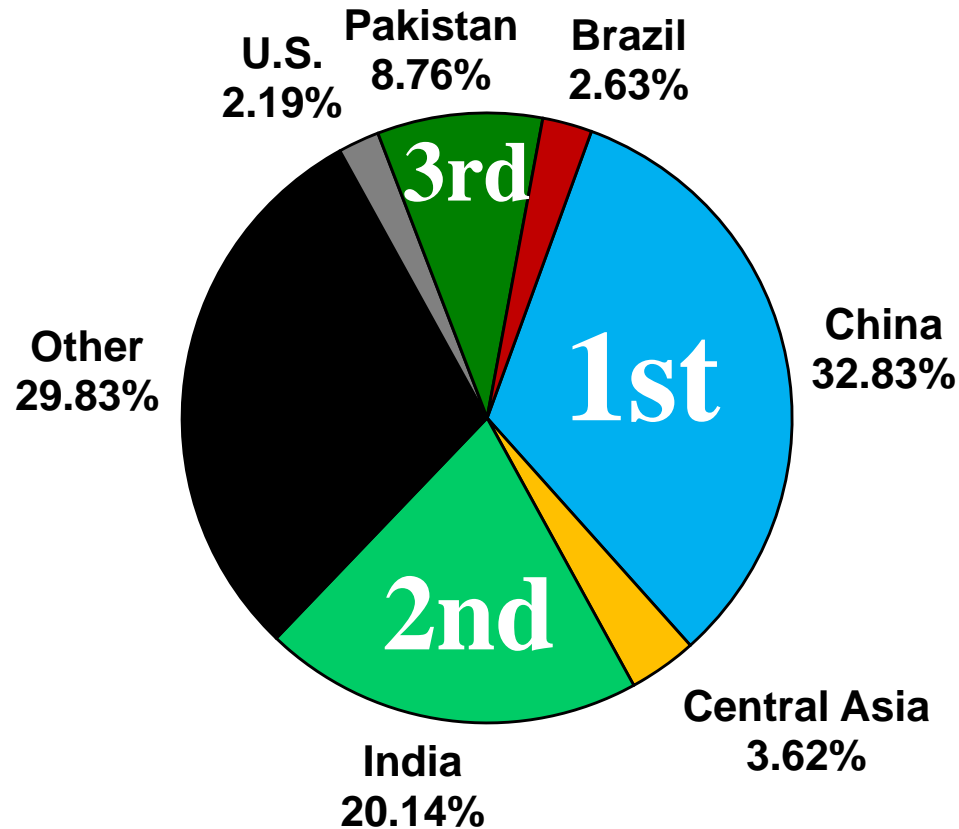
Global Cotton Production

480lb bales (average 2010/11 to 2014/15)



Source: USDA

Major World Cotton Consumers



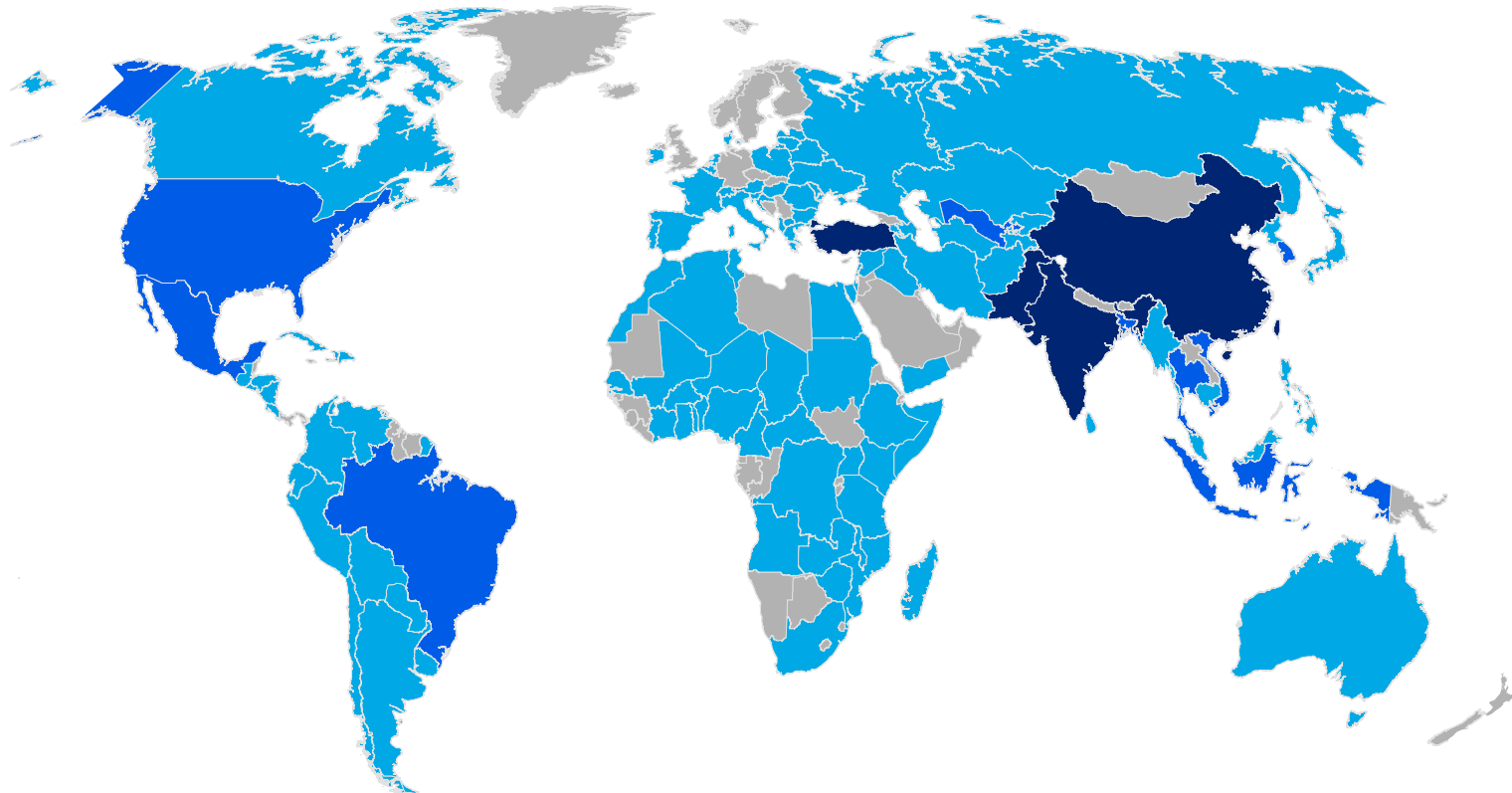
2018/19

Total Domestic Use = 114.21
Million 480-Lb. Bales

Source: October 9, 2020 Supply/Demand

Global Cotton Mill-Use

480lb bales (average 2014/15 to 2018/19)



Source: USDA

Global Market

- **Cotton growers in major exporting countries respond to price signals.**
 - **More so in developed, commercial exporters (U.S., Brazil, Australia)**
 - **Less in developing countries**
- **Cotton exporters are also influenced by exchange rates and changing economic conditions.**

Brazil

**2020/21
Production:**

**12.0 million
bales**

**2020/21
Consumption:**

**3.0 million
bales**

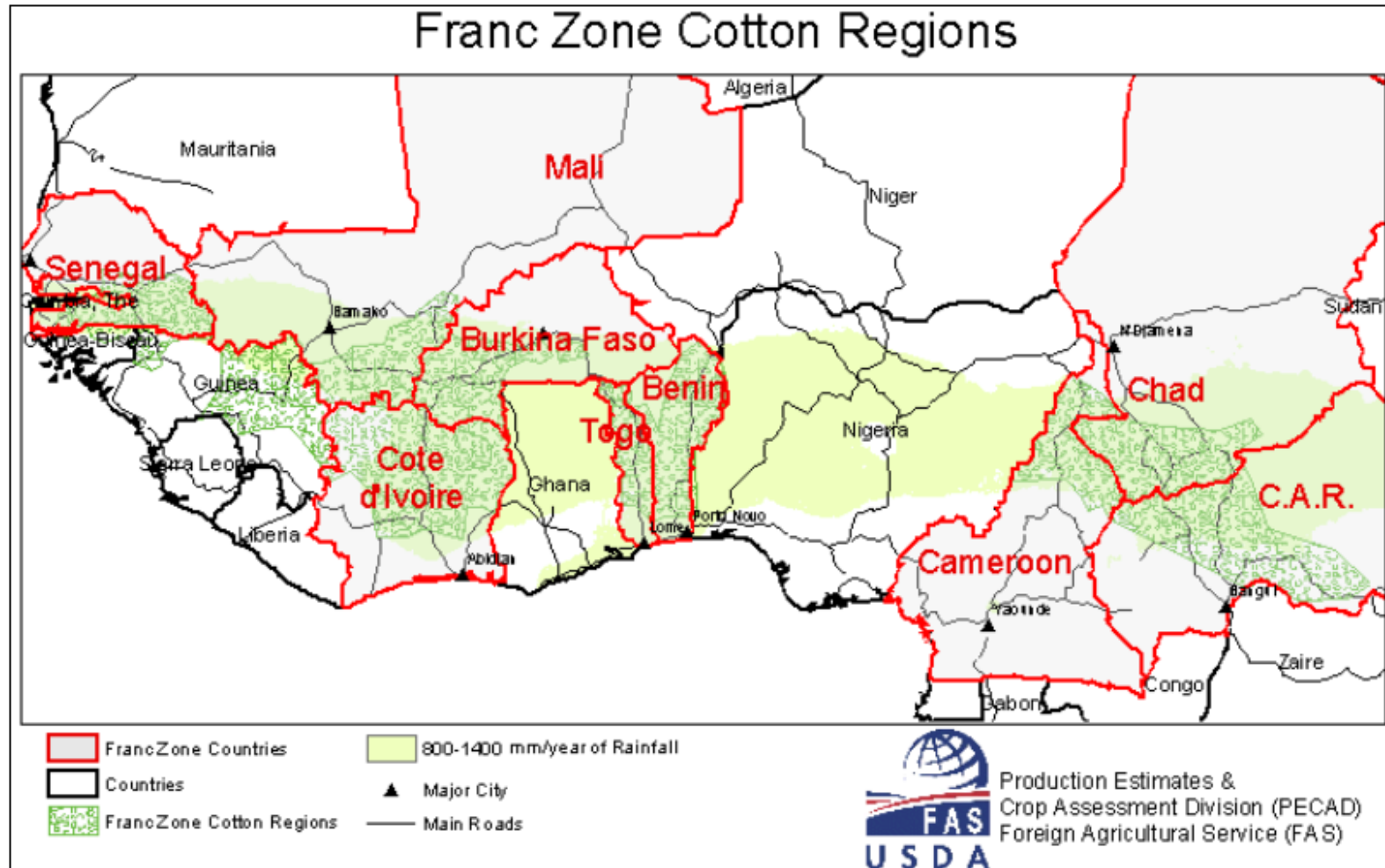


Australia



2020/21 Production and Consumption:
2.1 million bales 0.04 million bales

West African Cotton Belt



**2020/21 Production and Consumption:
5.00 million bales 0.14 million bales**

Make a New Plan, Stan

**2020/21
Production
(480 bales)**

**Pakistan:
5.80 million**

**Central Asia:
5.72 million**

**(Pakistan and
Central Asia
consume 10.0M
and 4.14M bales,
respectively)**



India

**2020/21
Production:
30.0 million bales**

**2020/21
Consumption:
23.0 million bales**



Chinese Cotton Belt

Production Share in 2019/20 (%)	
Xinjiang	85.25
Shandong	4.07
Hebei	3.64
Hubei	2.46
Hunan	1.39
Anhui	0.95
Gansu	0.56
Henan	0.46
Jiangsu	0.27
<u>Other</u>	<u>0.95</u>
Total China	100.00



Source: USDA/FAS China Attache Gain Report #CH2020-0047, April 2020.

2020/21 Production: 27.25 million bales
2020/21 Consumption: 37.50 million bales
2020/21 Net Deficit: 10.25 million bales

WASDE - 605 - 27

**World Cotton Supply and Use 1/
(Million 480-Pound Bales)**

2020/21 Proj.		Beginning Stocks	Production	Imports	Domestic Use	Exports	Loss /2	Ending Stocks
World	Sep	99.44	117.20	41.75	112.69	41.72	0.15	103.84
	Oct	99.21	116.27	42.23	114.21	42.24	0.13	101.13
World Less China	Sep	62.54	89.95	32.75	76.19	41.60	0.15	67.32
	Oct	62.31	89.02	32.73	76.71	42.11	0.13	65.11
United States	Sep	7.25	17.06	3/	2.50	14.60	0.02	7.20
	Oct	7.25	17.05	3/	2.50	14.60	0.00	7.20
Total Foreign	Sep	92.19	100.14	41.75	110.19	27.12	0.13	96.64
	Oct	91.96	99.23	42.23	111.71	27.64	0.13	93.93
Major Exporters 4/	Sep	40.59	57.88	1.71	31.33	23.35	0.02	45.48
	Oct	40.42	57.40	1.71	31.83	23.87	0.02	43.81
Major Importers 8/	Sep	49.08	39.21	37.47	74.92	2.39	0.11	48.33
	Oct	49.07	38.66	37.97	75.93	2.35	0.11	47.32

Cotton prices are highly influenced by how this variable changes (either monthly or year-over-year).

Cotton Balance Sheet

	2018/19	2019/20	2020/21
	<i>Area Million Acres</i>		
Planted	14.10	13.74	12.12
Harvested	9.99	11.61	9.01
	<i>Pounds</i>		
Yield/Harvested Acre	882	823	909
	<i>Million 480 Pound Bales</i>		
Beginning Stocks	4.20	4.85	7.25
Production	18.37	19.91	17.05
Imports	0.00	0.00	0.00
Supply, Total	22.57	24.77	24.30
Domestic Use	2.98	2.15	2.50
Exports, Total	14.84	15.53	14.60
Use, Total	17.81	17.68	17.10
Unaccounted	-0.09	-0.16	0.00
Ending Stocks	4.85	7.25	7.20
Ending Stks/Use (%)	27.24	41.01	42.11

?

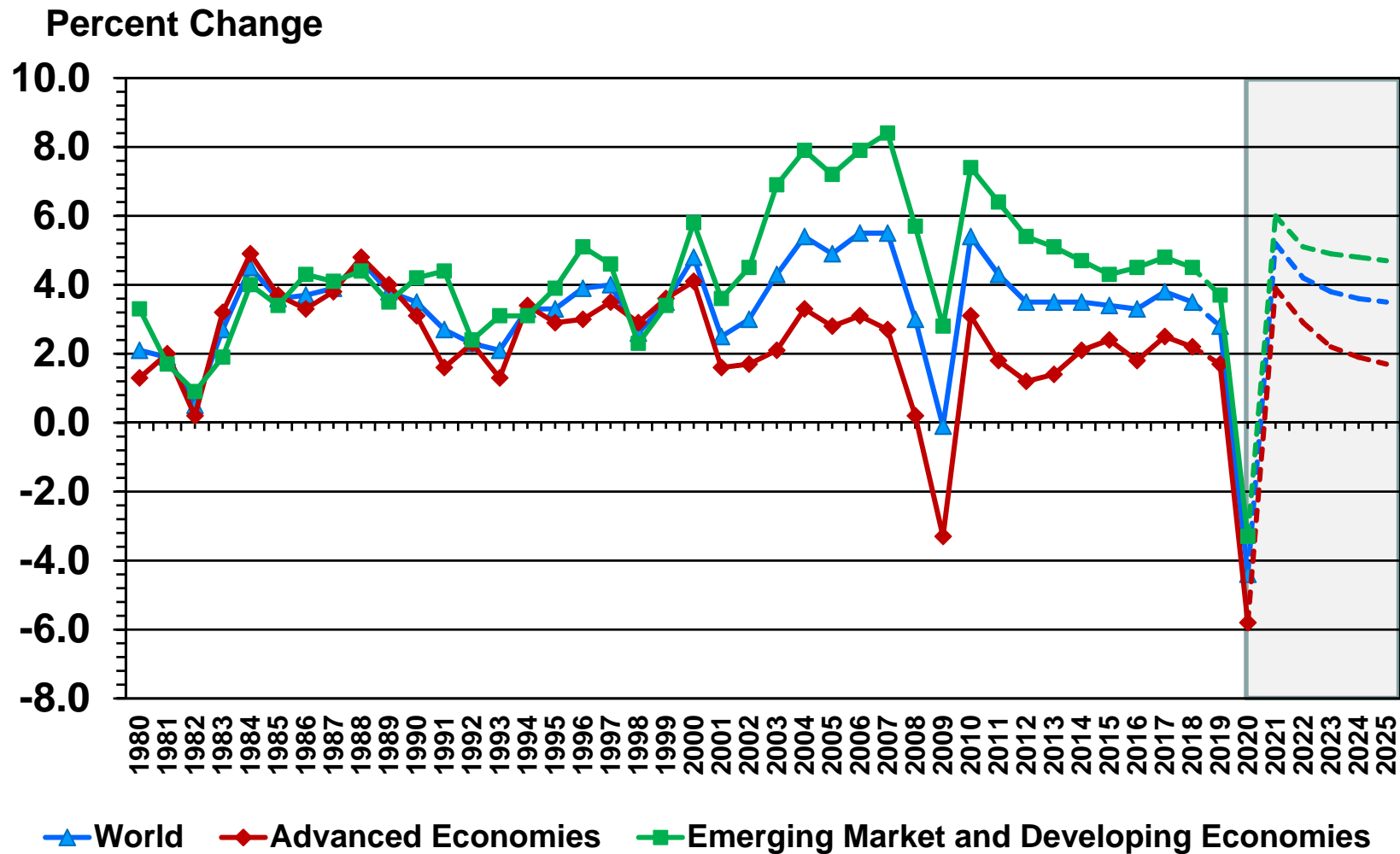
?

Demand Influences

- **U.S. Economic Indicators**
- **U.S. Exports**
- **Speculative Money**
- **Emerging Foreign Issues**

Global Economic Growth

Global economic growth is being driven by developing nations.
Real GDP Growth, 1980 - 2025

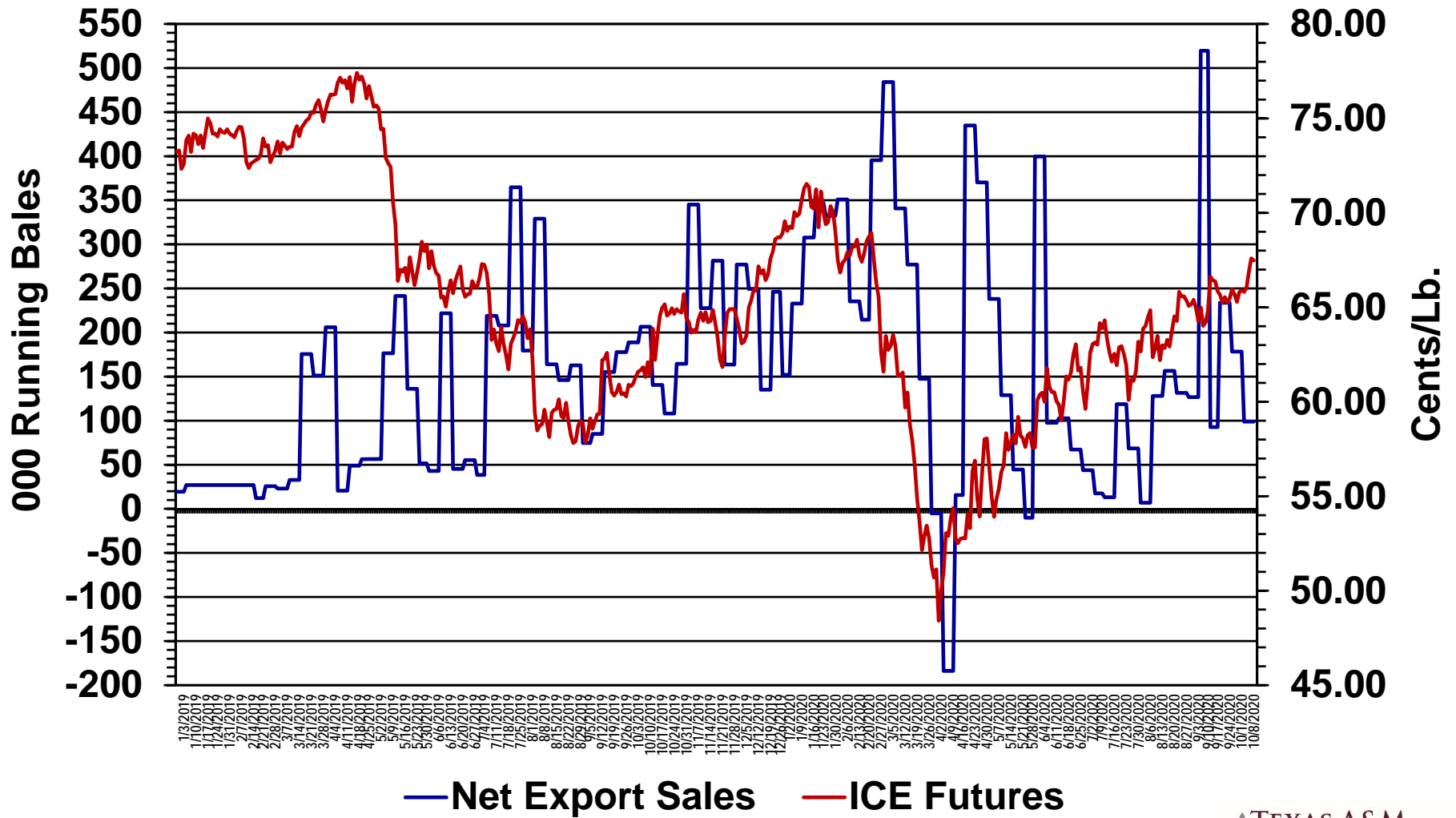


World Economic, Outlook, October 13, 2020 <http://www.imf.org>

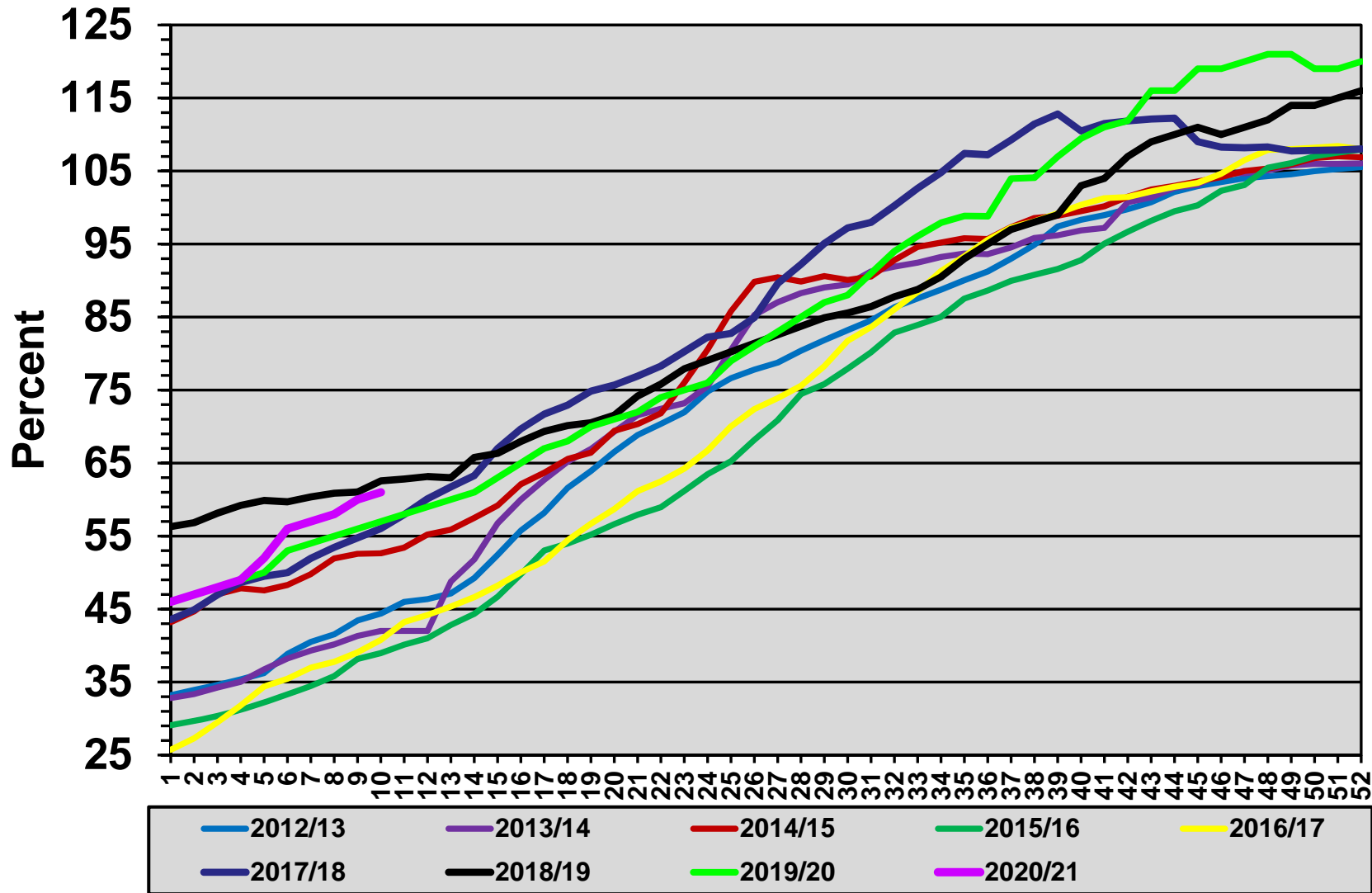
http://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD

U.S. 2020/2021 Upland Cotton Net Export Sales and ICE Futures

January 3, 2019 – October 8, 2020



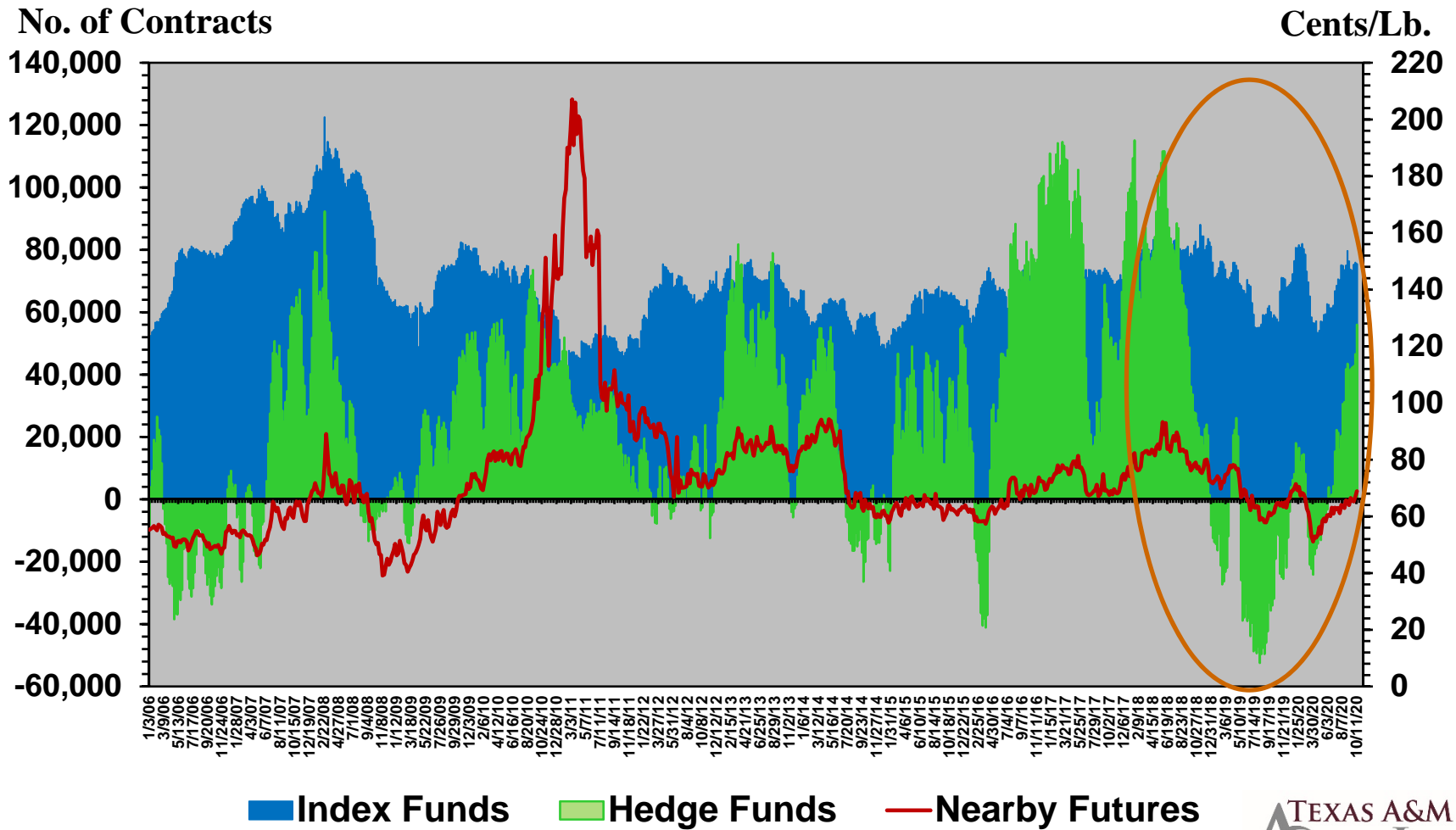
Cotton Export Total Commitments as a Percent of U.S. Cotton Exports, by Week



Source: USDA/OCE/FAS

Net Long Hedge Funds and Index Fund Position

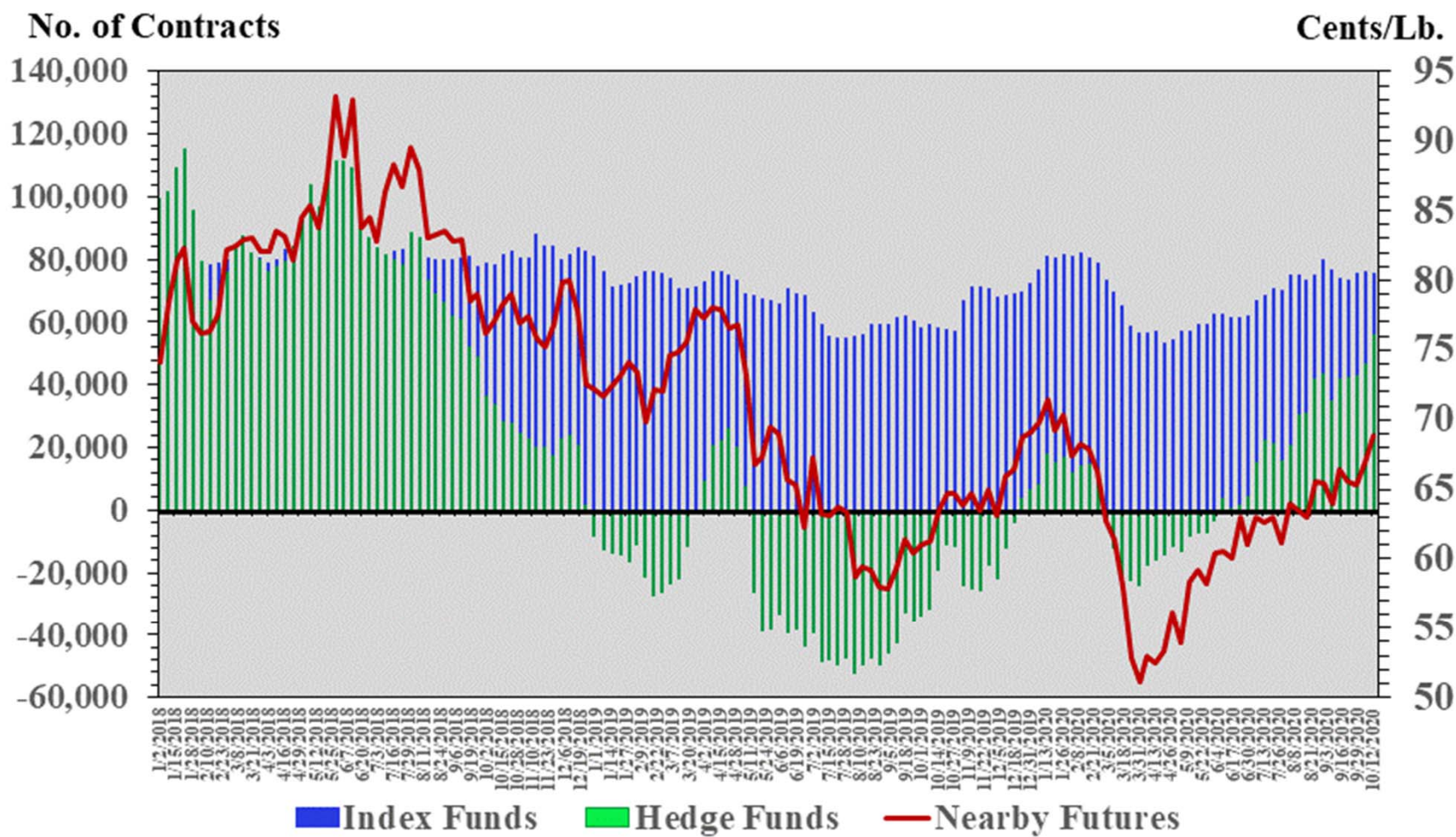
January 3, 2006 Through October 13, 2020



Source: Commitment of Traders Supplemental Report (Futures and Options)

Cotton: Net Positions of Index Funds, Hedge Funds, vs. Nearby Futures Prices

January 2, 2018 Through October 13, 2020



Source: Commitment of Traders Supplemental Report (Futures and Options)

Issues Affecting U.S. Exports:

- **U.S. 2020 Crop Quality & Yield?**
- **Timing of Pandemic Recovery?**
- **Continued Chinese Reserve Purchases?**
- **Future Chinese Mill Purchases?**
 1. From Economic Recovery
 2. From Restructuring to avoid Xinjiang Sanctions

Chinese Cotton Industry Restructuring?



NEWS

≡ NATIONAL REVIEW

WORLD

U.S. Bans Cotton, Other Products from Xinjiang, Citing Forced Uyghur Labor

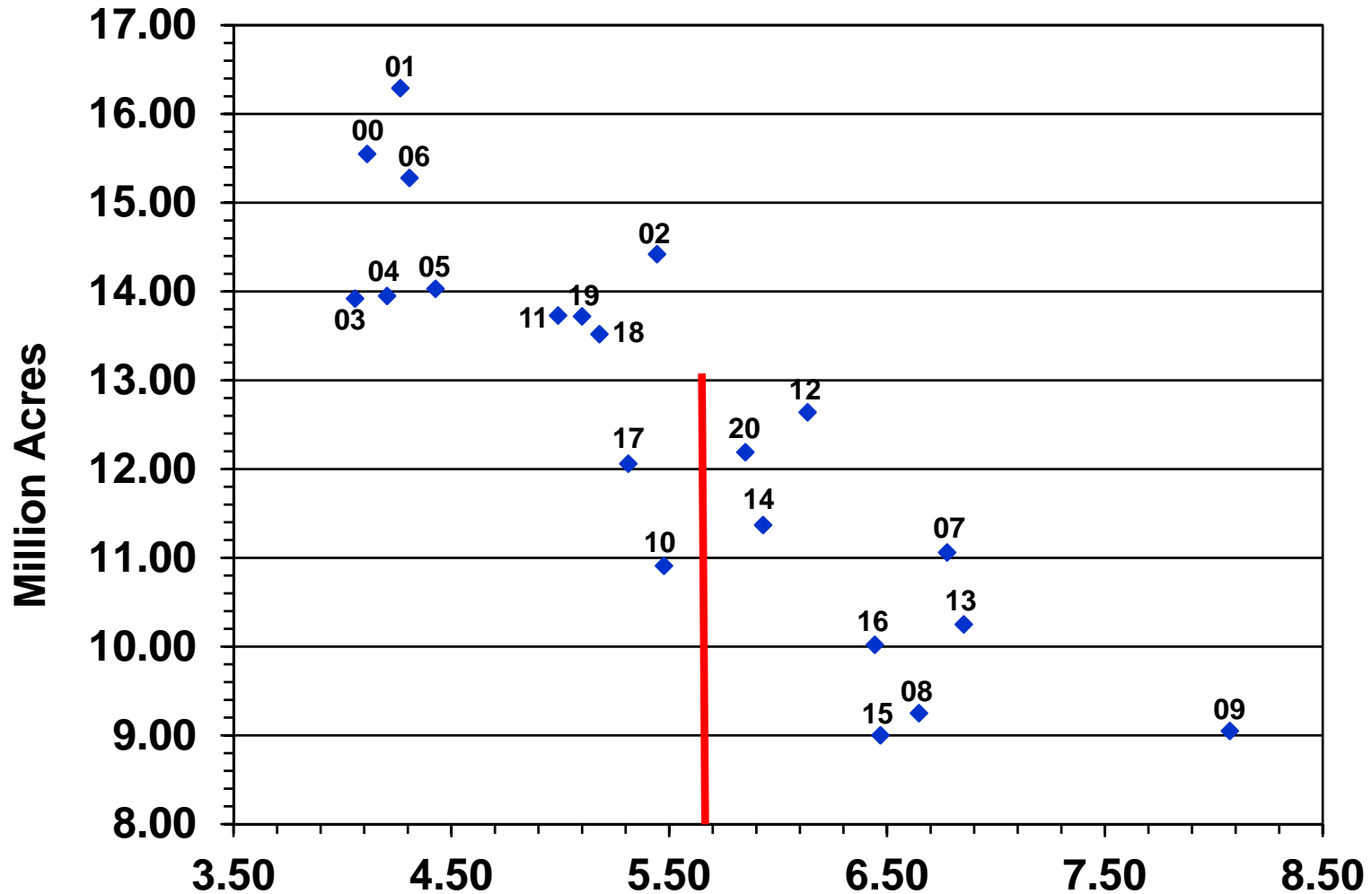
By BRITTANY BERNSTEIN | September 14, 2020 2:37 PM

The Department of Homeland Security announced Monday that U.S. Customs and Border Patrol agents would begin turning away products sourced from forced labor in the Xinjiang region of China, where more than a million Muslims, mostly of the Uyghur minority, have been imprisoned in concentration camps.

2021/22 Crop

- **Corn:cotton price ratios suggest around 13 million acres of U.S. cotton planted (upland and pima).**

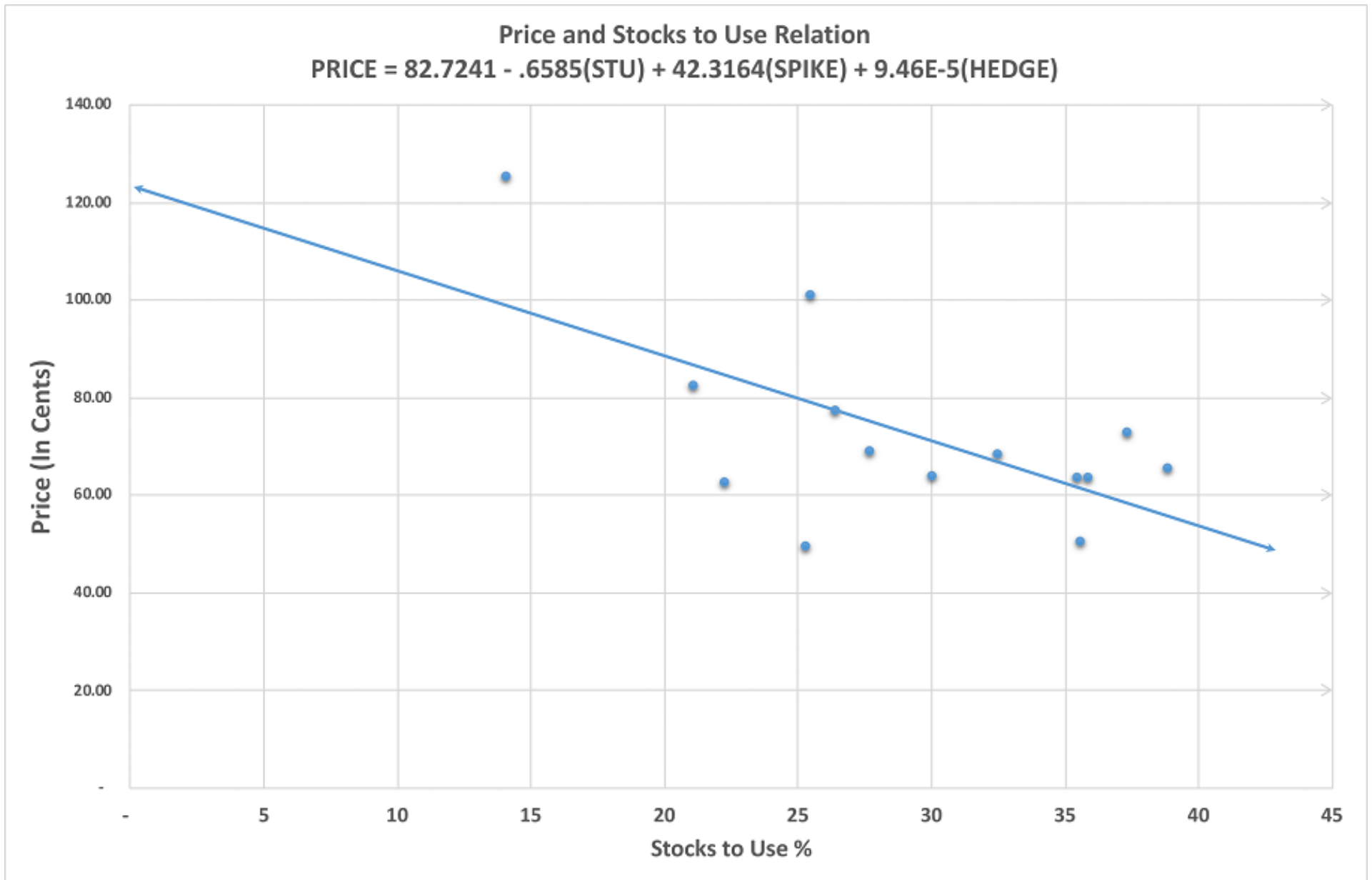
Ratio of CBOT CNZ20 / ICE CTZ20 Futures, Three Month Average First Quarter, vs. June Cotton Planted Acreage Report



Ratio = 5.7 October 14

2021/22 Crop

- **Corn:cotton price ratios suggest around 13 million acres of U.S. cotton planted (upland and pima).**
- **La Nina suggests dryer than normal**
 - a. **Higher abandonment (assume 29%)**
 - b. **Lower yields (assume 850 lbs/ac)**
 - c. **Potentially less production and stronger prices**
 - d. **Quick math: 16+M bale crop, plus 6.8M bales carry-in, less 18 million bales of use, gives 5+M bales of ending stocks, and a 29% stocks-to-use (down from 42%)**
 - e. **Statistically, avg. Dec futures price in October is 0.7 cents higher for every 1% decline in stocks-to-use, or about an 8-cent boost in the range of Dec'21.**

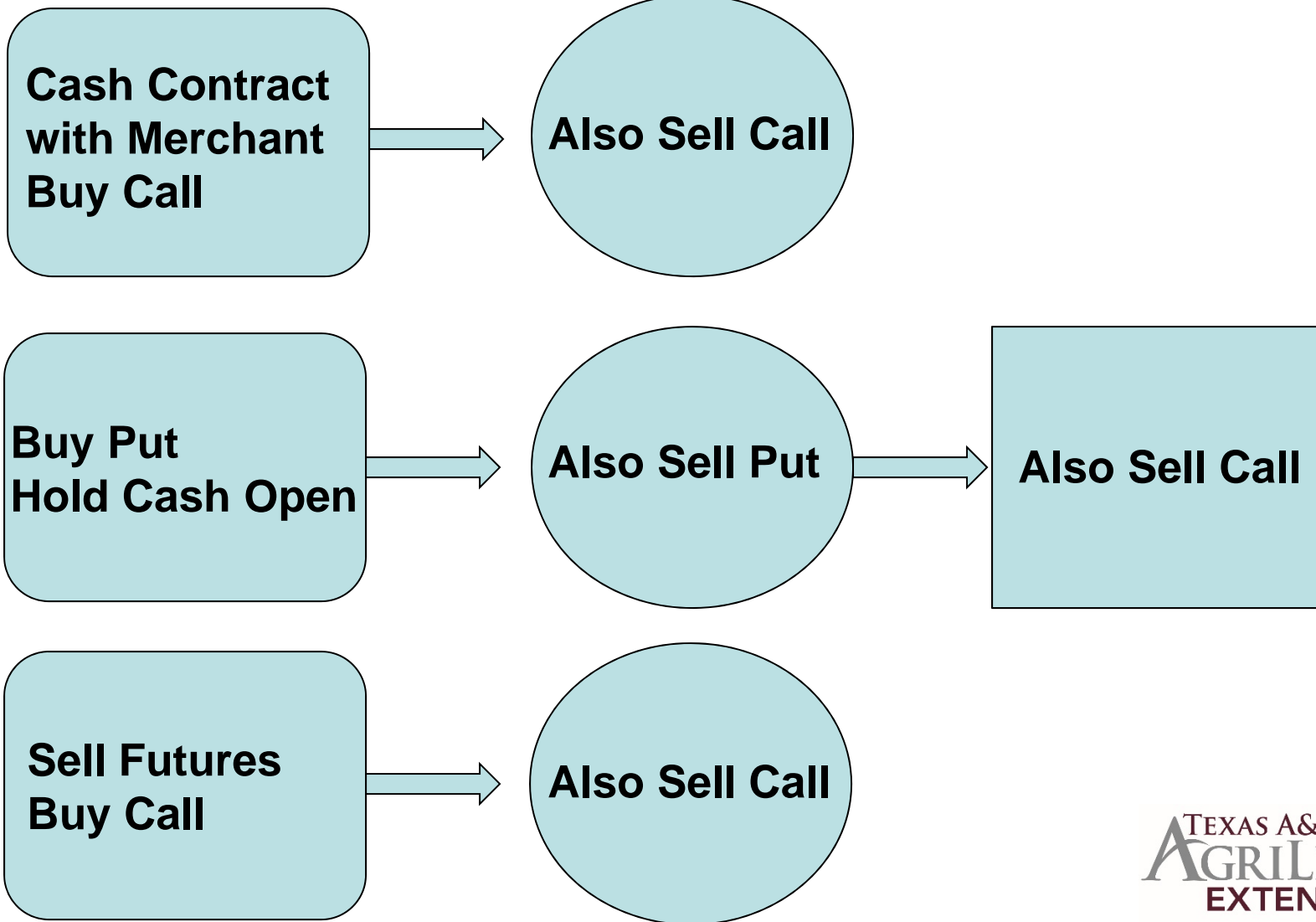


**Avg. Dec futures price in October, as influenced by stocks-to-use, etc.
 For a 1% drop in STU, average prices rise .66 cents, all other things equal.
 For a 10,000 increase in Hedge Fund open interest, avg. prices rise 0.95 cents, all other things equal.**

Different Ways of Doing the Same Thing

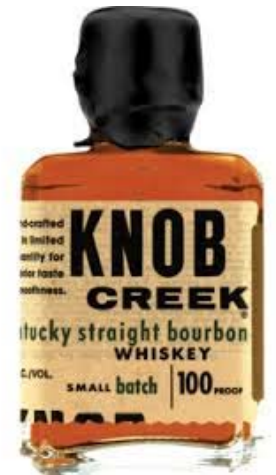
CORE POSITION

COST SAVING MEASURES



“Straight Futures” Hedging: Sell Dec. ‘21 Futures When the Price Is High Enough

- On 10/21/20, you could sell Dec. ‘21 Futures @ 70.51¢ (probably too low)
- Assume 5¢ basis (South Texas)
- Effective Floor Price is Futures less Expected Basis, i.e., you avoid option premiums
- Will receive floor price (subject to basis risk) regardless of how low or how high Dec’21 moves
- Fully exposed to margin risk (cash flow and stomach lining)



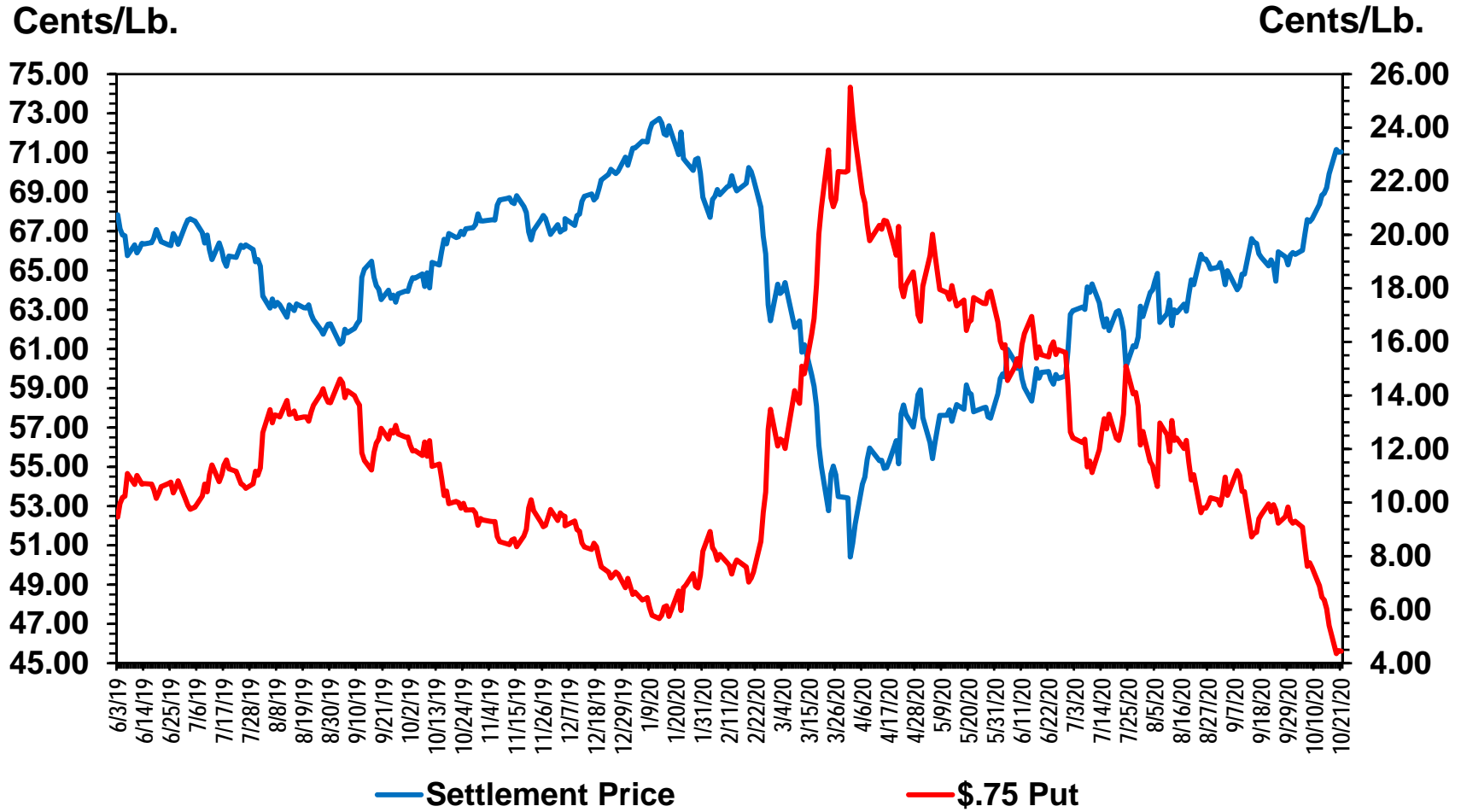
Futures Hedge Summary

- **Protects against lower prices by “Locking In” price – for good or bad**
- **Gives up potential to benefit from favorable price move**
- **If basis widened, you’d lock in a lower price than previously planned (basis risk)**
- **Can involve substantial margin calls, as in 2008 and 2010**

Options: More Flexibility, At a Cost

- An option is a contract giving the holder the right (but not the obligation) to buy a futures contract (Call Options) or sell a futures contract (Put Options) at a specified futures price.
- With options on futures contracts, the specified futures price is called a “Strike Price”.
- With option contracts, you’re buying the right to hedge with futures while avoiding the major disadvantages.
- How much would you be willing to pay for this?

Looking Back: December 2020 Futures Settlement Price vs. December 75¢ Put Option Premium



Daily
June 3, 2019 – October 21, 2020

Look for this opportunity in 2021!!!!!!



CONTACT INFO

Phone: 979-845-8011

Cotton: jrcr@tamu.edu

“Cotton Spin” Column, Southwest Farm Press

<http://southwestfarmpress.com/author/john-robinson>

The Cotton Marketing Planner Newsletter

<https://cottonmarketing.tamu.edu/>

Twitter: @aggie_prof

Facebook: <https://www.facebook.com/AgriLifeMasterMarketer>