Crop Market Outlook

Row Crop Short Course

March 3rd, 2022

Marianna, FL

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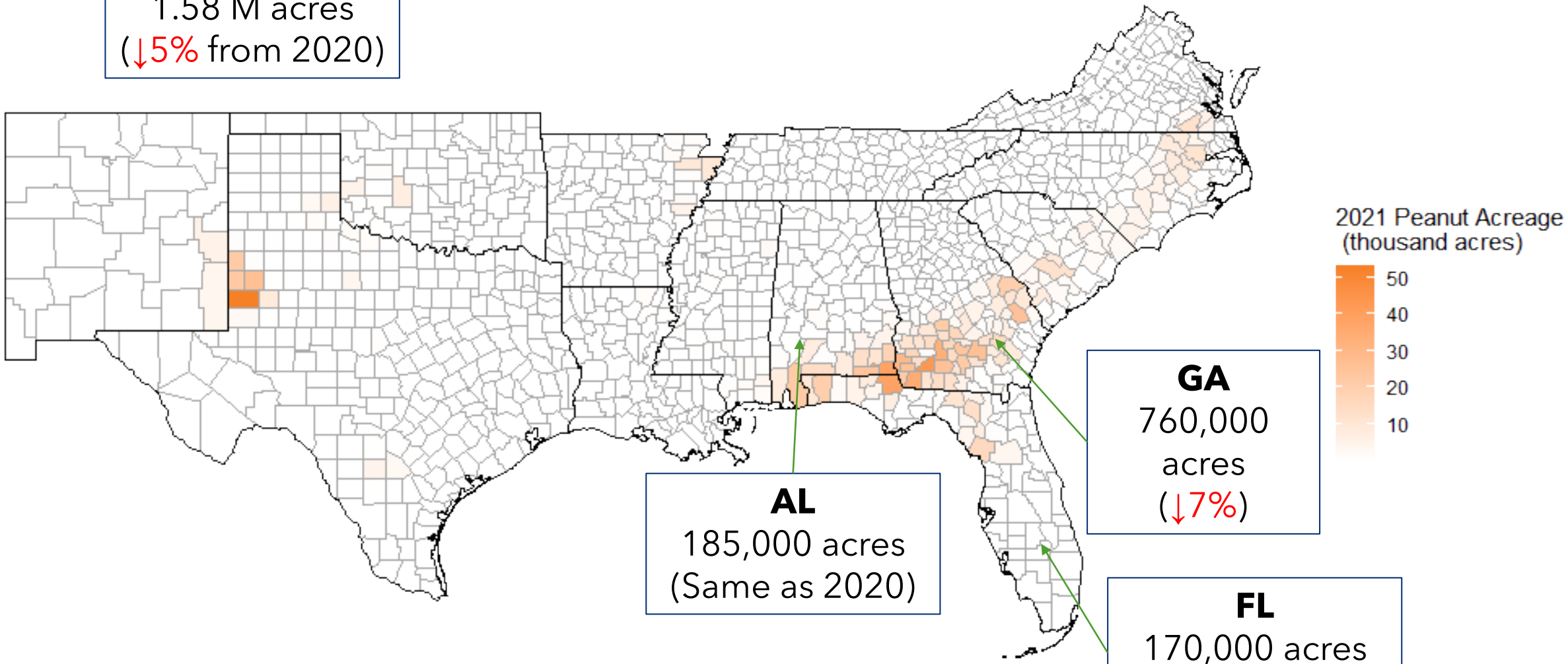
Peanuts

Peanut Highlights

- Supply
  - ➢Increased in 2021 due to higher yields
- Demand
  - ➢Food consumption up again
  - ➢Will exports recover?
- Other things to watch for
  - High input costs
  - High prices of competing crops

Peanut Acreage

US
1.58 M acres
(↓5% from 2020)



GA
760,000
acres
(↓7%)

AL
185,000 acres
(Same as 2020)

FL
170,000 acres
(↓3%)

Data source: FSA; Updated September 2021

Peanut Acreage Planted (1,000 acres)

State	2014	2015	2016	2017	2018	2019	2020	2021	% Change
Alabama	175	200	175	195	165	160	185	185	0%
Arkansas	11	16	24	30	26	34	39	36	-8%
Florida	175	190	155	195	155	165	175	170	-3%
Georgia	600	785	720	840	665	675	810	755	-7%
Mississippi	32	44	39	44	25	20	23	18	-22%
Southeast	**993**	**1,235**	**1,113**	**1,304**	**1,036**	**1,054**	**1,232**	**1,164**	**-5%**
New Mexico	5	5	8	9	6	5	6	11	83%
Oklahoma	12	10	13	21	16	15	15	16	7%
Texas	130	170	305	275	155	165	190	180	-5%
Southwest	**147**	**185**	**326**	**305**	**177**	**185**	**211**	**207**	**-2%**
North Carolina	94	90	101	120	102	104	108	115	6%
South Carolina	112	112	110	125	87	65	85	69	-19%
Virginia	19	19	21	27	24	25	28	30	7%
Virginia-Carolina	**225**	**221**	**232**	**272**	**213**	**194**	**221**	**214**	**-3%**
US	**1,365**	**1,641**	**1,671**	**1,881**	**1,426**	**1,433**	**1,664**	**1,585**	**-5%**

Data source: USDA-NASS; Updated January 2022

Peanut Yields (lb/ac)

State	2017	2018	2019	2020	2021	Record Yield
Alabama	3,650	3,550	3,350	3,500	3,400	4,000 (‘12)
Arkansas	5,300	4,900	5,200	4,800	5,000	5,300 (‘17)
Florida	3,550	3,950	3,800	3,400	3,650	4,000 (‘14)
Georgia	4,380	4,390	4,170	4,100	4,450	4,580 (‘12)
Mississippi	4,100	3,900	4,000	4,400	4,200	4,400 (‘12)
New Mexico	3,500	2,850	3,210	3,000	2,600	3,600 (‘06)
North Carolina	4,100	3,870	4,400	4,000	4,350	4,400 (‘19)
Oklahoma	3,700	3,070	4,000	4,200	4,400	4,400 (‘21)
South Carolina	4,000	3,400	3,800	3,400	4,200	4,200 (‘27)
Texas	3,600	3,200	3,050	2,800	3,600	3,750 (‘05)
Virginia	4,550	4,200	4,650	4,100	4,700	4,700 (‘21)
US Total	**4,074**	**4,001**	**3,934**	**3,796**	**4,135**	**4,211 (‘12)**

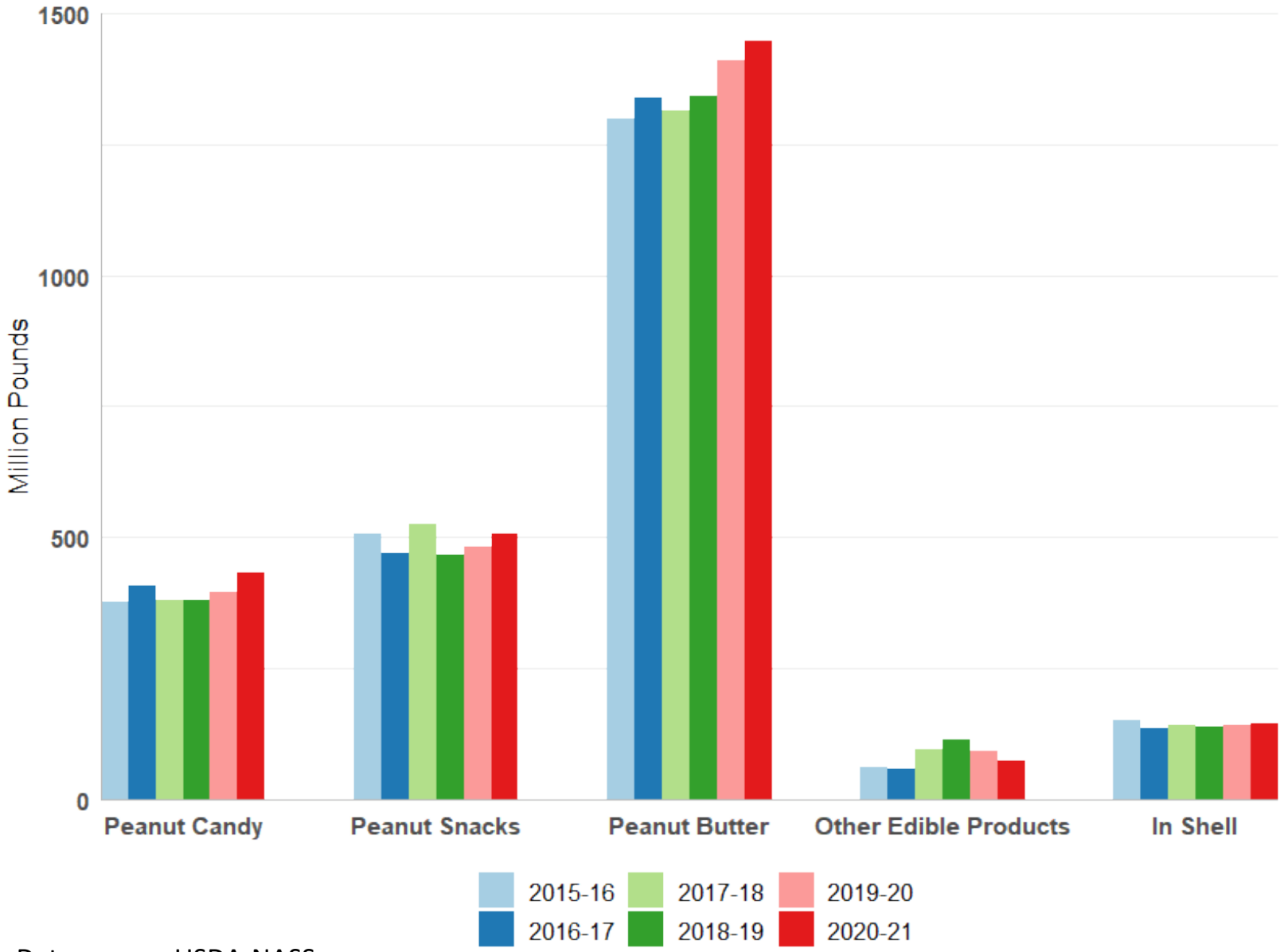
Data source: USDA-NASS; Updated January 2022

Peanut Production (1,000 tons)

State	2016	2017	2018	2019	2020	2021	% Change	2022 Ext. Acreage
Alabama	310	352	286	261	319	311	-2%	0%
Arkansas	55	77	56	86	91	88	-4%	8.6%
Florida	277	319	282	295	281	296	5%	0%
Georgia	1,377	1,786	1,438	1,376	1,640	1,669	2%	4.9%
Mississippi	76	86	47	38	48	36	-26%	14.9%
Southeast	**2,095**	**2,620**	**2,109**	**2,056**	**2,379**	**2,399**	**1%**	**3.7%**
New Mexico	11	13	8	8	7	14	99%	0%
Oklahoma	22	40	23	28	29	33	12%	0%
Texas	280	349	232	244	245	292	19%	5.6%
Southwest	**313**	**402**	**263**	**280**	**282**	**339**	**20%**	**5.0%**
North Carolina	175	240	190	224	212	248	17%	4.8%
South Carolina	170	236	136	118	139	139	-1%	9.1%
Virginia	38	60	50	56	55	71	27%	0%
Virginia-Carolina	**383**	**536**	**376**	**398**	**407**	**457**	**12%**	**0.5%**
US Total	**2,791**	**3,558**	**2,748**	**2,733**	**3,067**	**3,195**	**4%**	**2.1%**

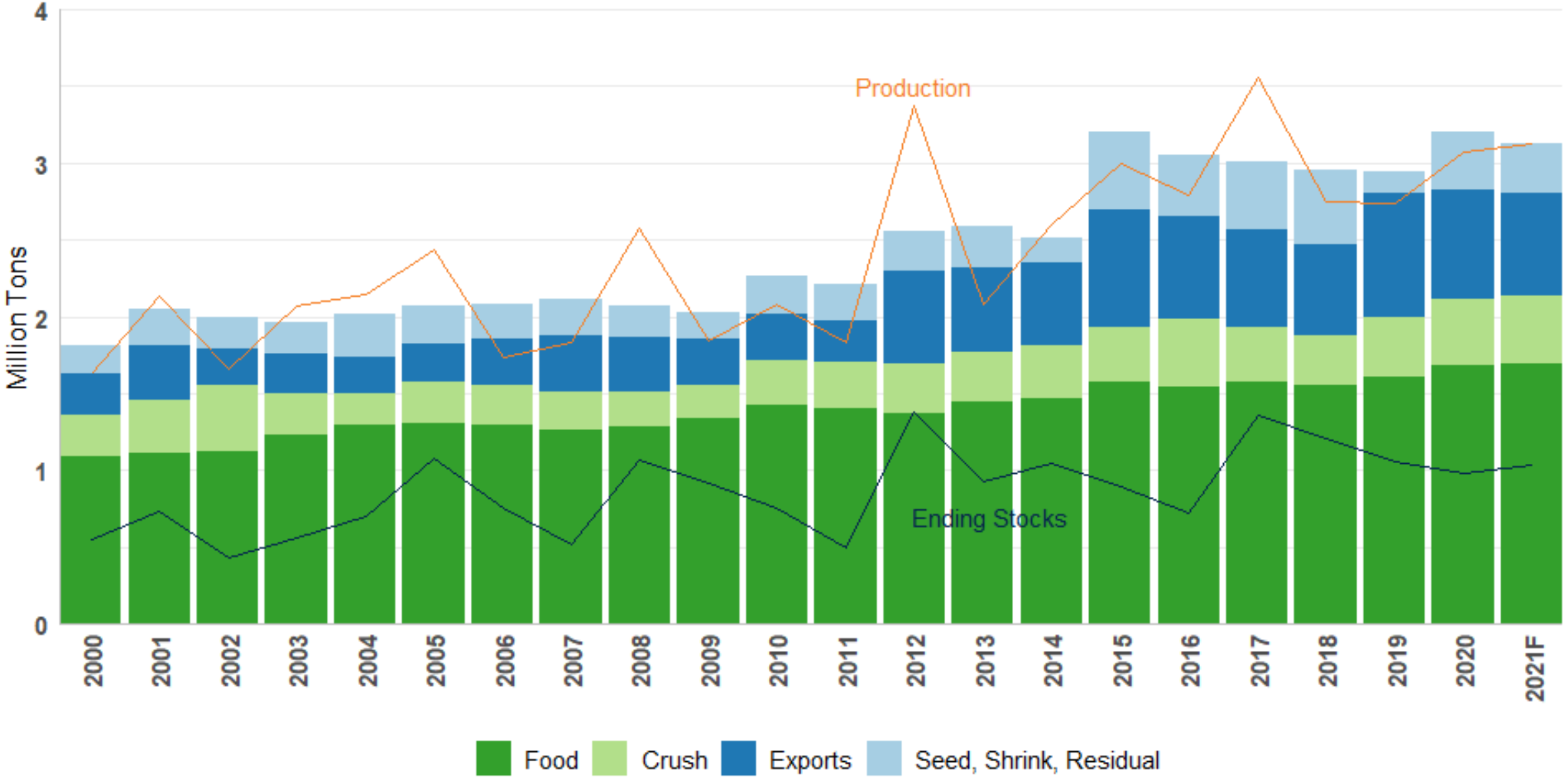
Data source: USDA-NASS; Updated January 2022

Peanut Food Consumption by Product and Marketing Year



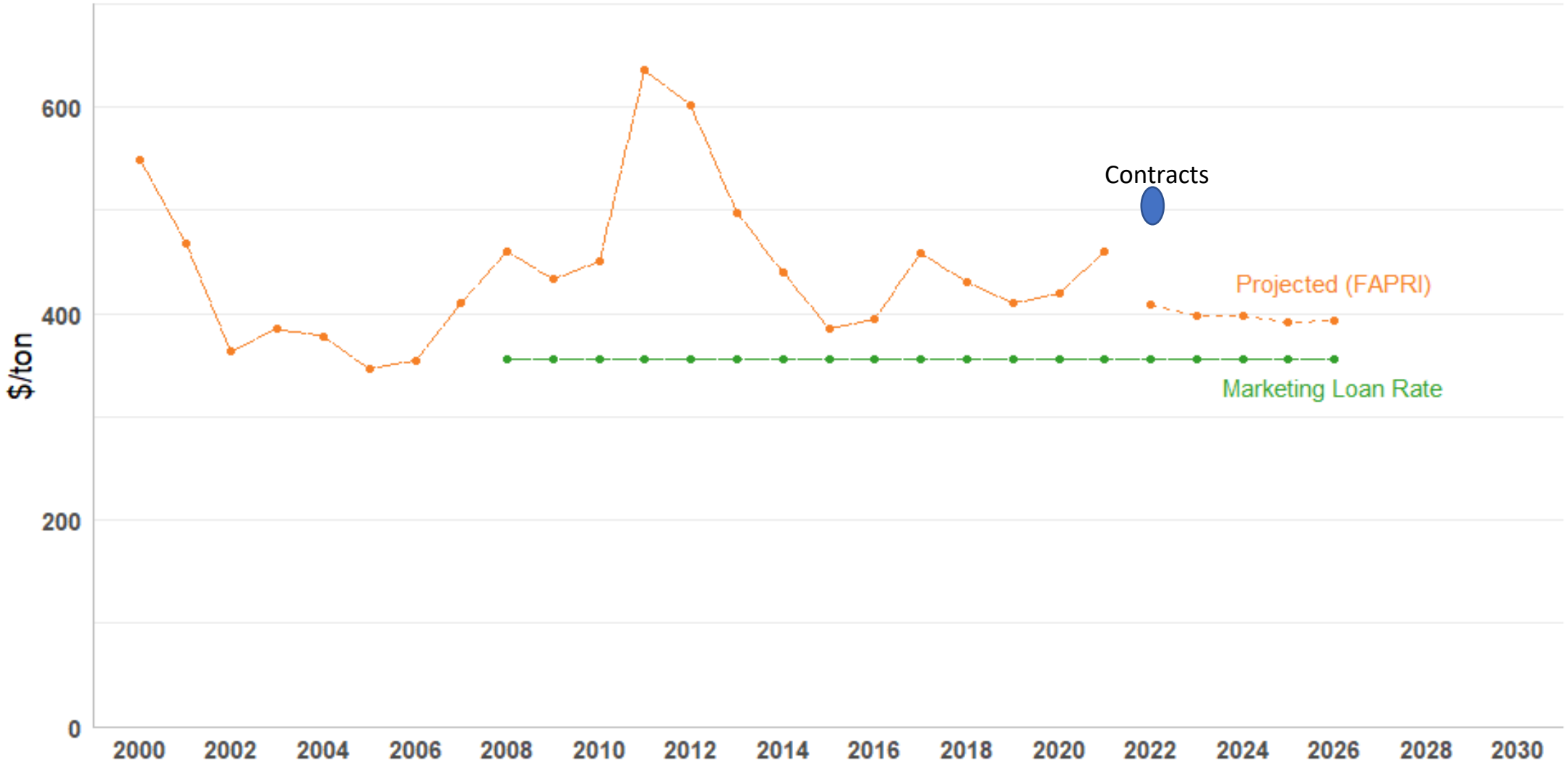
Data source: USDA-NASS

US Peanut Supply and Disappearance



Data source: USDA-NASS; Updated December 2021

Past and Projected US Peanut Prices



Data source: USDA-NASS

Enterprise Budgets

Visit aces.edu and search for “enterprise budgets”

- https://www.aces.edu/blog/topics/farm-management/enterprise-budgets-for-row-crops/

Enterprise budgets are a guide that follows recommended management practices. Actual costs will vary from farm to farm.

Dryland Peanut Enterprise Budget ($/acre)

	2021	2022	Change
Total Revenue	744	788	+6%
Total Costs	700	736	+5%
Variable Cost	567	602	+6%
Fungicides	90	99	+10%
Herbicides	75	83	+11%
Fixed Costs	133	134	+1%

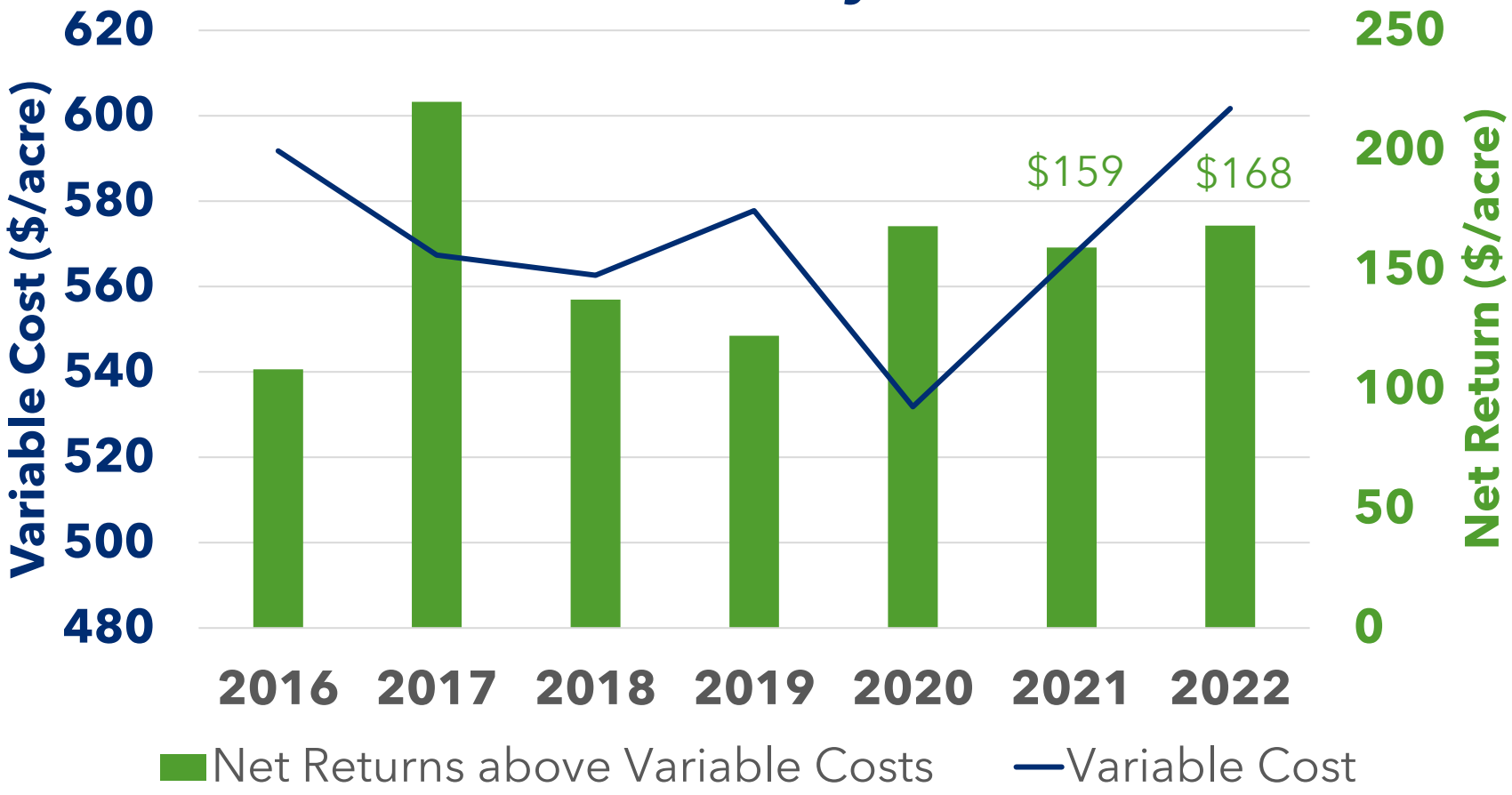
Source: ACES Peanut Enterprise Budget
https://www.aces.edu/blog/topics/farm-management/peanut-enterprise-budgets/

Dryland Peanut Enterprise Budget Sensitivity Analysis Net Returns over Variable Costs

	----------PRICE ($/Ton)----------				
Yield (Tons/acre)	**$400.00**	**$425.00**	**$450.00**	**$475.00**	**$500.00**
1.00	-$202.31	-$177.31	-$152.31	-$127.31	-$102.31
1.50	-$13.56	$23.94	$61.44	$98.94	$136.44
1.75	$80.82	$124.57	$168.32	$212.07	$255.82
2.00	$175.19	$225.19	$275.19	$325.19	$375.19
2.25	$269.57	$325.82	$382.07	$438.32	$494.57

Source: ACES Peanut Enterprise Budget
https://www.aces.edu/blog/topics/farm-management/peanut-enterprise-budgets/

Dryland Peanut Variable Costs and Net Returns by Year



Source: ACES Peanut Enterprise Budget
https://www.aces.edu/blog/topics/farm-management/peanut-enterprise-budgets/

Net Return Comparison for 2022 Dryland Crops

				Peanuts	
Expected Yield				**3,500 lb/ac**	
Variable Cost (VC)				**$602/ac**	
Breakeven Price at VC				**$344/ton**	
Futures Price				**$488/ton***	
Crop Income				**$875/ac**	
Net Return Above VC				**$252/ac**	
Based on ACES row crop enterprise budgets for 2022 and futures market (*contract) harvest price estimates as of 2/17/2022.					

Net Return Comparison for 2022 Dryland Crops

	Corn	Cotton (North)	Cotton (South)	Peanuts	Soybeans
Expected Yield	133.3 bu/ac	750 lb/ac	850 lb/ac	3,500 lb/ac	45 bu/ac
Variable Cost (VC)	$555/ac	$660/ac	$663/ac	$602/ac	$390/ac
Breakeven Price at VC	$4.17/bu	$0.88/lb	$0.78/lb	$344/ton	$8.66/bu
Futures Price	$5.86/bu	$1.024/lb	$1.024/lb	$488/ton*	$14.67/bu
Crop Income	$781/ac	$768/ac	$870/ac	$875/ac	$660/ac
Net Return Above VC	$226/ac	$108/ac	$207/ac	$252/ac	$270/ac
Based on ACES row crop enterprise budgets for 2022 and futures market (*contract) harvest price estimates with estimated basis as of 2/17/2022.					

Net Return Comparison for 2022 Irrigated Crops

				Peanuts	
Expected Yield				**5,000 lb/ac**	
Variable Cost (VC)				**$757/ac**	
Breakeven Price at VC				**$303/ton**	
Futures Price				**$488/ton***	
Crop Income				**$1,220/ac**	
Net Return Above VC				**$463/ac**	
Based on ACES row crop enterprise budgets for 2022 and futures market (*contract) harvest price estimates with estimated basis as of 2/17/2022.					

Net Return Comparison for 2022 Irrigated Crops

	Corn	Cotton (North)	Cotton (South)	Peanuts	Soybeans
Expected Yield	250 bu/ac	1300 lb/ac	1300 lb/ac	5,000 lb/ac	60 bu/ac
Variable Cost (VC)	$1,091/ac	$825/ac	$801/ac	$757/ac	$502/ac
Breakeven Price at VC	$4.37/bu	$0.634/lb	$0.616/lb	$303/ton	$8.37/bu
Futures Price	$5.86/bu	$1.024/lb	$1.024/lb	$488/ton*	$14.67/bu
Crop Income	$1,163/ac	$1,331/ac	$1,331/ac	$1,220/ac	$880/ac
Net Return Above VC	$348/ac	$506/ac	$530/ac	$463/ac	$378/ac

Based on ACES row crop enterprise budgets for 2022 and futures market (*contract) harvest price estimates with estimated basis as of 2/17/2022.

Key Takeaways for Peanuts

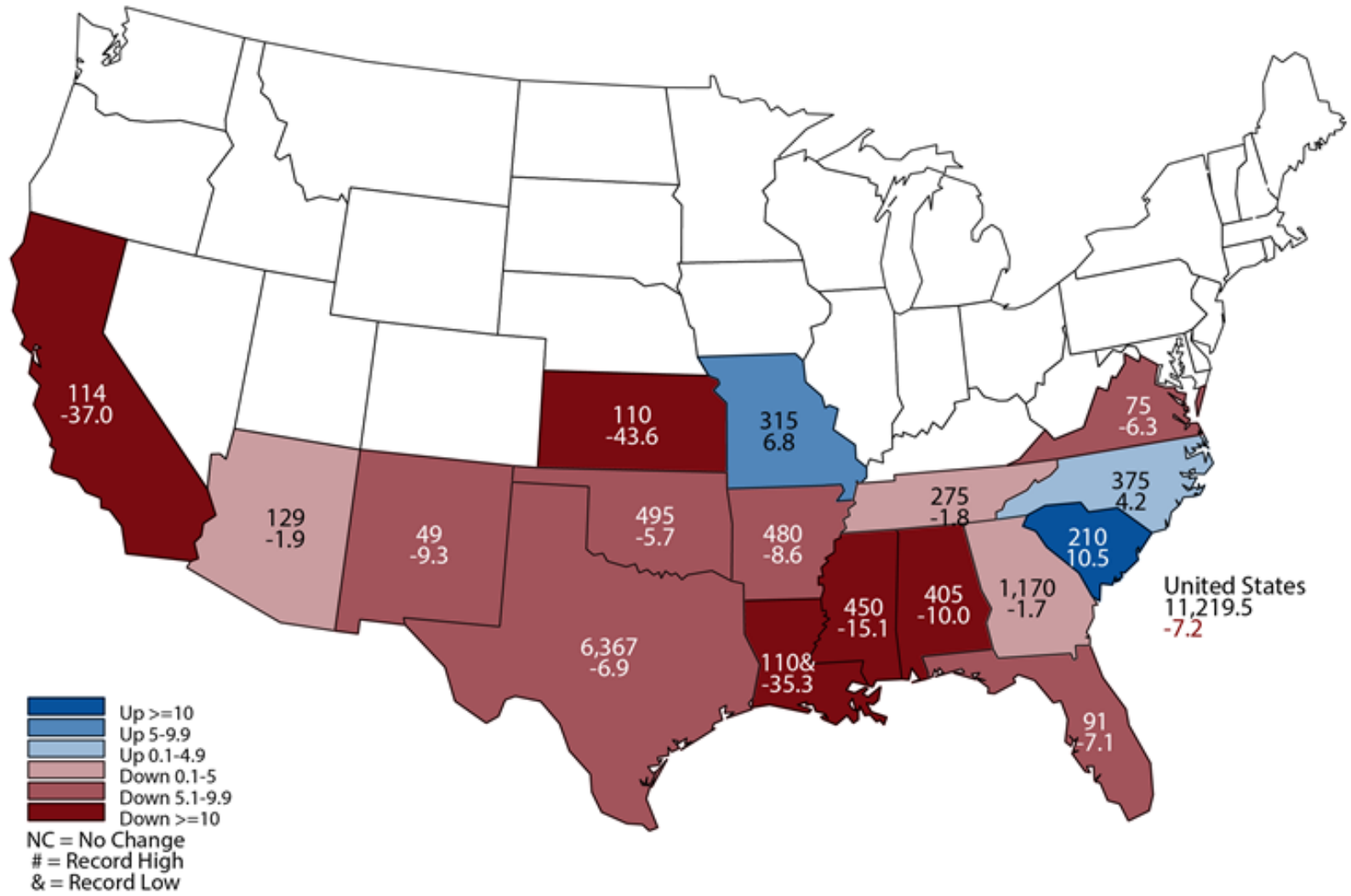
- Where will prices go?
  - Strong demand (food & oil crushing); will exports recover
  - Production increased in 2021
  - What will farmers plant in 2022?

Cotton

Cotton Highlights

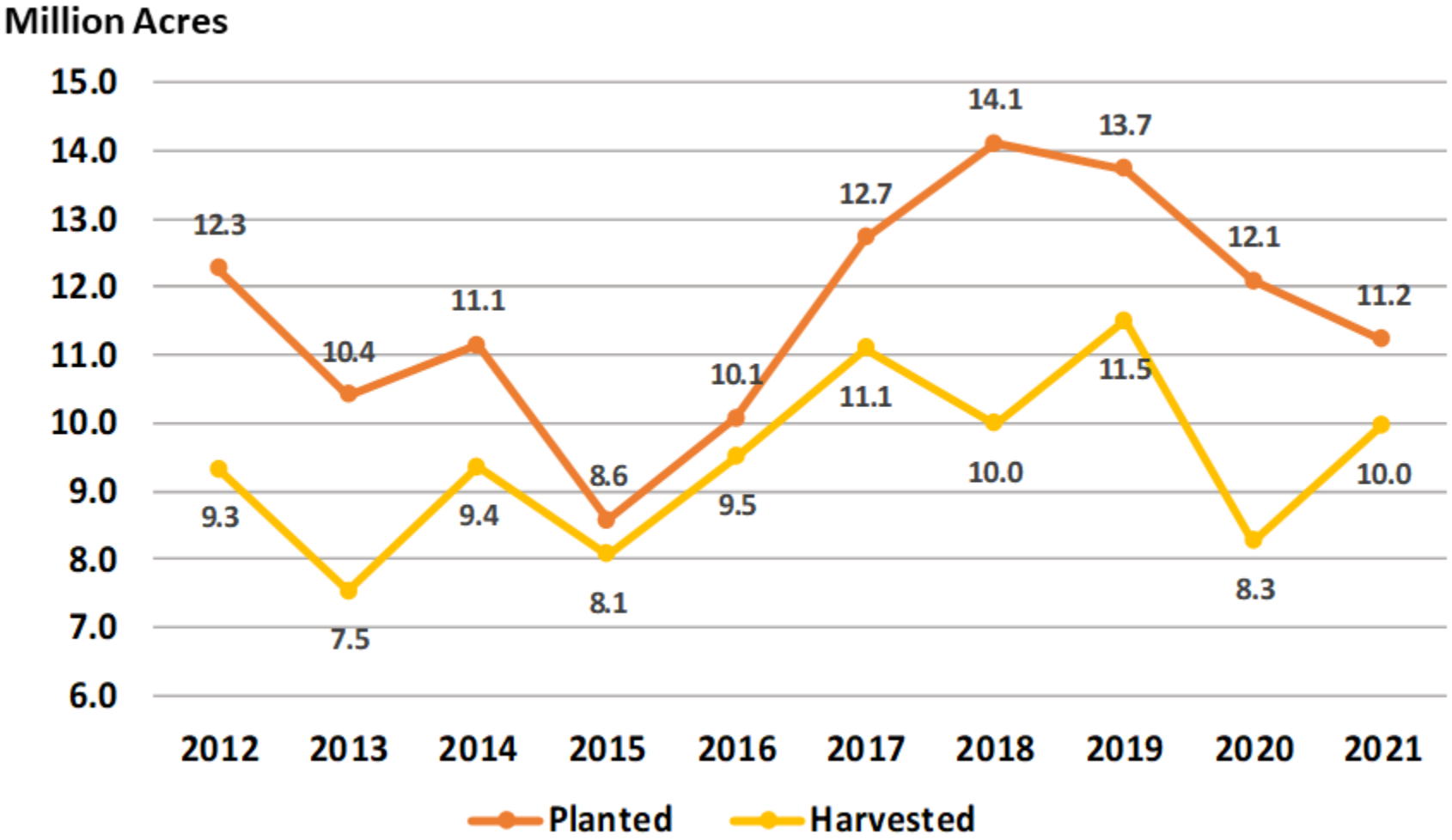
- High input prices pose a challenge
- High commodity prices across the board
- Increased cotton production in 2021 due to strong yields and harvested acres
- Demand picking back up

2021 US Cotton Planted by State (1,000 acres)



Data source: USDA-NASS; Updated January 2022

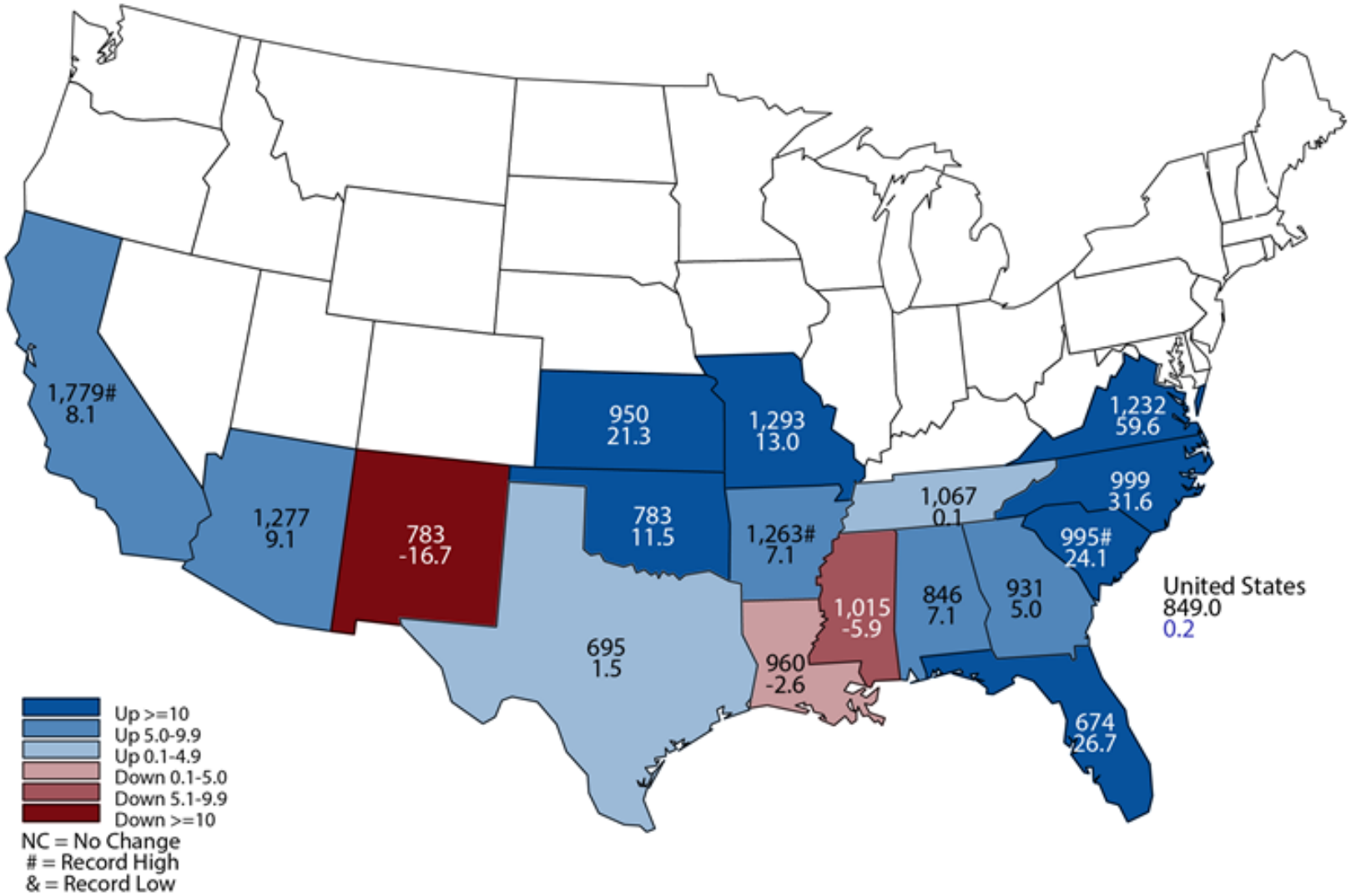
US Cotton Acreage



- Higher harvested acreage this year
- Abandonment rate:
  - 2020: 32%
  - 2021: 11%

Data source: USDA-NASS; Updated January 2022

2021 US Cotton Yields



Data source: USDA-NASS; Updated January 2022

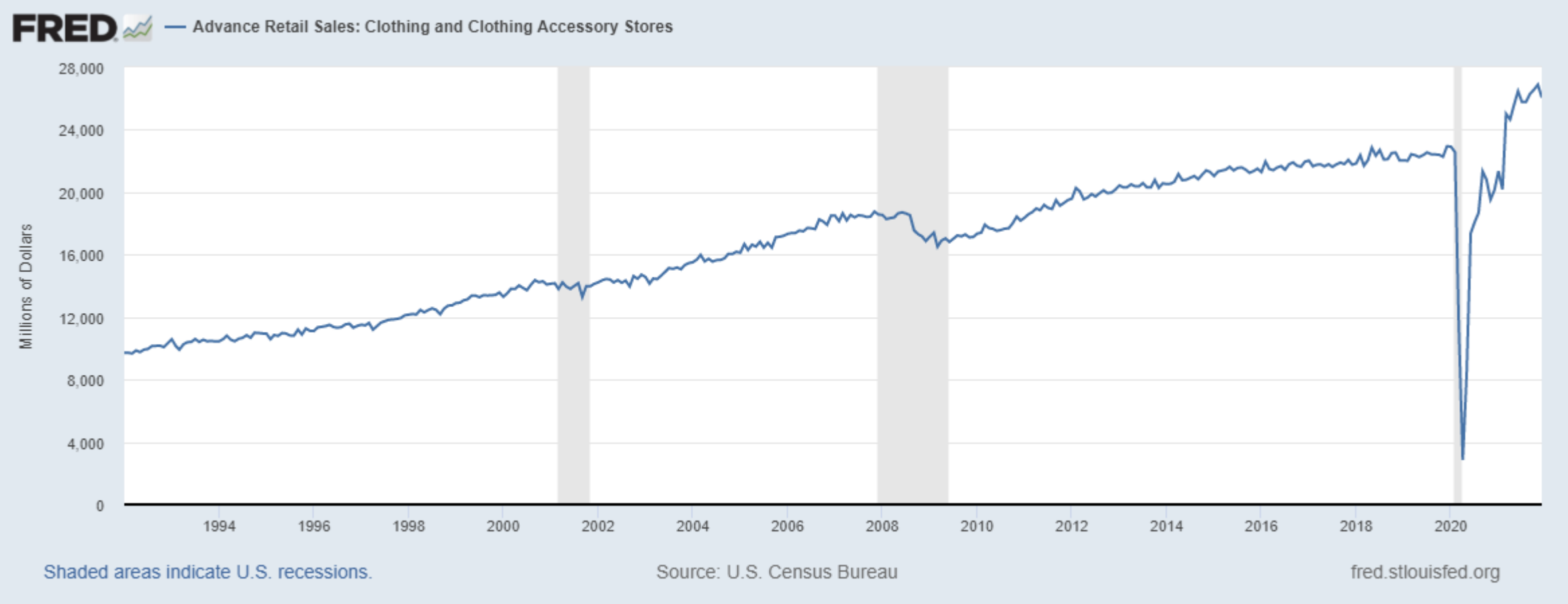
Upland Cotton Production by Year and State (1,000 bales)

	2016	2017	2018	2019	2020	2021	Change	2022 NCC Acres
Alabama	706	808	888	1,028	734	705	-4%	5.0%
Arkansas	840	1,074	1,133	1,506	1,277	1,250	-2%	15.7%
Georgia	2,180	2,225	1,955	2,740	2,180	2,250	3%	1.3%
Mississippi	1,081	1,351	1,462	1,621	1,180	920	-22%	6.5%
Missouri	566	750	921	915	684	835	22%	5.9%
North Carolina	343	741	702	1,040	522	760	46%	8.0%
Oklahoma	617	1,020	682	659	636	710	12%	5.6%
Tennessee	575	732	770	960	611	600	-2%	21.1%
Texas	8,100	9,270	6,850	6,320	4,570	7,600	66%	6.9%
United States	**16,601**	**20,223**	**17,566**	**19,227**	**14,401**	**17,257**	**20%**	**7.1%**

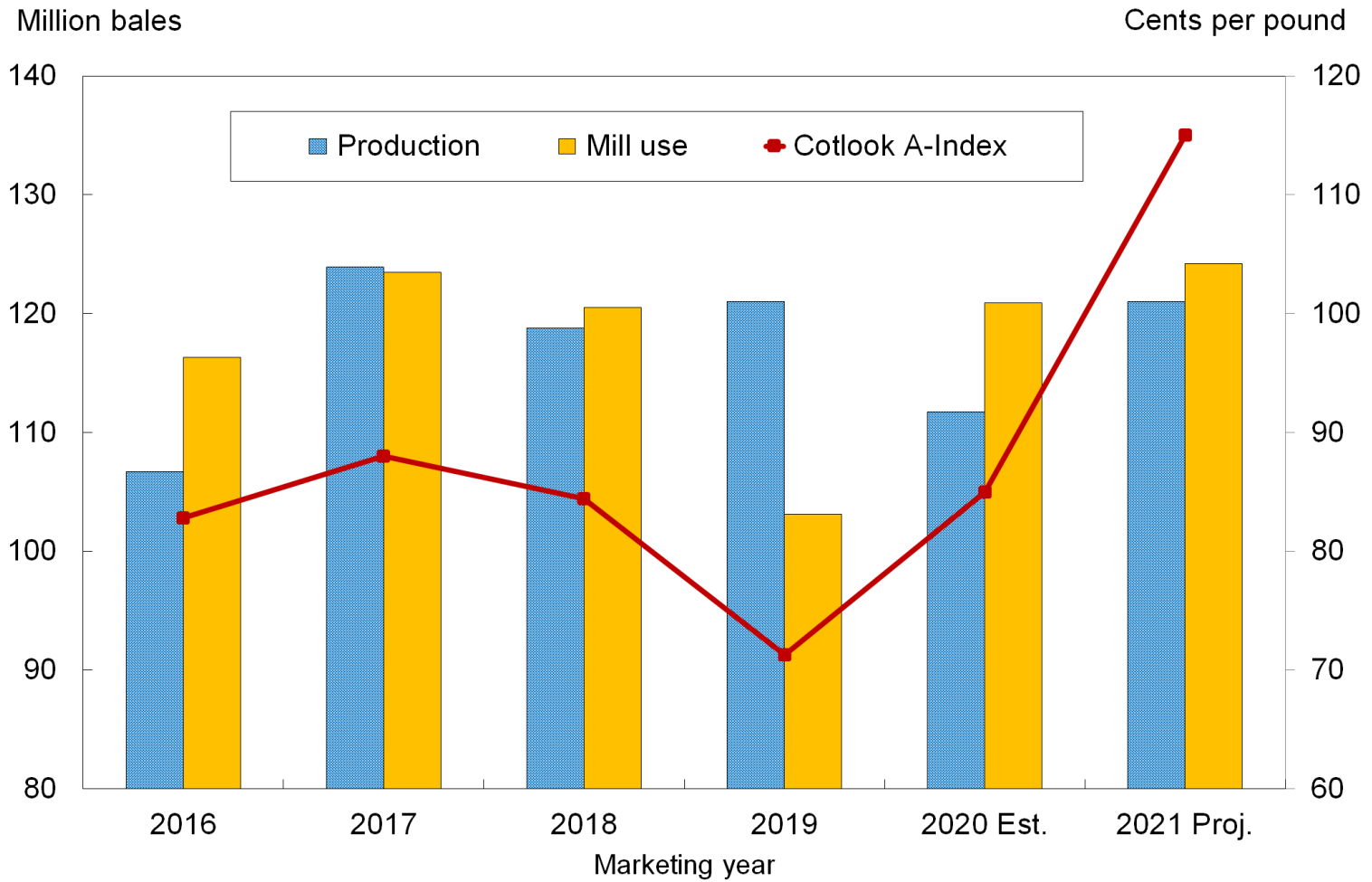
Data source: USDA-NASS; Updated January 2022

Cotton Demand

Clothing Sales



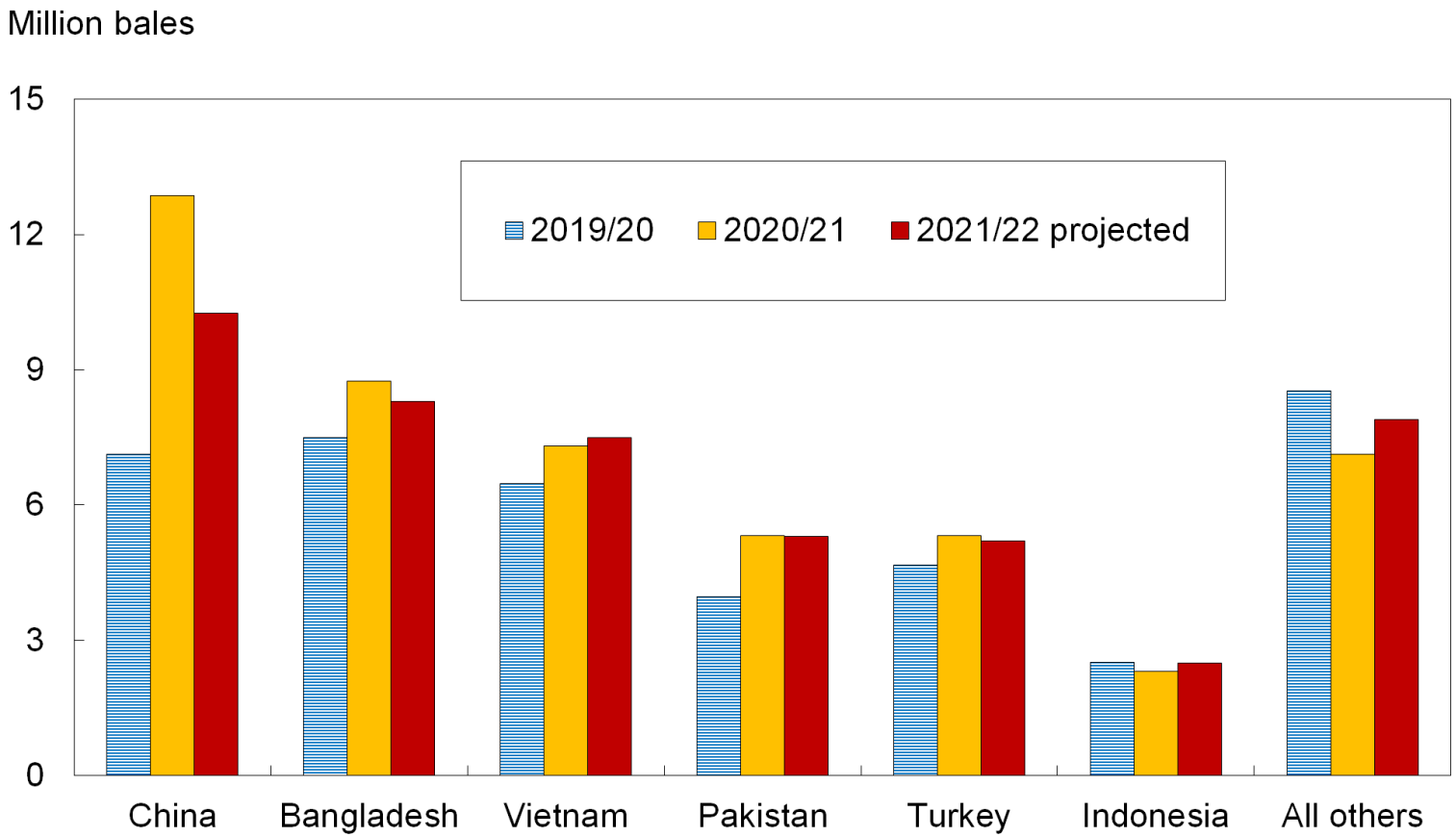
Global Cotton Production, Use, and Prices



Note: 1 bale = 480 pounds.

Source: USDA, *World Agricultural Supply and Demand Estimates* reports.

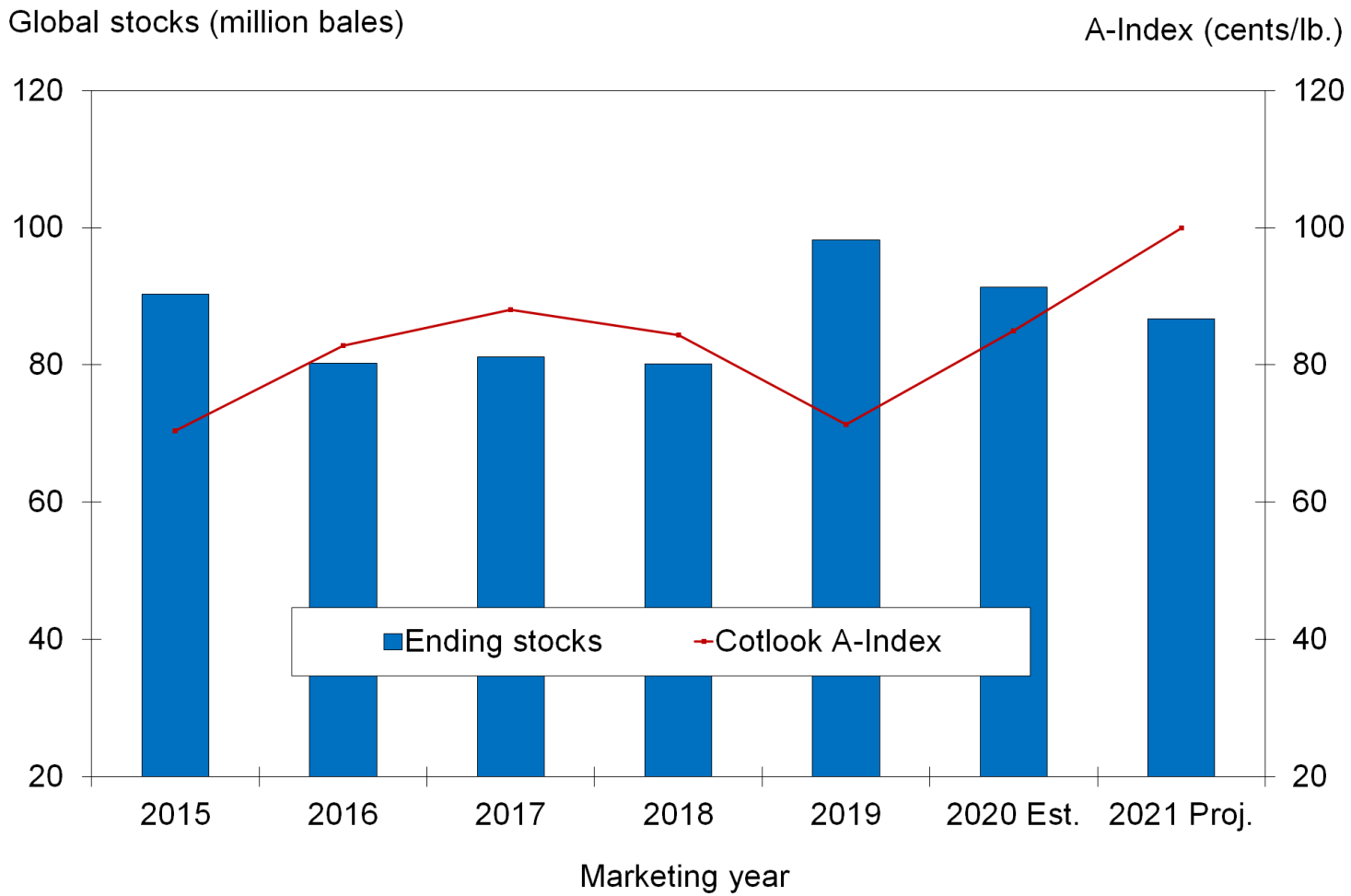
Leading Cotton Importers



Note: 1 bale = 480 pounds.

Source: USDA, *World Agricultural Supply and Demand Estimates* reports.

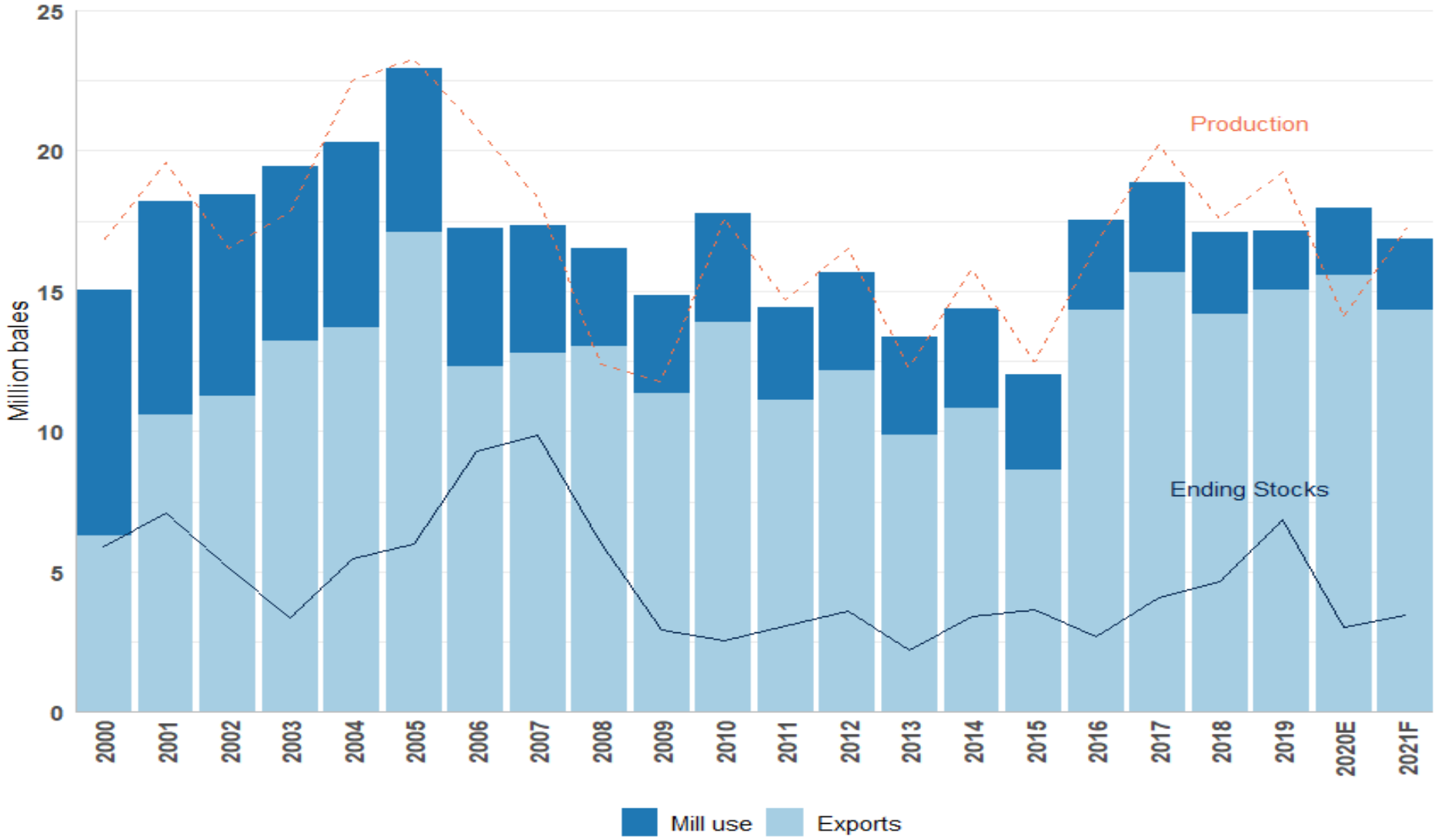
Global Cotton Stocks



Note: 1 bale = 480 pounds.

Sources: Cotlook and USDA, Interagency Commodity Estimates Committee.

US Cotton Supply and Use



Data source: USDA-NASS; Updated January 2022

Cotton Enterprise Budget – Southern AL ($/acre)

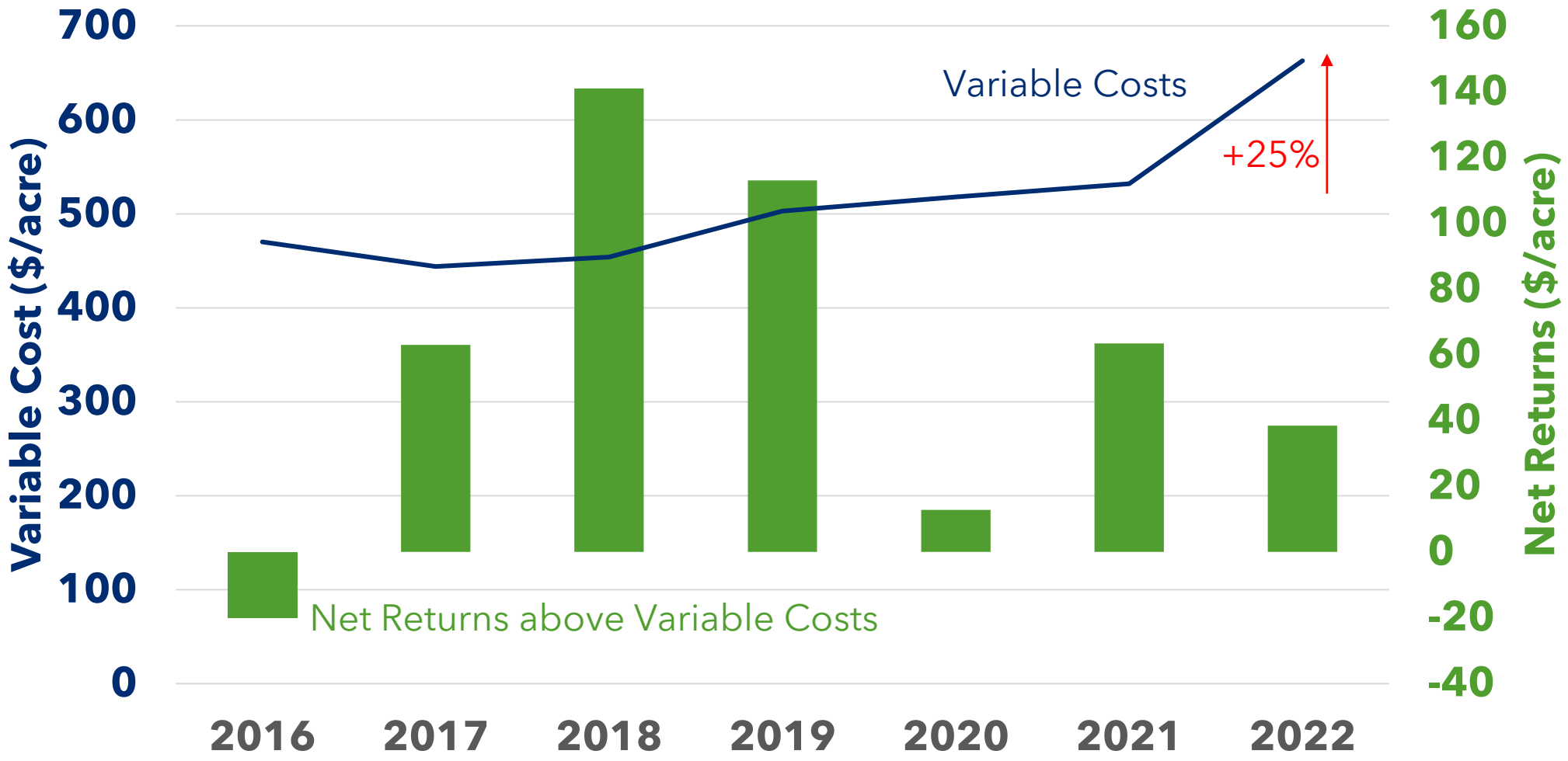
	2021	2022	Change
Total Revenue	595	701	18%
Total Costs	689	826	20%
Variable Cost	532	663	25%
Fertilizer	74	160	116%
Herbicides	75	83	11%
Fixed Costs	158	163	3%

Source: ACES Cotton South AL Reduced Tillage Cotton Budget https://www.aces.edu/blog/topics/farm-management/south-alabama-reduced-tillage-cotton-enterprise-budget/

Enterprise Budget Sensitivity Analysis
Net Returns over Variable Costs

	----------PRICE ($/LB)----------				
Yld Lbs/acre	**$0.775**	**$0.800**	**$0.825**	**$0.850**	**$0.875**
800	-$32.92	-$12.92	$7.08	$27.08	$47.08
825	-$18.50	$2.13	$22.75	$43.38	$64.00
850	-$4.08	$17.17	**$38.42**	$59.67	$80.92
875	$10.34	$32.21	$54.09	$75.96	$97.84
900	$24.75	$47.25	$69.75	$92.25	$114.75

Variable Costs and Net Returns by Year



Source: ACES Cotton South AL Reduced Till Cotton Budget

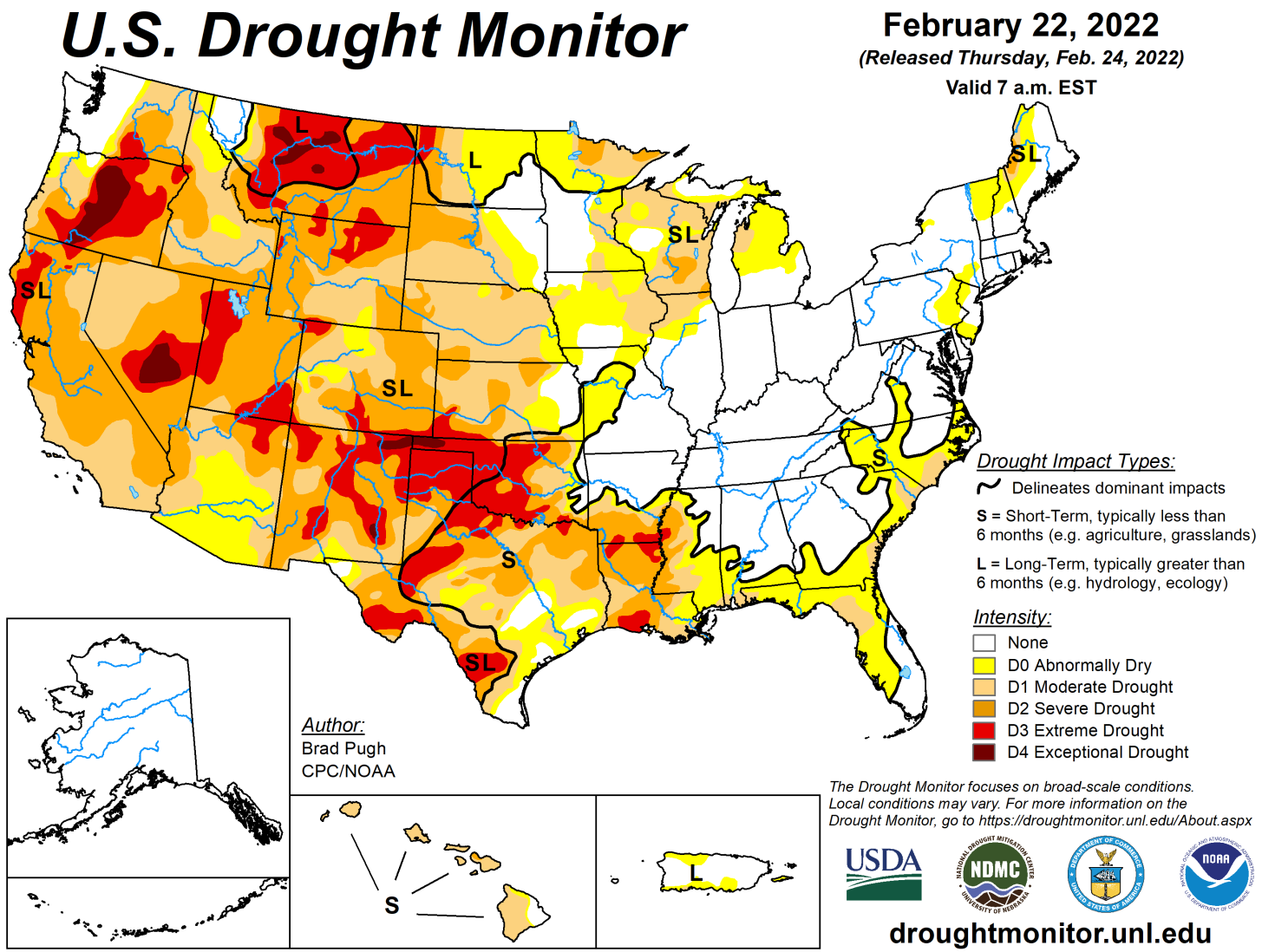
Cotton Prices

Source: Macrotrends

Key Takeaways for Cotton

- Cotton crop will depend on input cost/availability
  - Break-even prices are higher, but higher prices too
  - Net returns could decrease
- 2022 cotton acreage likely increasing
  - Highest crop prices in a decade for most crops
- Continue to see strong demand for cotton

Will Drought Let Up?



Pandemic Cover Crop Program

- Help producers maintain cover crops during financial challenges because of pandemic
  - $5/acre applied to crop insurance premiums
  - Must report cover crop acreage by March 15

Final Thoughts for 2022 Outlook

- Agriculture continues to face uncertainty
  - Continued pandemic effects
  - White House priorities, next farm bill, and midterm elections
  - The role of government programs in farm income
- Risk management is essential
  - Know cost of production
  - Consider marketing opportunities
  - Awareness and engagement in policy

Thank you!

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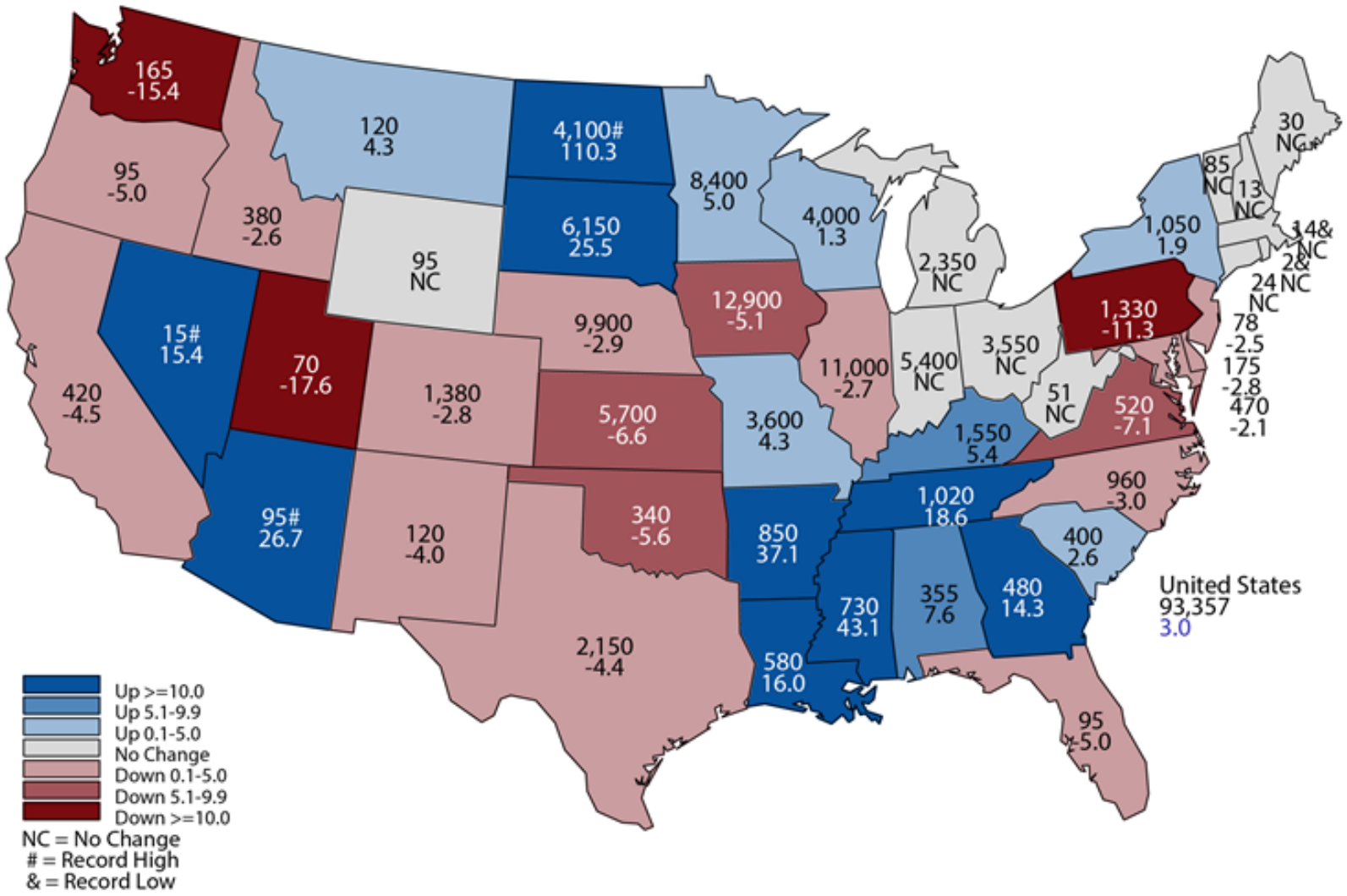
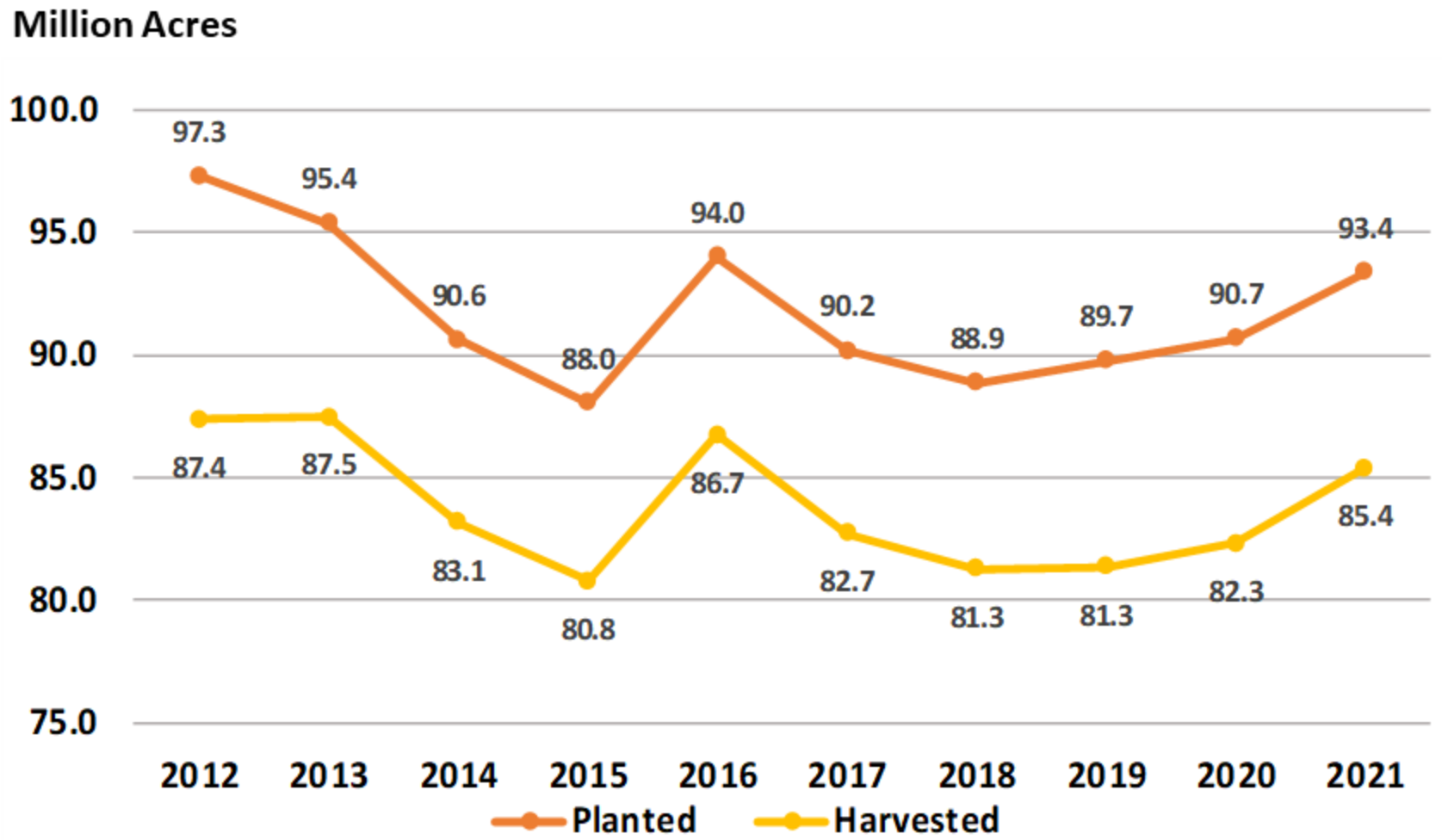
Corn/Soybeans

2021 US Corn Planted by State (1,000 acres)



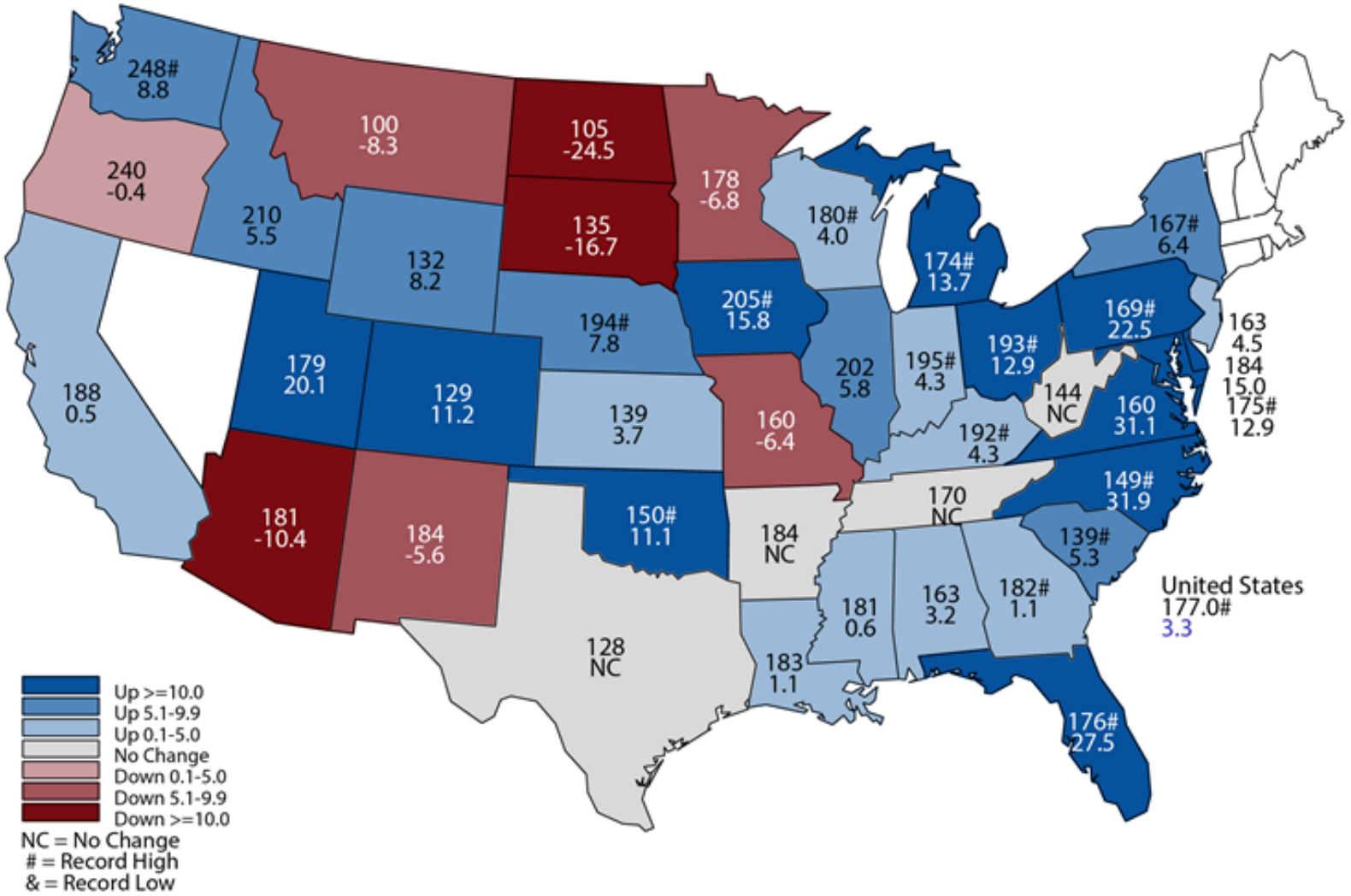
Data source: USDA-NASS; Updated January 2022

US Corn Acreage Planted



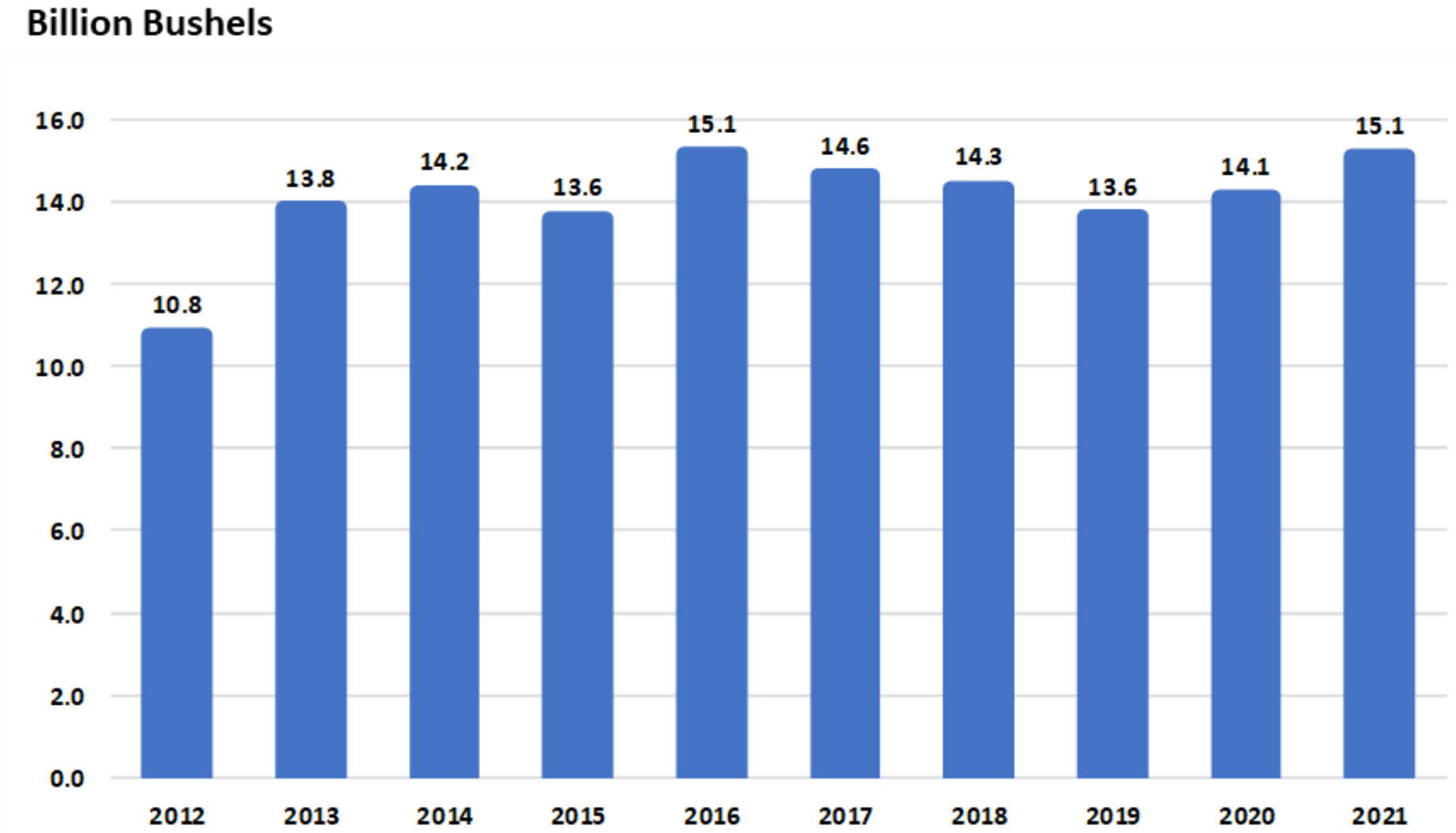
Data source: USDA-NASS; Updated January 2022

2021 US Corn Yields



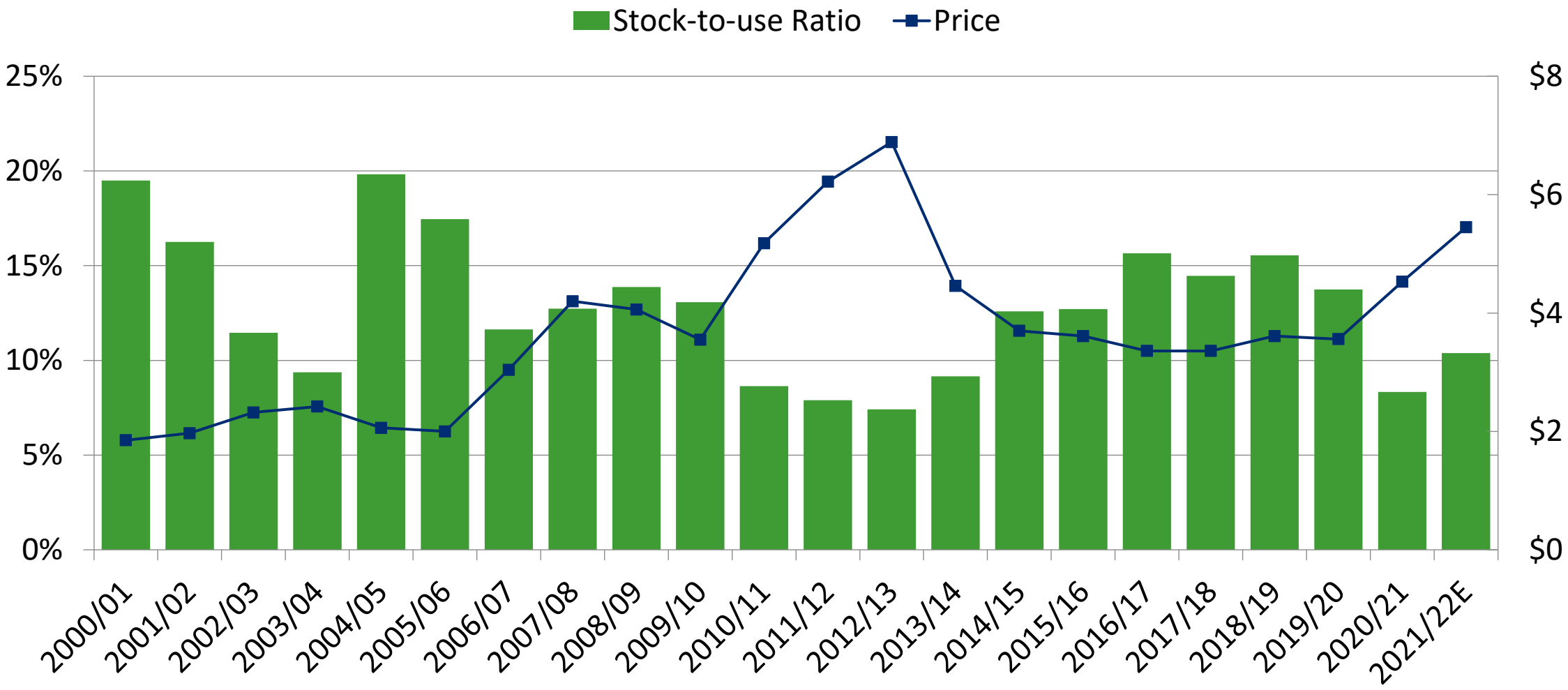
Data source: USDA-NASS; Updated January 2022

US Corn Production



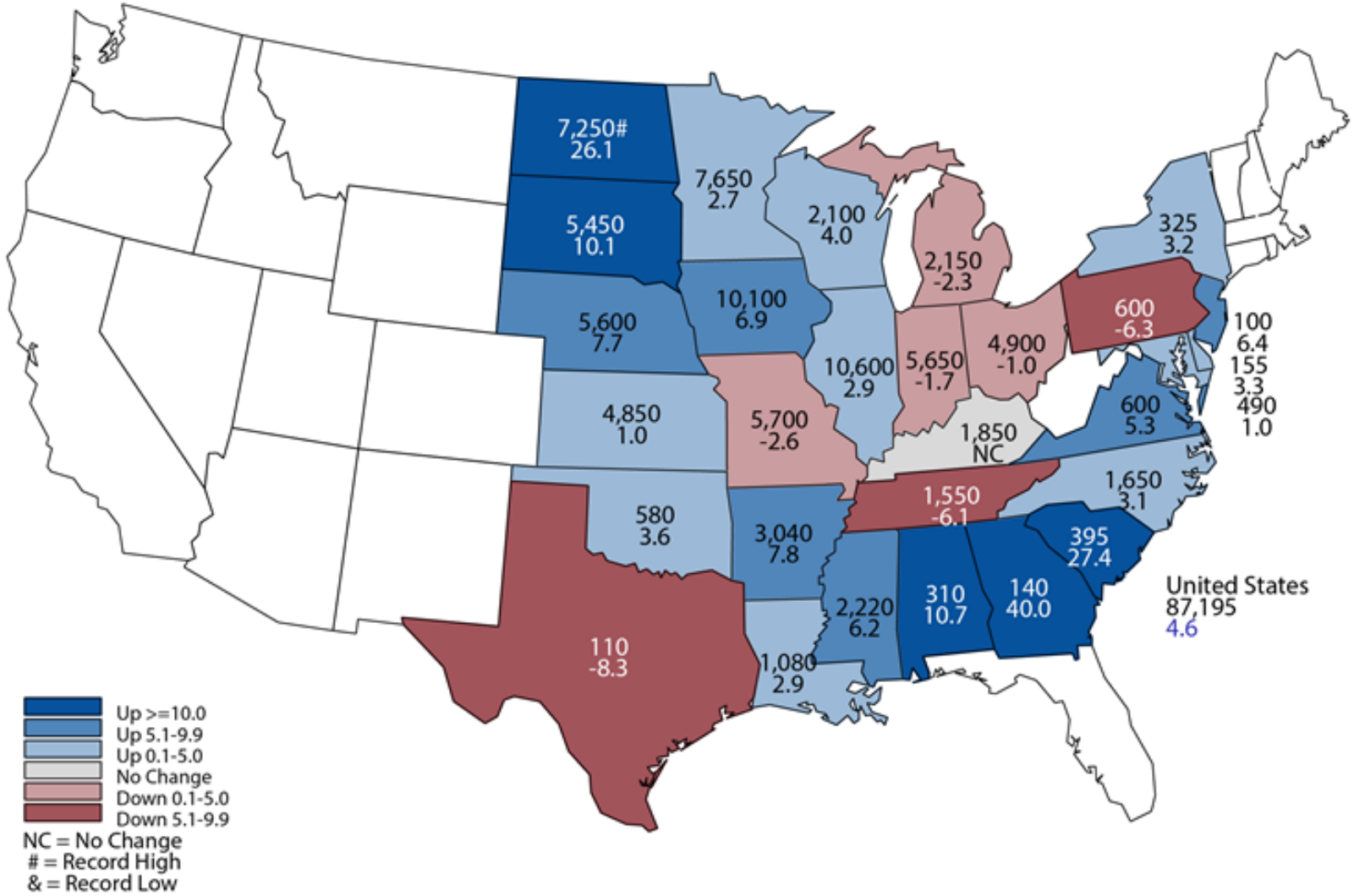
Source: USDA-NASS; Updated January 2022

U.S. Corn Price vs. Stock-to-use Ratio



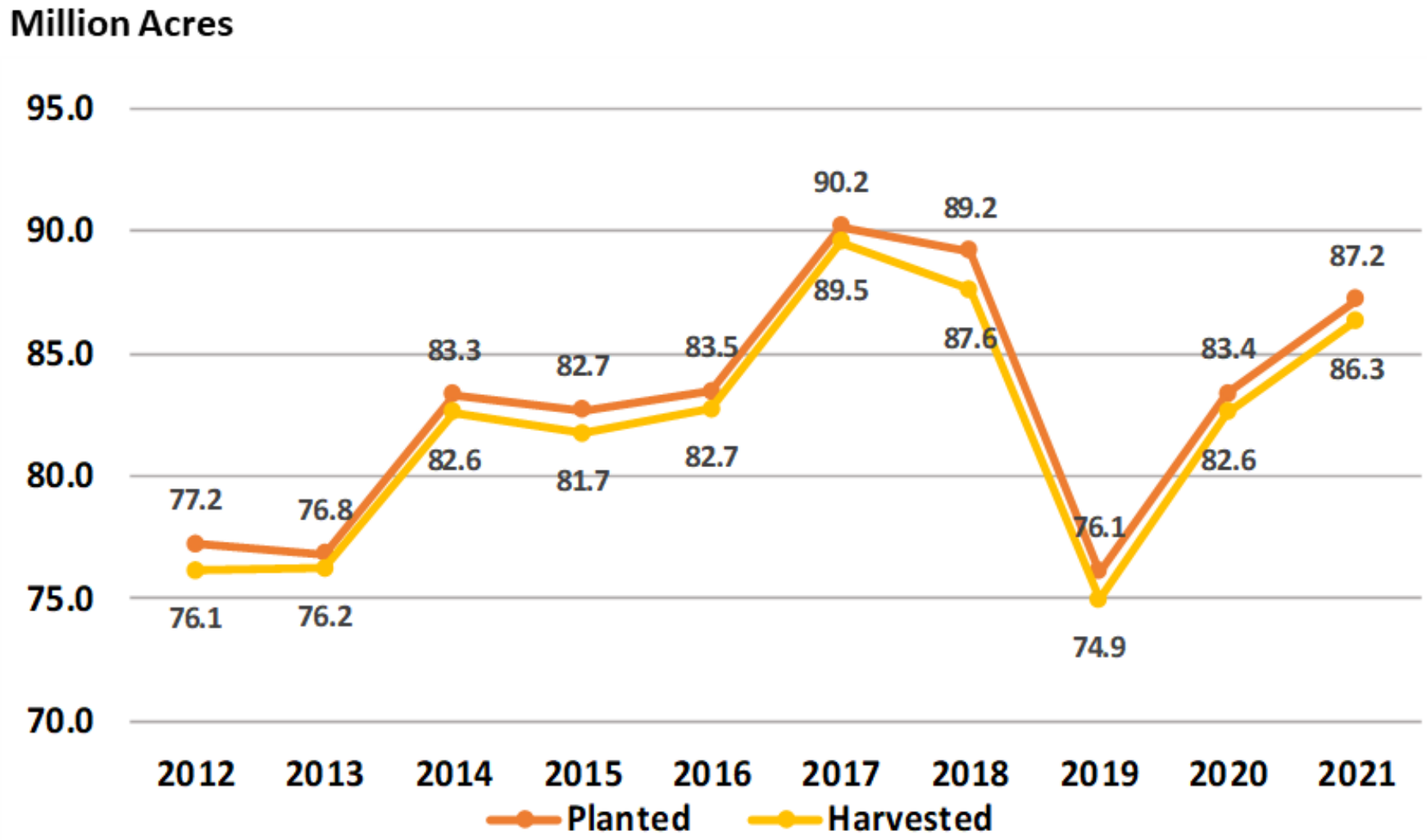
Data source: USDA *World Agricultural Supply and Demand Estimate*; Updated January 2022

2021 US Soybeans Planted by State (1,000 acres)



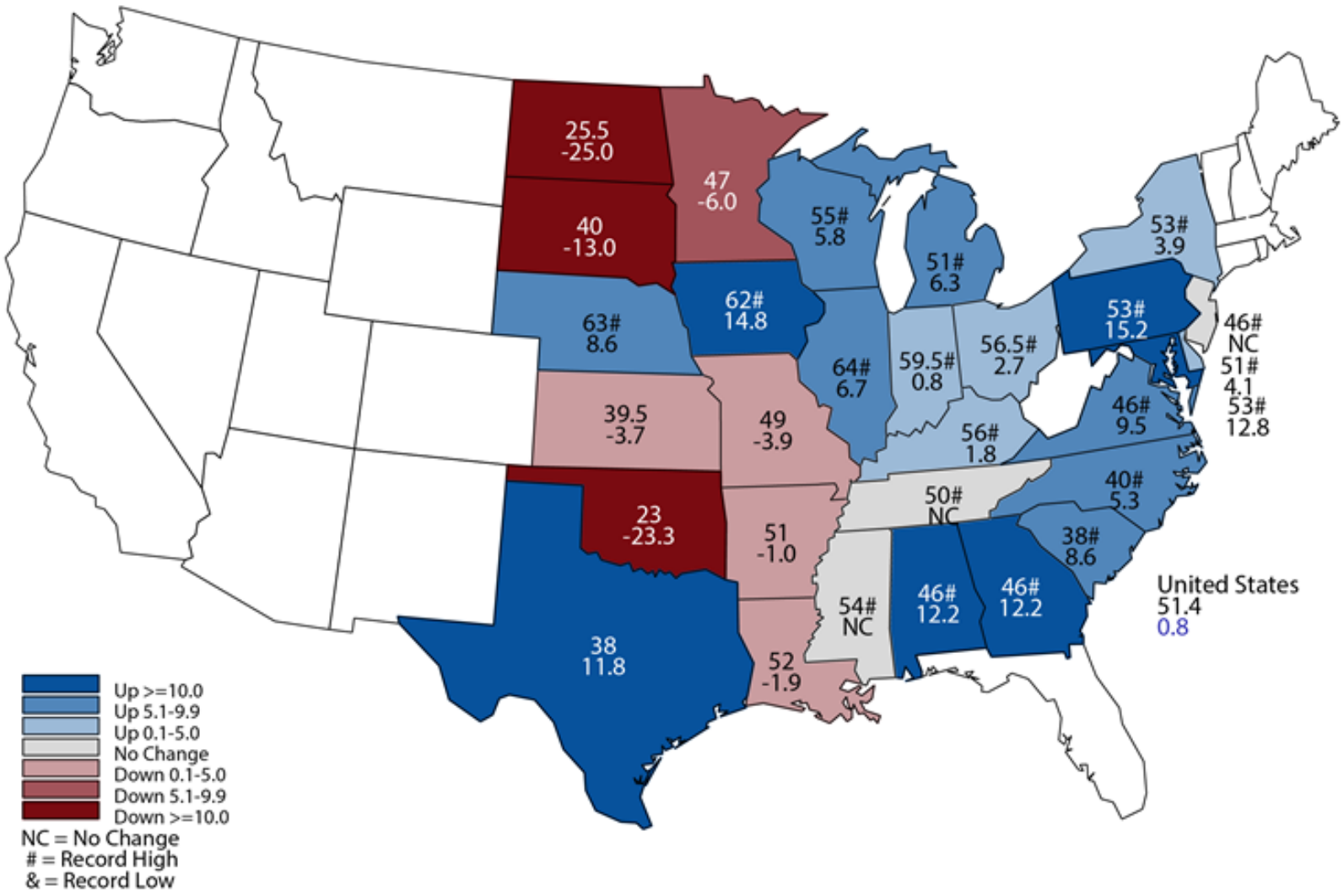
Data source: USDA-NASS; Updated January 2022

US Soybean Acreage Planted



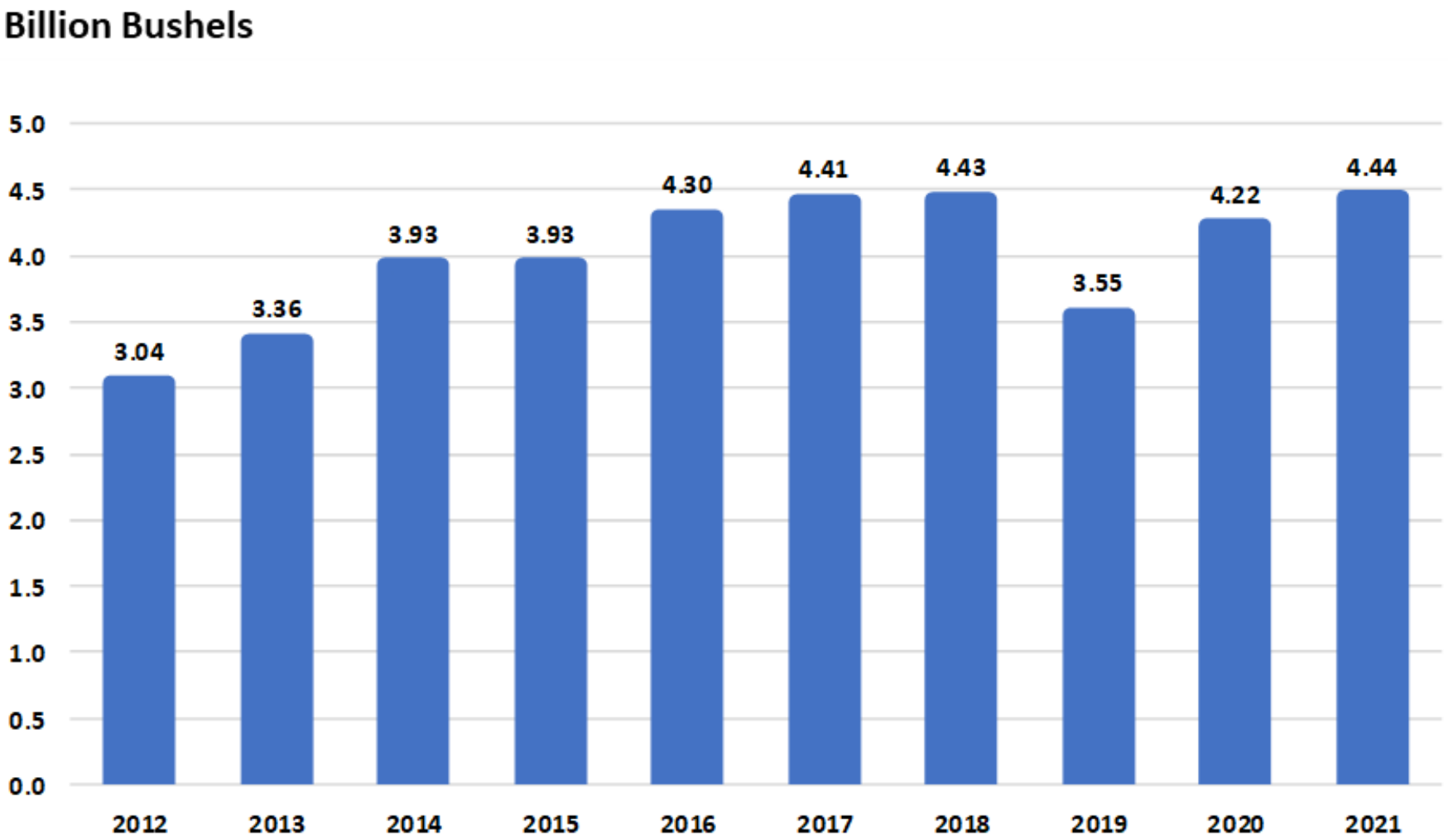
Data source: USDA-NASS; Updated January 2022

2021 US Soybean Yields



Data source: USDA-NASS; Updated January 2022

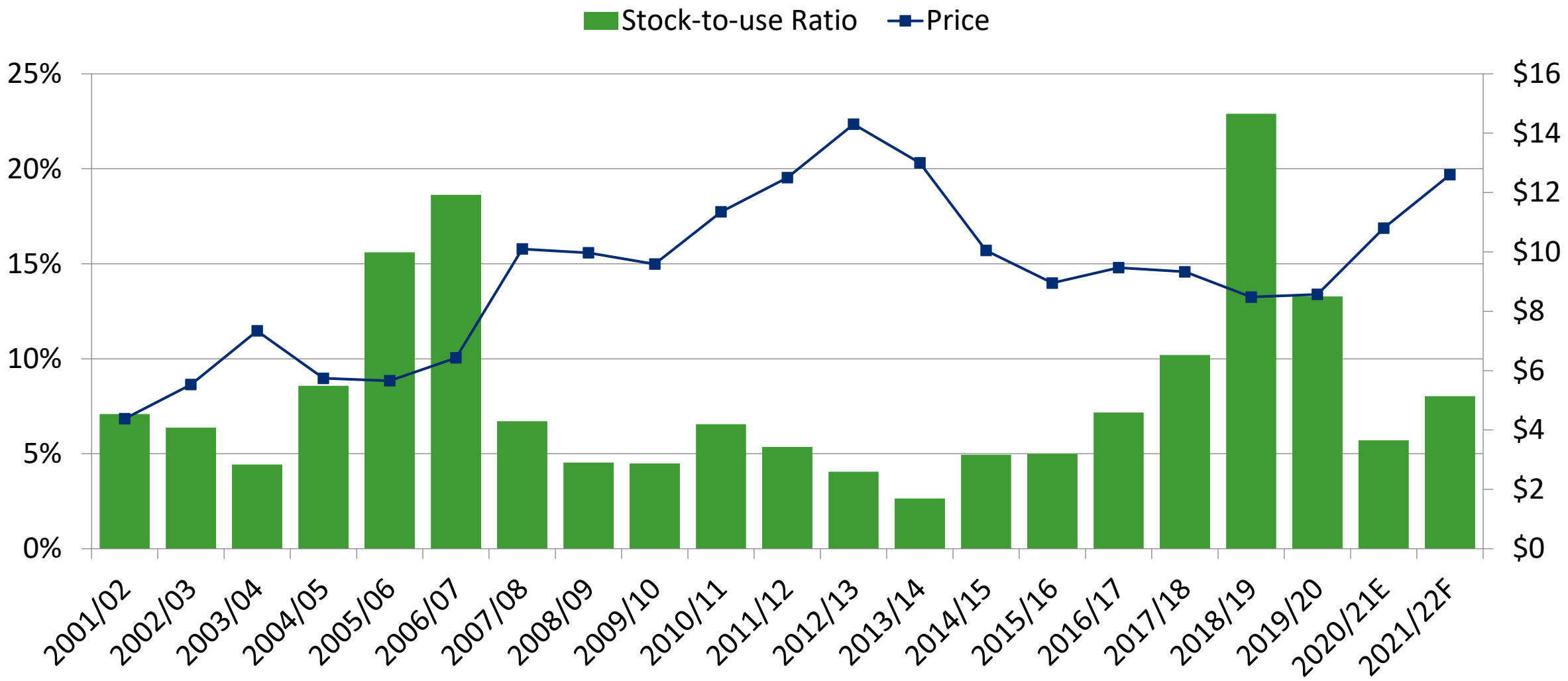
US Soybean Production



- Strong soybean demand will allow only slight additions to US stocks
  - Increase of 84M bushels to 340M bushels

Data source: USDA-NASS; Updated November 2021

US Soybean Price vs. Stock-to-use Ratio



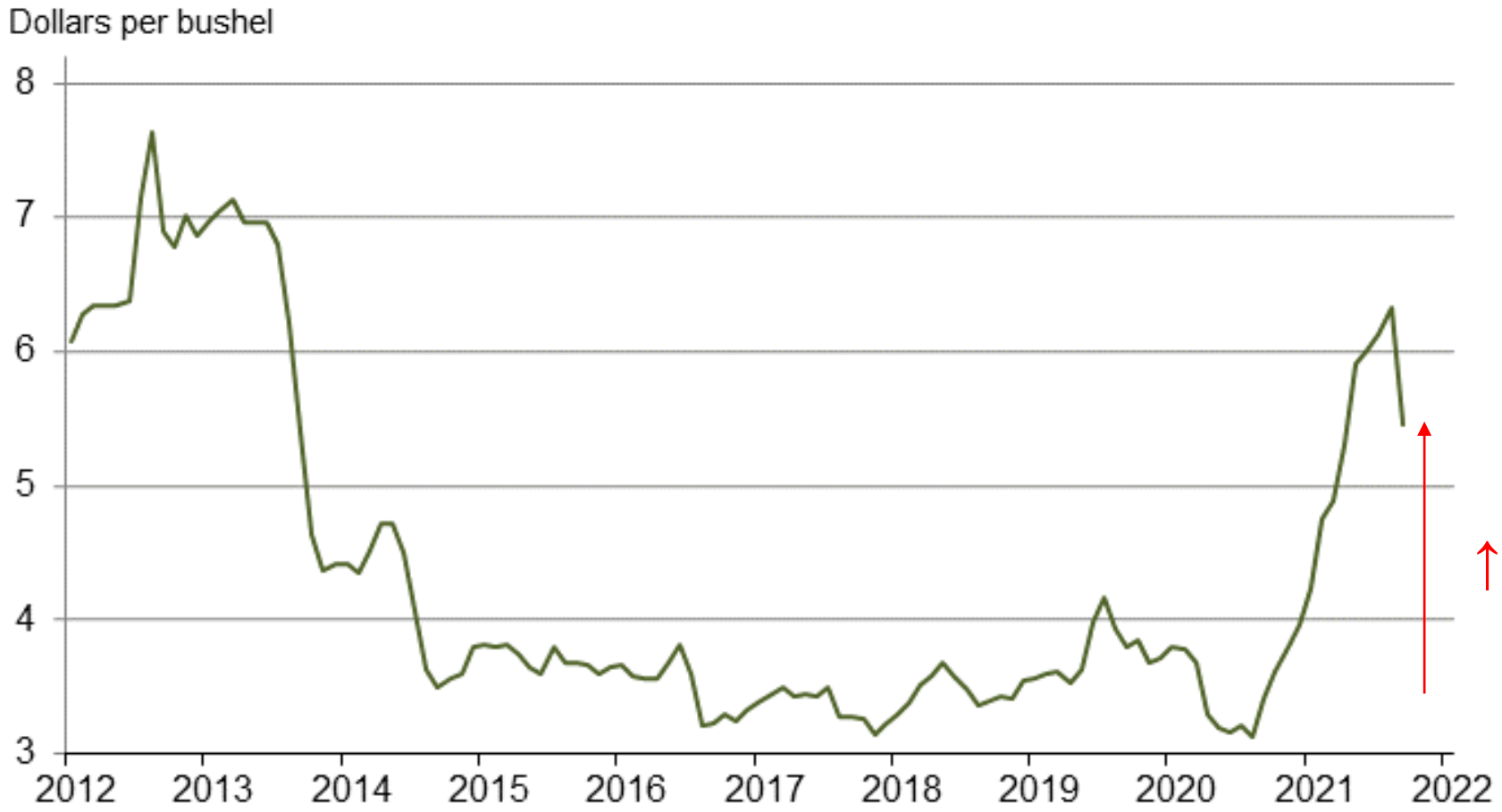
Data source: USDA *World Agricultural Supply and Demand Estimate*; Updated January 2022

Conclusions

- Strong farm economy overall
  - Highest net farm income in 7 years
  - Highest crop prices in a decade (for corn, soybeans, cotton)
- Input challenges
  - Higher costs (fuel, fertilizer, seed)
  - 2022 planted acres will depend on input costs/availability

	2019/20	2020/21 Estimated	2021/22 Projected	Jan 26th, 2022 Closing Price
Cotton ($/cwt)	59.6	66.3	90.0	99.37 Dec 22
Peanuts ($/ton)	410	420	475	NA
Soybeans ($/bu)	8.57	10.80	12.60	13.31 Nov 22
Corn ($/bu)	3.56	4.53	5.45	5.79 Sep 22

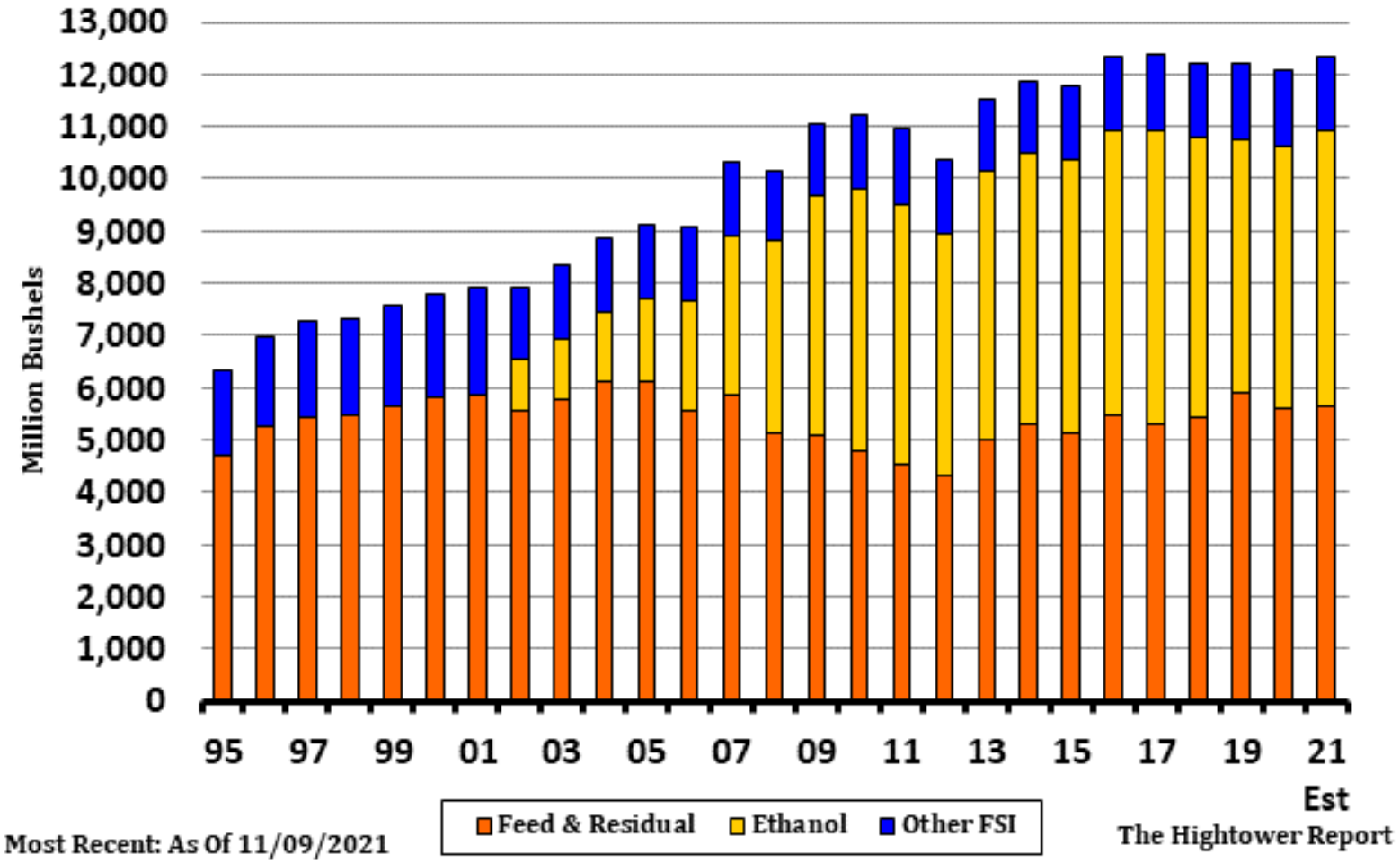
Prices Received for Corn by Month – US



↑**60%** since Sep 2020

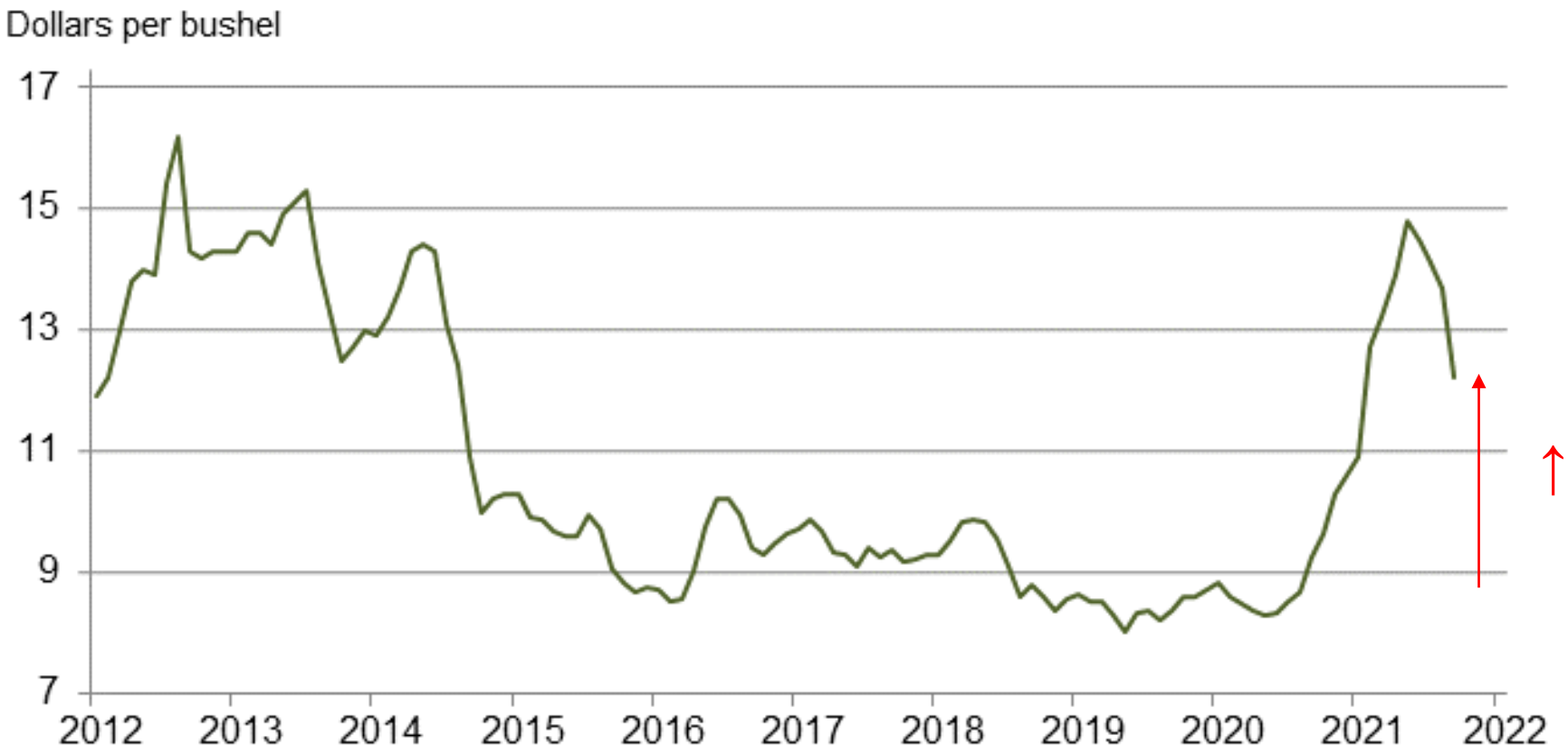
Source: USDA-NASS

US Domestic Corn Use



Source: CME Group

Prices Received for Soybeans by Month – US



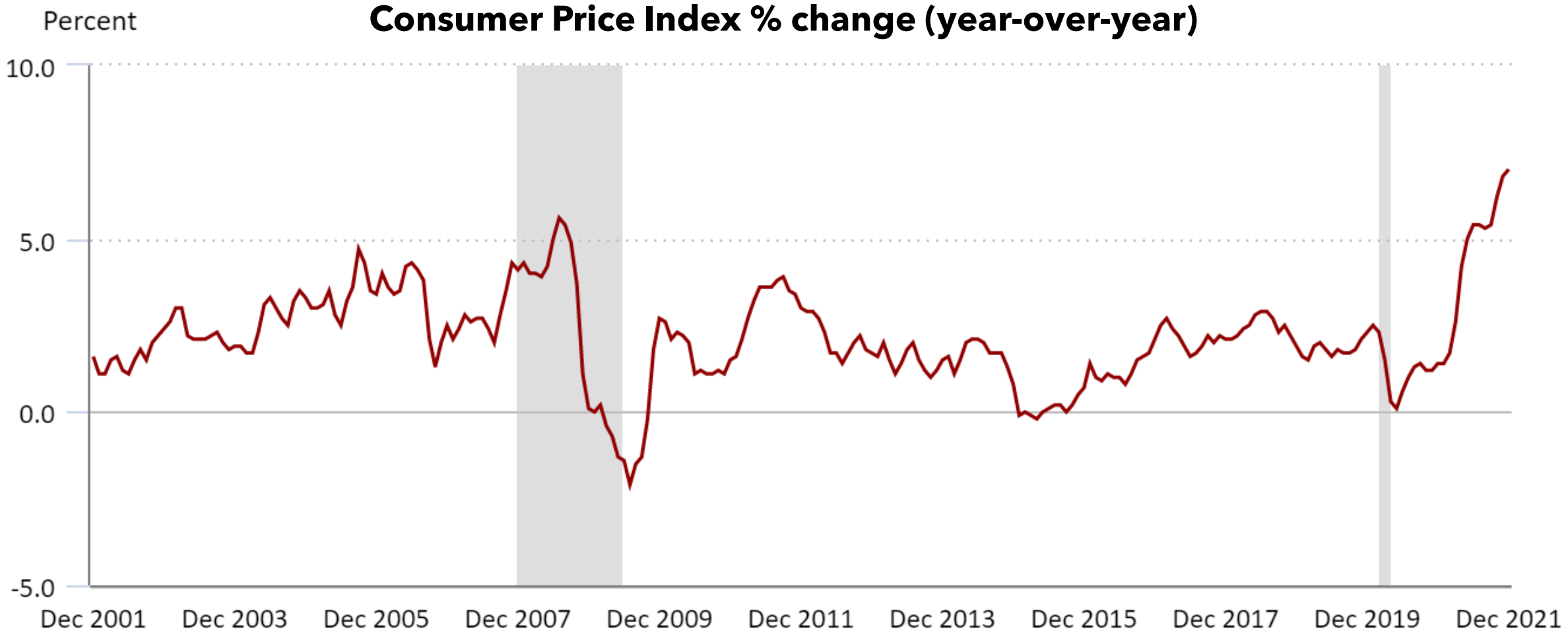
↑**32%** since Sep 2020

Source: USDA-NASS

GDP

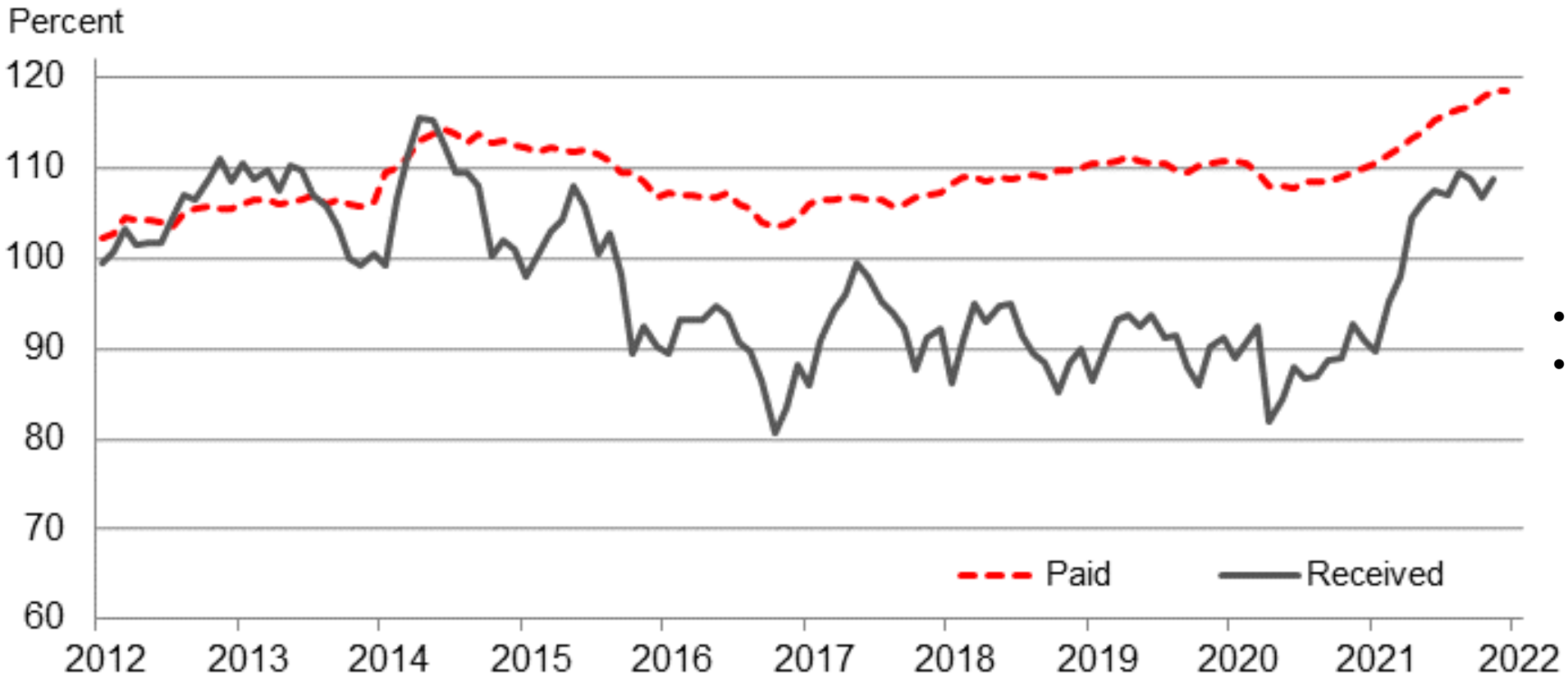

FRED
Gross Domestic Product
24,000
23,000
22,000
21,000
20,000
19,000
18,000
17,000
16,000
15,000
14,000
Billions of Dollars
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
Shaded areas indicate U.S. recessions.
Source: U.S. Bureau of Economic Analysis
fred.stlouisfed.org

Inflation



Source: Bureau of Labor Statistics; Updated December 2021

Prices Received and Paid for All Farms – US



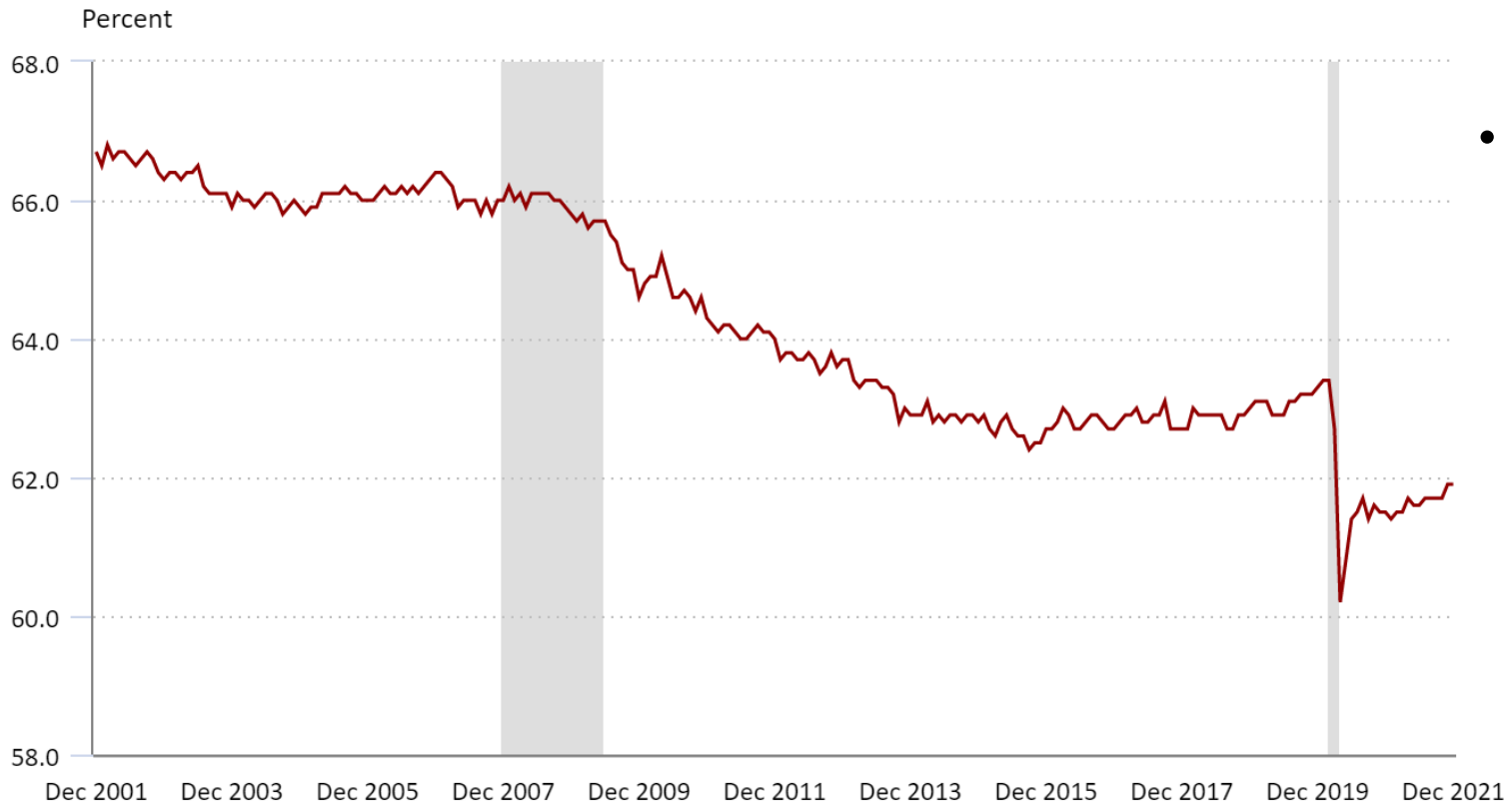
Since start of 2020

- Prices received up 22%
- Prices paid up 5%

Source: USDA-NASS; Updated December 2021

Employment

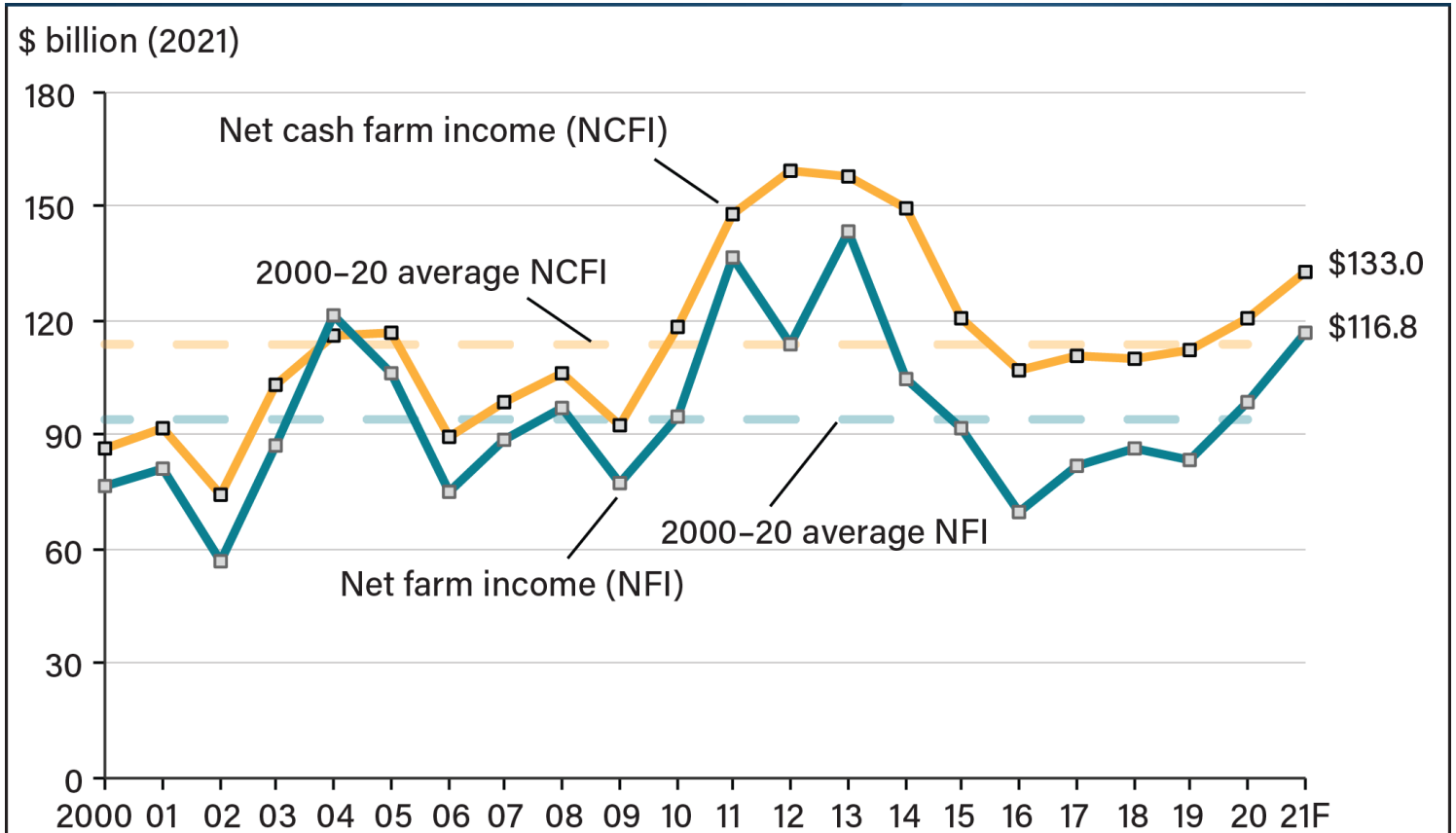
Civilian Labor Force Participation (Seasonally Adjusted)



- Unemployment rate continues return to pre-pandemic level
  - Current rate: 3.9% (Dec 2021)
  - High of 14.7% (April 2020)
  - ~3.7% pre-pandemic

Source: Bureau of Labor Statistics; Updated December 2021

US Net Farm Income



Notes: F = forecast. Values are adjusted for inflation using the U.S. Bureau of Economic Analysis Gross Domestic Product Price Index (BEA API series code: A191RG) rebased to 2021 by USDA, Economic Research Service. Net cash farm income (NCFI) is equal to gross cash income minus cash expenses. Net farm income (NFI) is a broader measure of farm sector profitability that incorporates noncash items, including changes in inventories, economic depreciation, and gross imputed rental income.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics. Data as of December 1, 2021.

- NFI has increased by almost 20% each of past two years
- Cash receipts are the main driver (13.5% increase) this year
- Direct gov payments down 43%