

Mid-Winter Grain Market Update



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In-Case you forgot- here is what happened in 2020

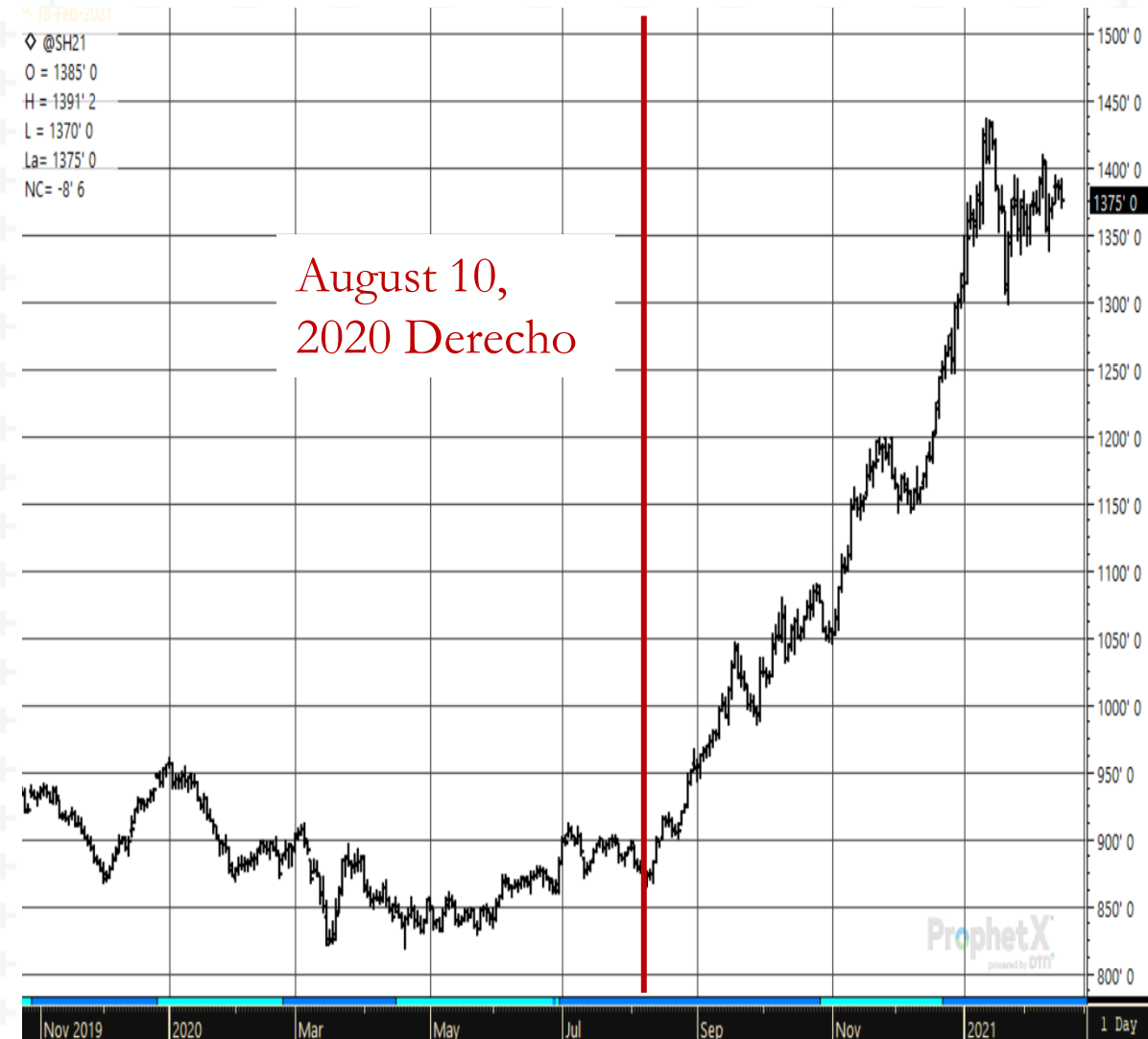
- ❖ **Phase 1 agreement with China in January created optimism.**
- ❖ **Pandemic hit and changed some things**
 - ❖ What we eat and where we eat
 - ❖ The amount we drive
 - ❖ The general economy (millions of people out of work)
 - ❖ The federal budget- record levels of emergency spending
- ❖ **US Crops came in smaller than anticipated due to drought and derecho and China went on a late-year buying spree**

It all started with some wind

Most Active Corn Contract



Most Active Soybean Contract



The Grain Complex

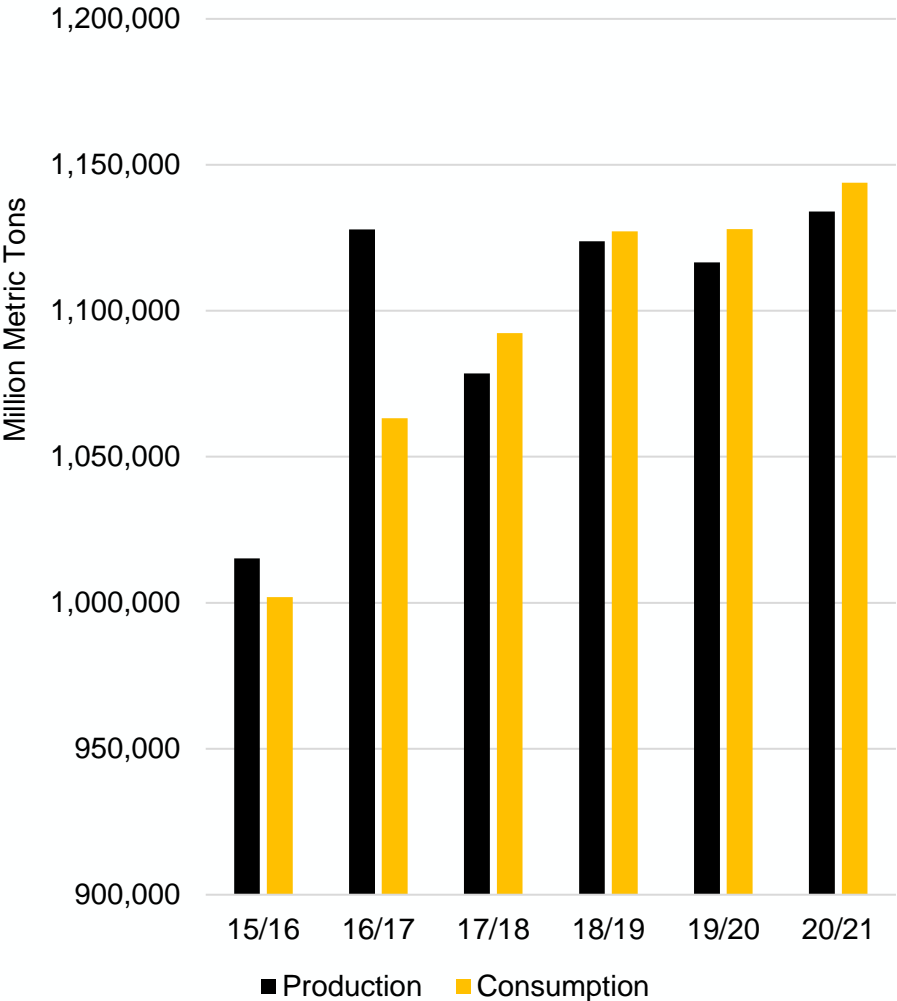
	May 2020 WASDE	August 2020 WASDE	February 2021 WASDE	Change, May-Aug.	Change, Aug- Feb.
Production (mil. bu.)	15,995	15,278	14,182	-717	-1,096
Beginning stocks	2,098	2,228	1,919	+130	-309
Exports	2,150	2,225	2,600	+75	+375
Feed, residual use	6,050	5,925	5,650	-125	-275
Ethanol, coproducts	5,200	5,200	4,950	0	-250
Other domestic use	1,400	1,425	1,425	+25	0
Ending stocks	3,318	2,756	1,502	-562	-1,254
Marketing year avg. price (\$/bu.)	3.20	3.10	4.30	-0.10	+1.20

The Oilseed Complex

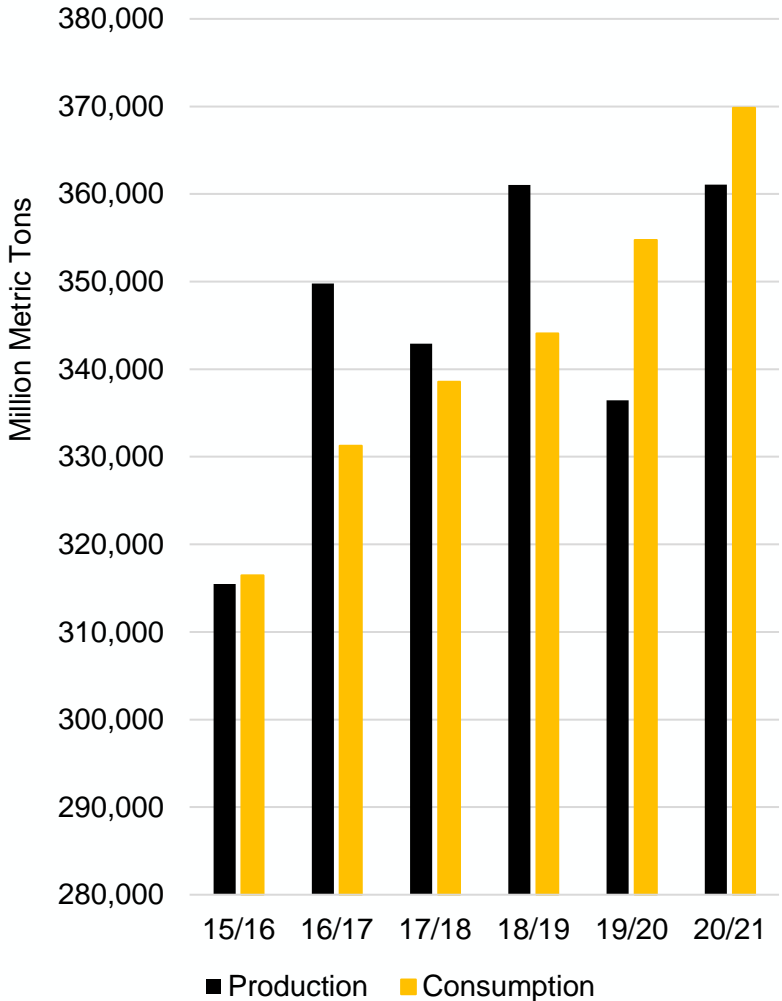
	May 2020 WASDE	August 2020 WASDE	February 2021 WASDE	Change, May- Aug.	Change, Aug.-Feb.
Production (mil. bu.)	4,125	4,425	4,135	+300	-290
Beginning stocks	580	615	525	+35	-90
Imports	15	15	35	0	+20
Exports	2,050	2,125	2,250	+75	+125
Crush	2,130	2,180	2,200	+50	+20
Other domestic use	135	140	125	+5	-15
Ending stocks	405	610	120	+205	-490
Marketing year avg. price (\$/bu.)	8.20	8.35	11.15	+0.15	+2.80

Global Ending Stocks

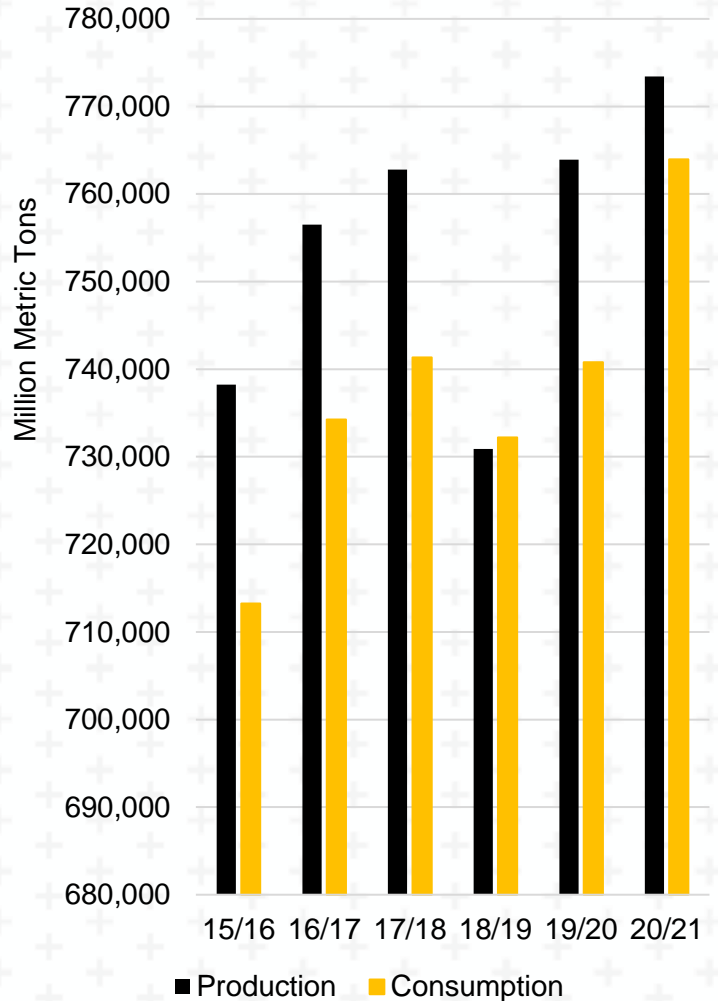
Global Corn Production & Consumption



Global Soybean Production & Consumption

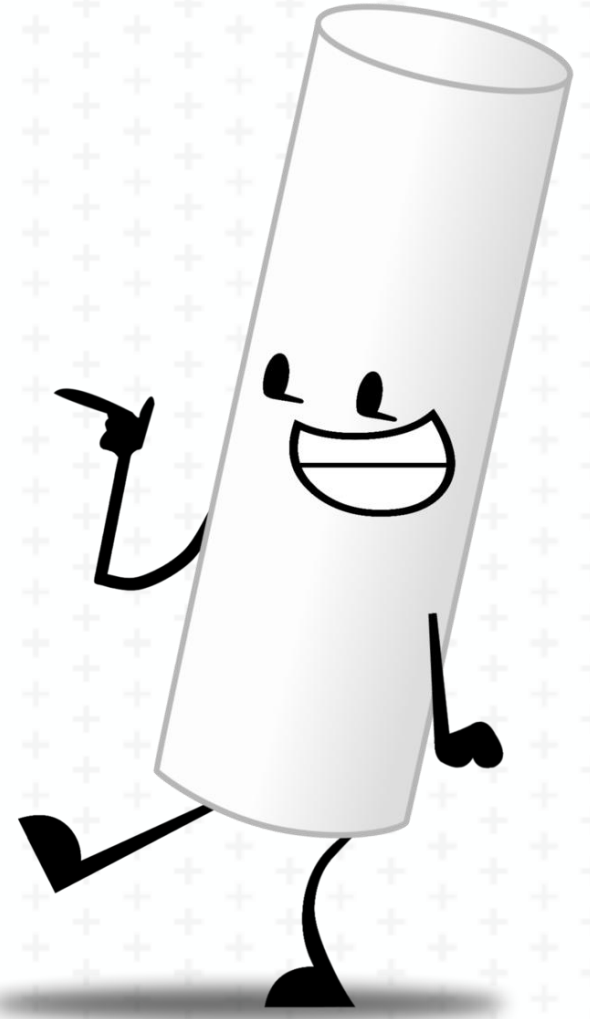


Global Wheat Production & Consumption

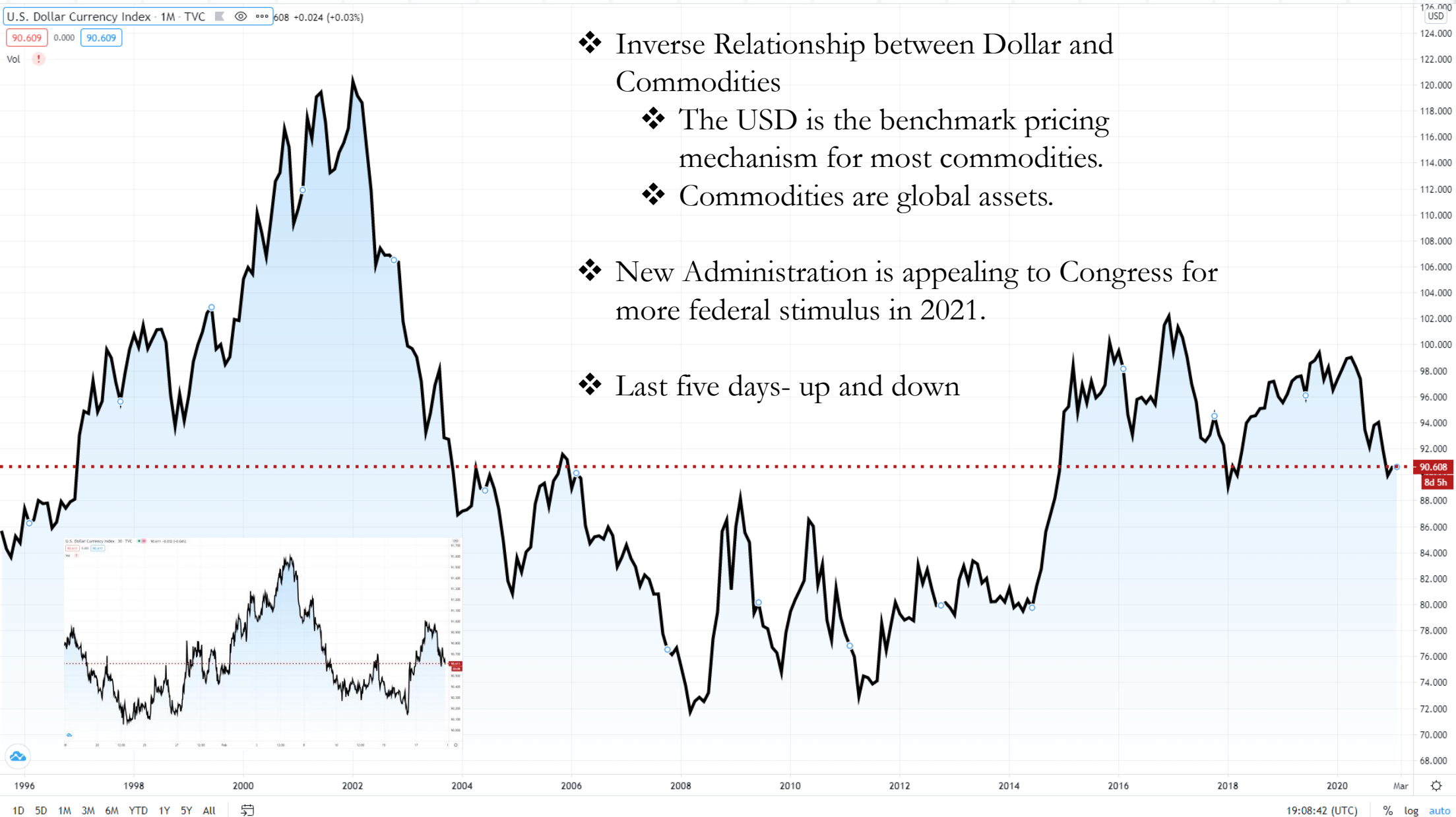


Outline

- ❖ Macro-economic Drivers
- ❖ February WASDE Key Points
- ❖ Demand Fundamentals
- ❖ 2021 Acreage
- ❖ Wrap-up



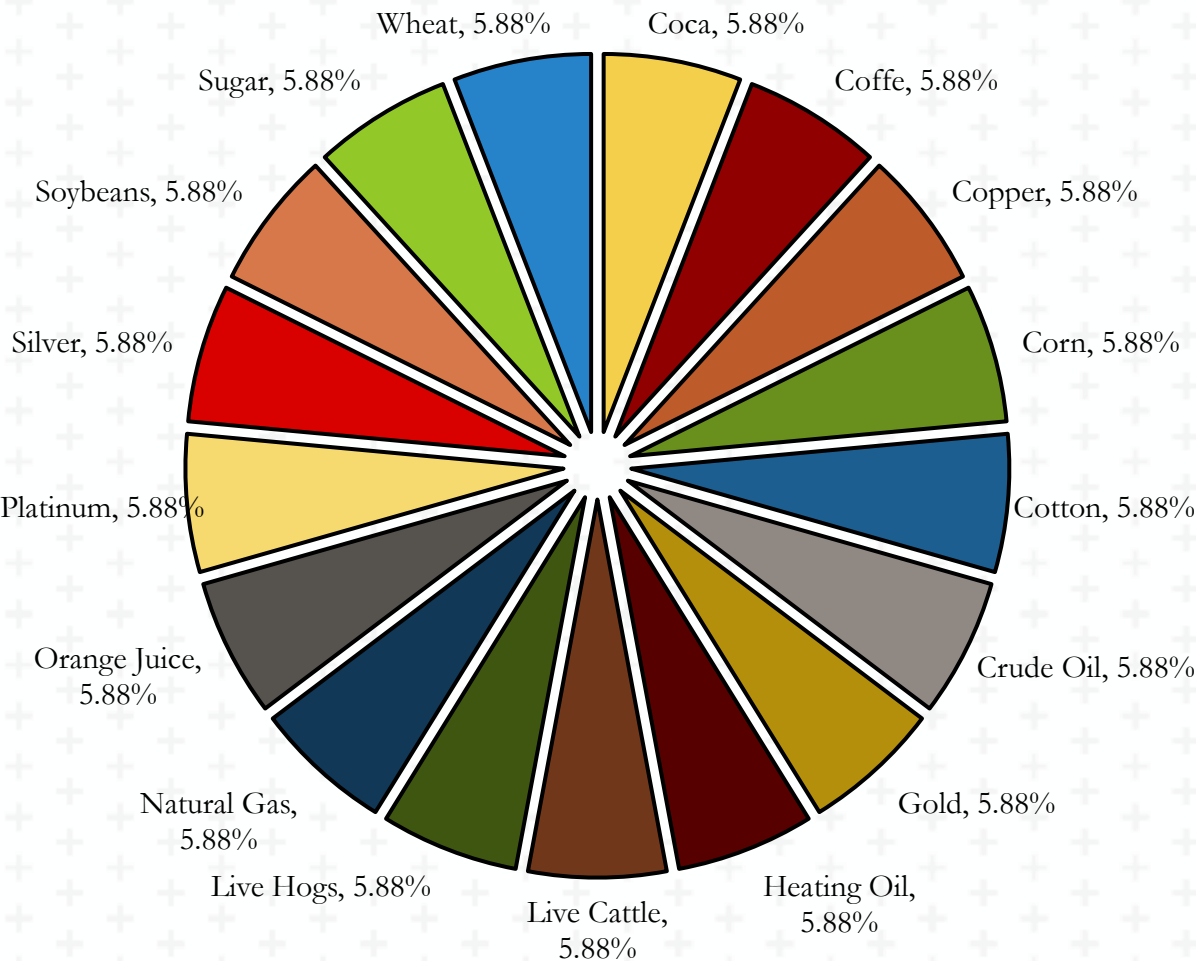
Money Flow Into Sector- USD



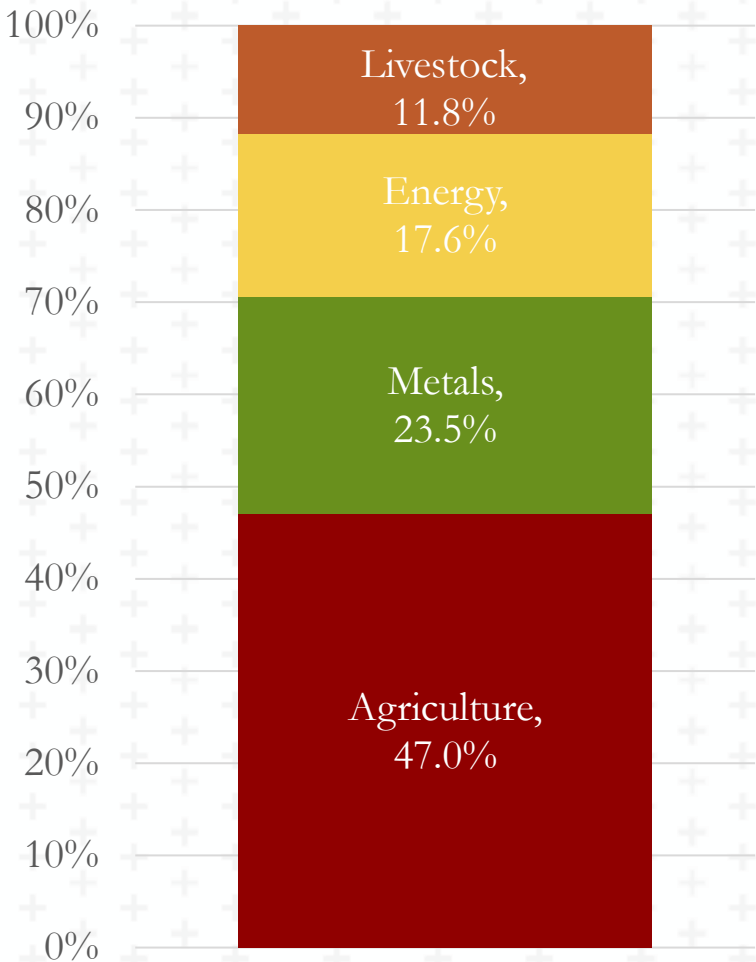
Data Source:
Trading View

Money Flow Into Sector- TRCCI

Thomson Reuters Equal Weight
Commodity Index



Index Breakdown by
Components



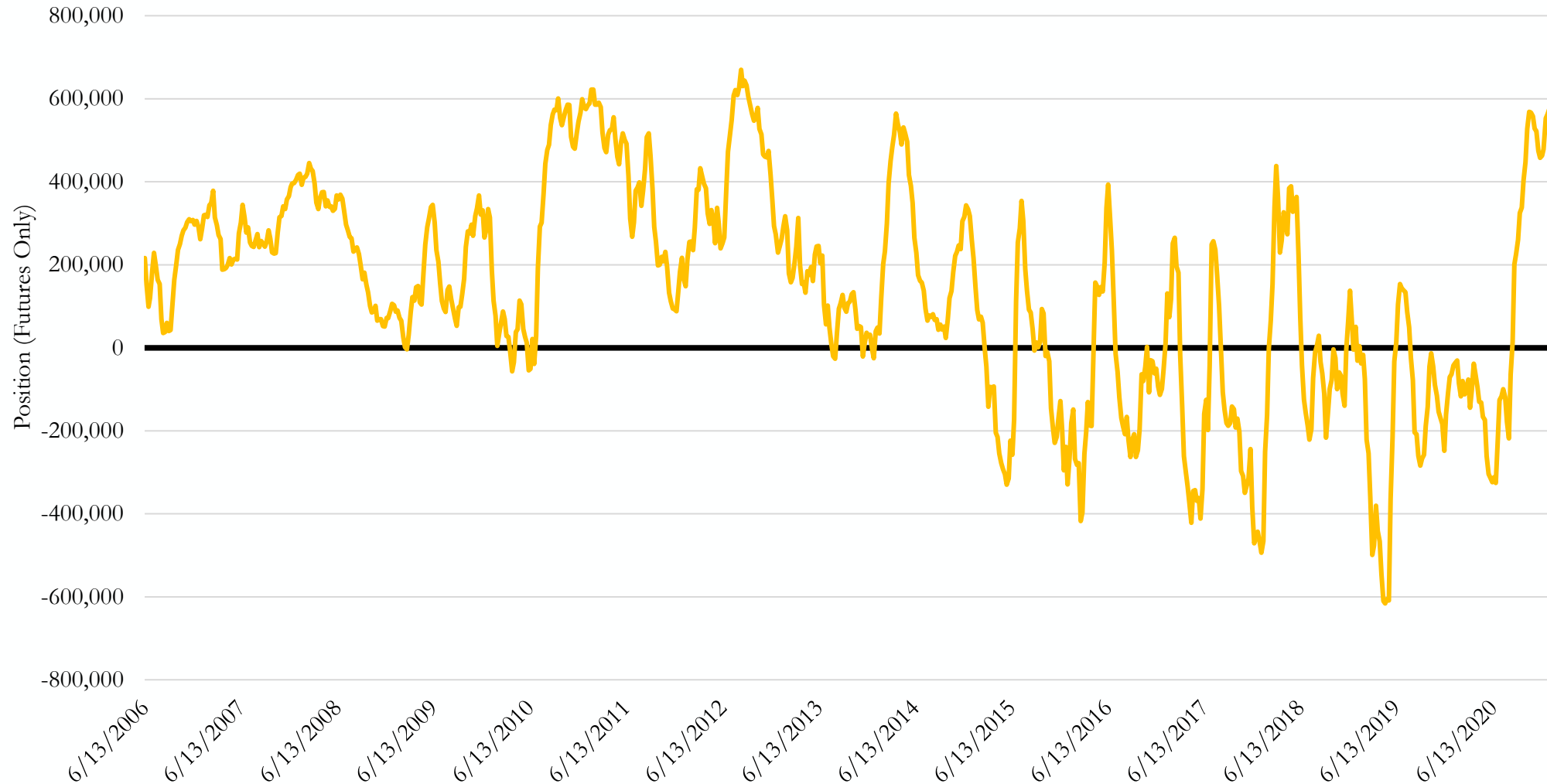
Money Flow Into Sector- TRCCI



Data Source:
DTN ProphetX

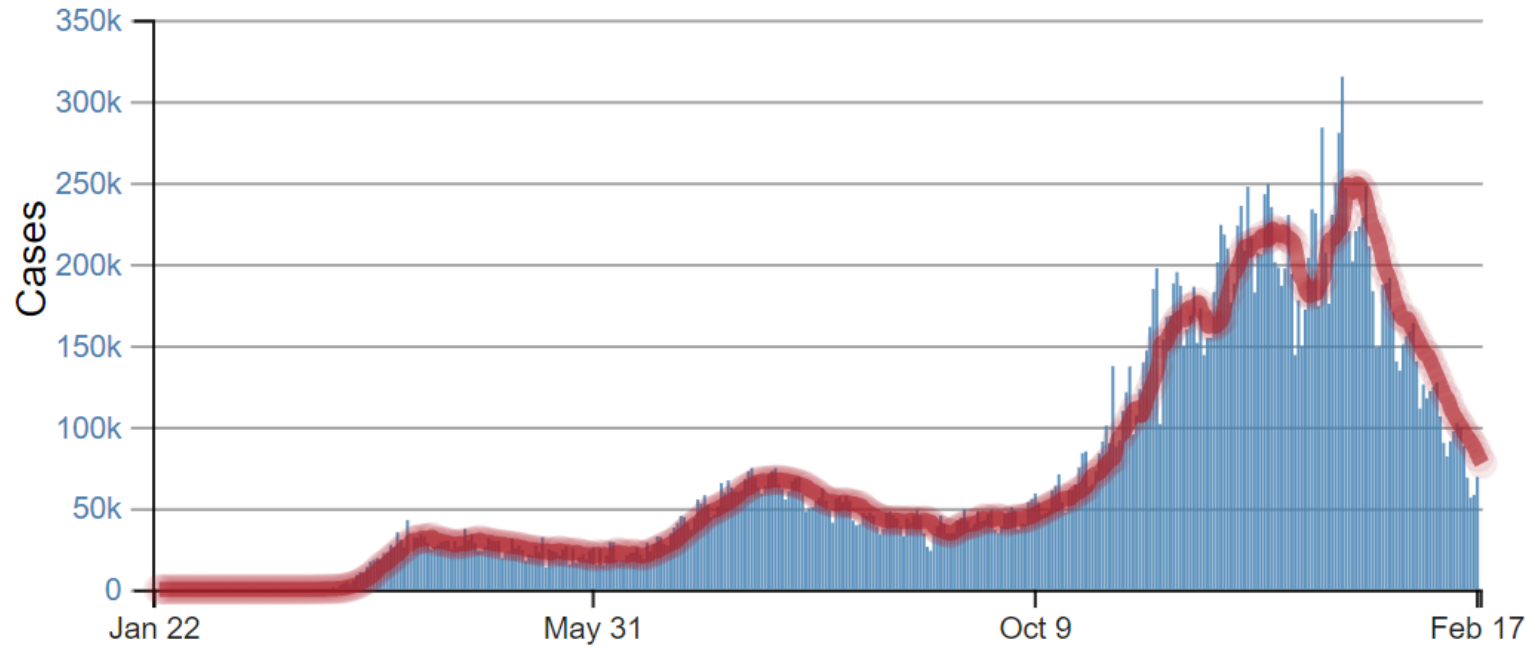
Money Flow Into Sector- USD

Managed Money- All Positions Corn, Soybeans, Chiacgo HRW & SRW,
and KC HRW Wheat- Jun 2006-Feb 9. 2021



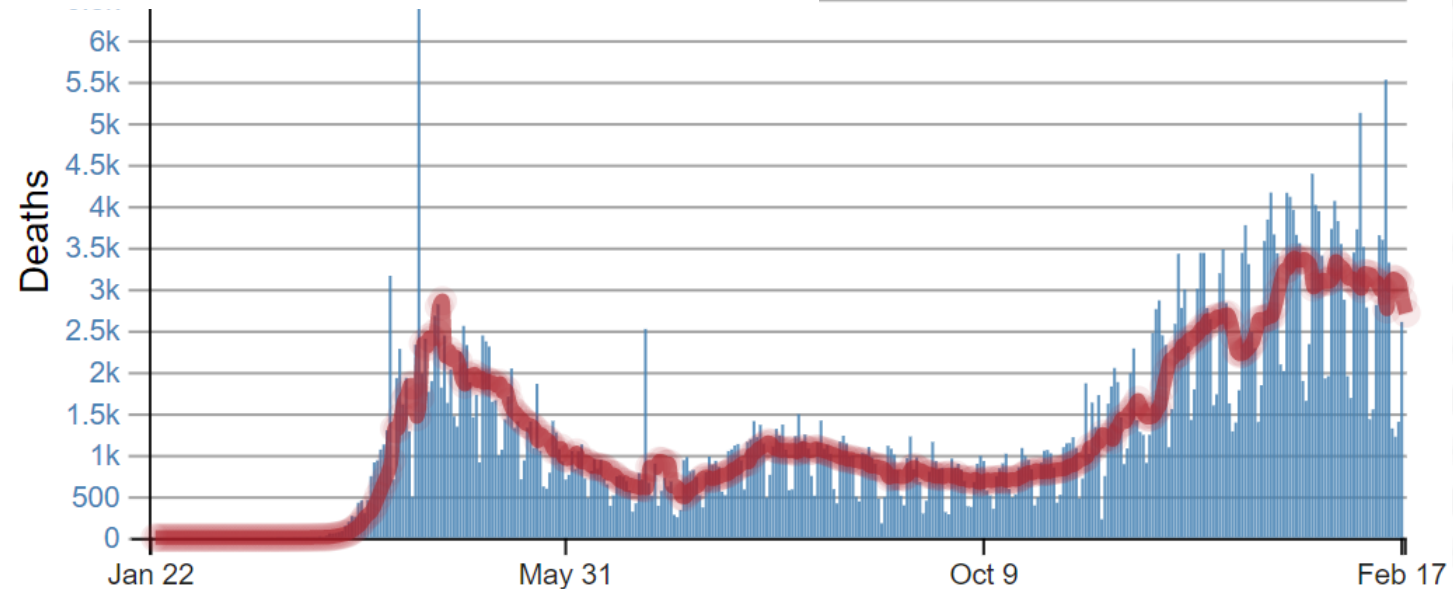
Data Source:
CFTC Weekly

COVID-19 Update



- 57,970 cases on Tuesday 2/16
 - 314,972 on 1/8
- 7-day average – 81,406 down 86%

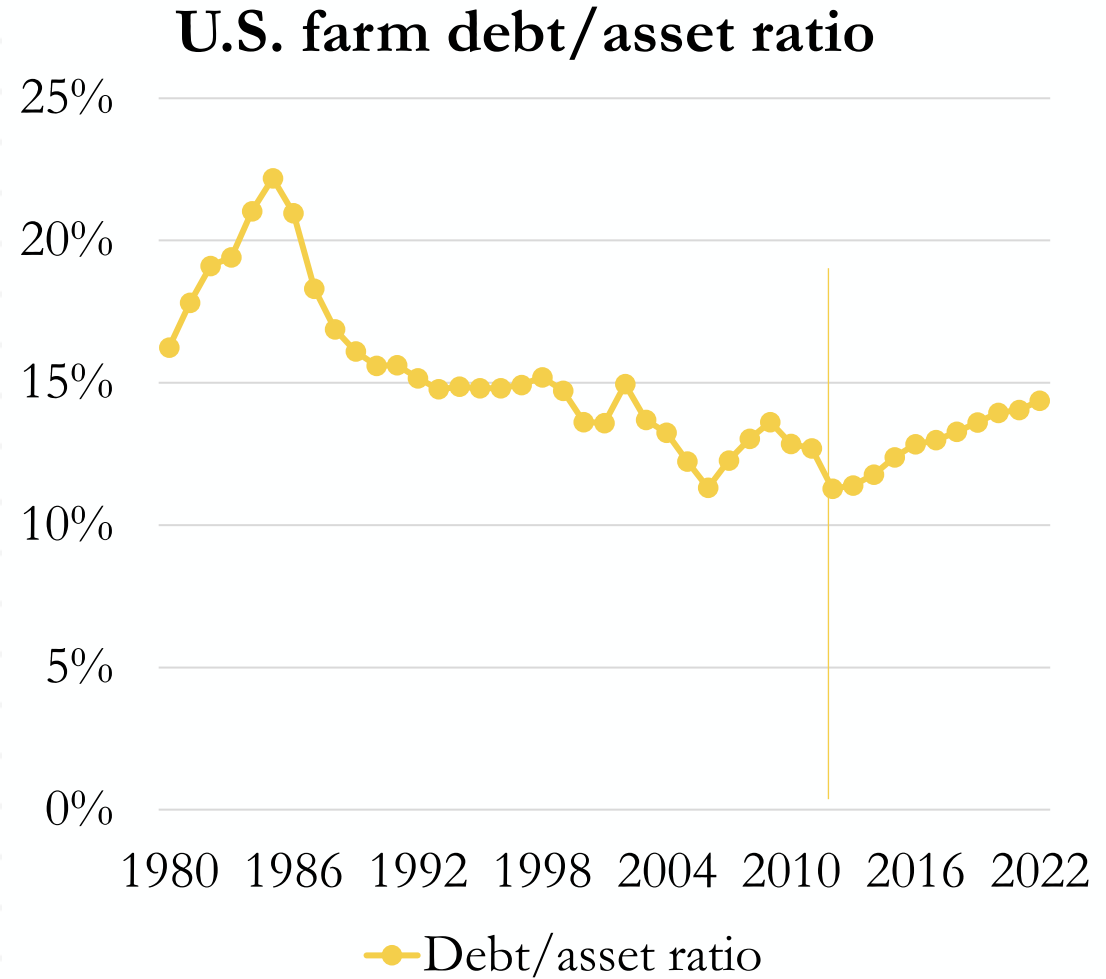
- 1,396 deaths on Tuesday 2/16
- Total of 489,067 deaths



Source: Center
for Disease
Control

It's not the 1980s, but...

- Things that are the same
 - “New Demand” USSR-Then, China Now
 - “Plant Fence Row to Fence Row”, “Need bigger Tractors”
 - Record Low Interest Rates
 - Increasing Land Values
- During the 1980s farm financial crisis, the farm debt/asset ratio peaked at 22%
- It declined to half that level in 2012, but has been increasing since then
- But it is concerning that the debt/asset ratio continues to increase



Sources: USDA ERS (history) and FAPRI-MU, Jan. 2021

Summary of the Economy

Federal Stimulus

- ❖ 4 Trillion allocated through 7 Pieces of Legislation under President Trump
 - ❖ Less than \$1 trillion still unspent
- ❖ Congress appears to be on track to pass \$1.9 trillion under President Biden.

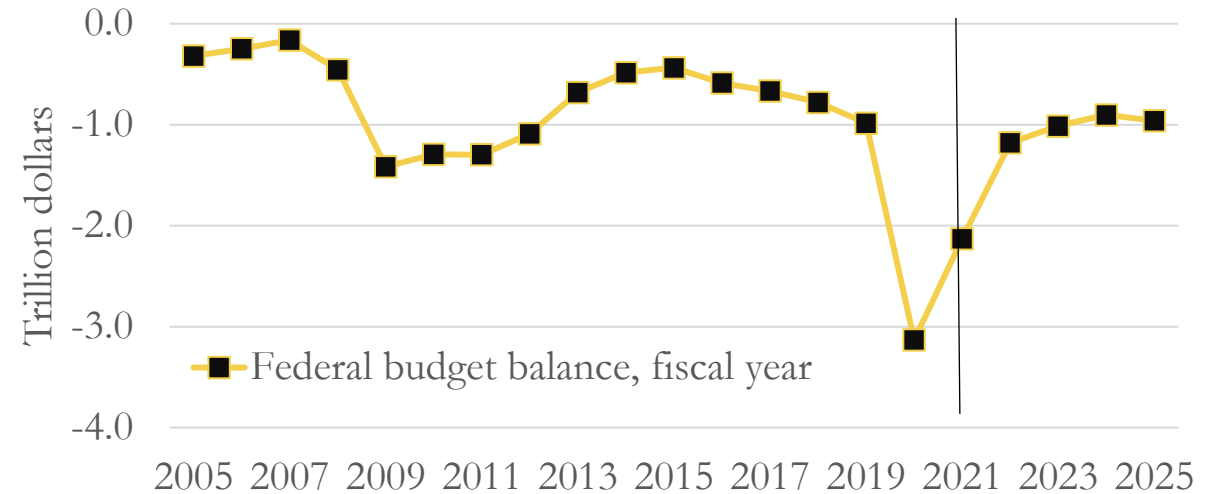
Federal Deficit

- ❖ 27.9 trillion-dollar national debt
- ❖ 127% of US Gross Domestic Product
- ❖ Annual deficit expected to be \$2.3 trillion in 2021

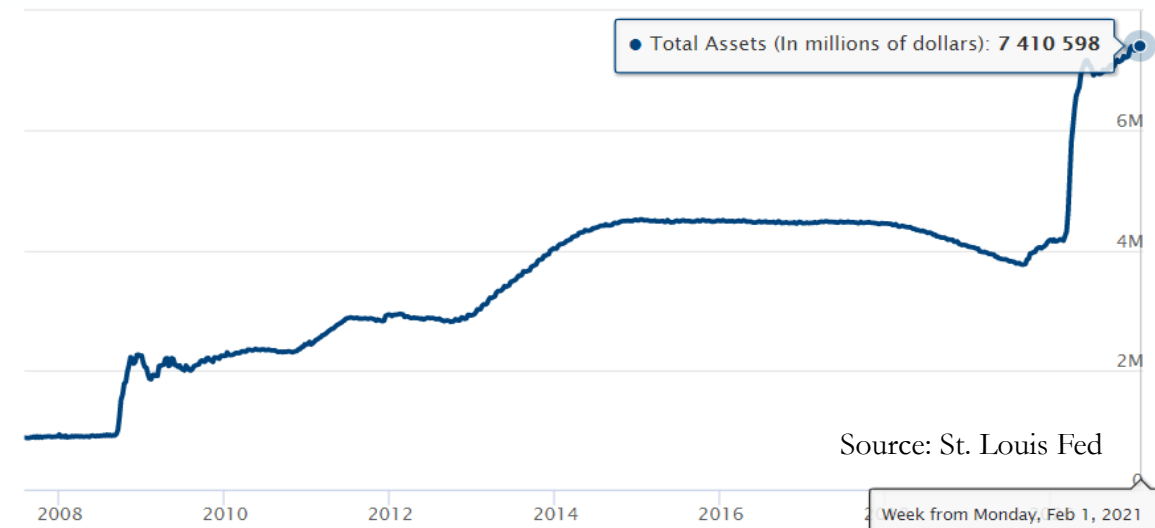
Federal Reserve

- ❖ Federal Reserve Balance Sheet grew 76.8% in 2020
 - ❖ Short-term interest rates expected to remain low
- ❖ Unemployment rates remain elevated (6.3% in Jan.)
 - ❖ First times unemployment claims data- 848 k
 - ❖ Continuous claims data at 4.494 million
- ❖ M1 Money (most liquid)- up 62%
- ❖ M2 Money (includes savings and deposits)- up 24%
- ❖ Velocity of Money lowest since records began in 1960

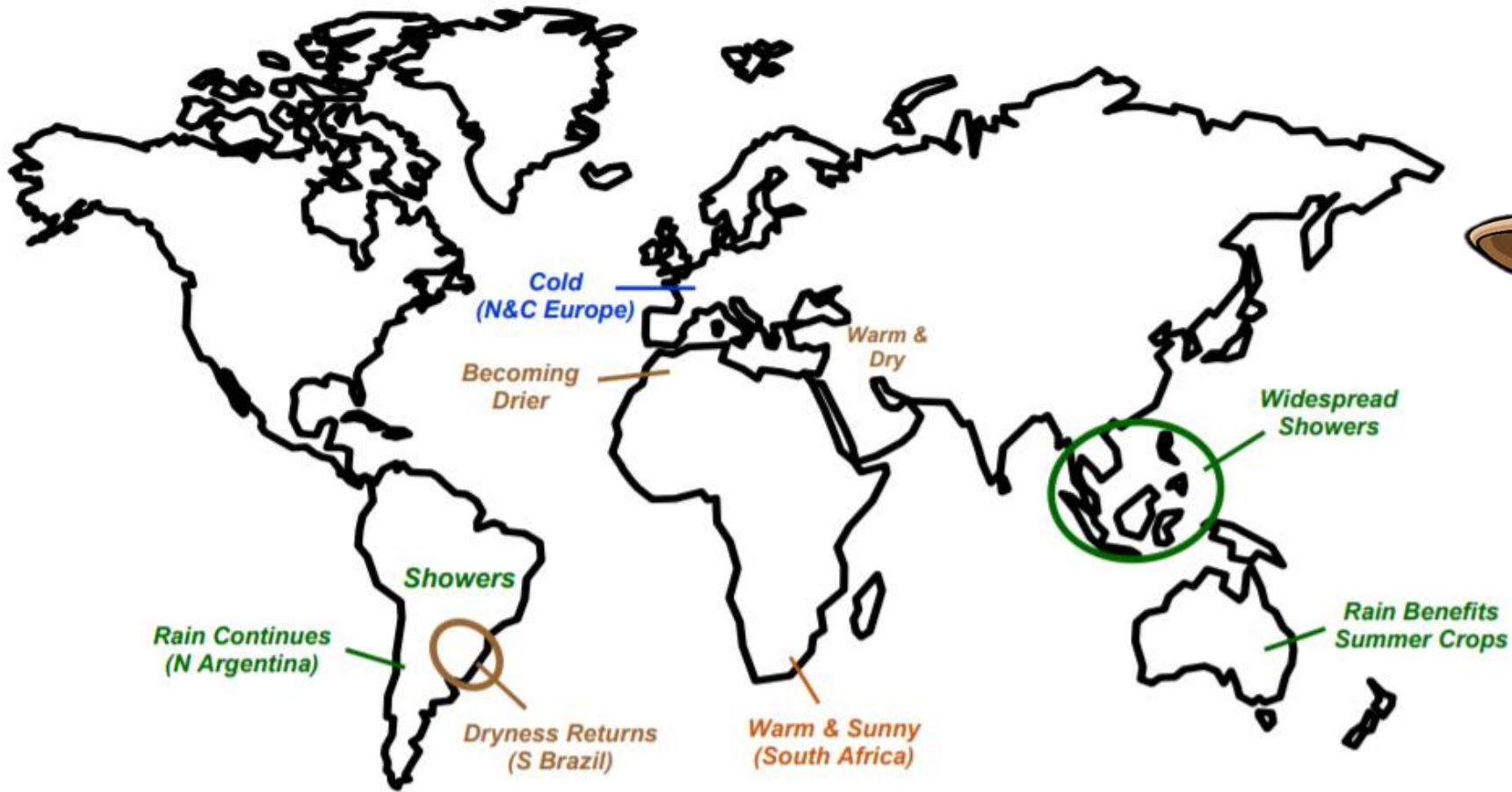
Federal Reserve Assets on Balance Sheet



Federal Reserve Assets on Balance Sheet

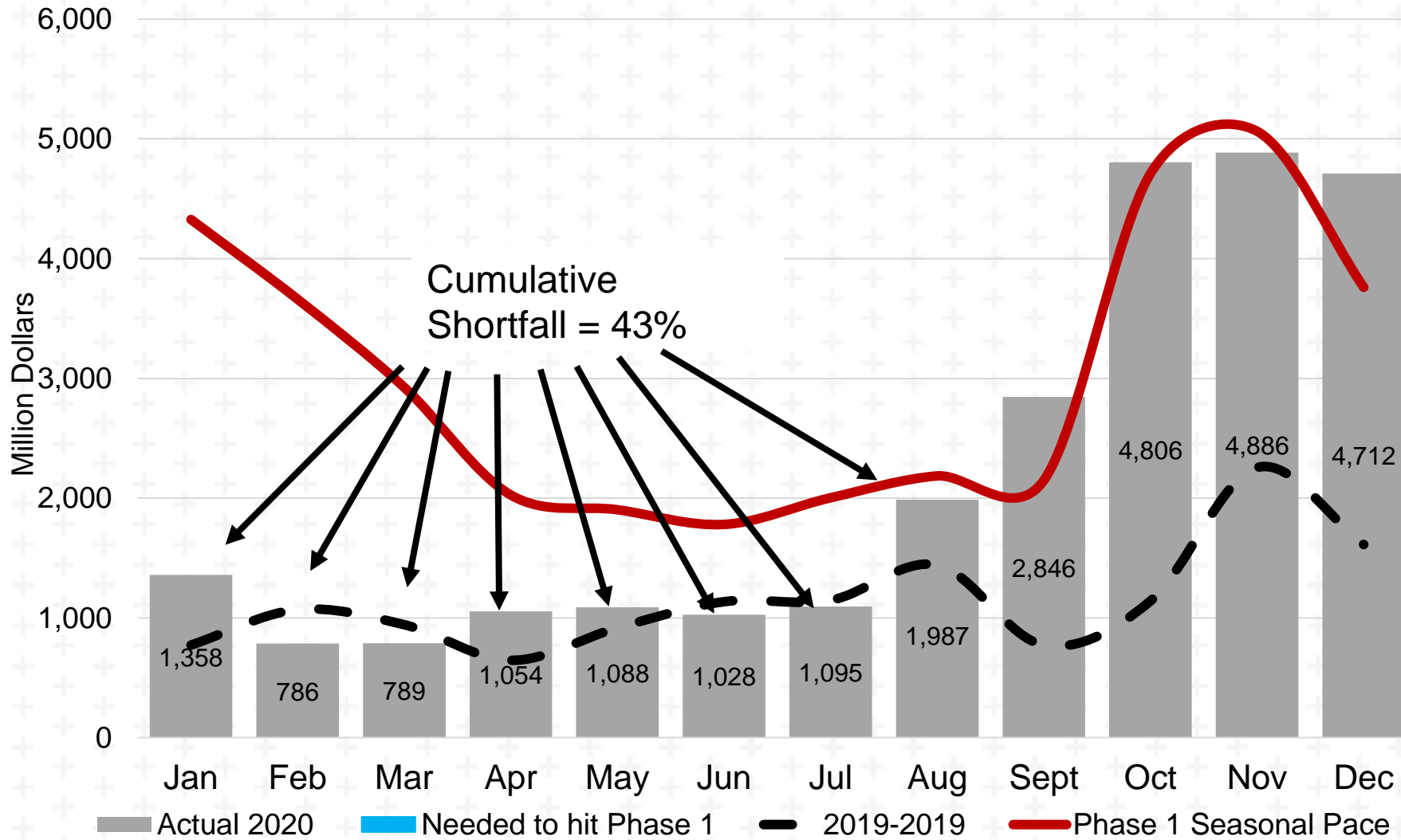


Current Issues: World Happenings

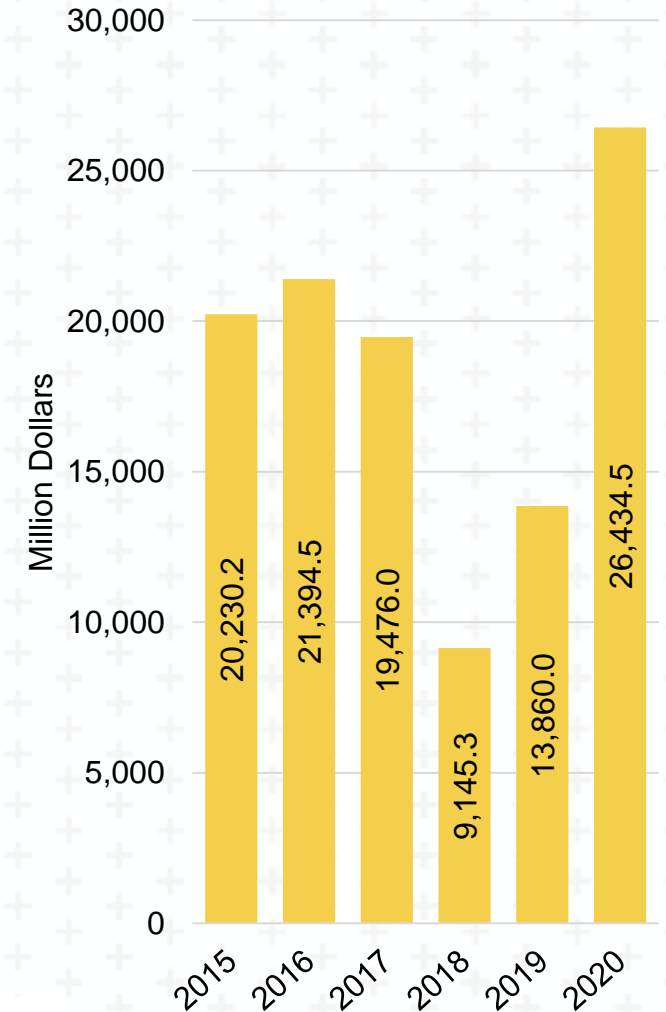


Chinese Phase 1 Ag Purchases

Agricultural Trade with China- 2020 (US Export Reporting)



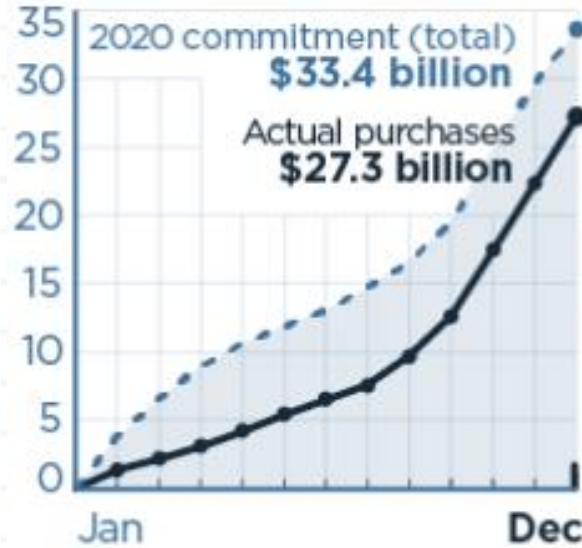
US Ag Exports to China- Annually



Data Source: USDA FSA GATS

Phase 1 Trade Deal

Agriculture

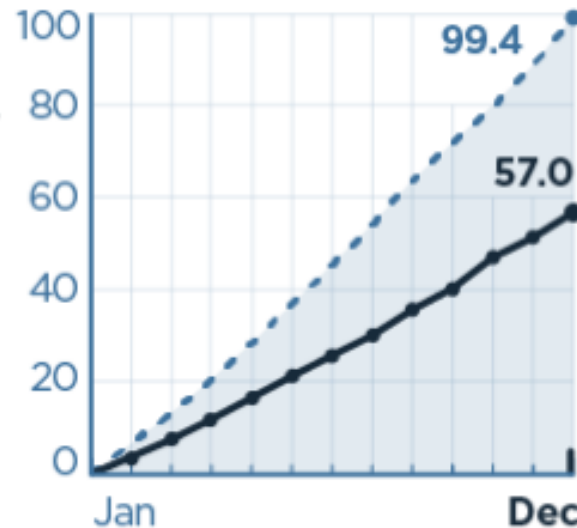


Agriculture- China imports show they reached 64% of their target in 2020, but US imports up 65% over 2019.

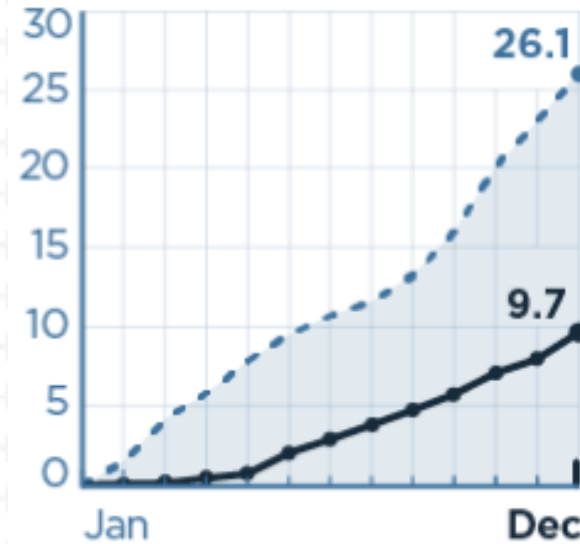
US export data show the previous record of \$ that China completed 82% of their commitments

Manufactured Goods- China reached 60% of their target.
US exports – 57%

Manufactured goods



Energy



Energy- China reached 39% of their target.

US- 37% export value

Uncovered Goods-
No set target, but down 12% from 2017 levels.

Question becomes-
how does the Biden Administration respond?

Uncovered



African Swine Fever- this week

HEALTHCARE & PHARMA FEBRUARY 5, 2021 / 5:35 AM / UPDATED 13 DAYS AGO

Chinese researchers find natural mutation in African swine fever virus

- ❖ African Swine Fever appears to be making a come back in some parts of Asia with new strains
- ❖ Some heard liquidation happening (nothing like 2018)
- ❖ Improvements in China's commercialization of hog facilities and better biosecurity measures **seem** to be working.
- ❖ Something to keep a watchful eye on.

HONG KONG CULLS 3,000 PIGS AFTER AFRICAN SWINE FEVER DISCOVERY

2/9/2021

German Pig Prices Rise After Disruption to Exports, Abattoirs

 Reuters

Winter disease surge hampers China's hog production recovery

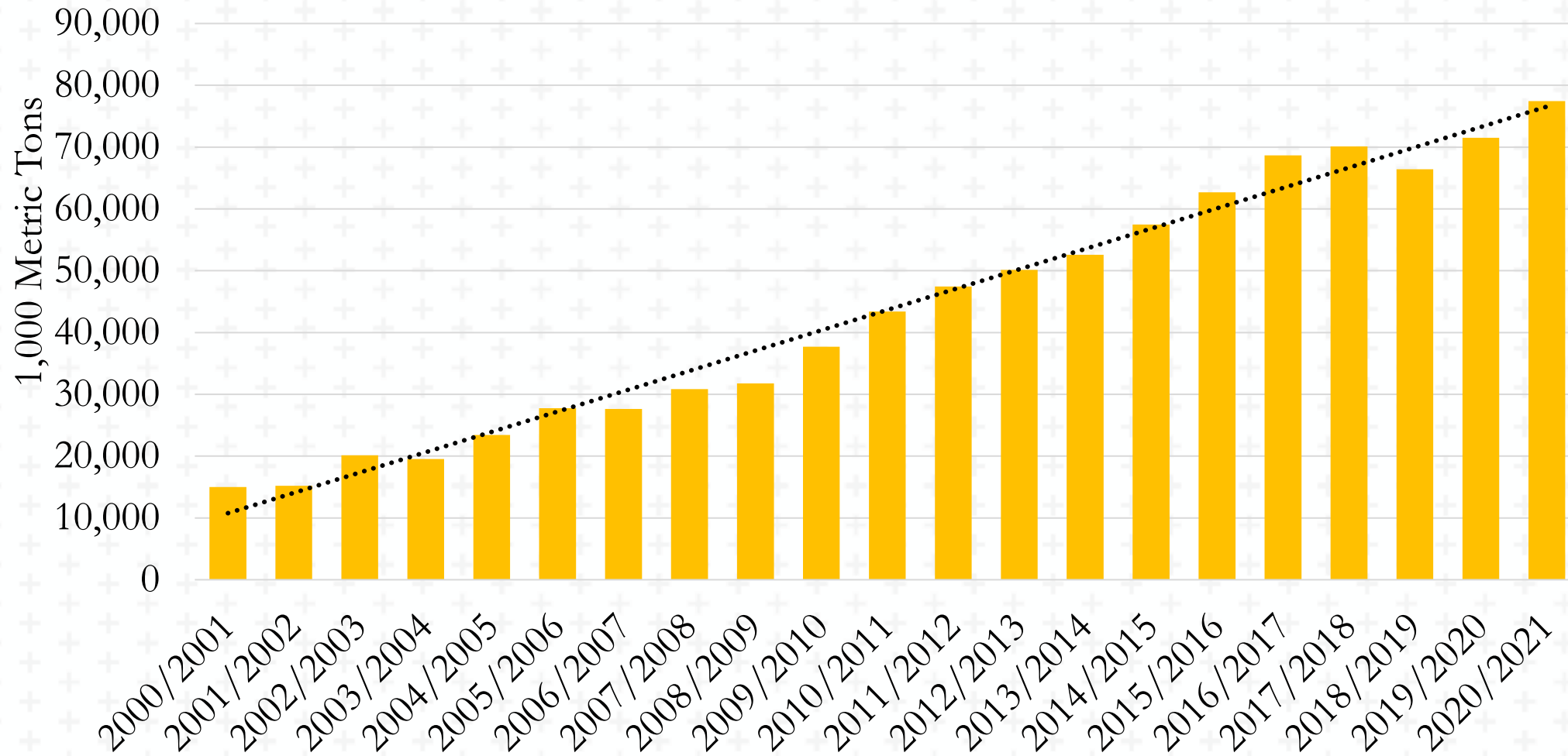
PED is not usually fatal to grown pigs but can kill piglets. It is also more likely to infect young sows without immunity to it, said a veterinarian with a

...

2 weeks ago

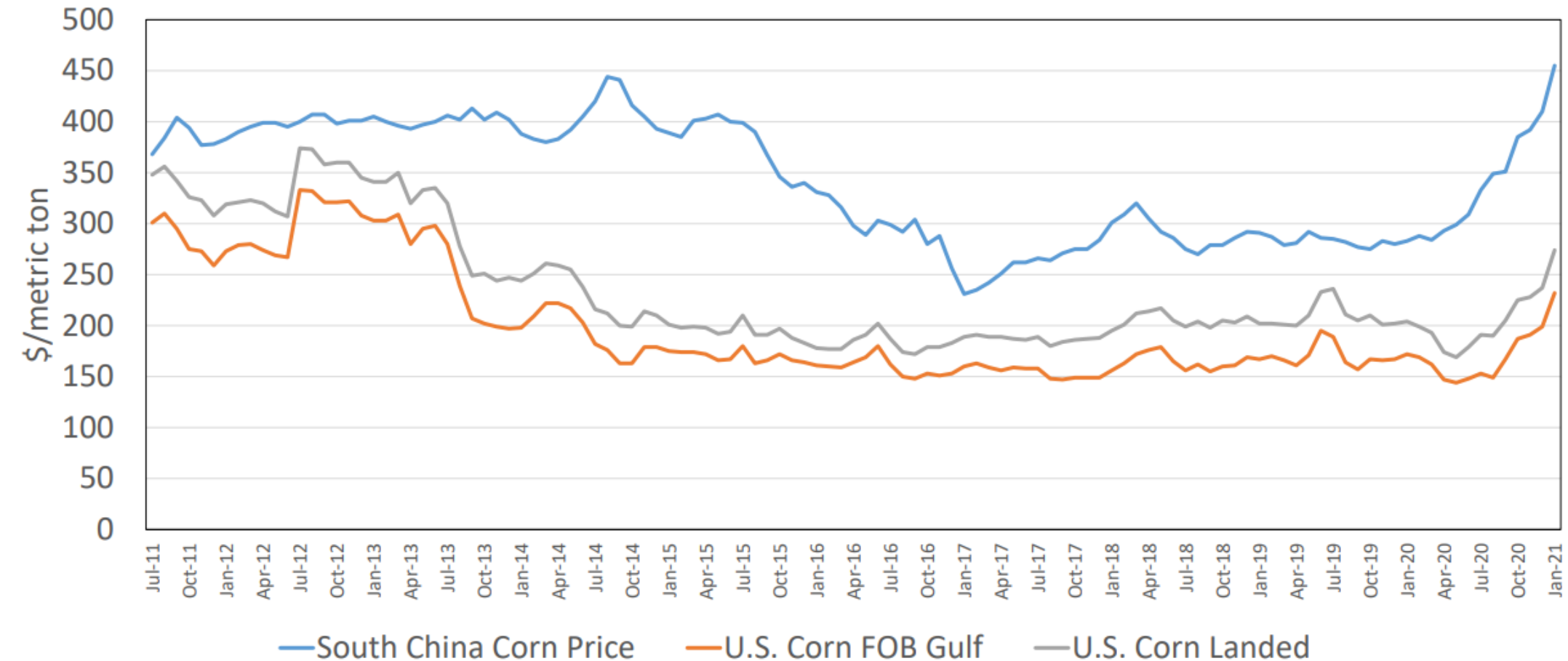
African Swine Fever

Chinese Soybean Meal Domestic Consumption



Weekly Soybean meal crush exceeded 2mmt 23 times in 2020. It only did it 5 times between 2017-2019.

Chinese Corn Demand- Prices



Source: GNGOIC and USDA Seth Meyer
Landed Does not include VAT or Tariff

What's the Outlook With China

- ❖ Porcine epidemic diarrhoea (PED) and ASF starting to emerge again.
- ❖ Is China stock piling corn and soybeans or using it?
- ❖ Chinese relations with Taiwan and ultimately the US involvement in that debate.

 Reuters

U.S. carrier group enters South China Sea amid Taiwan tensions

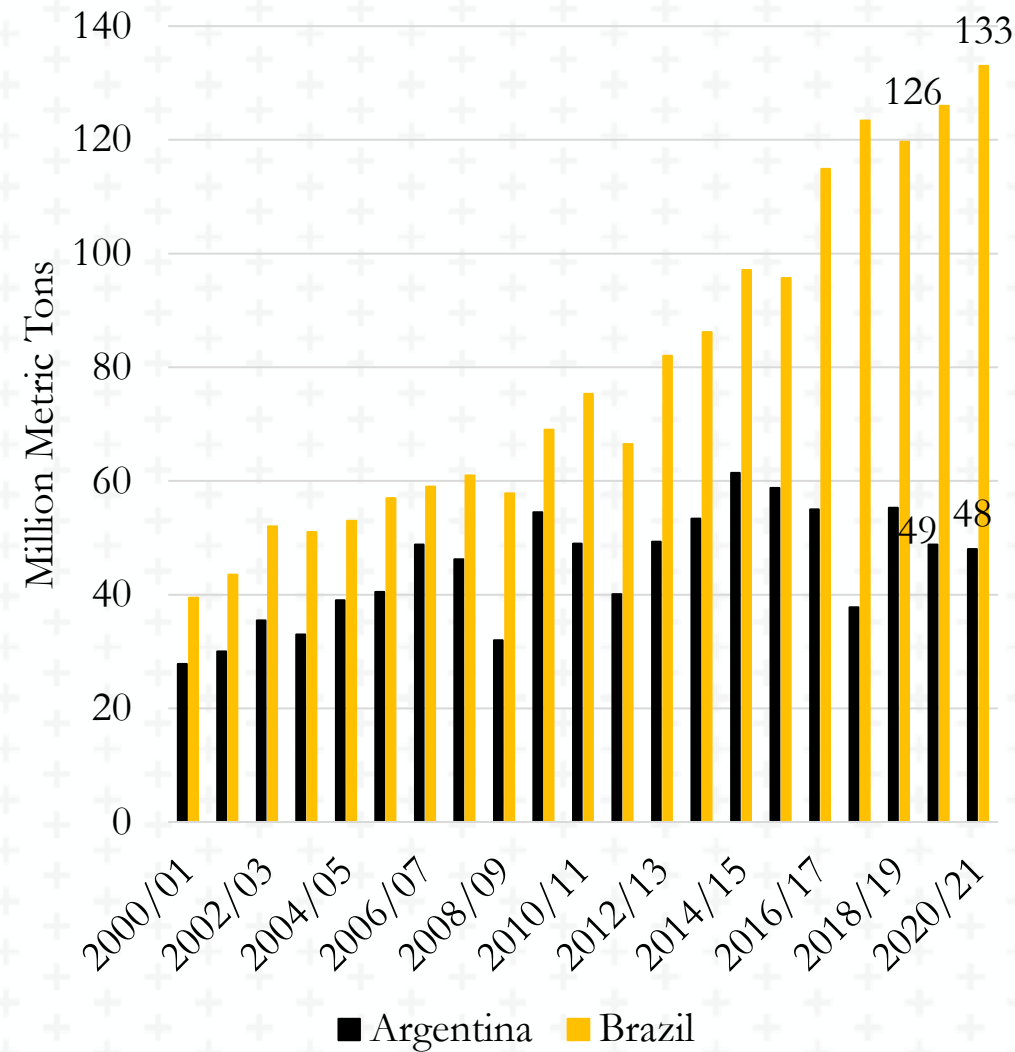
"After sailing through these waters throughout my 30-year career, it's great to ... China has repeatedly complained about U.S. Navy ships getting ...

3 weeks ago

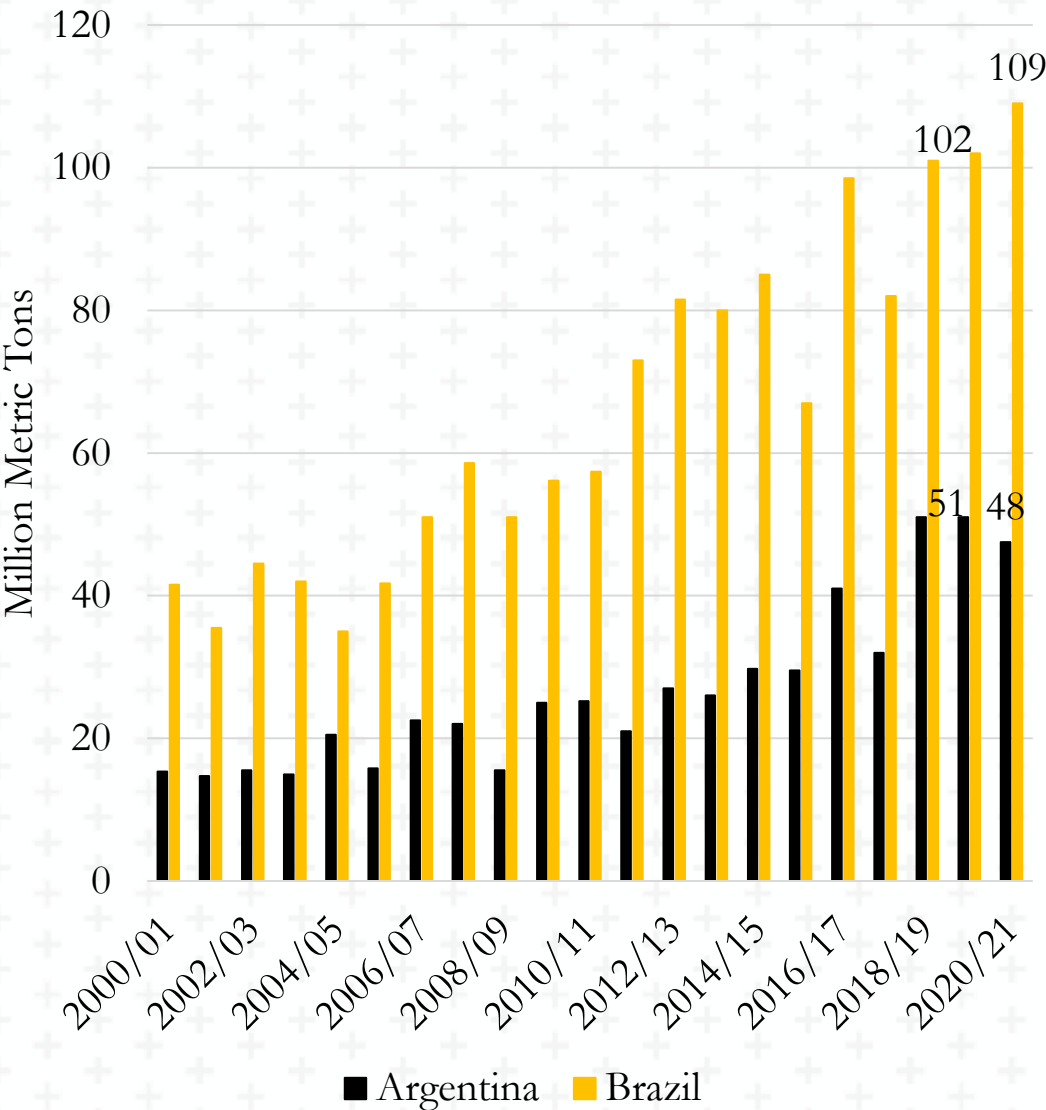


South American Production

Argentina and Brazil Soybean Production

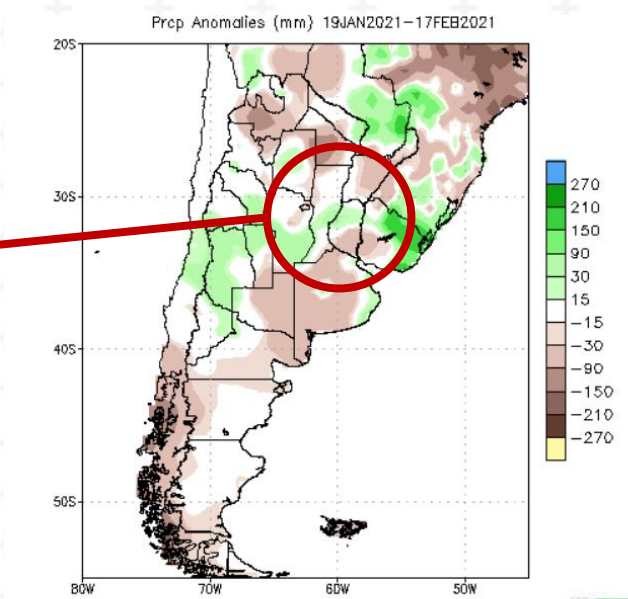
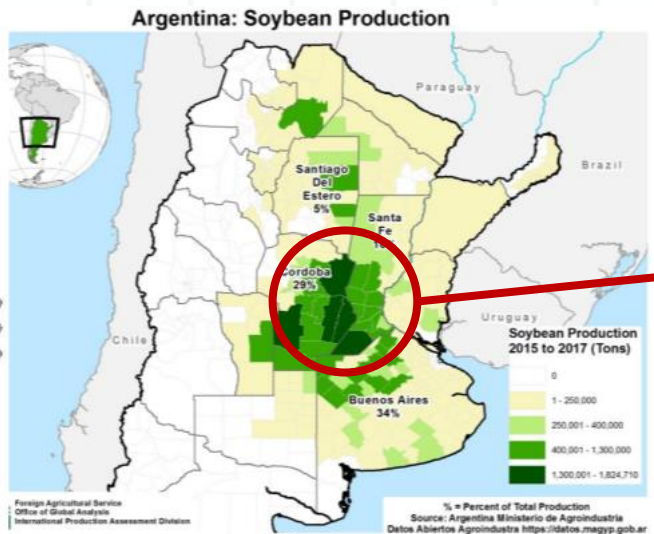


Argentina and Brazil Corn Production

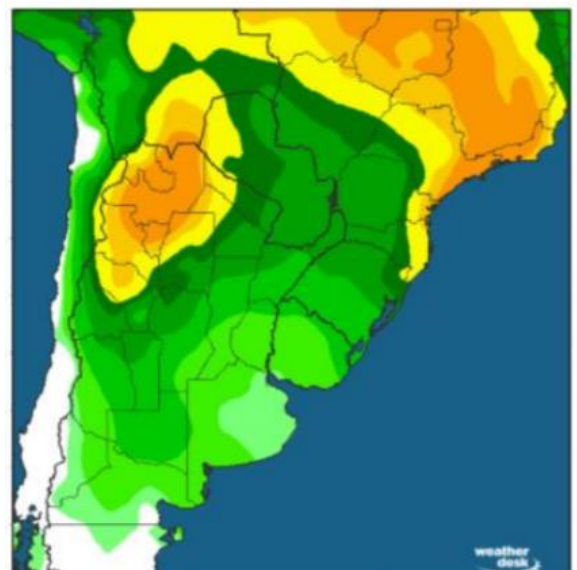


South American Weather- Arg.

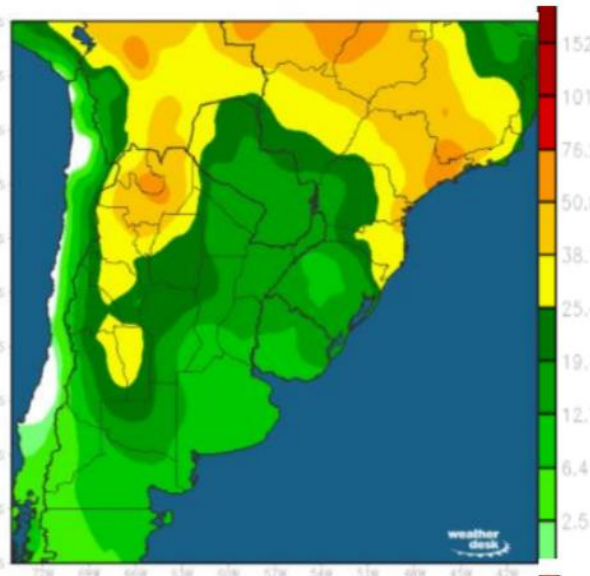
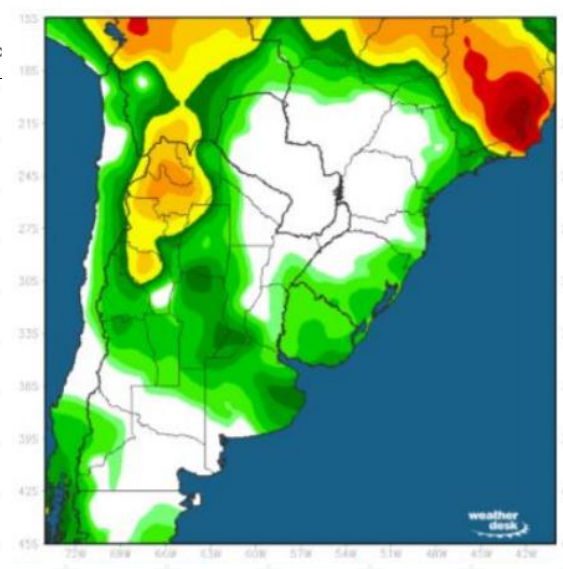
6-10 Day Weather



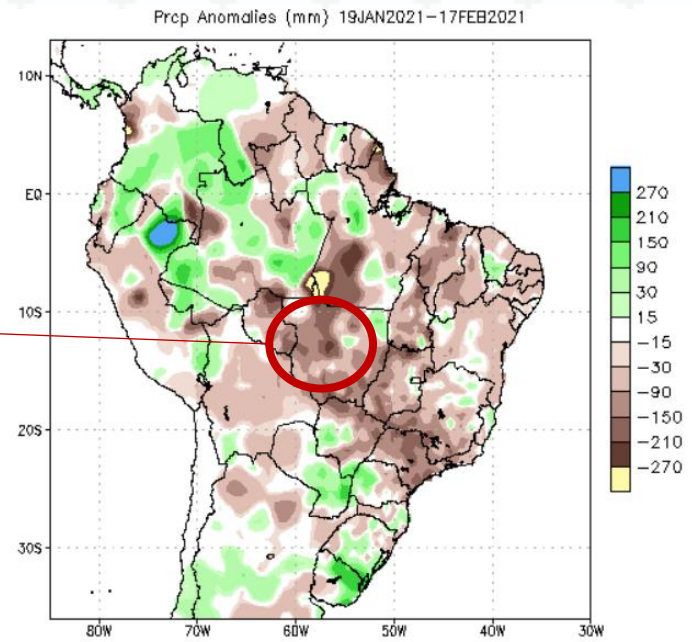
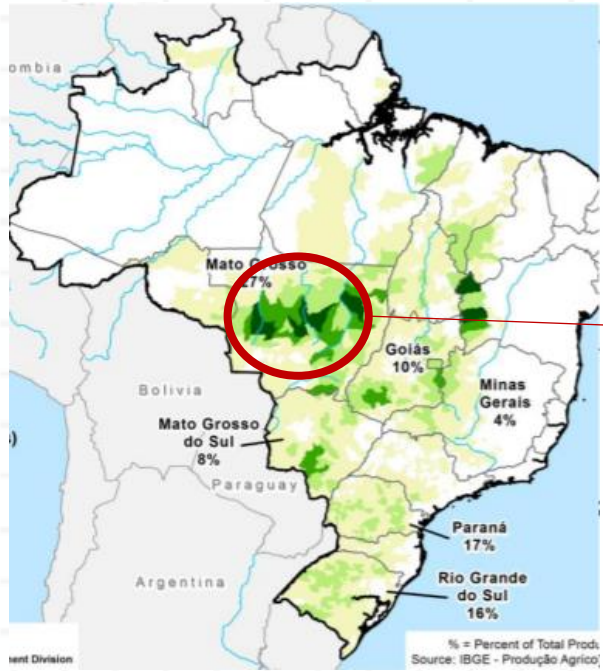
1-5 Day Weather



11-15 Day Weather

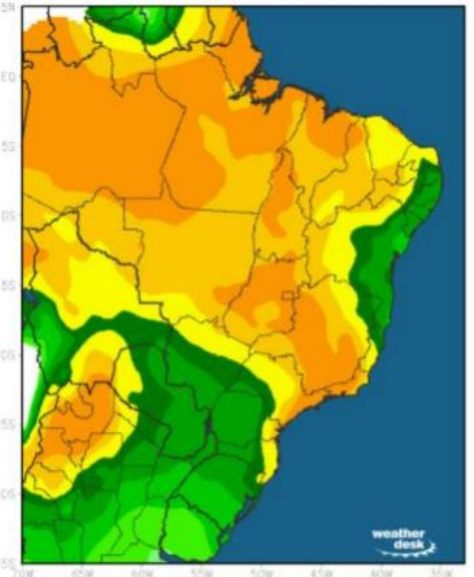


South American Weather- Brazil

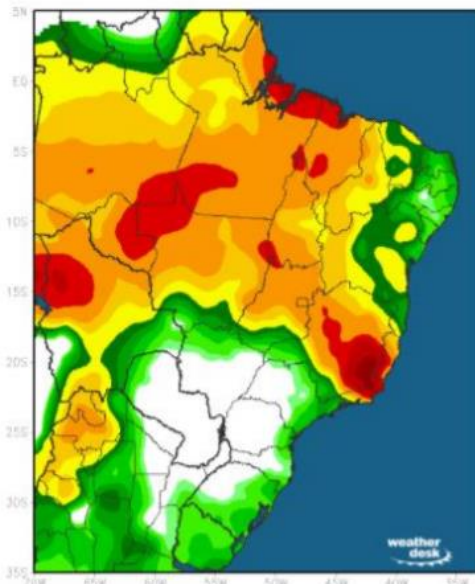


Data Source: CPC Unified (gauge-based & 0.5x0.5 deg resolution) Precipitation An Climatology (1981-2010)

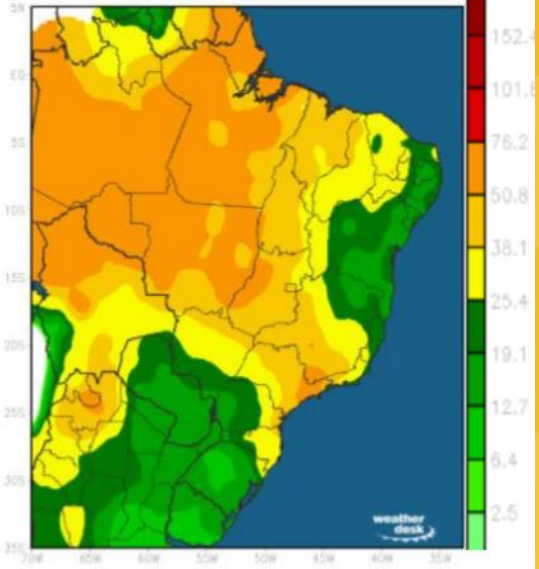
6-10 Day Weather



1-5 Day Weather

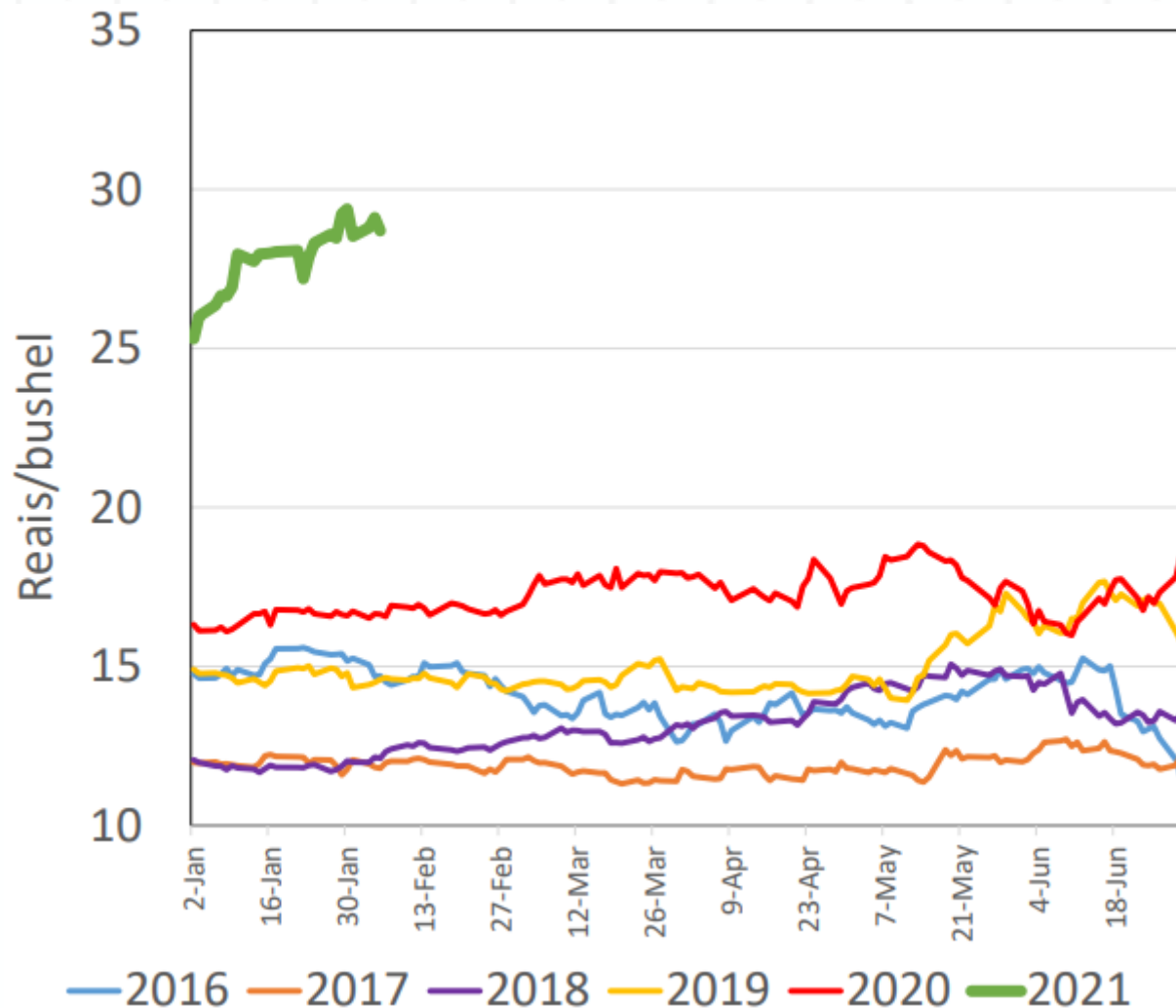


11-15 Day Weather

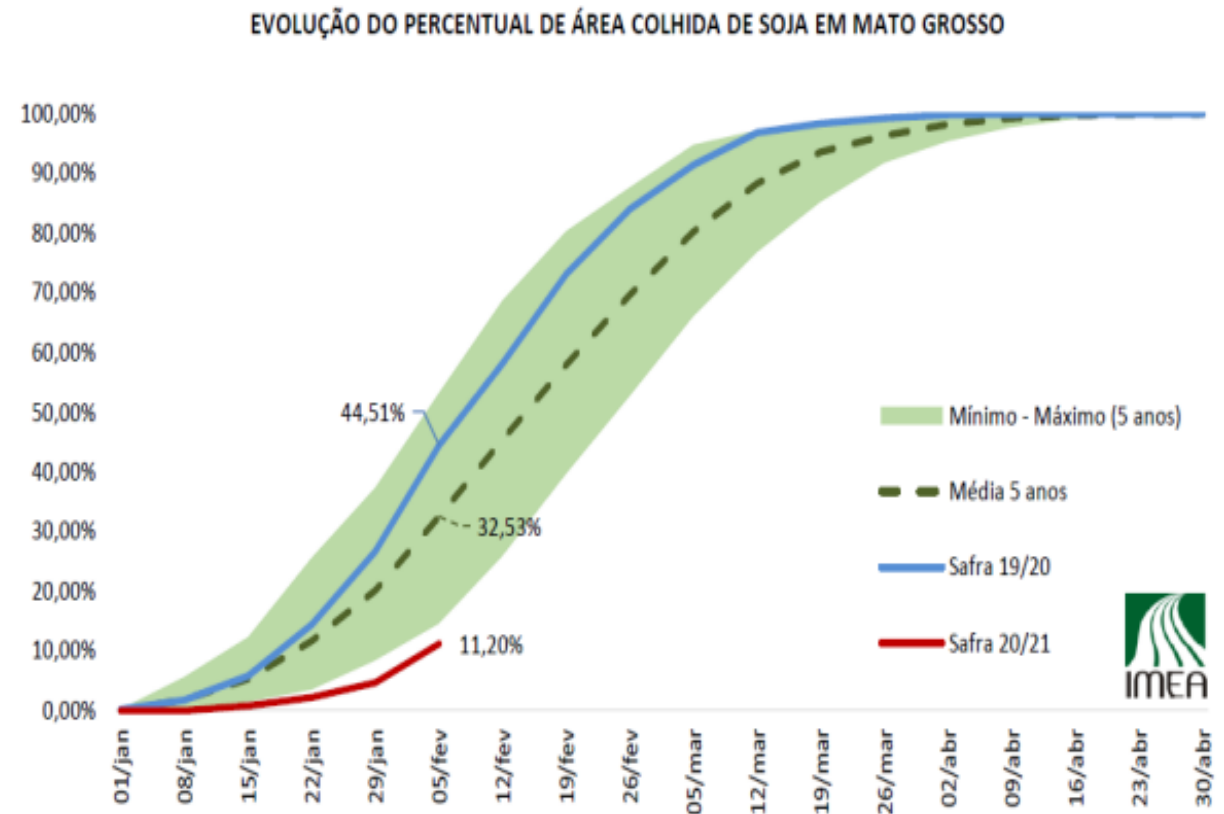


Brazil- Second Crop Corn

July Corn Futures in Brazilian Reais



Slow soybean harvest in Brazil means delayed planting of the safrina corn crop

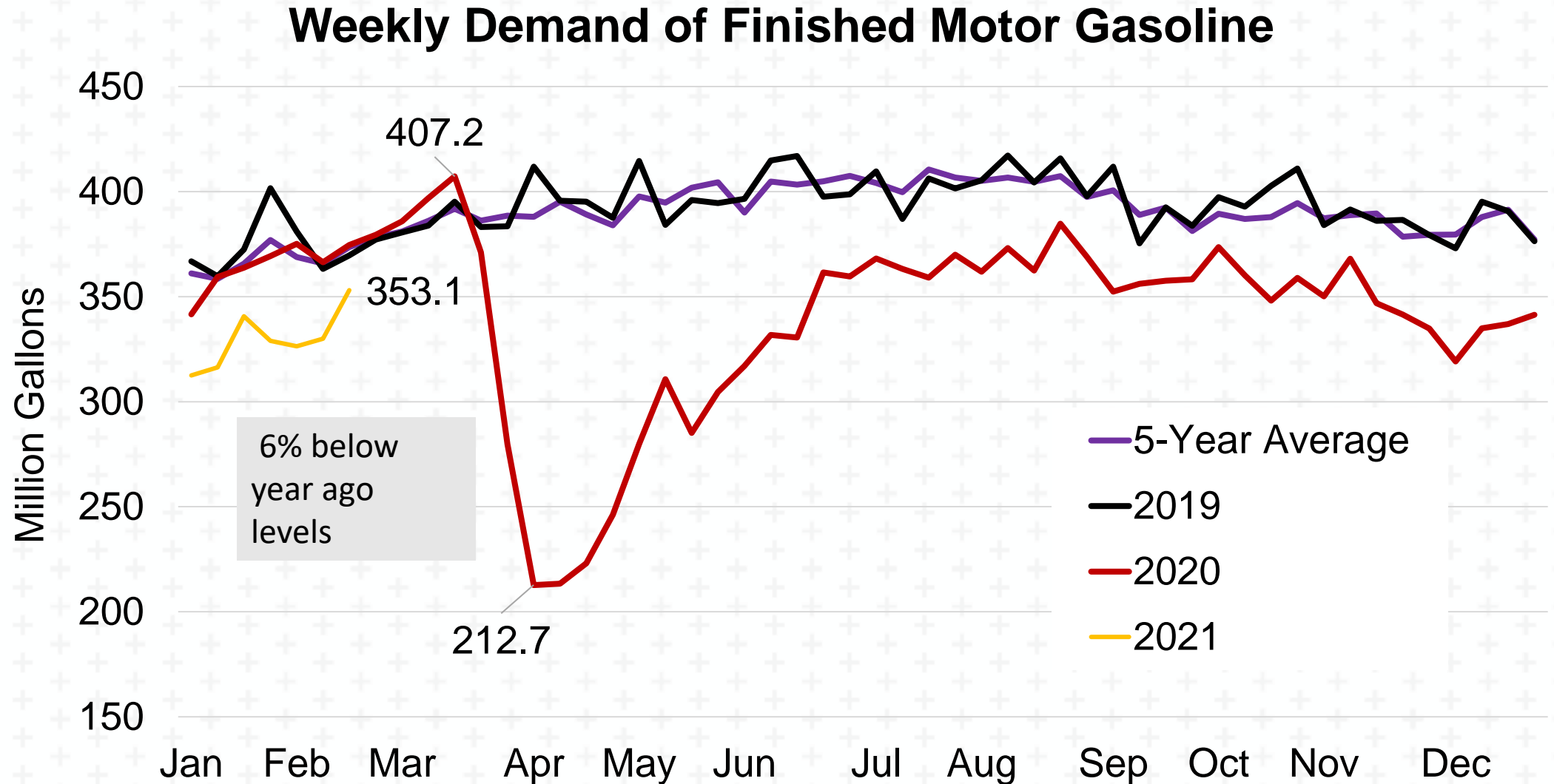


Fonte: Imea

Image Sources: USDA Outlook Forum, Seth Meyer

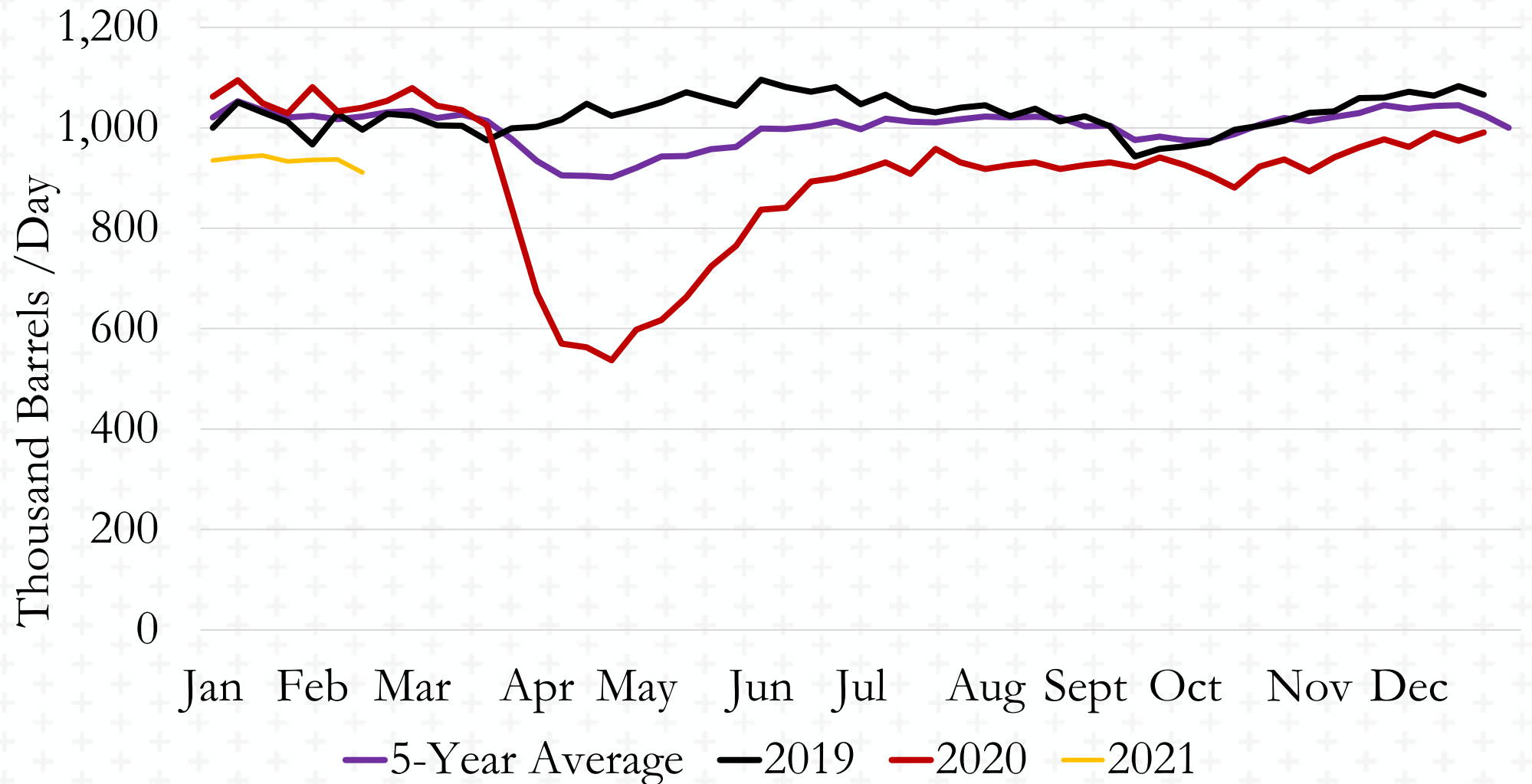


Corn Demand- Gas Consumption



Corn Demand- Ethanol Production

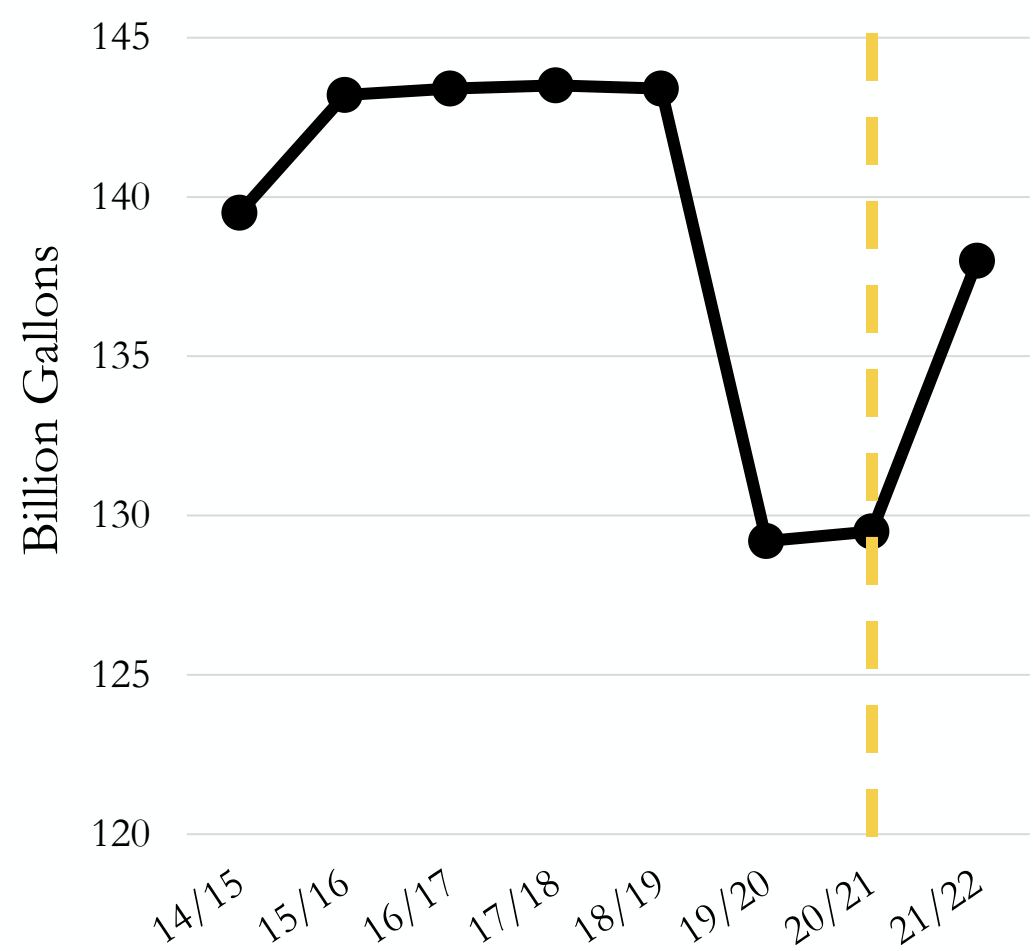
Us Weekly Ethanol Production



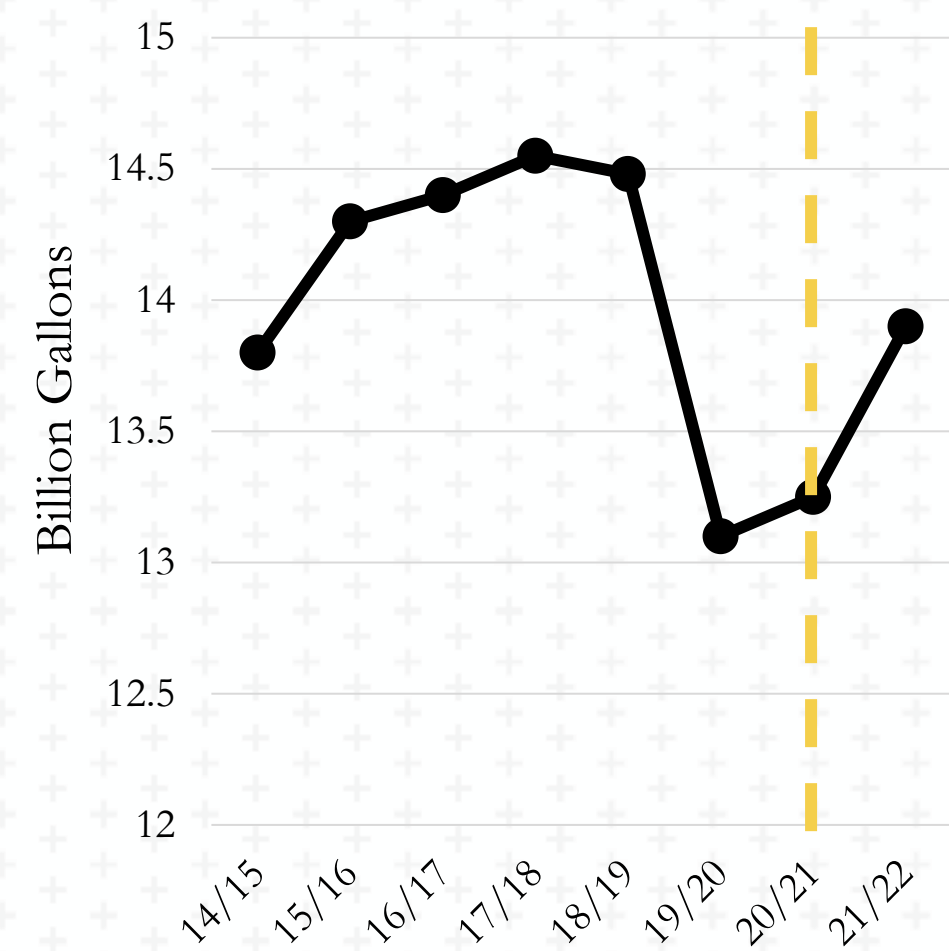
Source: Energy
Information
Agency

Corn Demand- Ethanol Grind

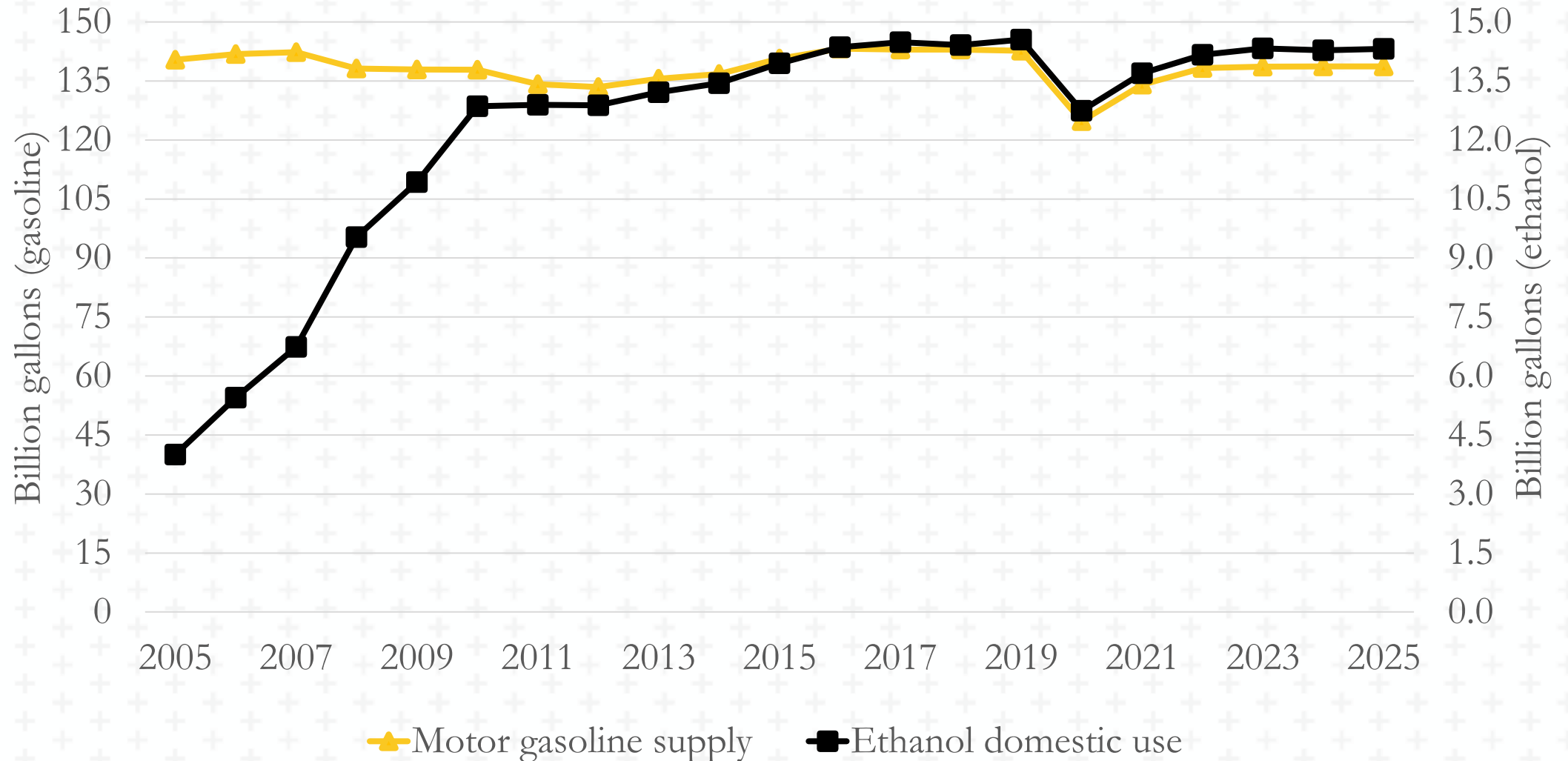
Gasoline Consumption-
Annual



Ethanol Consumption-
Annual



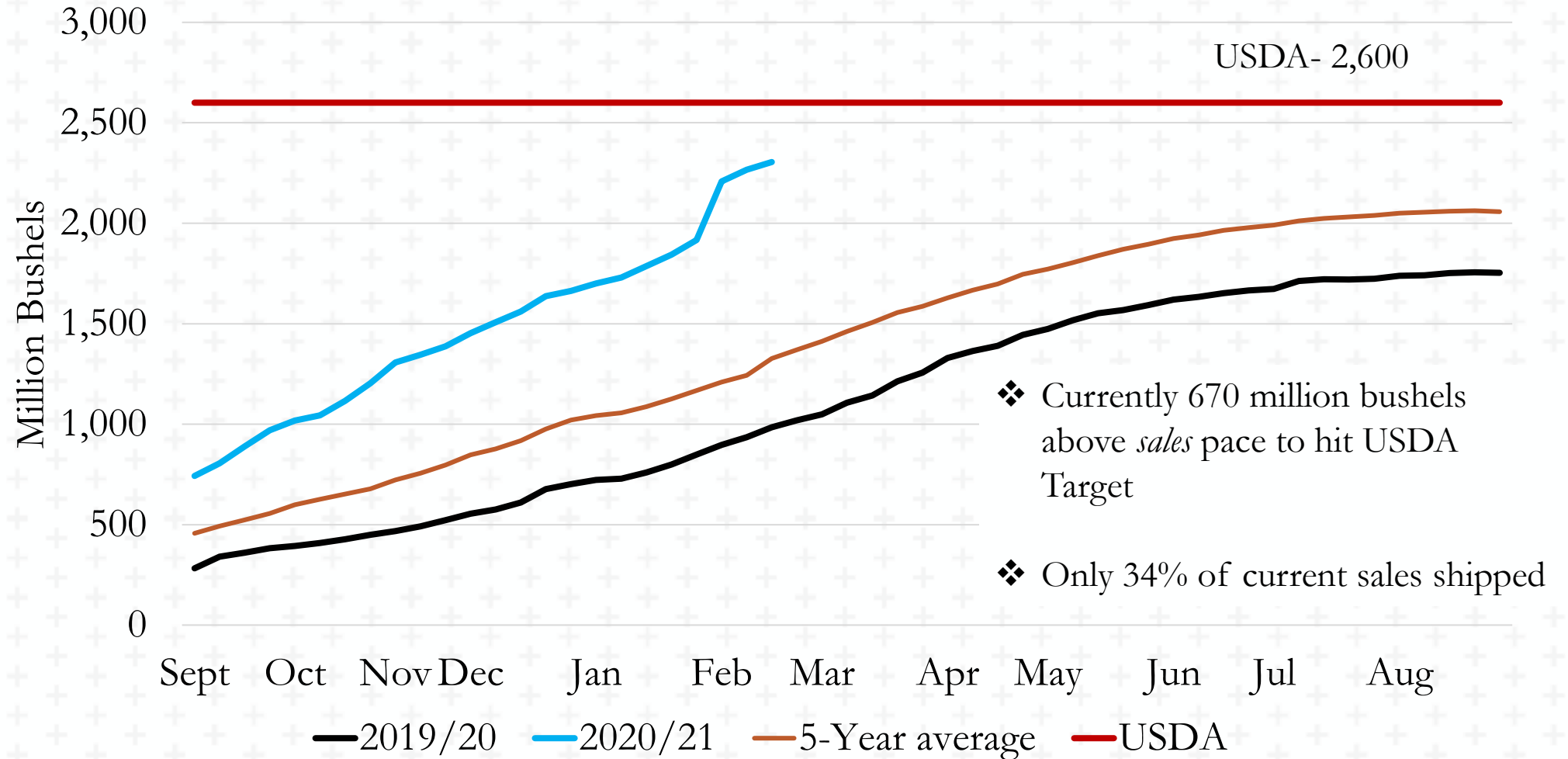
Gasoline and Ethanol



Source: Energy Information Administration and FAPRI-MU, Feb. 2021

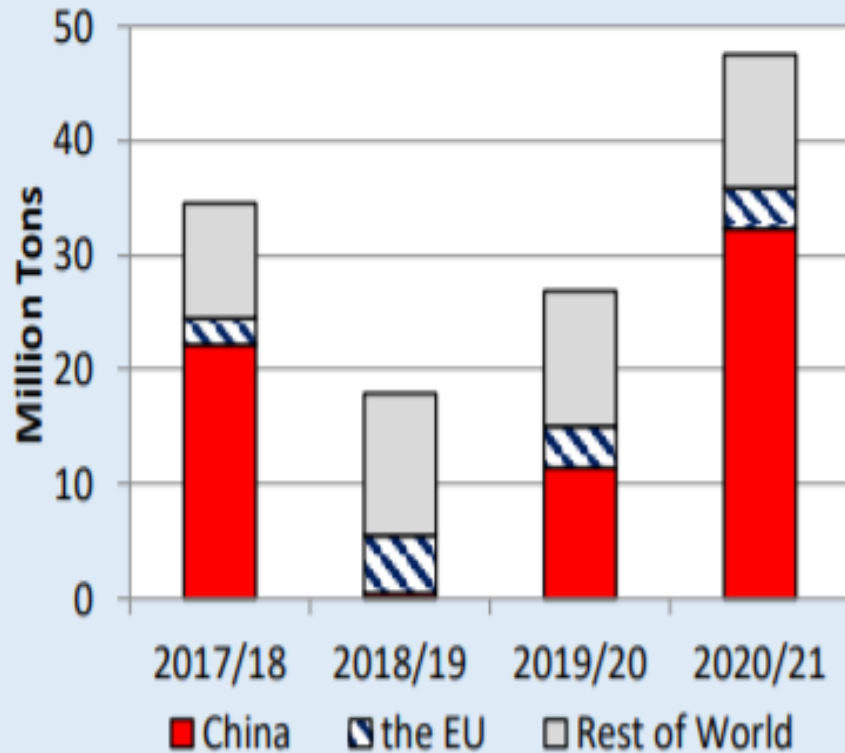
Corn Demand- Exports

US Corn Export Commitments (Exports + Outstanding Sales)

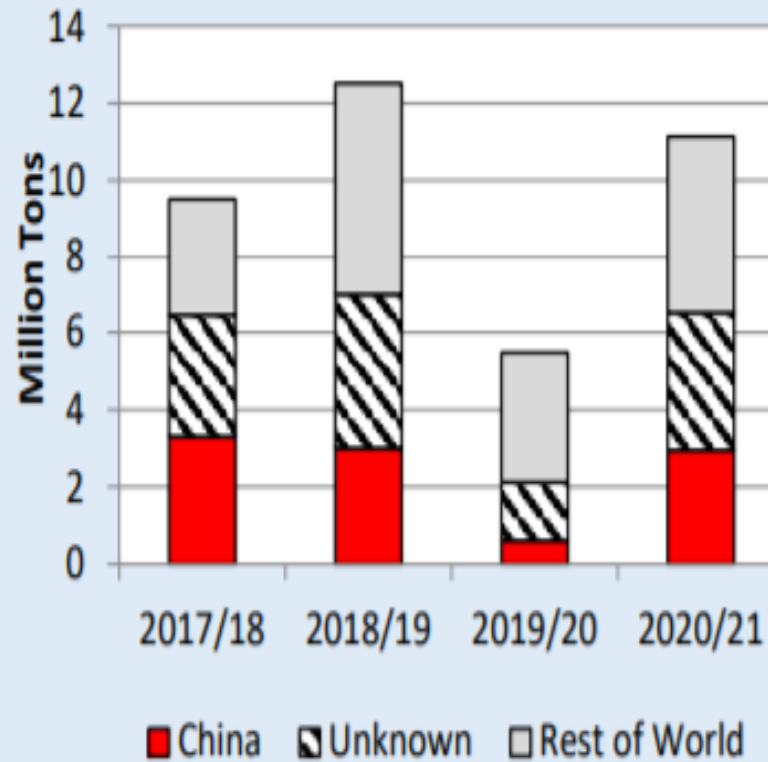


Soybean Demand- Exports

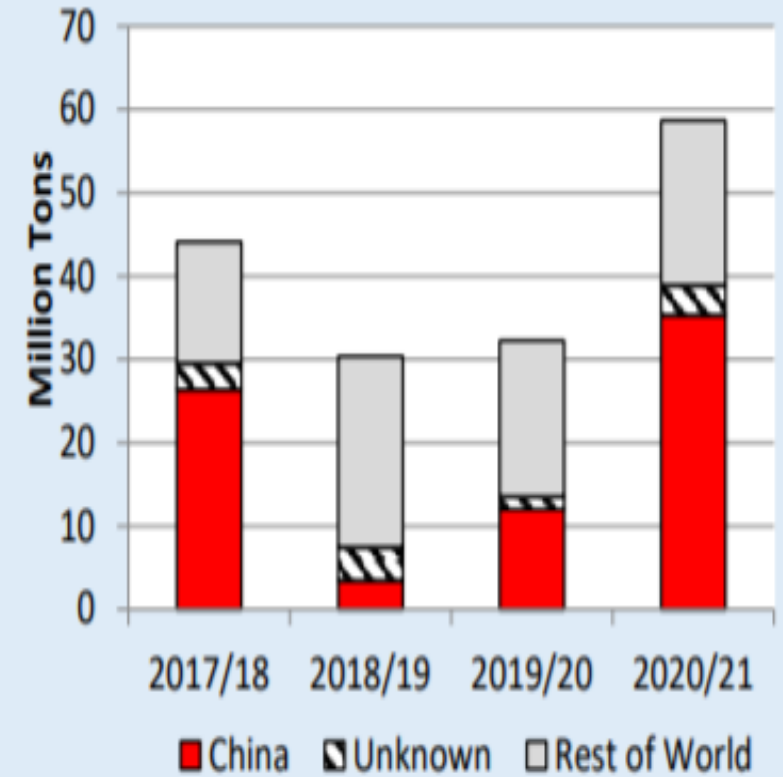
U.S. Soybean Accumulated Exports
As of January 28



U.S. Soybean Outstanding Sales
As of January 28

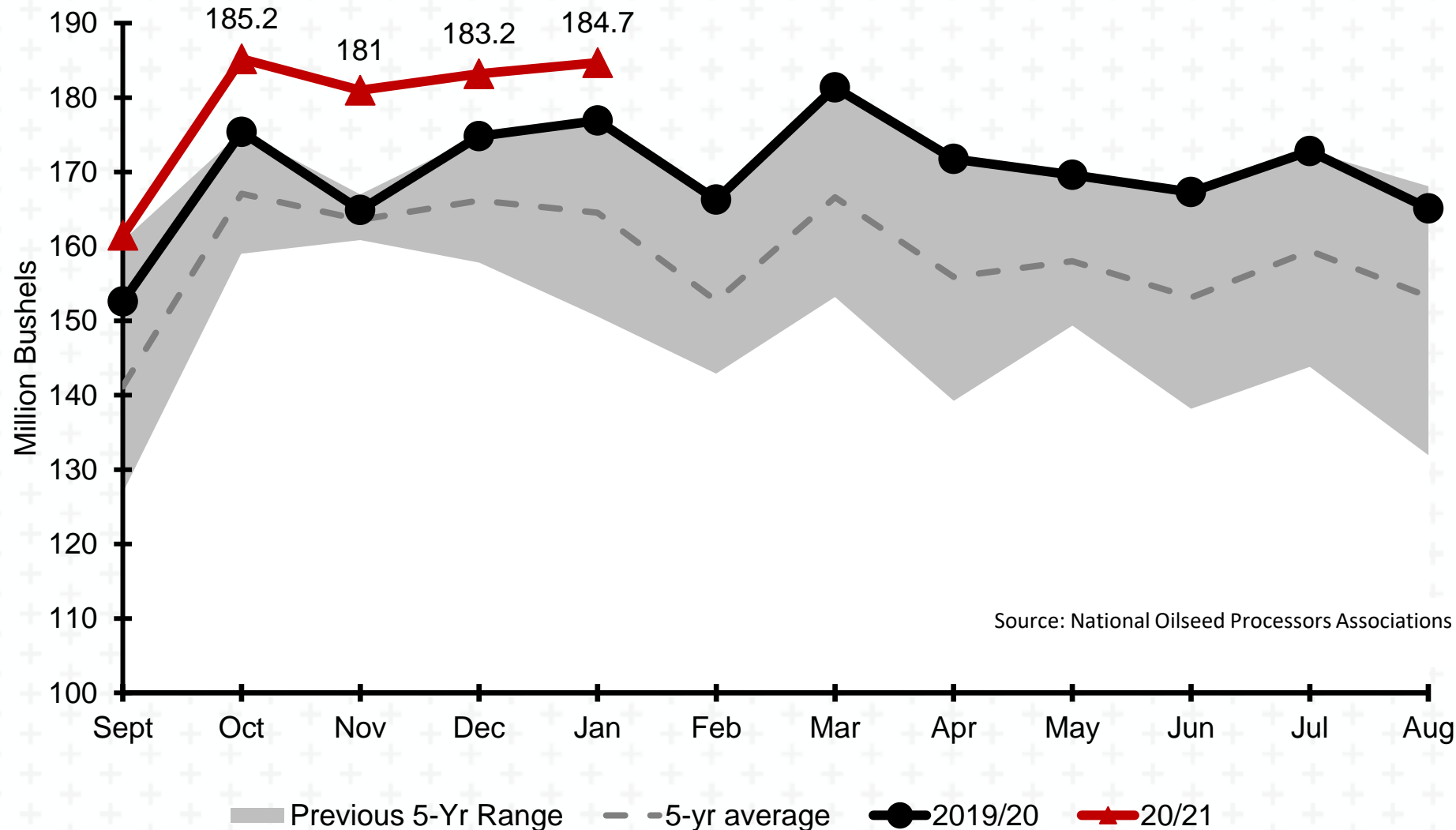


U.S. Soybean Total Commitments
As of January 28



Soybean Demand- Crush

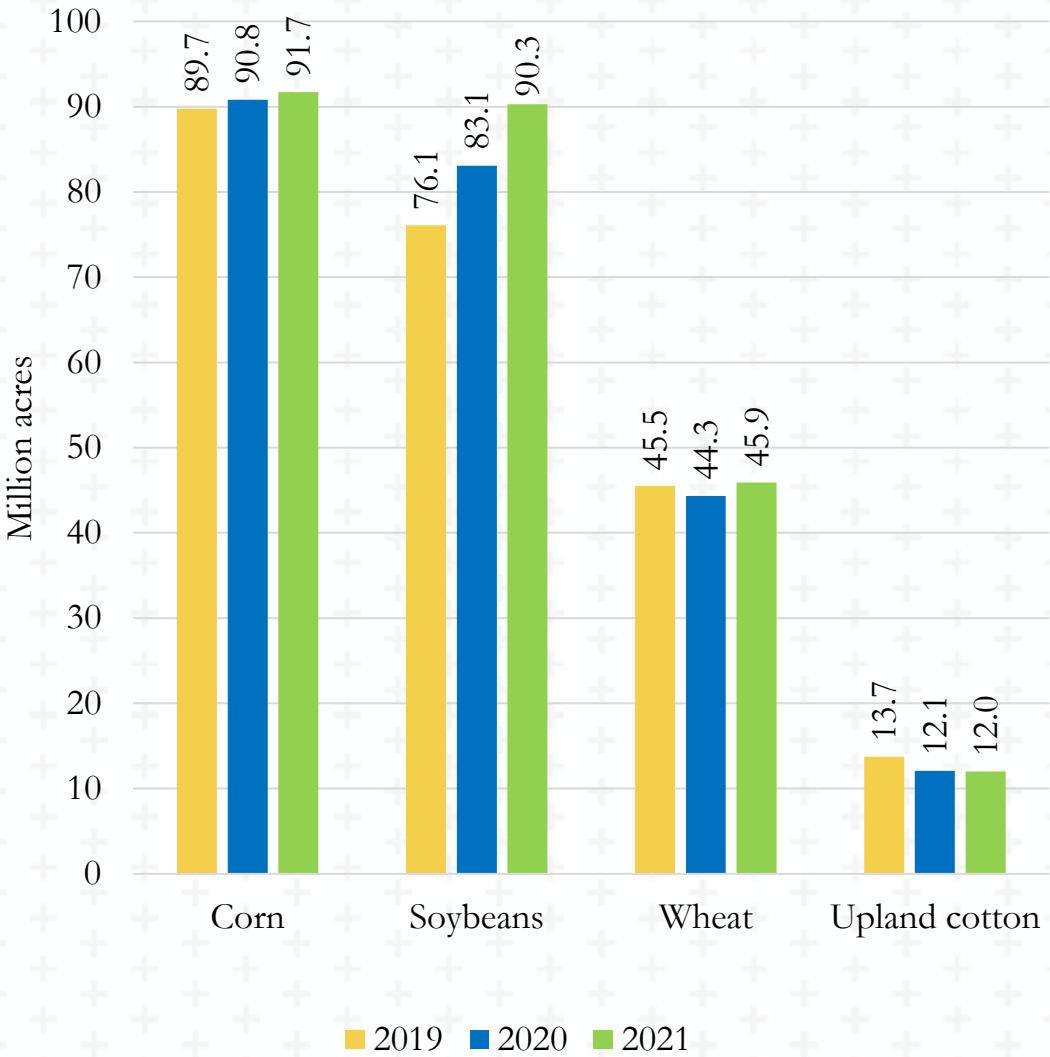
NOPA Soybean Monthly Crush - Feb. 16 Report



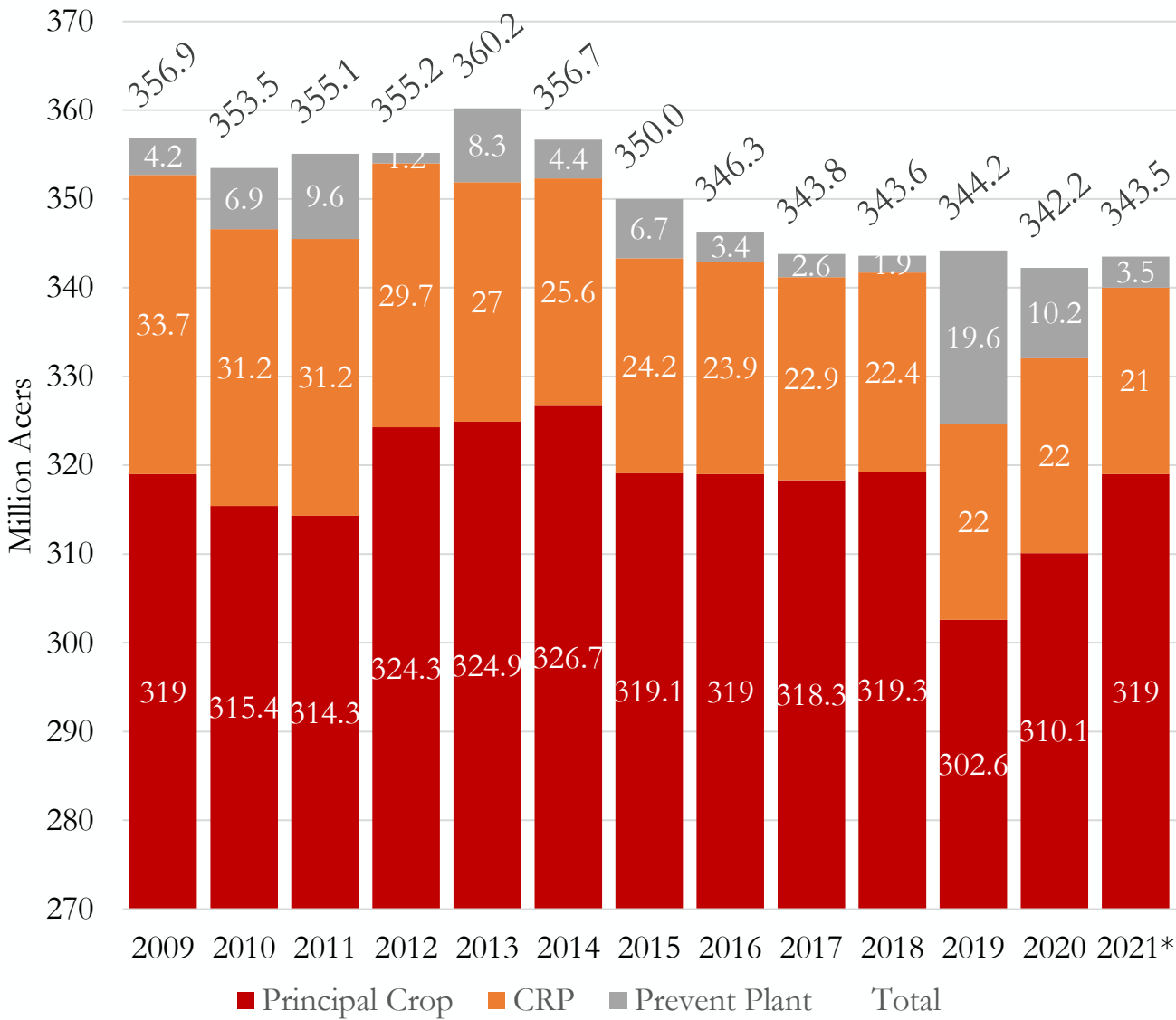
- ❖ Second largest total ever (Oct 20)- above analyst expectations of 183.1 mil bu.
- ❖ New January record- +7.8 mil bu. yoy
- ❖ Cumulative bushels now stand at 896 mlb for the year. +50 mil bu. yoy
- ❖ USDA current increase for 2020/21 is an additional 35 mil. Bu. Expectation is that higher prices will ratio domestic use.

Available Acres- 2021

Major Crop Acreage

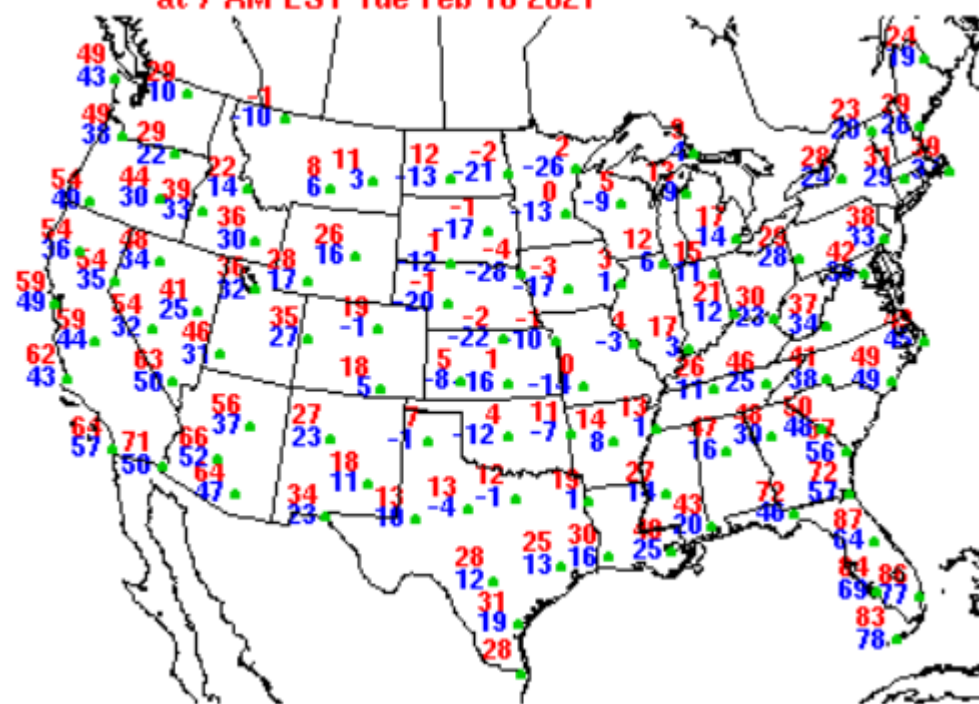
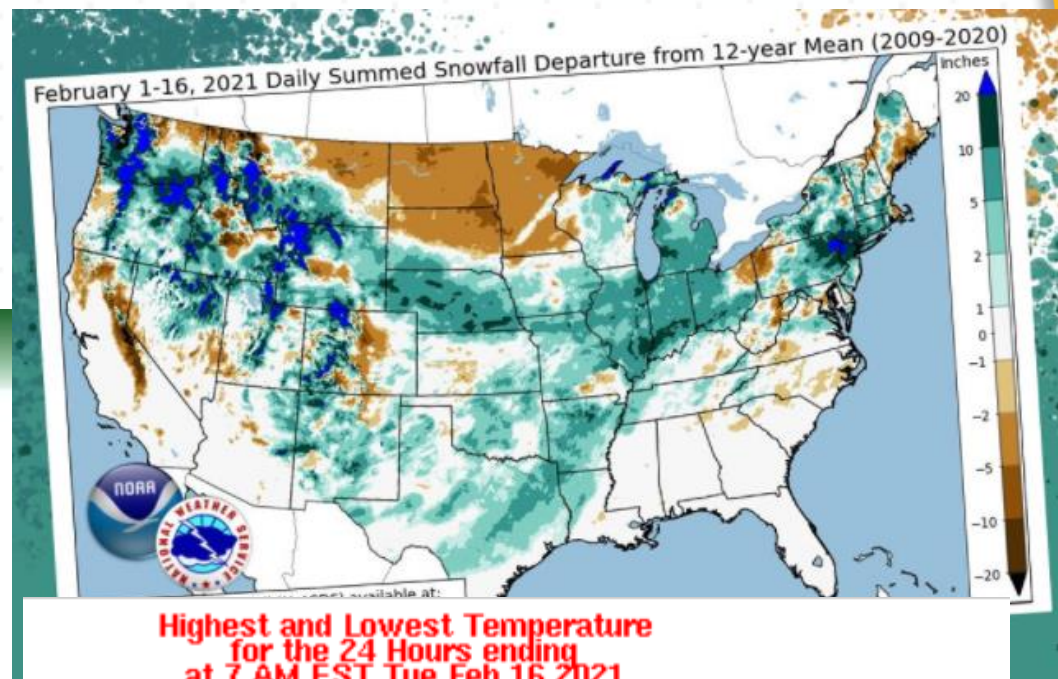
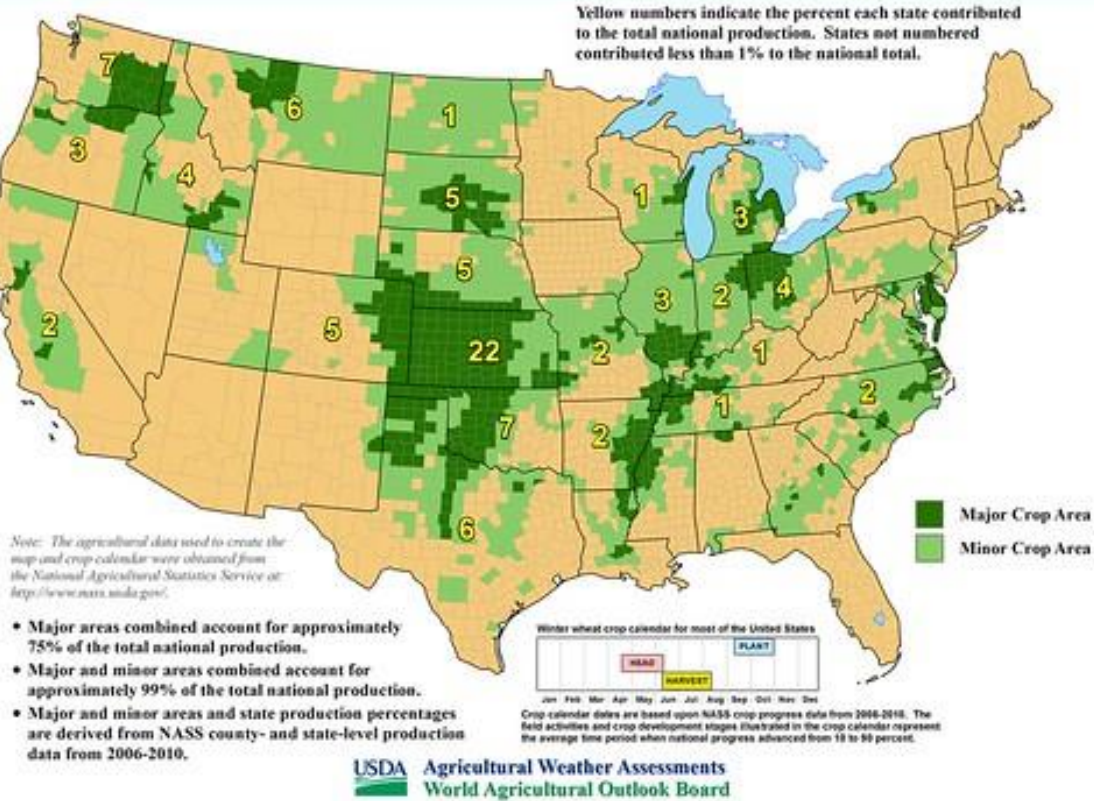


Expectations for Acres



Winter Wheat Acres

United States: Winter Wheat



Soybean Balance Sheet

Marketing year:	2018/19	2019/20	Projected	
			2020/21	2021/22
(million acres)				
Planted area	89.2	76.1	83.1	90.3
Harvested area	87.6	74.9	82.3	89.1
(bushels per acre)				
Yield	50.6	47.4	50.2	50.3
(million bushels)				
Beginning stocks	438	909	525	121
Production	4,428	3,552	4,135	4,479
Imports	14	15	35	22
Total supply	4,880	4,476	4,695	4,622

- ❖ 2020/21 estimates should match USDA's Feb. WASDE
- ❖ The projected increase in acreage and trendline yields results in a 344 mil. bu. increase in projected 2021 production
- ❖ However, the sharp reduction in beginning stocks means that projected total supplies actually are smaller in 2021/22 than in 2020/21

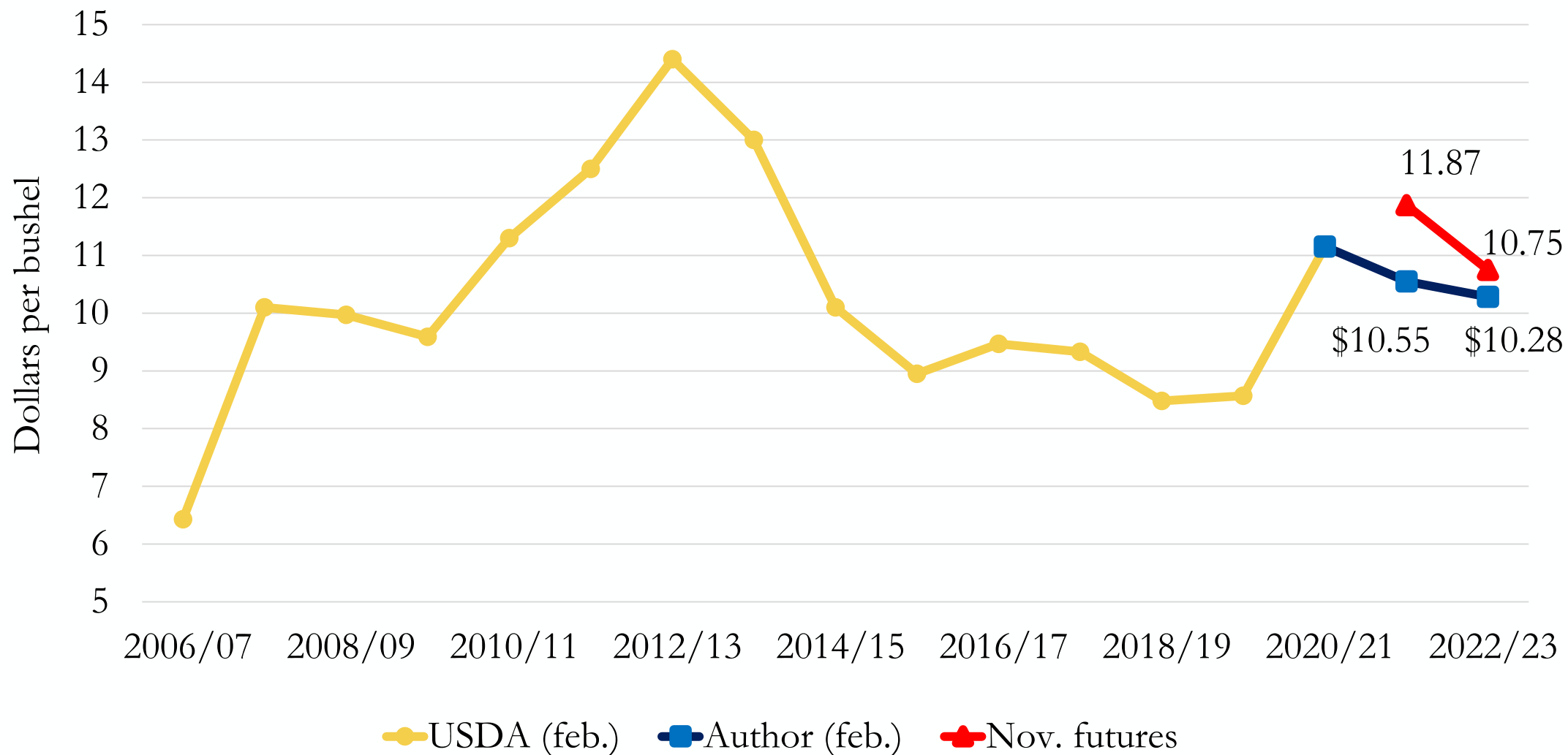
Soybean Balance Sheet

Marketing year:	2018/19	2019/20	Projected	
			2020/21	2021/22
			(million bushels)	
Crush	2,092	2,165	2,201	2,230
Seed and residual	128	105	124	131
Exports	1,752	1,682	2,249	2,090
Total use	3,971	3,952	4,574	4,451
Ending stocks	909	525	121	170
Stocks/use ratio	22.9%	13.3%	2.7%	3.8%
			(dollars per bushel)	
Farm price	8.48	8.57	11.15	10.55
Loan rate	5.00	6.20	6.20	6.20
Reference price	8.40	8.40	8.40	8.40

- ❖ Figures for 2020/21 are all very close to the February WASDE from USDA
- ❖ Projections show an increase in crush but a reduction in exports in 2021/22, due to an expected increase in exports from S. America
- ❖ Futures markets suggest higher 2021/22 prices, and Seth Meyer projected a \$11.25 soybean price at USDA's Ag. Outlook forum today

Sources: USDA WASDE and author projections, February 2021,

Soybean Prices



Sources: USDA WASDE and author projections, February 2021, and CME Nov. futures, Feb. 18, 2021

Corn Balance Sheet

February 2021

Corn Supply and Use

Marketing year:	2018/19	2019/20	Projected	
			2020/21	2021/22
U.S. supply and use				
		(million acres)		
Planted area	88.9	89.7	90.8	91.7
Harvested area	81.3	81.3	82.5	83.7
		(bushels per acre)		
Yield	176.4	167.5	172.0	178.5
		(million bushels)		
Beginning stocks	2,140	2,221	1,919	1,495
Production	14,340	13,620	14,182	14,940
Imports	28	42	25	33
Total supply	16,509	15,883	16,127	16,468

2020/21 estimates should match USDA's Feb. WASDE

- ❖ The projected increase in acreage and trendline yields results in a 758 mil. bu. increase in projected 2021 production
- ❖ However, the reduction in beginning stocks means that projected total supplies are only 341 million bushels larger in 2021/22 than in 2020/21

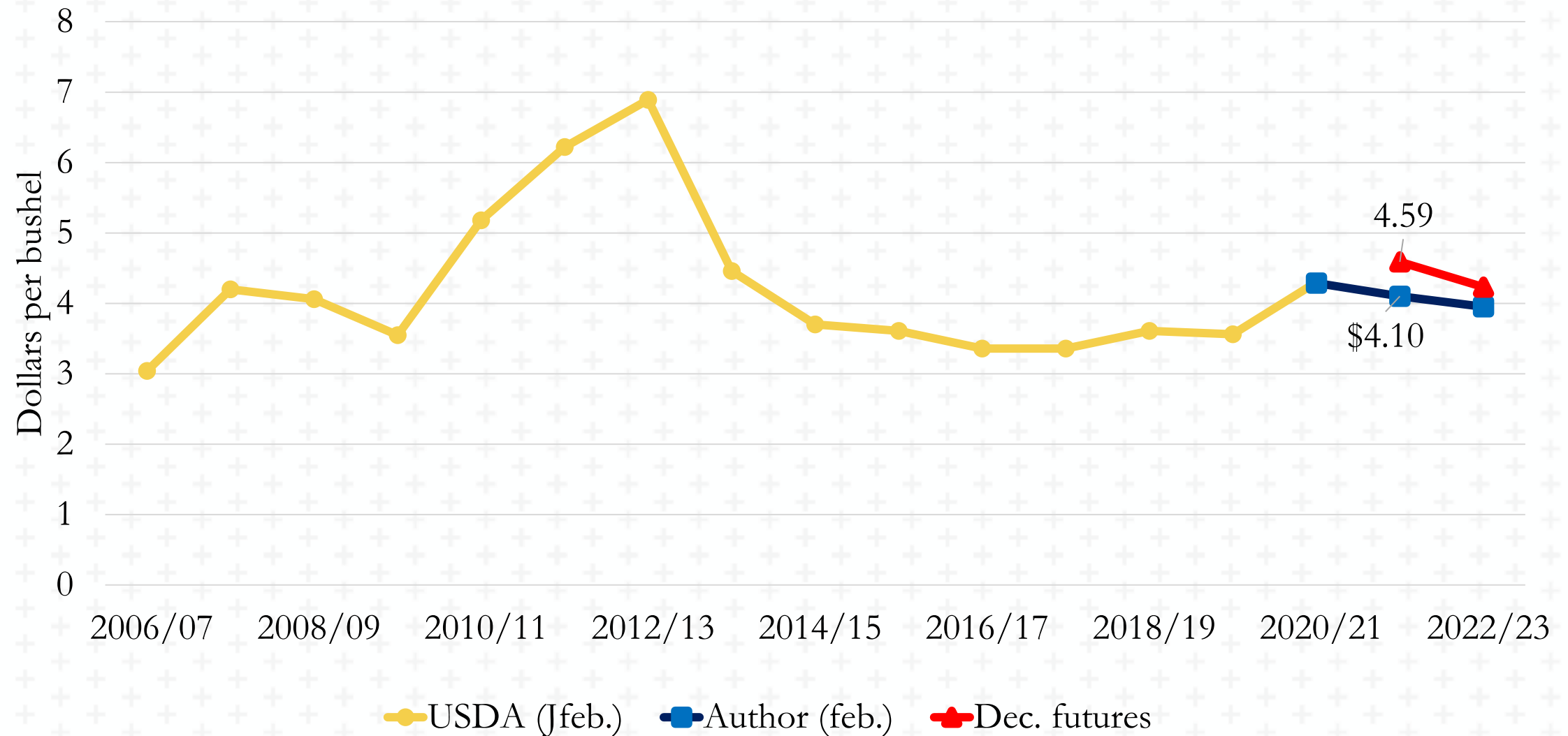
Sources: USDA WASDE and author projections, February 2021

Corn Balance Sheet

Feed and residual	5,429	5,903	5,656	5,722
Food, seed, industrial	6,793	6,282	6,372	6,669
Exports	2,066	1,778	2,604	2,357
Total use	14,288	13,963	14,632	14,749
Ending stocks	2,221	1,919	1,495	1,719
Stocks/use ratio	15.5%	13.7%	10.2%	11.6%
(dollars per bushel)				
Farm price	3.61	3.56	4.29	4.10
Loan rate	1.95	2.20	2.20	2.20
Reference price	3.70	3.70	3.70	3.70

- ❖ Figures for 2020/21 are all very close to the February WASDE from USDA
- ❖ Projections show a recovery in ethanol use, pushing 2021/22 FSI use. Exports decline a little in 2021/22, and depend on policy choices in China and competitor supplies
- ❖ Futures markets suggest slightly higher 2021/22 prices, and Seth Meyer projected a \$4.20 corn price at USDA's Ag. Outlook forum today

Corn Balance Sheet



Sources: USDA WASDE and author projections, February 2021, and CME Dec. futures, Feb. 18, 2021, USDA at \$4.20 yesterday

Wheat Balance Sheet

Marketing year:	2018/19	2019/20	Projected	
			2020/21	2021/22

	(million acres)			
Planted area	47.8	45.5	44.3	46.1
Harvested area	39.6	37.4	36.7	38.6

	(bushels per acre)			
Yield	47.6	51.7	49.7	49.7

	(million bushels)			
Beginning stocks	1,099	1,080	1,028	834
Production	1,885	1,932	1,826	1,920
Imports	135	105	120	123
Total supply	3,119	3,117	2,974	2,877

Marketing year:	2018/19	2019/20	Projected	
			2020/21	2021/22

	(million bushels)			
Food, seed, industrial	1,014	1,022	1,027	1,022
Feed and residual	88	101	123	108
Exports	937	965	989	962
Total use	2,039	2,089	2,140	2,092

Ending stocks	1,080	1,028	834	785
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Stocks/use ratio	53.0%	49.2%	39.0%	37.5%
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	(dollars per bushel)			
Farm price	5.16	4.58	4.99	5.16
Loan rate	2.94	3.38	3.38	3.38
Reference price	5.50	5.50	5.50	5.50

Note: Seth Meyer forecast a \$5.50 price for 2021/22 yesterday at the USDA Ag. Outlook Forum

Key Take Aways

❖ Macroeconomy

- ❖ The dollar seems to have stabilized
- ❖ COVID cases are dropping with a slight recovery in COVID deaths
- ❖ Large amounts of M1 money supply signaling pent up demand

❖ International

- ❖ Chinese ASF and PED cases worth monitoring
- ❖ Geopolitical tensions with Taiwan
- ❖ Biden does not seem to be blinking when it comes to China

❖ Corn

- ❖ Finally, a strong signal in gasoline improvement
- ❖ Corn export commitments need strength but are struggling with high prices.

❖ Soybeans

- ❖ Even record acreage of soybeans in 2021 the balance sheet remains “tight”
- ❖ Something will have happen:
 - ❖ Cancellation of sales or rolling to next marketing year
 - ❖ Lower domestic use
 - ❖ Increased imports to the US



Thank You- Ohio!

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