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May Market Update
Corn, Soybeans, Rice, and Cotton

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WASDE Summary Notes for 2019/20 and 2020/21 Crop Years

The May WASDE report contains the USDA's first official estimates for the 2020/21 crop year. *Editor's note: comments on 2019/20 crop dynamics appear in italics throughout this report's subsection.*

The corn crop for 2020/21 is projected at a record 16.0 billion bushels, up from last year on increased area and a return to trend yield. The yield projection of 178.5 bushels per acre is based on a weather-adjusted trend assuming normal planting progress and summer growing season weather, estimated using the 1988-2019 time period. Despite beginning stocks that are down slightly from a year ago, total corn supplies are forecast record high at 18.1 billion bushels.

Total U.S. corn use in 2020/21 is forecast to rise relative to a year ago with increases for domestic use and exports. Food, seed, and industrial (FSI) use is projected to rise 245 million bushels to 6.6 billion. Corn used for ethanol is projected to increase from the 2019/20 COVID-19 reduced levels, based on expectations of a rebound in U.S. motor gasoline consumption. Corn feed and residual use is projected higher mostly reflecting a larger crop and lower expected prices. U.S. 2020/21 corn exports are forecast to rise 375 million bushels to 2,150 million, driven by growth in world corn trade. U.S. market share is expected to increase from the 2019/20 multi-year low but remains below the average level seen during 2015/16 to 2019/20 with competition from Argentina, Brazil, and Ukraine.

With total U.S. corn supply rising more than use, 2020/21 U.S. ending stocks are up 1.2 billion bushels from last year and if realized would be the highest since 1987/88. Stocks relative to use at 22.4% would be the highest since 1992/93. With larger stocks relative to use, the season average farm price is projected at $3.20 per bushel, down 40 cents from 2019/20 and the lowest since 2006/07.

The USDA's projected 2019/20 old crop ending stocks for corn were raised 6 million bushels to 2.098 billion bushels, well below the estimates due to larger export and feed use assumptions. The 2019/20 price for corn is estimated at $3.60 per bushel.

The 2020/21 outlook for U.S. soybeans is for higher supplies, crush, exports, and lower ending stocks compared to 2019/20. The soybean crop is projected at 4.125 billion bushels, up 568 million from last year on increased harvested area and trend yields. Despite lower beginning stocks, soybean supplies are projected up 5% from 2019/20 to 4.720 billion bushels. The U.S. soybean crush for 2020/21 is projected at 2.130 billion bushels, up slightly from the 2019/20 forecast with higher soybean meal disappearance partly offset by lower soybean meal exports. U.S. soybean exports are forecast at 2.050 billion bushels, up 375 million from the revised forecast for 2019/20.

With higher global soybean import demand for 2020/21 led by expected gains for China, U.S. export share is expected to rise to 34% from the 2019/20 record low of 30%. U.S. ending stocks for 2020/21 are projected at 405 million bushels, 175 million bushels down from the revised 2019/20 forecast. The 2020/21 U.S. season-average soybean price is projected at $8.20 per bushel, down 30 cents from 2019/20. Soybean meal prices are forecast at $290 per short ton, down $10.00 from 2019/20. Soybean oil prices are forecast at 29.0 cents per pound, up 0.5 cents from 2019/20.

The USDA increased 2019/20 old crop soybean ending stocks to 580 million bushels, up 100 million bushels from April. The increase to carryout came via additional cuts to exports. On May 12th, the USDA's mandatory reporting system confirmed a purchase of 136,000 metric tons of old crop soybeans to China. Marketing year-to-date exports from yesterday's report are 75% of the May forecast, with 1.263 billion bushels shipped. The 2019/20 price for soybeans is estimated at $8.50 per bushel, a $0.15 reduction from last month.

The 2020/21 outlook for U.S. rice is for larger supplies, exports, domestic use, and ending stocks. U.S. 2020/21 all rice production is projected at 216.2 million cwt, up 17% from the previous year. Partly offsetting the increased 2020/21 crop is a 32% decrease in beginning stocks. The total 2020/21 rice supply is projected at 279.3 million cwt, up 7% from last year. U.S. Total use for 2020/21 is projected at 237.5 million cwt, up 3% from the previous year with both domestic and residual use and exports edging higher. All rice ending stocks for 2020/21 are projected at 41.8 million cwt, up 37% from the previous year's low level. The 2020/21 long grain Season Average Farm price (SAFP) is projected at $11.80 per cwt, down $0.20 from the 2019/20 revised SAFP. The Southern medium grain SAFP is projected at $11.90 per cwt.

For the 2019/20 market year, rice exports are reduced 1.0 million cwt to 98 million and the SAFP is lowered $0.20 per cwt to $13.00. Long grain price is reduced $0.20 to $12.00 per cwt. Southern medium grain is reduced $0.10 to $11.80 per cwt.

The U.S. cotton forecasts for 2020/21 include larger beginning stocks, consumption, exports, and ending stocks compared with the year before. Production is forecast at 19.5 million bales- 400,000 bales less than the year before, based on 13.7 million planted acres as indicated in the NASS March Prospective Plantings report. Planted area is expected to remain virtually unchanged from 2019/20, but harvested area is projected to shrink 2% due to the increase in abandoned acres from 2019/20. The yield is projected only slightly higher using 10-year regional averages.

Domestic mill use and exports are expected to rebound as the world economy begins to recover. Mill use is expected to rise 200,000 bales, and exports by 1 million; but ending stocks are expected to rise 600,000 bales to 7.7 million, equivalent to 41% of use. This would be marginally higher than in 2019/20 and the

highest since 2007/08's 55%. The price received by upland producers is forecast at 57 cents per pound, slightly below 2019/20.

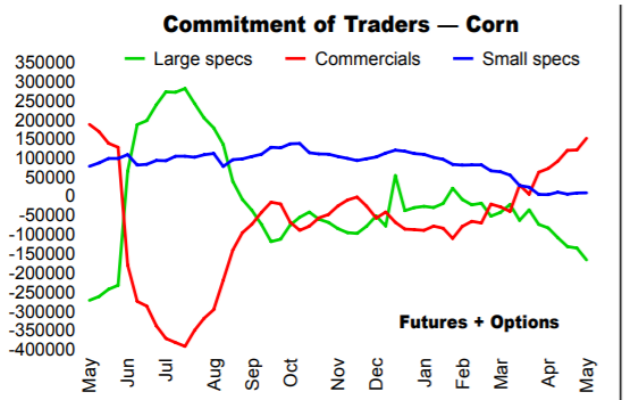
For 2019/20, U.S. cotton production is raised slightly from last month. The export forecast is unchanged, but expected consumption is 200,000 bales lower, and ending stocks 400,000 bales higher.

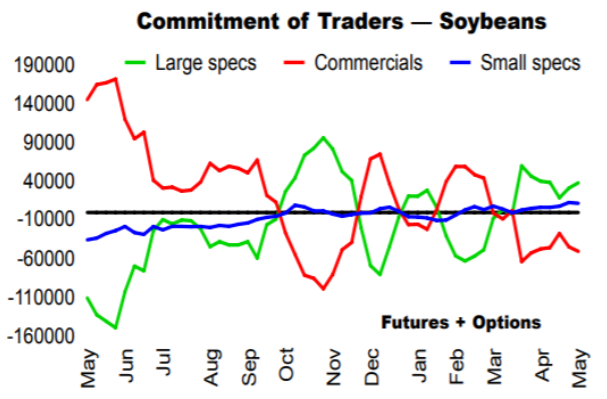
Since the release of the May WASDE report, the trade has drawn their attention to the level of ending stocks for the 2020/21 crop year. Notable ending stock increases are forecasted for corn, cotton and rice.

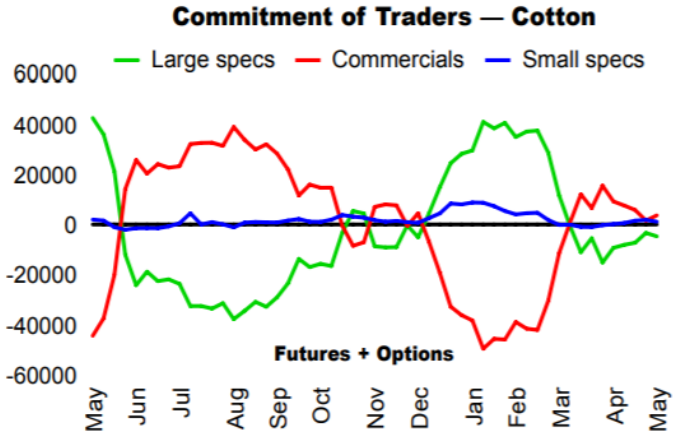
U.S. 2019-20 ENDING STOCKS in bil. bu.				
Sources: USDA: WASDE, Bloomberg	USDA MAY	TRADE AVG. EST.	TRADE RANGE	USDA APRIL
CORN	2.098	2.278	2.109-2.545	2.092
SOYBEANS	.580	.495	.430-.549	.480
WHEAT	.978	.974	.925-1.041	.970
COTTON (mil. bales)	7.10	NA	NA	6.70
RICE (mil. cwt)	30.5	NA	NA	29.5

U.S. 2020-21 ENDING STOCKS in bil. bu.				
Sources: USDA: WASDE, Bloomberg	USDA MAY	TRADE AVG. EST.	TRADE RANGE	USDA OUTLOOK FORUM
CORN	3.318	3.410	2.665-3.900	2.637
SOYBEANS	.405	.432	.300-.683	.320
WHEAT	.909	.824	.696-.971	.777
COTTON (mil. bales)	7.70	7.74	5.50-9.75	5.30
RICE (mil. cwt)	41.8	NA	NA	49.0

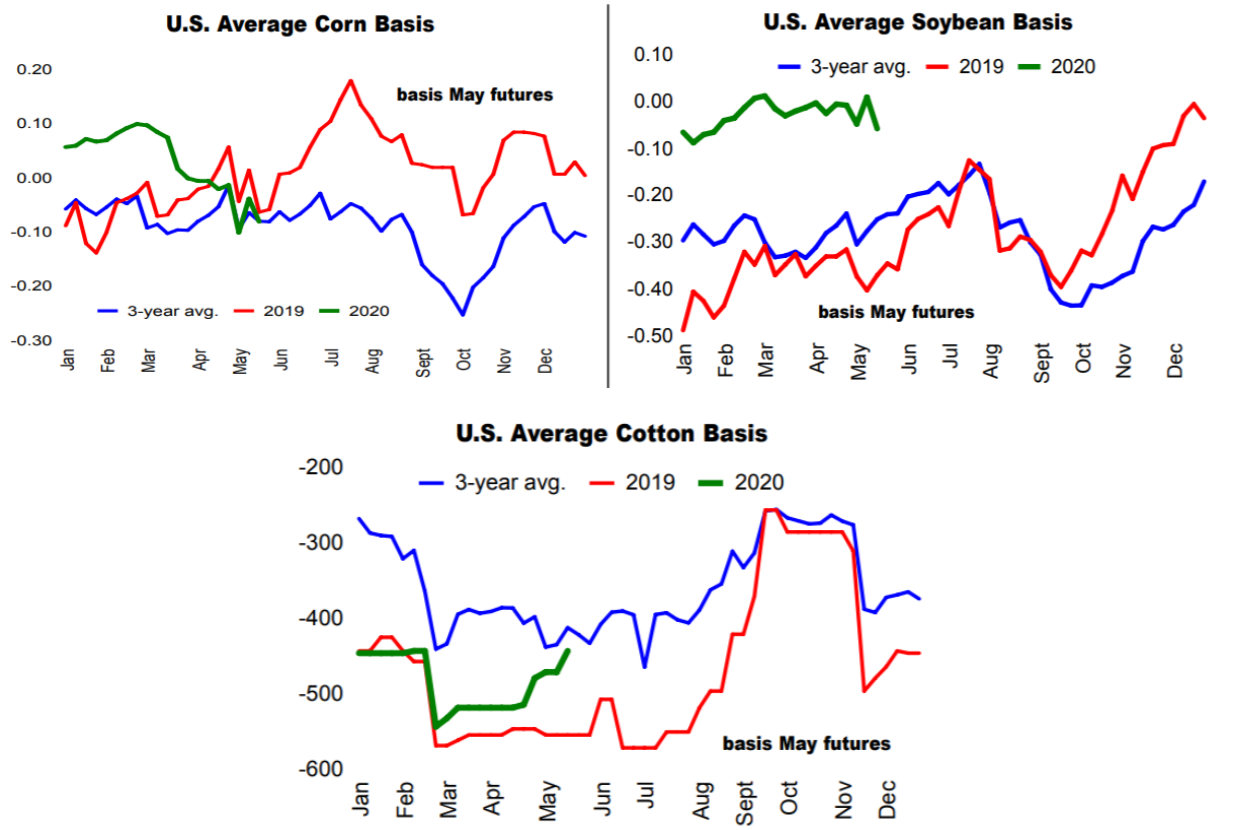
Commitment of Traders Report, Tuesday, May 12, 2020







Cash Market Basis Charts May 13, 2020

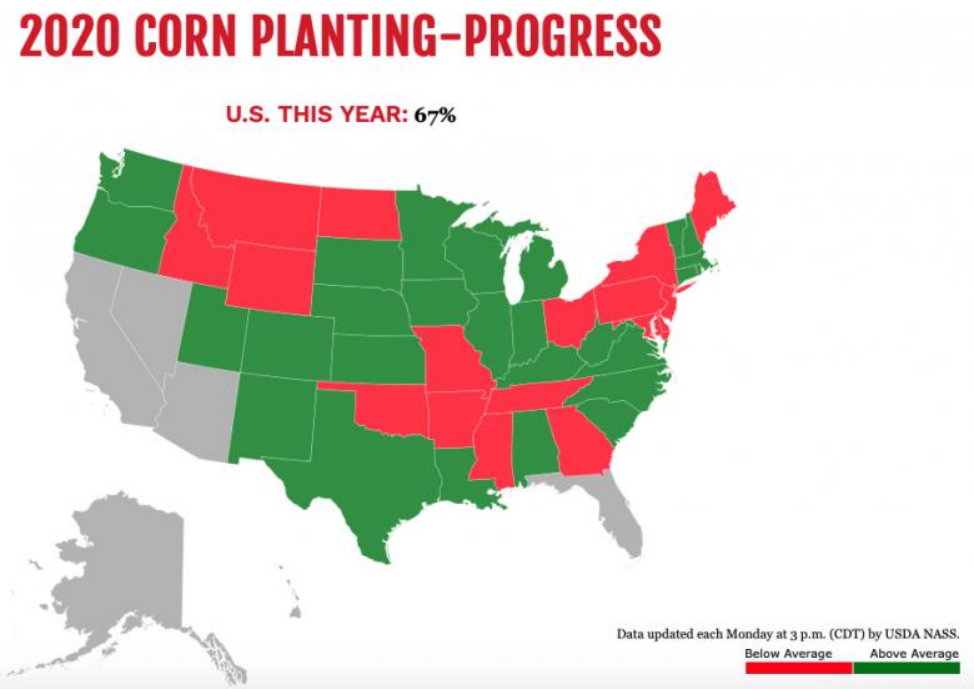


Corn

Grain markets barely reacted to the USDA's May WASDE report as U.S. corn ending stocks for the current marketing year are expected to grow but not as high as traders had expected. Because the USDA released corn numbers that have already been built into the market, corn prices didn't have much of a reaction to the new data. With anticipation of large stocks, funds short, and no shortage of grain, demand was the key to May's WASDE report.

For the current crop year, ethanol usage was reduced but only by 100 million bushels and corn exports increased 50 million bushels. However, crop exports are anticipated to increase in 2020/2021 by 375 million bushels. The USDA is also looking for an increase in ethanol demand. With an optimistic demand outlet on this report, the weather and Chinese purchases will set the tone until the June report. In corn, higher feeding demand helped offset some of the slackened demand for ethanol but overall trend line yields and confirmation of U.S. planted corn acres in the neighborhood of 97 million acres do little to change the market's balance sheet expectations.

Corn planting advanced 16% points over the past week as U.S. producers have 67% of the corn crop in the ground, ahead of a five-year average of 56%. While that's 11 percentage points above the five-year average, it fell short of the 71% completion rate analysts that were surveyed anticipated. Also, 24% of the nation's corn has emerged versus the five-year average of 22%.

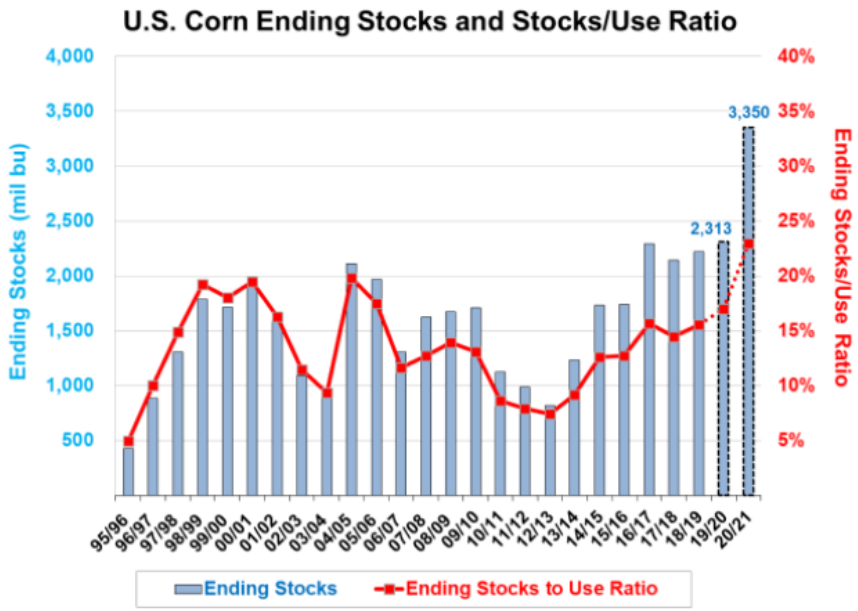


Corn prices came off recent lows last week on glimmers of hope that the worst of the coronavirus impacts on corn use may have passed. Uncertainty around the pace of economic recovery prompts a significant disparity between corn price outcomes as we move deeper into 2020. Recent export sales and a jump in gasoline demand carry the promise of positive news for corn prices over the near term.

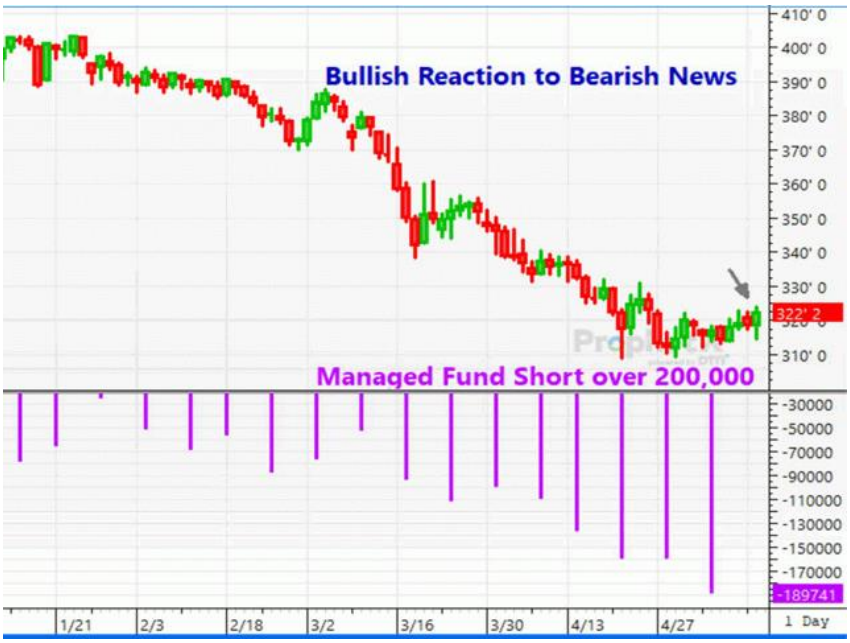
While corn bulls will point out that the USDA's corn crop estimate for 2020/21 is largely a guessing game at this stage, the USDA is also counting on some very sizable increases in demand for next year that are questionable. For 2019/20, the USDA slashed its corn-use-for-ethanol estimate by 100 million bushels and it cut food/seed/industrial use by 110 million bushels. It raised feed and residual along with export demand for 2019/20. However for 2020/21, the USDA envisions corn-use-for-ethanol bouncing back by 250 million bushels versus the current marketing year, along with increases of 245 million bushels for food/seed/industrial, 350 million bushels for feed and residual and 375 million bushels for exports. All of those increases assume a rebound in the economy and a return back toward "normal" for the ethanol and livestock industries.

While some form of a rebound is likely, questions as to the extent of that rebound remain. Unless breakthroughs on the vaccine/treatment front for COVID-19 appear, it is anyone's guess as to when the economy is going to get back to normal, regardless of government policies. The bottom line is it is difficult to see corn carryout coming in lower than 3 billion bushels unless there is a significant crop shortfall due to some weather-related event or other disaster.

Interestingly, Brock and Associates (graph below) forecasts a slightly larger carryout at 3.350 billion bushels with a stocks to use ratio (STUR) of 22.9%. The bottom line is that major U.S. crop problems will be needed to spark any substantial rally in corn prices. However, the good start to planting and the long-term weather forecasts do not favor a crop disaster.

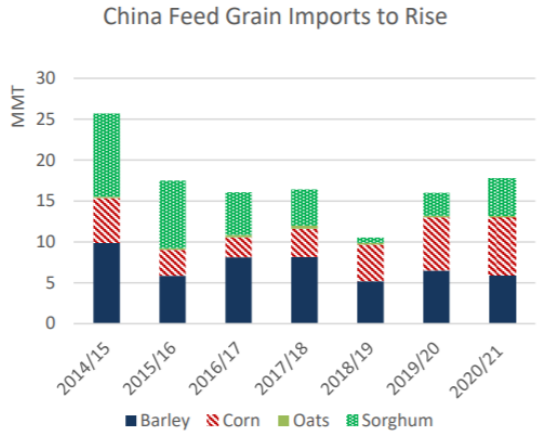


The daily chart of July corn futures (DTN) denotes Tuesday's positive reaction to what was a decidedly very bearish WASDE report along with the large managed fund net-short position, which when compared with past market behavior, could be signaling that corn has potentially found its price floor at this time. There are many who feel that, ultimately, corn acreage would be less than the USDA's forecasted 97 million acres due to price weakness since early March. Yield is assumed to be at trend at 178.5 bushels per acre, providing, if all holds constant, what will be the largest corn crop ever at nearly 16 billion bushels. Although the USDA was careful to be conservative on demand losses related to COVID-19 restrictions, the resulting estimate for ending stocks of 3.318 billion bushels was slightly lower than the trade estimate but the largest carryout since 1987/88.

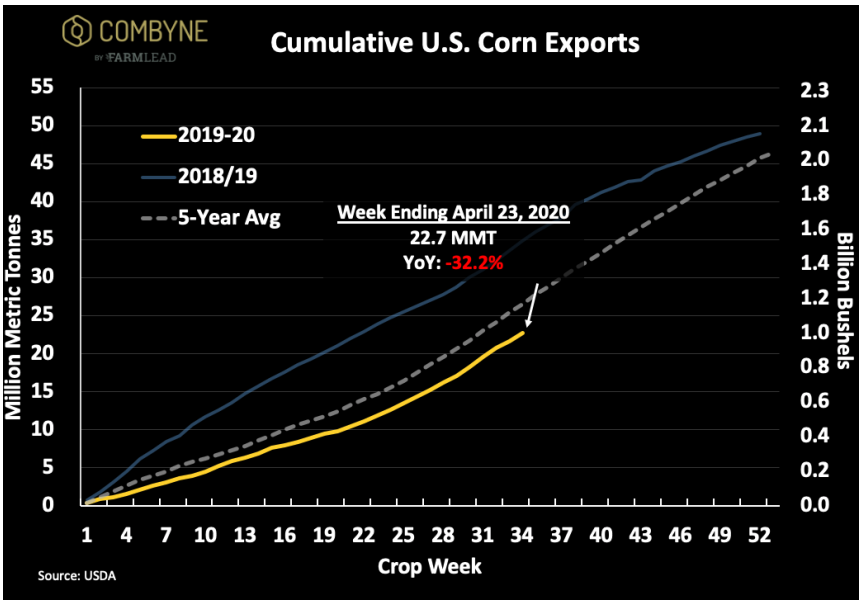


Outstanding sales as of April 30 came in at 528 million bushels, up nearly 120 million bushels over sales from last year. Since the previous export sales report, corn sales to China saw another 27 million bushels sold with 14.6 million bushels for this marketing year. The prospect of China buying corn provides additional support to an already decent outlook for the U.S. export market. As of May 7, cumulative marketing year exports sit near 1.04 billion bushels. Exports during the final 16 weeks of the year must average 41 million bushels weekly if they are to reach USDA projections. Export inspections over the previous four weeks averaged 43.9 million bushels per week.

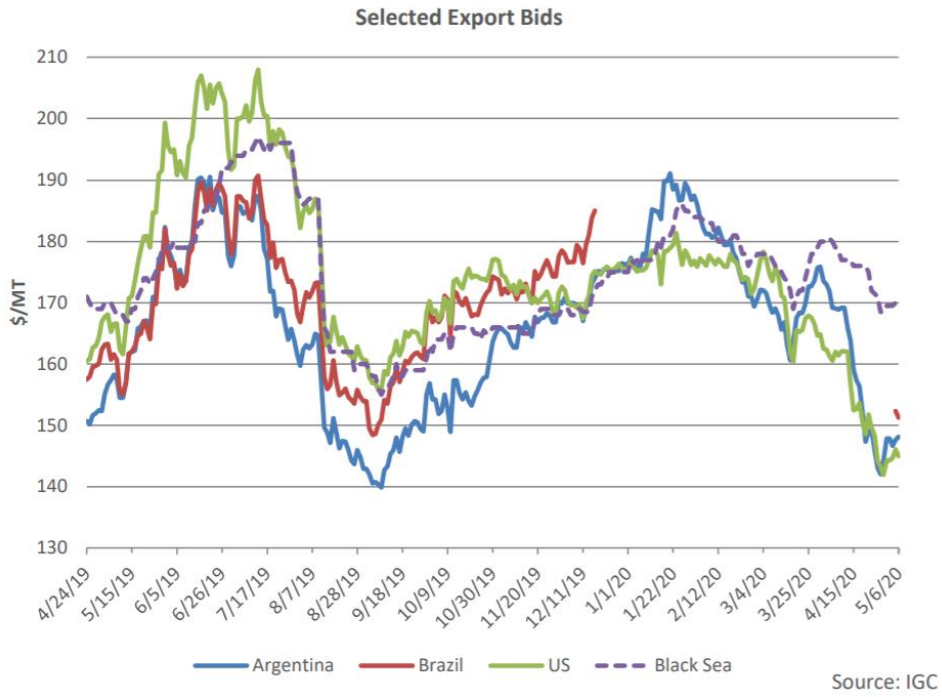
Chinese corn is projected to rise to its tariff rate quota (TRQ) level on expectations for competitively priced feedstuffs. Domestic corn prices in southern China have remained elevated, while prices at world levels have plunged in response to falling U.S. demand amid COVID-19 and supply pressure. Sorghum imports are projected to rise sharply. In March 2020, China waived its retaliatory tariffs on U.S. sorghum. The tariff waiver is valid for a year and goes well into 2020/21. With larger inflows of corn and sorghum, barley imports are projected to fall moderately. When all combined, feed grain imports are projected to expand to the largest level since 2014/15.



A couple factors weigh heavily on corn export prospects, most prominently being the growing strength of the U.S. dollar. Global investors flocked to the dollar *en masse* at the onslaught of the pandemic and are not looking to divest their dollars until market volatility eases. This favors international shipments over American corn. South America stands to benefit from these economic conditions as their second corn crop awaits harvest in June. The global pandemic is sending economic shockwaves rippling through nearly every U.S. trading partner and something as simple as quarantined dock workers could increase those felt impacts in the supply chain. There are some glimmers of hope for exports. In 4 of the last 6 years, export pace has increased in the second half of the marketing year. COVID-19's sharp simultaneous supply and demand shock to the global food supply chain will likely begin to recover in the second half of 2020, which offers hope for the international corn market. Chinese demand is set to come back online, and they have intimated their demand for corn – and they want it soon. The Chinese Ministry of Agriculture raised their 2019/20 corn import forecast 39.4 million bushels to 157.5 M bushels. Indeed, Chinese purchases of U.S. corn have accounted for strengthening projections for U.S. corn exports.



Since the April WASDE, U.S. bids have declined again by $15 per ton to $145. Demand for ethanol remains weak leading to ample nearby supplies, while weather is largely favorable for planting progress. U.S. bids are at their lowest level in over 10 years. Argentine bids are down $21 per ton to $148 on harvest pressure and Black Sea bids are down $10 per ton to $170 reflecting soft foreign demand. Brazilian bids are now seasonally available at $151 per ton.



Gasoline demand may see a more rapid recovery than many had expected when the lockdowns went into place. After a near 50% fall in demand from mid-March levels in early April, gasoline demand increased to 6.6 million barrels per day last week. The increase came in up over 30% since the start of April. As many areas of the economy begin to open back up and come online, an expectation of higher gasoline

demand should be in place, but it will still be below pre-pandemic levels near 9.5 million barrels per day. Ethanol's recovery is likely to be a bit slower. Last week's ethanol production total saw the first increase in nine weeks at 598 thousand barrels a day. While promising, production at that level sits well below the million-plus barrel daily totals common before the lockdown. Idled plants and reduced production look to place corn use recovery well below pre-pandemic levels for the remainder of this year.

Feed use for corn looked to benefit from reduced ethanol co-products. Supply chain disruptions leading to backups may blunt major increases for feed use this marketing year and into the next. The level of feed and residual use remains unknown until the release of the stocks report on June 30.

The impact on the corn market from the coronavirus situation has been severe. Nearby corn futures are now trading at their lowest levels since the summer of 2016 with spot prices projected likely to fall below $3.00 per bushel, not seen since 2009. Forward values could fall even more precipitously should planting intentions of 97 million be realized and demand cut sharply due to COVID-19. The 2020/21 ending U.S. corn stocks could be at their highest levels since 1987/88 at well over 3.3 billion bushels.

The attached graphic is a matrix of what the 2020/21 STUR could be using various combinations of planted acreage (million acres) going horizontally across the *x*-axis at the top and yields in bushels per acre going vertically down the *y*-axis on the left. The STUR would be the largest since 1992/93 if one were to take the USDA's demand figure of 14.740 billion bushels, given at their February 2020 Ag Outlook Forum, which now seems very high at 640 million bushels above their revised 2019/20 carryout projection.

Prospective 2020/21 U.S corn ending stocks to use ratio with planted acreage-yield matrix

	93.0	93.5	94.0	94.5	95.0	95.5	96.0	96.5	97.0	97.5	98.0	98.5	99.0
160	13.2%	13.7%	14.2%	14.8%	15.3%	15.8%	16.3%	16.9%	17.4%	17.9%	18.4%	18.9%	19.5%
161	13.8%	14.3%	14.9%	15.4%	15.9%	16.4%	17.0%	17.5%	18.0%	18.5%	19.1%	19.6%	20.1%
162	14.4%	14.9%	15.5%	16.0%	16.5%	17.1%	17.6%	18.1%	18.6%	19.2%	19.7%	20.2%	20.8%
163	15.0%	15.6%	16.1%	16.6%	17.2%	17.7%	18.2%	18.7%	19.3%	19.8%	20.3%	20.9%	21.4%
165	16.2%	16.8%	17.3%	17.9%	18.4%	18.9%	19.5%	20.0%	20.5%	21.1%	21.6%	22.2%	22.7%
166	16.8%	17.4%	17.9%	18.5%	19.0%	19.6%	20.1%	20.6%	21.2%	21.7%	22.3%	22.8%	23.3%
167	17.5%	18.0%	18.5%	19.1%	19.6%	20.2%	20.7%	21.3%	21.8%	22.4%	22.9%	23.4%	24.0%
168	18.1%	18.6%	19.2%	19.7%	20.2%	20.8%	21.3%	21.9%	22.4%	23.0%	23.5%	24.1%	24.6%
169	18.7%	19.2%	19.8%	20.3%	20.9%	21.4%	22.0%	22.5%	23.1%	23.6%	24.2%	24.7%	25.3%
170	19.3%	19.8%	20.4%	20.9%	21.5%	22.0%	22.6%	23.2%	23.7%	24.3%	24.8%	25.4%	25.9%
171	19.9%	20.4%	21.0%	21.6%	22.1%	22.7%	23.2%	23.8%	24.3%	24.9%	25.5%	26.0%	26.6%
172	20.5%	21.0%	21.6%	22.2%	22.7%	23.3%	23.9%	24.4%	25.0%	25.5%	26.1%	26.7%	27.2%
173	21.1%	21.7%	22.2%	22.8%	23.3%	23.9%	24.5%	25.0%	25.6%	26.2%	26.7%	27.3%	27.9%
174	21.7%	22.3%	22.8%	23.4%	24.0%	24.5%	25.1%	25.7%	26.2%	26.8%	27.4%	27.9%	28.5%
176	22.9%	23.5%	24.1%	24.6%	25.2%	25.8%	26.4%	26.9%	27.5%	28.1%	28.7%	29.2%	29.8%
177	23.5%	24.1%	24.7%	25.3%	25.8%	26.4%	27.0%	27.6%	28.1%	28.7%	29.3%	29.9%	30.4%
178	24.1%	24.7%	25.3%	25.9%	26.4%	27.0%	27.6%	28.2%	28.8%	29.4%	29.9%	30.5%	31.1%
179	24.7%	25.3%	25.9%	26.5%	27.1%	27.7%	28.2%	28.8%	29.4%	30.0%	30.6%	31.2%	31.7%
180	25.3%	25.9%	26.5%	27.1%	27.7%	28.3%	28.9%	29.4%	30.0%	30.6%	31.2%	31.8%	32.4%
181	25.9%	26.5%	27.1%	27.7%	28.3%	28.9%	29.5%	30.1%	30.7%	31.3%	31.9%	32.4%	33.0%
182	26.6%	27.1%	27.7%	28.3%	28.9%	29.5%	30.1%	30.7%	31.3%	31.9%	32.5%	33.1%	33.7%
183	27.2%	27.8%	28.4%	29.0%	29.5%	30.1%	30.7%	31.3%	31.9%	32.5%	33.1%	33.7%	34.3%
184	27.8%	28.4%	29.0%	29.6%	30.2%	30.8%	31.4%	32.0%	32.6%	33.2%	33.8%	34.4%	35.0%
185	28.4%	29.0%	29.6%	30.2%	30.8%	31.4%	32.0%	32.6%	33.2%	33.8%	34.4%	35.0%	35.6%

Assumptions: Beginning stocks JSK estimate of 2.272 billion bushels vs. Apr 2020 WASDE ending stocks of 2.092 bushels. JSK estimate of total 2020/21 demand at 14.100 billion bushels vs. USDA projection given at their Feb 2020 Outlook Forum at 14.740 billion bushels.

DTN

DTN's assumptions include an estimate of 20/21 beginning stocks at 2.272 billion bushels versus April's WASDE ending stocks of 2.092 billion bushels as we have lower estimates for this year's final export, ethanol and feed demand. It appears that unless corn acreage is significantly pared back from the 97 M Prospective Plantings figure or yields fall back below 170 bushels per acre, it is likely that the 2020/21 corn stocks-to-use ratio will be in excess of 20% implying December 2020 futures below $3.00, perhaps significantly so by the fall harvest.

Recall in a prior piece where we showed a correlation trend between the final U.S. corn stocks/use ratios versus the average farm price scatterplot using data from the 2007/08 season to this year, which explains about 85% of the projected farm price using the stocks-to-use ratio.

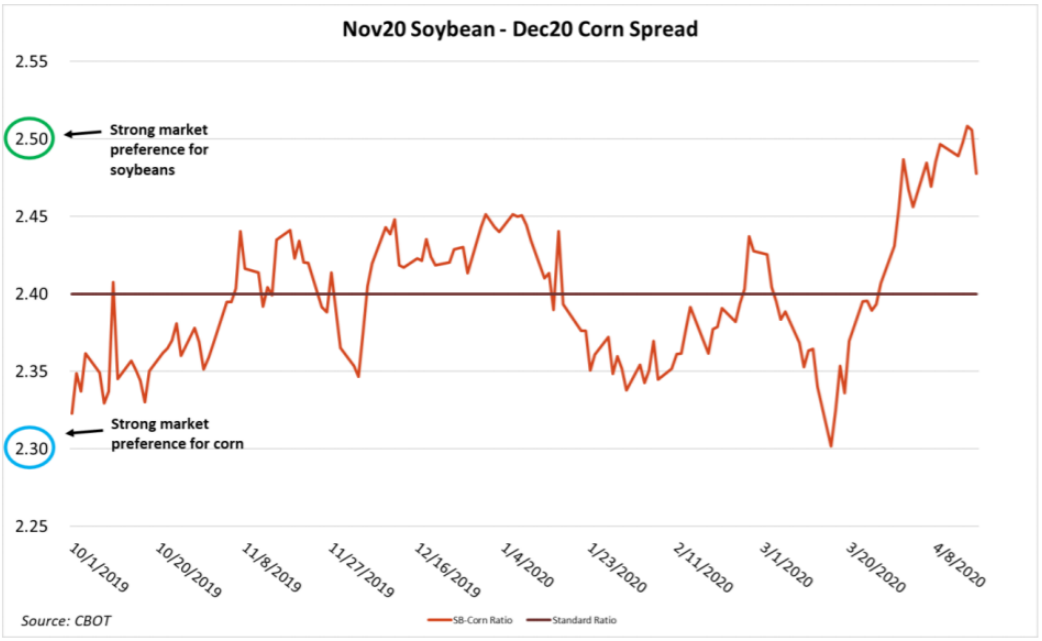
Analysts at DTN assume that the average farm price is $0.30 cents below corn futures, so using various stocks-to-use ratio figures some possible average farm price and new crop futures prices can be calculated for the 2020/21 marketing year. The formula is:

*average farm price = 0.7516 * (2020/21 stock/use ratio)-0.806*

But markets have been abuzz with skepticism in the weeks following the release of the USDA's most recent estimates. The recent collapse of the ethanol industry amid a slowdown in global fuel consumption has suddenly made corn acres slightly less attractive than soybeans. So, is a massive migration to soybean acreage possible for 2020? The honest answer is, it isn't clear at this point. But several factors at play could influence the ultimate planting decision. Futures price signals have favored soybean acreage following ethanol's late March collapse in demand. The new crop price ratio has hovered around 2.5 over the past week, indicating a market preference for soybeans. But neither crop has exhibited strong price favorability in the prime decision-making period for planting in recent months.

In reality, corn prices have dropped more than soybeans since the COVID-19 virus crises and dropping energy prices, and it's likely at least some acres will be shifted due to the unattractiveness of corn prices. The market hardly reacted to the numbers, with new selling in spite of corn's intimidating large ending stocks numbers. Perhaps all the sellers are already short corn? In fact, corn prices actually rallied on the WASDE-release Tuesday to $0.05 gains after starting lower. So, apparently the report didn't seem bearish corn to traders

The mid-April new crop price ratio has not traded below the pivotal 2.4 mark since late March. Prices above the 2.4 mark signal a market preference for soybeans and below expresses market favorability for corn acres. However, the ratio has rarely traded near the levels of strong demand for either commodity. Ratios of 2.3 and 2.5 would show a very clear market preference for corn or soybeans, respectively, and provide farmers with more certainty about which crop would have more favorable long-term profit potential. The ratio has regularly traded between 2.35 – 2.45 since last fall as price levels in 2019/20 simply have not expressed clear preference for either commodity. A recent shift towards soybeans due in no small part to the collapse of the ethanol industry has piqued farmer and price interest in soy, but it could be too late for some farmers to switch from corn.

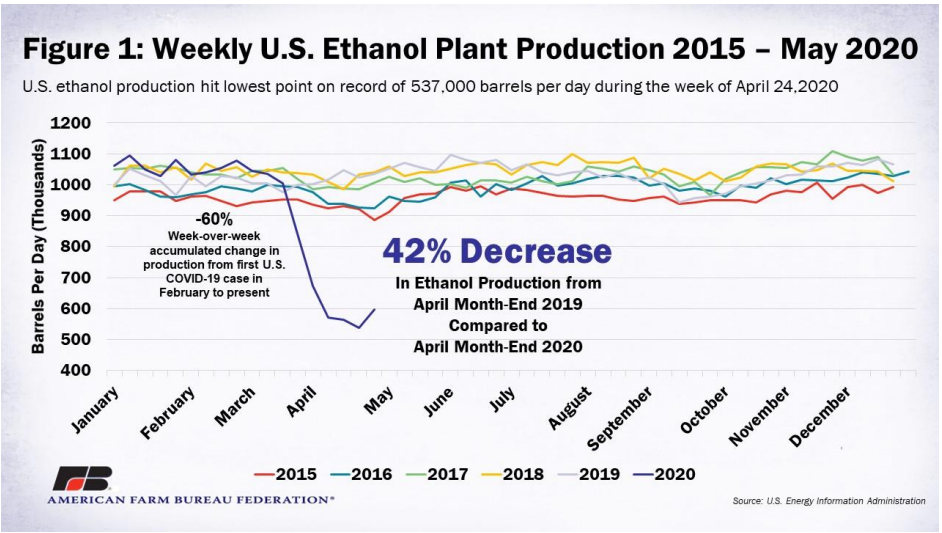


The U.S. ethanol industry became a casualty in the current set of market circumstances as blending demand dropped simultaneously with the decrease in gasoline consumption. Countless ethanol plants around the country have either idled, reduced production, temporarily closed for maintenance, or have slashed basis levels to maintain eroding profit margins.

Sources: Farm Progress, POET, Reader Responses

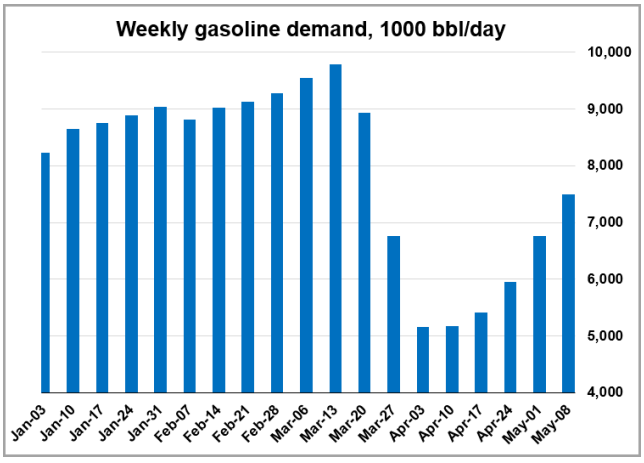
Nearly 3.5 billion gallons of annual ethanol production are expected come offline in 2020 as fuel demand remains depressed amidst reduced traffic stemming from COVID-19. That translates to nearly 1.3 billion bushels of corn. The Energy Information Agency is predicting an 11% decline in ethanol production through year end. Record declines in weekly ethanol output are likely to continue while global lockdown

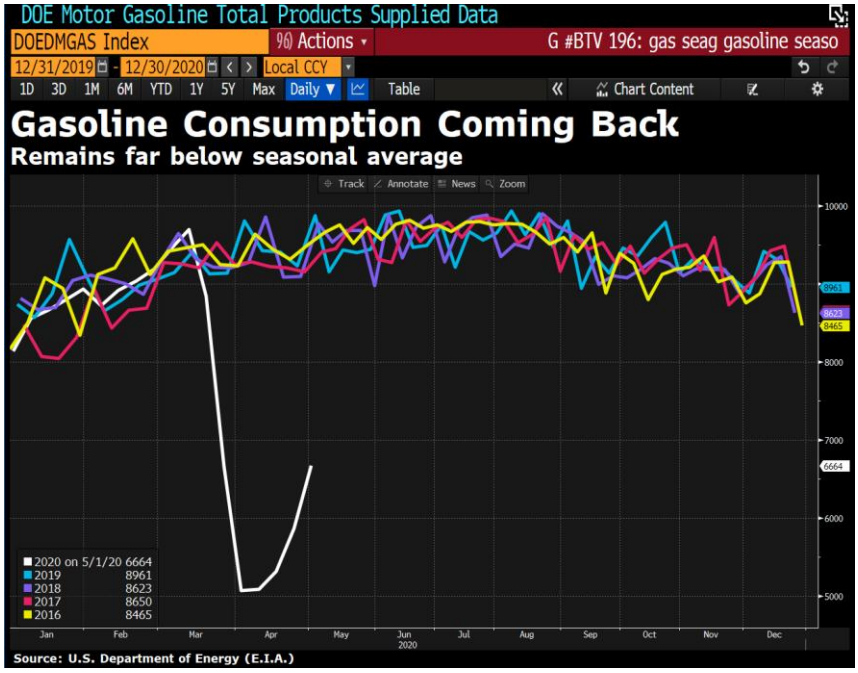
measures are enforced. Ethanol production currently accounts for 41.4% of 2019 production, but that estimate could easily be adjusted downward if the recent agreement between Russia and OPEC to curb global oil production does not come to fruition. The ethanol collapse led to lower cash prices around the Corn Belt as more bushels flooded the market, particularly in the Northern Plains and Eastern Corn Belt. Cash bids have dropped as much as $0.40/bushel over the last few weeks. The basis collapse was a sharp reversal from an atypically strong basis enjoyed by much of the Corn Belt since last fall and will likely persist in the face of muted demand.



"There's light at the end of the tunnel for the battered American ethanol market, according to producer Green Plains Inc. For now, coronavirus stay-at-home measures are keeping cars off the road, slashing demand for biofuels. But as economies reopen and people settle into post-pandemic life, they will likely avoid mass transportation and drive more, according to Todd Becker, chief executive officer of the Omaha-based company. "That will help the beleaguered industry, which was already struggling with negative margins even before the virus hit. Add to that an oil price war between Russia and Saudi Arabia that sent crude prices crumbling, and plants across the nation idled or slowed production rates."

"The U.S. ethanol industry has in recent years been battered by oversupply, a trade war with China and waivers given to small oil refineries exempting them from blending requirements. While President Trump has allowed a 15% ethanol blend rate, the Environmental Protection Agency still has to take some steps to facilitate adoption."

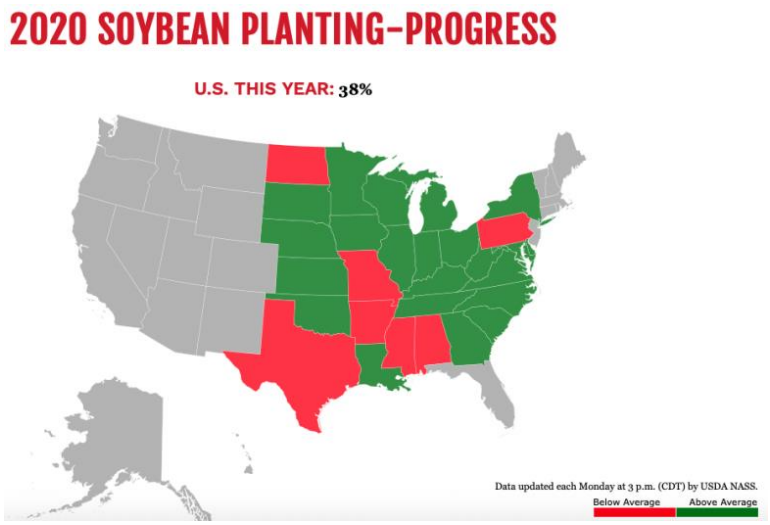




Soybeans

Soybean numbers from the USDA were somewhat 'friendly'. The soybean futures reaction to Tuesday's WASDE was mild, to say the least, with the July contract finishing the day just 3 cents lower and the new-crop November contract falling just 1 1/2 cents. The agency reported higher new-crop exports and lower-than-expected ending stocks but traders remain skeptical of the USDA's optimism. The report didn't have a lot of supportive data for prices, but the market appeared to have already priced in some of the bearish expectations that came to pass. The near-term price outlook will depend on global weather and future Chinese purchases.

Soybean planting advanced less than the market anticipated over the past week, with showers in some areas of the Corn Belt. The USDA rated the nation's soybean planting completion rate at 38% vs. a 23% five-year average. 7% of the U.S. soybean crop has emerged vs. a 4% five-year average.



Reuters reports that CBOT soybean futures rose about 2% on strong export demand and news of fresh purchases by top global soy buyer China, as well as technical buying and short-covering at month-end, as the month of April came to a close. Chinese state-owned importers bought at least five bulk cargoes of U.S. soybeans, or at least 300,000 tons, for shipment mostly from U.S. Gulf Coast export terminals, two traders with knowledge of the deals said.

This graphic is a matrix of what the 2020/21 U.S. soybean stocks-to-use ratio could be using various combinations of planted acreage in millions going across the *x*-axis at the top and yields in bushels per acre going down the *y*-axis on the left. DTN makes the assumptions include an estimate of 2020/21 beginning stocks at 480 million bushels which is the April 2020 WASDE ending stocks estimate.

Prospective 2020/21 U.S. soybean ending stocks in million bushels with planted acreage-yield matrix

	82.0	82.3	82.6	82.9	83.2	83.5	83.8	84.1	84.4	84.7	85.0	85.3	85.6	85.9	86.2	86.5	86.8
46.0	27	41	55	68	82	96	109	123	137	150	164	178	191	205	219	232	246
46.3	52	65	79	93	107	120	134	148	162	175	189	203	217	230	244	258	272
46.6	76	90	104	118	131	145	159	173	187	201	214	228	242	256	270	284	297
46.9	100	114	128	142	156	170	184	198	212	226	240	254	267	281	295	309	323
47.2	125	139	153	167	181	195	209	223	237	251	265	279	293	307	321	335	349
47.5	149	163	177	191	205	220	234	248	262	276	290	304	318	332	347	361	375
47.8	173	188	202	216	230	244	259	273	287	301	315	330	344	358	372	386	401
48.1	198	212	226	241	255	269	283	298	312	326	341	355	369	383	398	412	426
48.4	222	236	251	265	280	294	308	323	337	351	366	380	395	409	423	438	452
48.7	246	261	275	290	304	319	333	348	362	377	391	406	420	434	449	463	478
49.0	271	285	300	314	329	344	358	373	387	402	416	431	445	460	475	489	504
49.3	295	310	324	339	354	368	383	398	412	427	442	456	471	486	500	515	529
49.6	320	334	349	364	378	393	408	423	437	452	467	482	496	511	526	540	555
49.9	344	359	374	388	403	418	433	448	462	477	492	507	522	537	551	566	581
50.2	368	383	398	413	428	443	458	473	488	502	517	532	547	562	577	592	607
50.5	393	408	423	438	453	468	483	498	513	528	543	558	573	588	603	618	633
50.8	417	432	447	462	477	492	507	523	538	553	568	583	598	613	628	643	658
51.1	441	456	472	487	502	517	532	548	563	578	593	608	623	639	654	669	684
51.4	466	481	496	511	527	542	557	573	588	603	618	634	649	664	679	695	710
51.7	490	505	521	536	551	567	582	597	613	628	644	659	674	690	705	720	736
52.0	514	530	545	561	576	592	607	622	638	653	669	684	700	715	731	746	761
52.3	539	554	570	585	601	616	632	647	663	679	694	710	725	741	756	772	787
52.6	563	579	594	610	626	641	657	672	688	704	719	735	751	766	782	797	813
52.9	587	603	619	635	650	666	682	697	713	729	745	760	776	792	807	823	839
53.2	612	628	643	659	675	691	707	722	738	754	770	786	801	817	833	849	865
53.5	636	652	668	684	700	716	731	747	763	779	795	811	827	843	859	874	890
53.8	660	676	692	708	724	740	756	772	788	804	820	836	852	868	884	900	916
54.1	685	701	717	733	749	765	781	797	813	829	846	862	878	894	910	926	942
54.4	709	725	742	758	774	790	806	822	838	855	871	887	903	919	935	952	968

Assumptions: Beginning stocks USDA Apr 2020 WASDE of 480 million bushels, estimated 2020/21 demand of 4.187 billion bushels which is 125 mln less than they estimated at their Feb 2020 Outlook Forum due to an export projection we estimate at 1.900 blns. USDA Outlook projection at 2.050 blns. this year's 1.775 bln. We assume a 99% harvested to planted ratio. Cells shaded in yellow are ending stocks that result in a stocks to use ratio less than 10%, those in orange at 10-20% and cells in green stock/use over 20%

Note that this year's ending stocks figure, which is next year's beginning stocks number, is likely to be larger as the current USDA export projection for this year at 1.775 billion bushels looks very high in light of limited Chinese purchases of U.S. soybeans in recent months.

Given overall lower global demand for vegetable oils and protein meals in the wake of the COVID-19, the fact that South America is wrapping up a record soybean harvest with both Brazil and Argentina having favorable currency rates relative to those in the U.S. and again a slow buying pace by China, we think when the USDA releases their first take on the 2020/21 balance sheets for the major crops in next month's WASDE report, they too will lop their overseas sales figure.

Note that in the March prospective plantings report the USDA said U.S. farmers intend to seed 83.5 million acres of soybeans this year, about 1.5 million less than the trade had anticipated.

University studies showing soybean returns losing less money on a net per acre basis vs. corn and the recent move in the SX2020/CZ2020 ratio to 2.55 suggests soybean planted acreage may exceed the intentions number.

Markets pulled back to start the month of May as the U.S./China trade dispute heats up as both sides debate who is to blame for the spread of the coronavirus pandemic and increasing fears of lower domestic grain demand. Traders will continue to monitor the spread of the virus as well as any improvements in the U.S./China trade dispute. On a positive note, China reportedly bought at least 300,000 tons of U.S. soybeans on April 30th for shipment mostly from the Gulf in August and September. That is at least five cargoes, but traders said that buyers were seeking between eight and ten at the time of the purchase.

Reuters reported last week that, "China remains 'very, very committed' to meeting its commitments under a Phase 1 trade deal with the United States, despite the unprecedented economic and health impacts of the new coronavirus pandemic, a senior U.S. trade official said. "The official told reporters that U.S. officials were talking regularly, and often daily, about implementation of the trade deal and to make sure that China fulfilled its extensive agreements to buy U.S. goods and services."

The Wall Street Journal reported that "A senior U.S. trade official expressed confidence Wednesday that Beijing will meet its obligations under the trade deal with Washington, despite fallout from the coronavirus pandemic and doubts by experts about China's ability to meet purchase targets. "There have been certain challenges presented by the coronavirus, but overall the experience that we've had is that the Chinese are very, very committed to implementing their commitments,' the senior official said during a briefing with reporters."

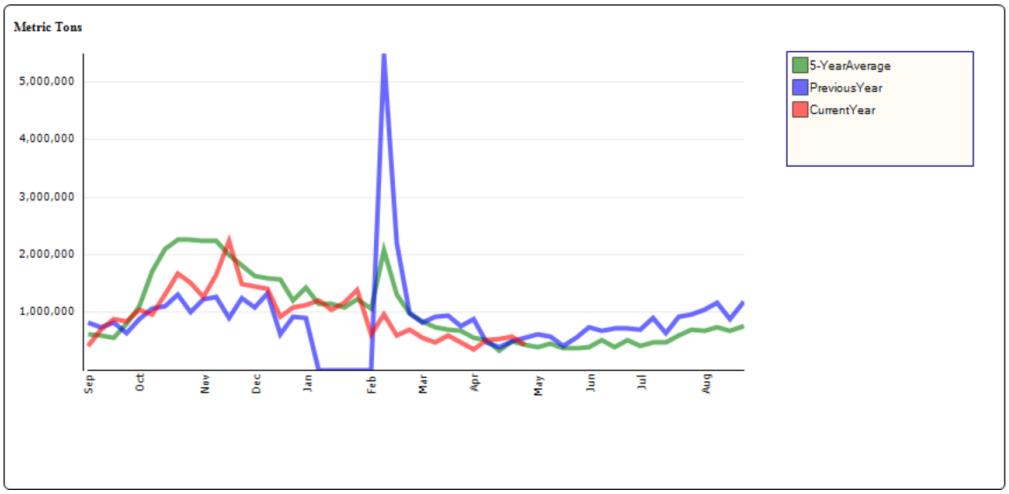
China was essentially shut for most of February, its domestic transport networks ground to a halt. It is slowly clawing back to normalcy, but Western economies—and global logistics networks—remain in disarray. U.S. food-processing plants are struggling with rising infection counts and labor problems, while crops rot in the fields. The Wall Street Journal goes onto state "The impact is already painfully evident in first-quarter trade data. Chinese imports of U.S. farm goods—a major element of the trade deal—did rise sharply. But most of the increase appears to have been before the virus hit: U.S. exports of farm goods to China were up 72% from a year earlier in January, according to the USDA, then down 27% in February.

Soybean prices have lived and died by export news so far in 2020. Rightfully so – with the exception of a few weeks during 2019 harvest, in the week following the signing of the Phase 1 trade agreement, and this past week, U.S. weekly soybean exports for the 2019/20 marketing year have lagged 21.7% behind the previous five years' average. Year to date soybean exports are down across all purchasing countries for the 2019/20 marketing year. Excluding China, the next 10 largest export destinations for U.S. soybeans had purchased 10.5% fewer soybeans in the current marketing year than in 2018/19. Reduced purchase volumes from Mexico, Germany, and the Netherlands have offset increased sales to Taiwan with over a third of the marketing year remaining. Lacking Chinese demand has been the main culprit for the decrease in exports. Coronavirus lockdowns in China early this year drew 2019/20 Chinese exports nearly 50% lower to date than the previous five year average.

Weekly Exports - World Total

Soybeans

Selected Year: 2019-2020 as of 04/30/2020

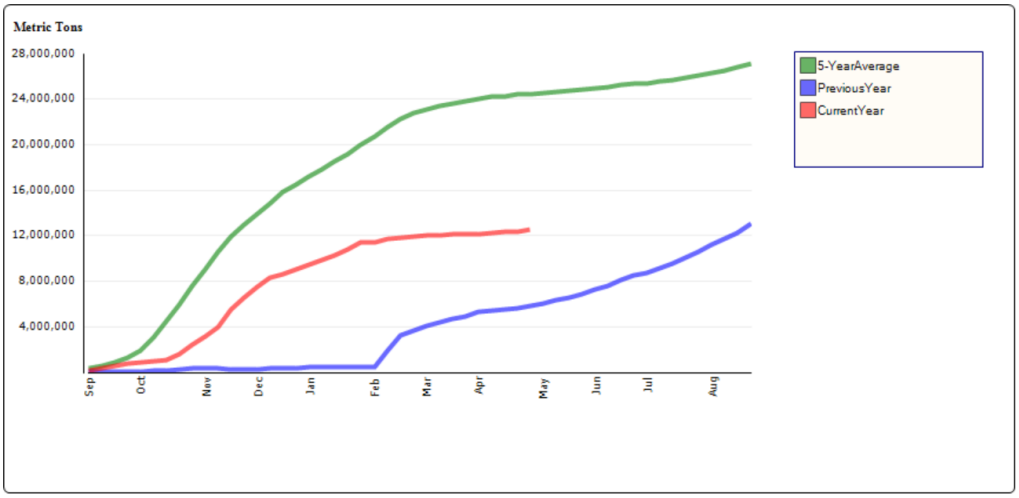


While government officials assure American farmers of a demand rebound as the world's second largest economy comes back online, soybean exports to China have been consistently reported at multi-year lows in recent weeks. Chinese soybean export pace typically slows in the second half of the marketing year in favor of the newly harvested South American crop. Export sales to China may indeed pick back up after this spring, but don't bet the farm on it in the short run.

Accumulated Exports - CHINA, PEOPLES REPUBLIC OF

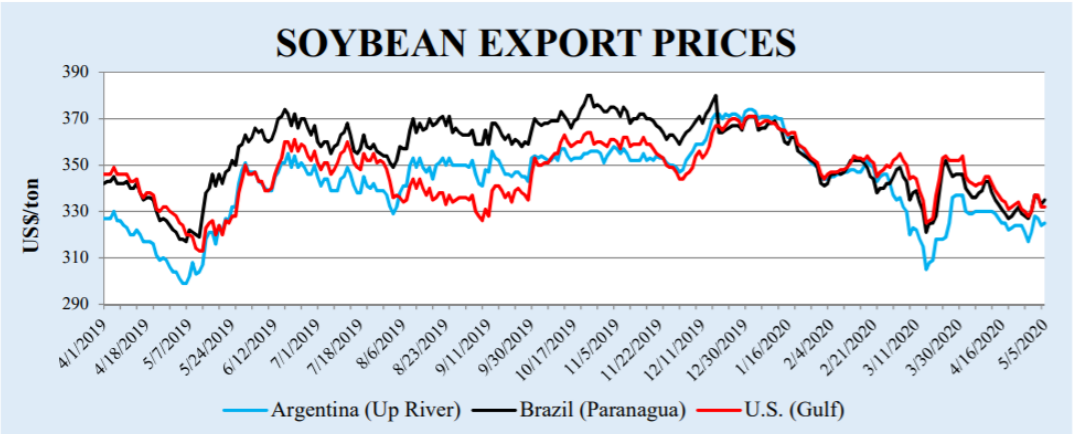
Soybeans

Selected Year: 2019-2020 as of 04/30/2020

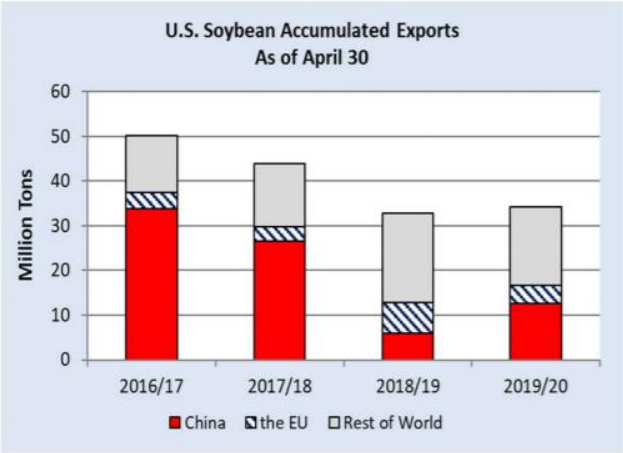


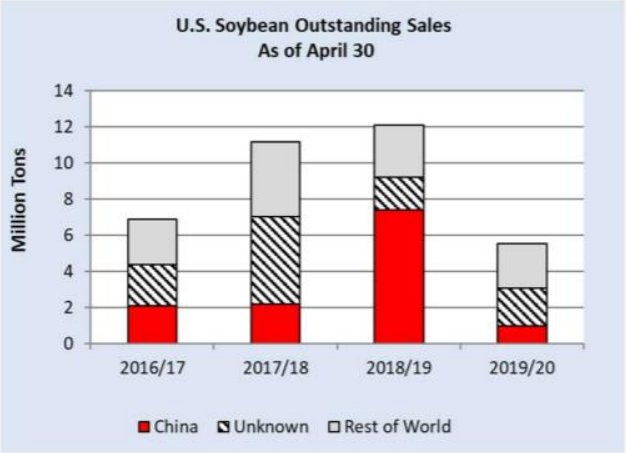
Both soybean and meal export prices have experienced a downturn since the beginning of April in response to rapidly changing market forces due to the COVID-19 global pandemic. U.S. Gulf FOB soybean export bids in April averaged $337 per ton, down $8 from March. Brazil Paranaguá FOB averaged $334 per ton, down $6. Argentina Up River FOB averaged $326 per ton, up $2. Meal export prices dropped at a fast pace for the month as demand fell in response to meat processing facility closures and shrinking livestock herds. U.S. soybean meal export bids in March averaged $349 per ton, down $12 from March. Brazil Paranaguá FOB averaged $319 per ton, down $18 from March, and Argentina Up River FOB averaged $328 per ton, down $20. Soybean oil prices continued to weaken due in part to the

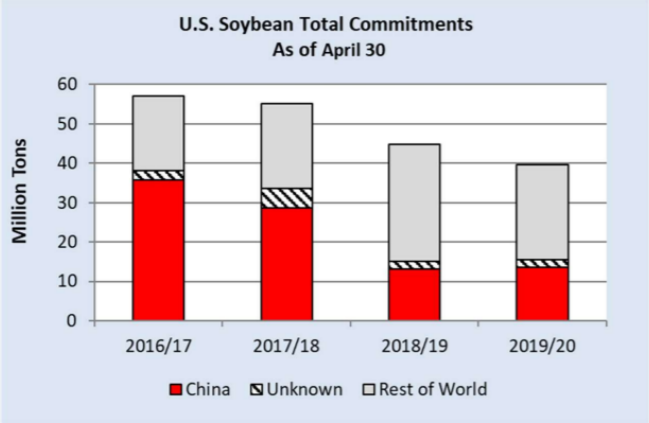
impact of COVID-19 and low petroleum prices on food and fuel markets with monthly average declines of $31 per ton in the United States and $21 per ton in both Argentina and Brazil.



In the week ending April 30, 2020, U.S. soybean accumulated exports (shipments) to China totaled 12.6 million tons and 21.6 million to the rest of the world, up 4% 2019, but 22% lower than 2017. Outstanding sales grew more than 400,000 tons from last month on higher sales to China; however, these remain below 2019 levels at 970,000 tons to China and 2.5 million to the rest of the world. At this time last year, accumulated exports to China were 5.9 million tons and 26.9 million to the rest of the world and outstanding sales to China were 7.4 million tons and 2.9 million to the rest of the world. U.S. soybean export commitments (outstanding sales plus accumulated exports) to China exceeded 2019 levels slightly, totaling 13.5 million tons compared to 13.3 million a year ago. However, export commitments to China continue to trail 2018 and 2017 levels. Total commitments to the world remain lower than last year, totaling 39.7 million tons compared to 44.9 million tons the year before.







The USDA reported on May 13th sales of 396,000 metric tons of soybeans to China as the forecast for U.S. exports this year continues to rise on increasing Chinese demand. The latest USDA daily report shows that half of the latest export sales – 198,000 tons – is for 2019-20 delivery and half is for the upcoming marketing year that begins September 1st. The Wednesday announcement follows a sale to China reported Tuesday for 136,000 tons of old crop U.S. soybeans. And last week USDA reported a daily sale of 378,000 tons of U.S. soybeans to China, including 242,000 tons for 2020-21 delivery.

Meanwhile, the USDA's Foreign Agricultural Service is raising its forecasts for both overall U.S. soybean exports and Chinese imports. A combination of strong Chinese demand and the quick pace that Brazil is selling off its latest crop will translate into substantial U.S. exports in the final several months of the year. In other parts of the world, Bangladesh, Vietnam and Pakistan –strong markets for the U.S. – are expected to increase imports this year. European Union soybean imports are expected to decline as the bloc buys more soymeal.

With expanding production, global soybean supplies will reach record levels. Demand, led by a rebound in China, is projected to exceed supply growth, resulting in a further draw-down in global ending stocks. Expansion of China's swine herd, recovering from African Swine Fever, will help boost feed demand and drive both crush and import demand higher. China is projected to account for over half of global consumption growth in 2020/21 and roughly 85% of import growth. Export growth for the coming year will need to come from the United States as it may be difficult for South American suppliers to exceed current Oct/Sep 2019/20 export forecasts. Argentina exports are projected to decline in the face of strong competition from the United States and Brazil and growing domestic crush.

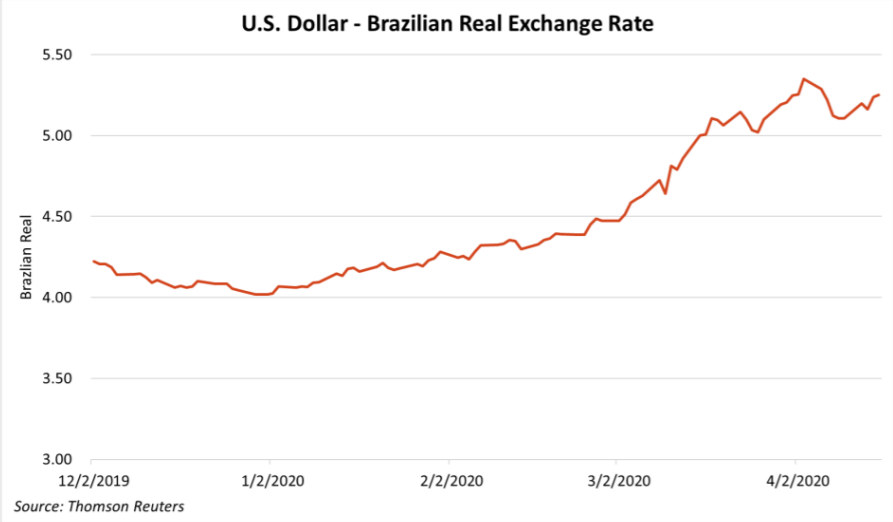
Brazil's state-owned oil company, Petrobras hit a record level of crude oil exports in April, with over 1 million barrels per day sailed. Worth noting though, is that China accounted for about 60% of these imports. Conversely, Rystad Energy is estimating, specifically in the U.S., that the oil and gas industry could see dozens of bankruptcies in the near term, with potentially hundreds if the demand function continues to remain depressed through to 2021.However, they also noted that as production cuts start to show up, this could help bring oil prices back up.

But therein lies the dilemma: How much biodiesel demand will there be in the long-term if oil demand remains depressed? However, now that we're in the month of May, production cuts from OPEC and Russia have started. Further, we must not only look at major biodiesel customers (i.e. China), but also look at those countries that have a lot of demand for feedstuff byproducts, like soymeal and canola (again, looking at China here). That said, Brazil's soybean exports in April set a new record of 16.3 million

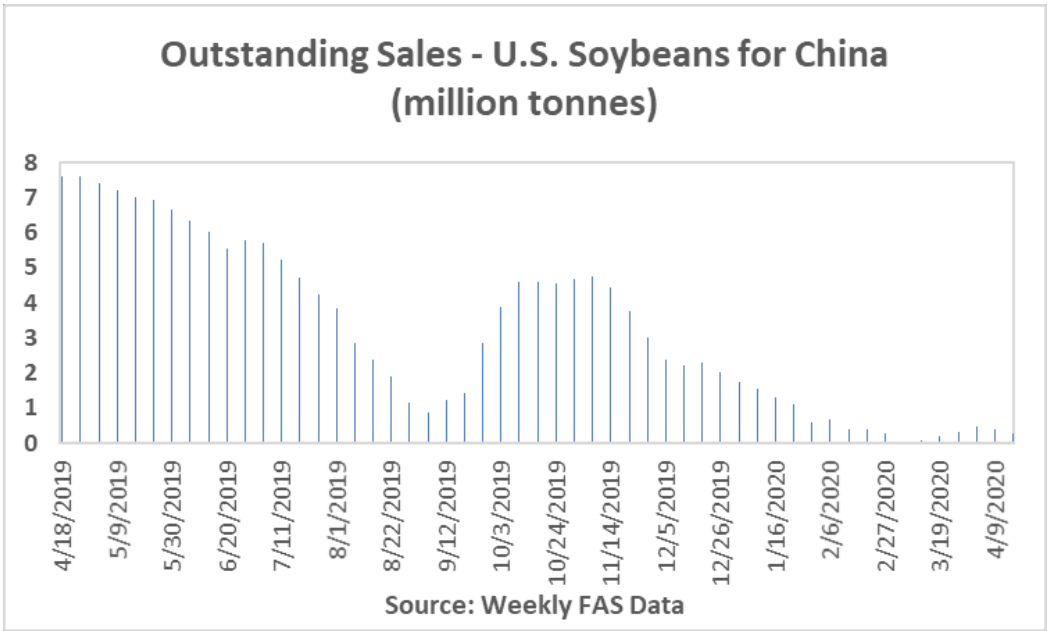
metric tons. This is a 40% jump over March 2020's 11.64 million metric tons of Brazilian soybean exports, and a significant improvement over the previous record of 12.35 million metric tons, set nearly two years ago in May 2018. Further, there are expectations that soybean exports from Brazil in May will be another strong showing, especially considering that soybean prices there are sitting at record levels, thanks to the devaluation of the Brazilian Real relative to the U.S. Dollar.

Thus, there are two subsequent factors of interest. First, what additional quantities of soybeans does China need, considering that they could be dealing with African Swine Fever and a reduced hog herd for up to 2 more years. Second, what additional quantity of soybeans can Brazilian farmers grow and export. Conversely, despite their economy shutting down for nearly 2 months, China is still expected to make good on the commitments of purchasing agricultural commodities from the U.S., as per the trade deal signed in January.

Regardless of the impacts from drought, Brazil is still on track to produce its largest soybean crop in history. As nervous investors seek safe haven in the U.S. dollar, the weakening Brazilian real has made the newly harvested soy crop an attractive commodity on the world market.



According to the USDA FAS daily reporting system, private exporters have recently sold more than 470,000 tonnes of U.S. soybeans to ship from U.S. shores by the end of August. This has provided a modest boost to the market sentiment after China had been noticeably absent from the U.S. soybean market in recent weeks. According to weekly FAS export figures, outstanding sales of U.S. soybeans bound for China in the current (Sep. '19-Aug. '20) marketing year fell to just 63,000 tonnes as of March 5th. That figure has crept higher in recent weeks to reach nearly 285,000 tonnes in latest figures as of mid-April, and the additional purchases will provide a boost to that figure in upcoming reports. The following chart highlights the stark contrast in unshipped sales on account of China beginning the same week last year. However, it is important to remember that sales were abnormally strong last April as trade talks between the U.S. and China continued to gain momentum and China committed to buy 10 M tonnes of U.S. soybeans at the end of February.



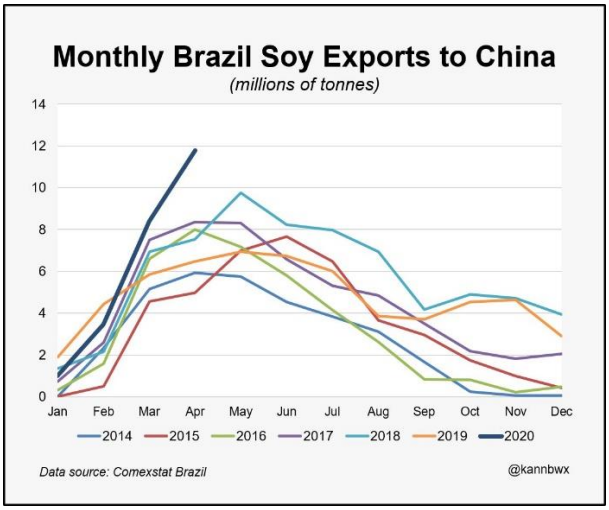
As concerns continue to linger globally about the effectiveness of measures instituted to flatten the curve and stem the spread of COVID-19, this latest news serves as a reminder to foreign buyers of the market opportunity that is available from the recent drop in commodity prices. Despite the underlying economic uncertainty, the U.S. farm and supply chains remain open to ensure the availability of quality, sustainable U.S. soybeans to end-users around the world.

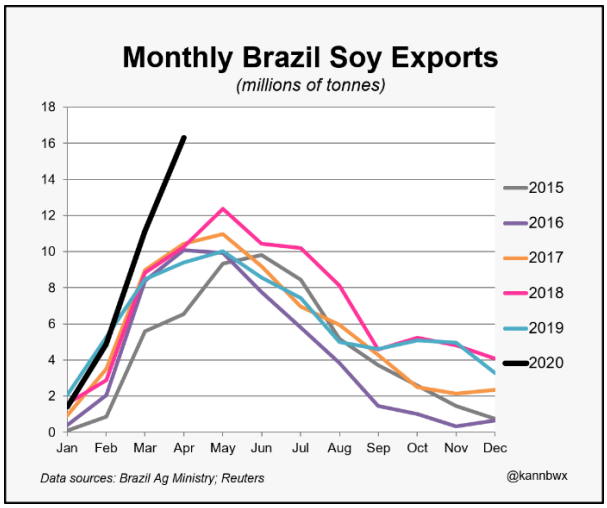
China will buy between 30 and 40 million metric tons of U.S. soybeans this calendar year as the Chinese government tries to live up to promises it made under the "phase one" trade pact, according to the U.S. Soybean Export Council. China has already been buying old and new crop soybeans from the U.S. in recent weeks and sales are expected to accelerate. The USDA new export sales of 378,000 metric tons of U.S. soybeans to Chinese buyers, 242,000 tons of which is slated for delivery in the 2020-21 marketing year. The other 136,000 tons are for delivery in 2019-20.

Since the emergence of COVID-19 across the U.S., news has picked up about meat plants shutting down, the euthanizing of farm animals, a sharp decline in oil and gasoline usage and prices, and other economic hits to the country. While livestock farmers are at the forefront of the pandemic's economic impact, the ripple effect extends to row-crop farmers. Some of the first soybean demand issues popped up when China's pork industry took a hit from COVID-19 before it overtly affected the U.S., eviscerating demand. Domestically, retail meat sales saw a boom as consumers stocked up, but since then the demand has leveled off some in the U.S. Aside from grocery stores, restaurant sales have fallen, helping cause the decline in the meat industry.

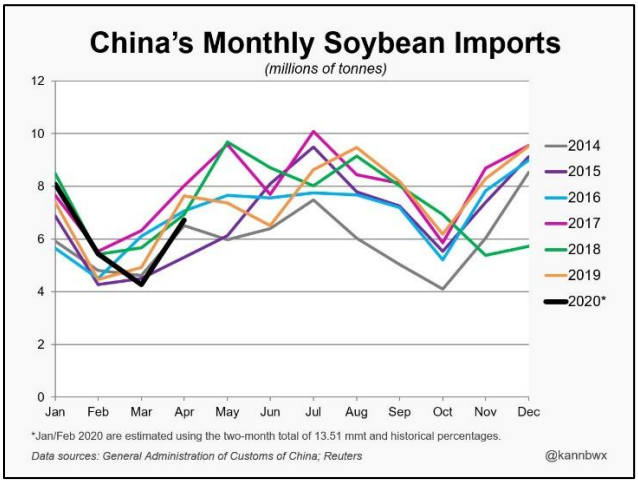
COVID-19 is one factor in the changes of soybean supply chains, prices, and demand, but the seasonality for exports, currency rates, and many other factors contribute to the fluctuations, too. The U.S. dollar's strength compared with other currencies as a factor in fewer exports because Brazil's currency is weaker and more economically beneficial to other countries. The currency issue also links to COVID-19 as investors flock to more stable areas to keep their money, like the U.S. dollar, widening the gap between the dollar and weaker currencies. This time of year, soybean exports pick up out of Brazil and South America as a whole while the U.S. exports play a smaller role.

Brazil's April shipments of soybeans to China totaled 11.8 million metric tons or 433 million bushels (+21% over May 2018 high). Brazil's January-April 2020 exports to China were 24.7 million metric tons or 906 million bushels. For reference, that is a bit more than all U.S. soy shipments to China between February 2019 and April 2020. Brazil exported 16.3 million tons of soybeans in April, 32% more than the prior monthly record set in May 2018. Some 72% of those were to China. Brazil shipped 33.7 million metric tons (1.24 billion bushels) of beans in the first 4 months of 2020. March + April alone = 1 billion bushels.





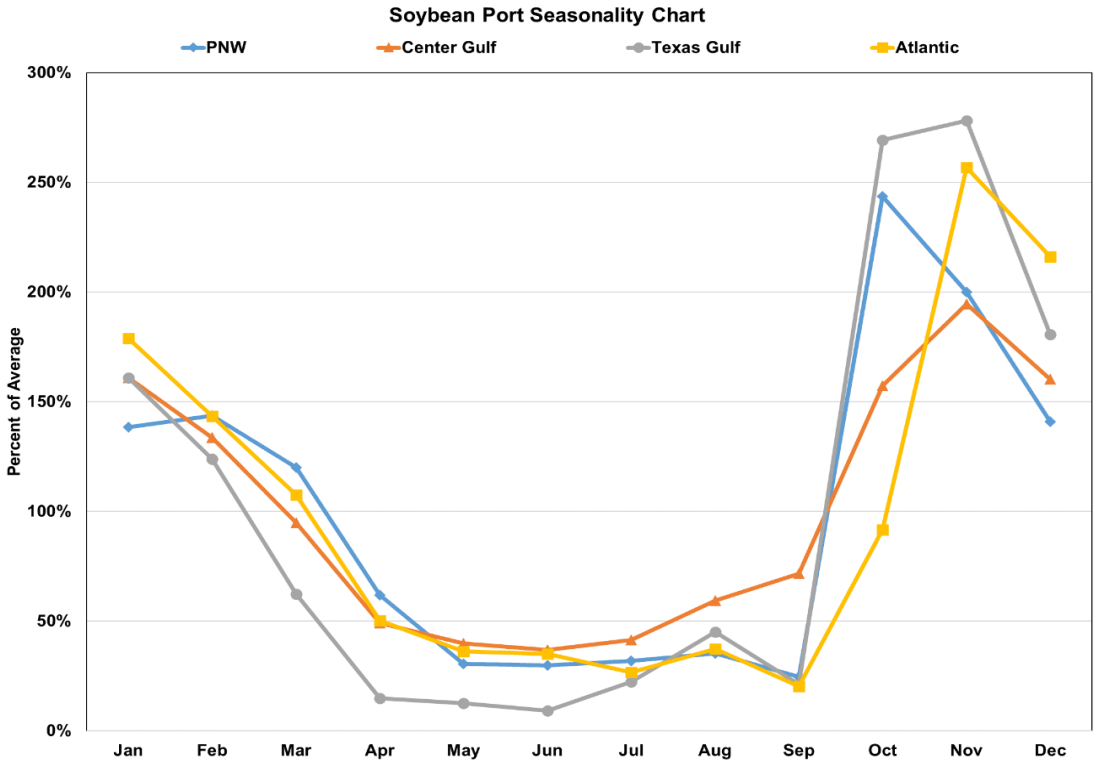
China imported 6.7 million tons of soybeans in April, the lowest for the month in five years. The drop was more than expected but is attributed to slower loadings in Brazil late Feb/early Mar. Year-to-date imports total 24.5 million metric tons, fractionally up from 2019 but still behind 2017 and 2018.



"While recent dry, sunny weather has helped speed along harvest of Argentina's soybean and corn crop, it has also further diminished water levels along the Parana River that is key for transporting grains to the country's main export channels," reports Pro Farmer's Meghan Vick. "The situation has forced exporters to reduce loading and take extra time to top off cargoes farther along the river where water levels improve."

Global buyers will have to fill in for the reduced volume by turning to the U.S. or Brazil. Brazil's currency devaluations have soybean and gain exports in full swing. On the other hand, the U.S. has

plenty of available export capacity until mid-September to ship a few extra vessels. U.S. soybean harvest starts to fill export supply chains in late August and reaches full steam in mid-September as shown below. Although the extra export volume is limited, the increase in sales is welcome, especially this time of year.



The USDA FAS attaché Post released its annual reports focused on China's soybeans – which some would say is arguably the single most important foreign market in terms of U.S. demand. According to the Post, China's swine sector is expected to slowly recover from the impact of African Swine Fever, making the Post seemingly optimistic as total oilseed demand is seen rising by 2% to 148 million metric tons (MMT) in marketing year (MY) 20/21, up from an estimated 145 MMT in MY19/20 and on par with MY18/19 demand. Driven by increased swine feed consumption, total protein meal feed use is forecast up 2% and soybean crush volume is forecast up 3% in MY20/21 versus the previous marketing year.

The Post projects that China's soybean imports will reach 86 MMT in MY20/21, based on a recovery in crush volume for animal feed as the swine herd rebuilding continues. The attaché's MY20/21 forecast is up from an estimated 84 MMT in MY19/20 and 82.5 MMT in MY18/19. As has been well documented, China's soy imports were down in 2018 and 2019 due to reduced feed demand attributed to lower swine herds from ASF as well as the additional Chinese tariffs on U.S. soybeans. During the second half of 2019, the Chinese government implemented an informal tariff exclusion process to permit some state-owned and private companies to purchase U.S. soybeans free from the additional tariffs. On February 18, 2020, China announced a new round of exclusions from the additional tariffs, with soybeans listed as an eligible product for applications by individual importers. The application period opened on March 2, 2020 and, although early purchases were scant reflecting China's focus on cheaper new-crop Brazilian soybeans, there have been recent improvements as weekly FAS sales data showed sales of U.S. soybeans totaled 618,099 tonnes in the week ending April 23.

China Soybean Supply and Demand Estimates

	2018/19 - USDA Official	2019/20 - USDA Official	2020/21 - FAS Post*
Area Harvested (1,000 Ha)	8,413	9,300	9,100
Beginning Stocks	23,064	19,455	21,035
Production	15,967	18,100	17,300
Imports	82,540	89,000	86,000
Total Supplies	121,571	126,555	124,335
Exports	116	125	120
Crush	85,000	86,000	85,000
Food Use	12,900	13,400	13,300
Feed Waste	4,100	4,300	4,200
Ending Stocks	19,455	22,730	21,715
Stocks-to-Use %	19%	22%	21%
Yield (kg./Ha)	1.90	1.95	1.90

* Post forecast differs from official USDA WAOB figures

Trae reports have surfaced stating that China is renewing their interest in sourcing U.S. soybeans. Following a substantial program which featured new-crop South American beans, there is optimism that China is making strides towards making good on promises for increased purchases of U.S. agricultural products under the Phase One trade agreement. This is a viewed as a positive sign in the market as China returns from its own measures to curb the spread of the novel coronavirus that began earlier this year. Other buyers of U.S. soybeans should remain conscious of China's demand and its ability to support the global soybean market.

Rice

The May WASDE contained higher U.S. and world rice production translating into slightly lower rice prices. The USDA did make revisions to the 2019/20 balance sheet by lowering exports and prices for long and medium grain rice. New crop estimates for 2020/21 include larger supplies, exports, use, and ending stocks. As a result to new crop estimates, prices for both classes of rice is reduced $0.10 per cwt to $11.80 for long and Southern medium grain rice, respectively.

The WASDE report provided some additional information as to how the USDA projects the crop to trade. Initial estimates of 2020 production will include planted acres from the NASS Prospective Plantings survey completed in March. June will see a significant amount of reporting as well, at which time we will be able to incorporate official acreage into the analysis.

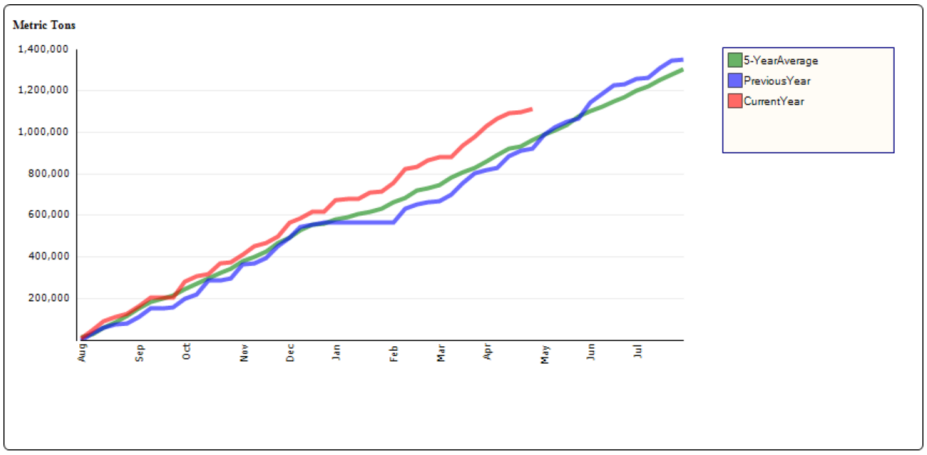
The weekly trading ranges for the September contract are getting tighter as a wedge formation develops (chart below). Trading has been confined to a sideways range between $11.83 and $11.98. A dry weather forecast in the Mid-South in the coming weeks will advance planting progress and could pull the September contract toward initial chart support at $11.80/cwt.

New planting is roughly 90% completed in Louisiana. There is limited current rough inventory remaining in first hands. The last trading of current crop was done at $25.00 per barrel ($15.10-$15.15 per cwt). New crop long grain bids rest at $20.00 per barrel ($12.00 per cwt). In the Mid-South, planning activity advanced on improved weather, with planting progress in Arkansas surpassing 67%. Like Louisiana and Texas, there is not much paddy remaining for this current crop that is not already committed.

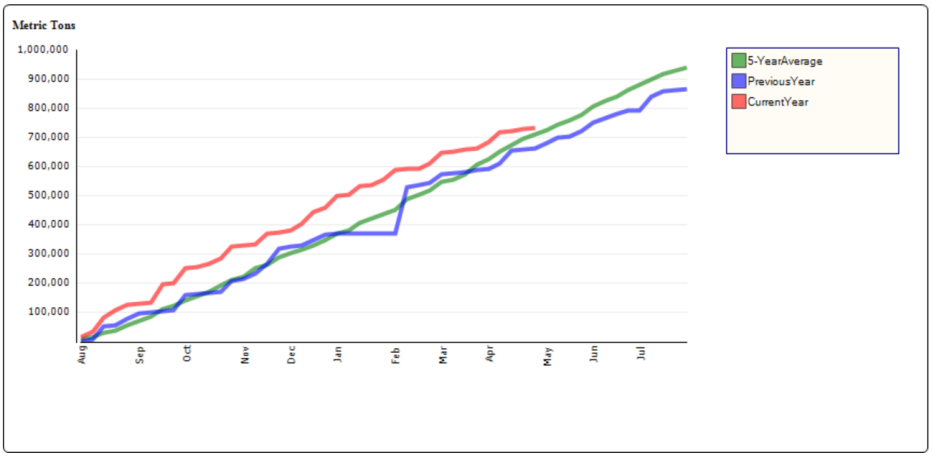
Old crop rice appears to be fully committed at this time and as such is unavailable for trade while new crop is still such a wildcard that very little business is being done in that market segment either. Early harvested rice should be in good demand; however, the key is whether new crop pricing will be strong?

Export sales were up considerably against the previous week's values and are indicative of overseas buyers sourcing rice from wherever there is availability. Many of the states are beginning to open for business which is lending more strength to their ability to complete trades. Vessel loadings were also substantially stronger. In addition to shipping against old sales, these numbers suggest that volume is moving through the system faster than is normal at this time. Asian pricing has plateaued against last week's indicators (some origins have even softened slightly). These changes are reflective of both exchange rates as well as demand side fundamentals in that region. It should be noted that multiple origins are providing indicator bids only as actual trade is frozen until after the lockdowns are lifted.

Accumulated Exports - World Total
Rice - LG Rough
Selected Year: 2019-2020 as of 04/30/2020



Accumulated Exports - World Total
Rice - Long Grain, Milled
Selected Year: 2019-2020 as of 04/30/2020

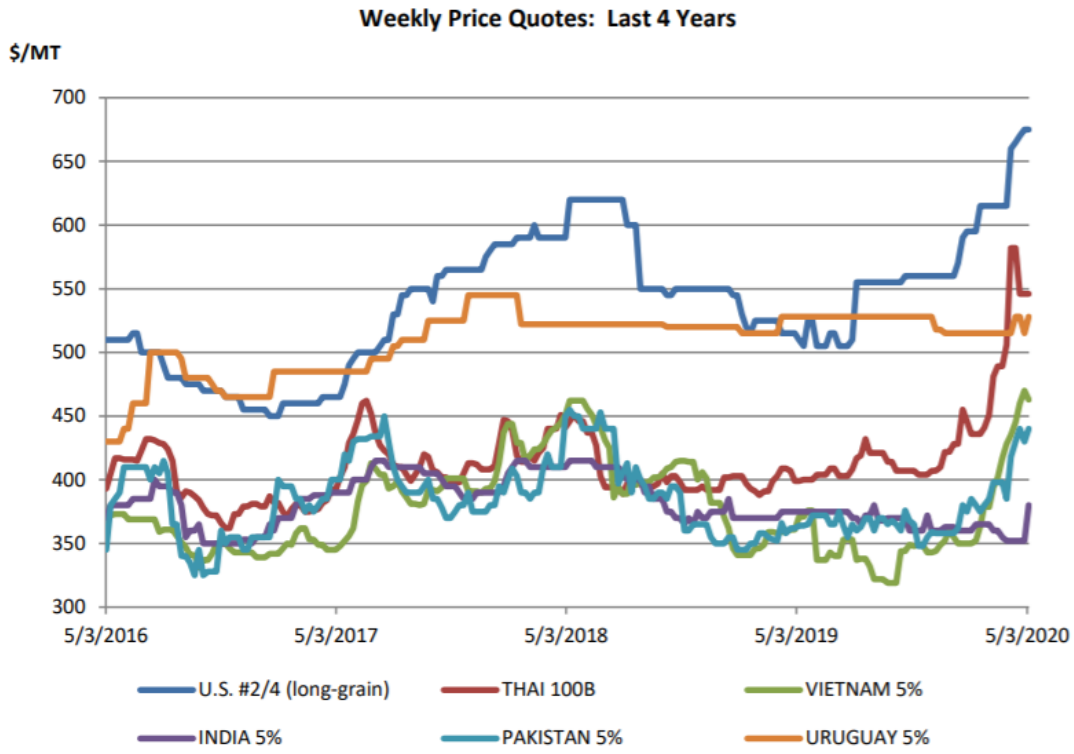


A potentially disturbing issue (pointed out in the *Creed Rice Report*) is the tonnage lost by the U.S. to South American suppliers to traditional core markets such as Mexico and Panama. U.S. rice prices are $150 per ton above MERCOSUR competitors. Conditions among South American exportable supplies vary. The undertone of the South American market appears steady.

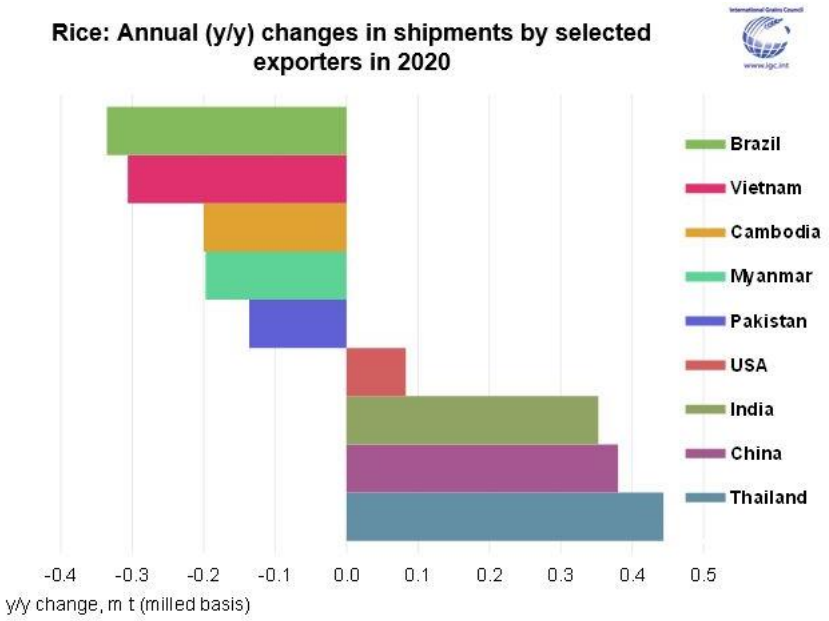
It appears that Asian markets are trying to get back up and running, after many of them had suspended business because of the coronavirus situation. Thailand rice weekly report (May 11th) states that Rice export prices (in-county) remain unchanged at high levels. Foreign buyers are reportedly seeking Vietnamese and Indian rice, which are approximately U.S. $65/MT and U.S. $165/MT cheaper than Thai rice, respectively. Rice export prices remain unchanged from the previous week as domestic rice paddy prices are still high due to shrinking supplies of MY2019/20 off-season rice caused by drought. Thai Rice exports from January 1 to April 26, 2020, totaled 1,425,501 metric tons, down 39% from the same period last year.

The past few months have been particularly dynamic for rice export quotes. Smaller crops in both the U.S. and Thailand had already been lifting quotes higher. In addition, the emergence of the COVID-19 pandemic resulted in larger purchases of staple grains including rice. To ensure sufficient domestic

supplies, several countries implemented trade-restrictive measures in March and April. Most notably, the third-largest exporter Vietnam imposed an export ban. As a result, quotes in close competitor Thailand rose sharply to the highest levels in 7 years. Although Vietnam has lifted its restrictions, Burma maintains an export quota and Cambodia still has a partial ban on paddy and white rice, sustaining Southeast Asian quotes at relatively high levels. Recently both Indian and Pakistani quotes have risen higher. Only Uruguayan and other South American quotes remain relatively stable as the new crop has recently been harvested.

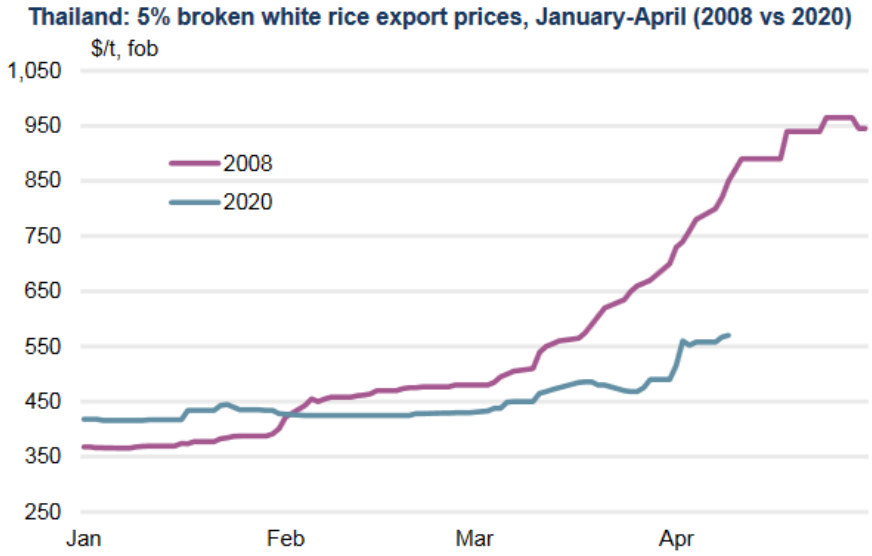


Firm pricing observed in the international rice market is projected to underpin rice acreage gains in 2020/21, with output potentially at a new peak, including increases among the leading exporters. The International Grains Council reports that amid temporary export restrictions and logistical challenges among several key suppliers, global rice trade is tentatively expected to be broadly steady year-over-year in 2020, with some offsetting changes in exporters' shipments.



Reflecting surging consumer demand and widespread logistical restrictions during the coronavirus global pandemic coupled with sustained drought conditions have seen Thai benchmark rice prices reach a seven-year high. Rice prices have also firmed in other parts of the world, including in Vietnam, where in late March the government temporarily ceased issuing fresh export licenses in order to prevent further gains in the local market. Cambodia and Myanmar also imposed restrictions on dispatches, while shipments by India have been greatly impeded by logistical constraints and labor shortages.

Despite sharp gains in prices, global availabilities of rice appear ample, and supplies are forecast to exceed demand in 2019/20 and 2020/21. The combination of surging prices and export restrictions amid a broadly comfortable world supply and demand balance has led some to make comparisons with the 2008 rice price crisis. However, while the full impact of the pandemic remains highly uncertain at this time, significant differences exist between the market then and now.



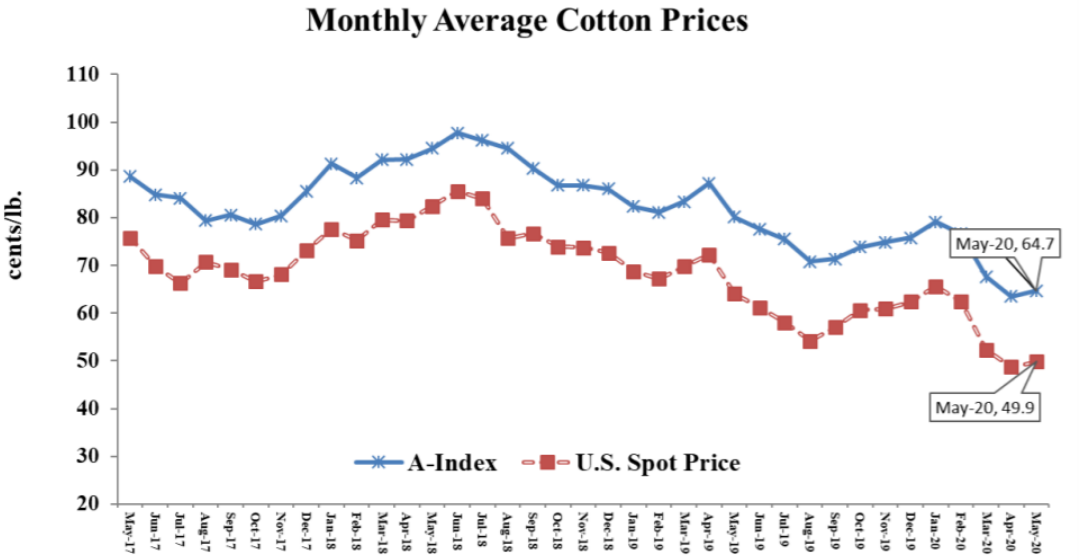
Cotton

After the initial WASDE report reaction had the front months lower, cotton rallied back to close higher. The July cotton market bulls are back in business following today's solid gains that restarted a price uptrend on the daily bar chart. Traders gave a not-as-bearish-as-it-could-have-been reaction to today's monthly USDA supply and demand report that showed U.S. cotton carryover at 7.1 M bales for 2019/20- up from 6.7 million bales in April. The very large U.S. plantings number is discounted by many traders and puts a premium on the WASDE June report estimate.

Importantly, when the world cotton numbers are taken into consideration, the WASDE May report becomes bearish. Looking for hints as to the severity of COVID-19's impact on spinning capacity has merchants paying close attention to the USDA's projections for world cotton consumption. For 2019/20, the world consumption forecast is reduced to 105 million bales, or the largest year-over-year decline in world consumption since before 2000. While consumption is expected to rise 11.5 million bales versus 2019/20, that level of consumption is still 3.9 million bales below 2018/19. The 116.5 million bales estimate is significantly higher than the 112.4 million bales estimated by Bloomberg. For traders that were banking on a very small world consumption number for 2020/21, the report is viewed as bullish.

As of May 10th, 32% of the U.S. cotton crop had been seeded, which compares to 18% last week and 27% on average. Texas now has 37% of its crop in the ground, which is 17 points ahead of the five-year average pace. Georgia has seeded 26% of its intended acres versus the usual 29%.

The A-index and U.S. spot price have edged up slightly from April's WASDE owing to stronger financial markets including the S&P Retail Index, in addition to market speculation regarding purchases for U.S. cotton. The April A-Index was the lowest monthly average in 11 years, reflecting the severe expected impacts from COVID-19 on global cotton demand.

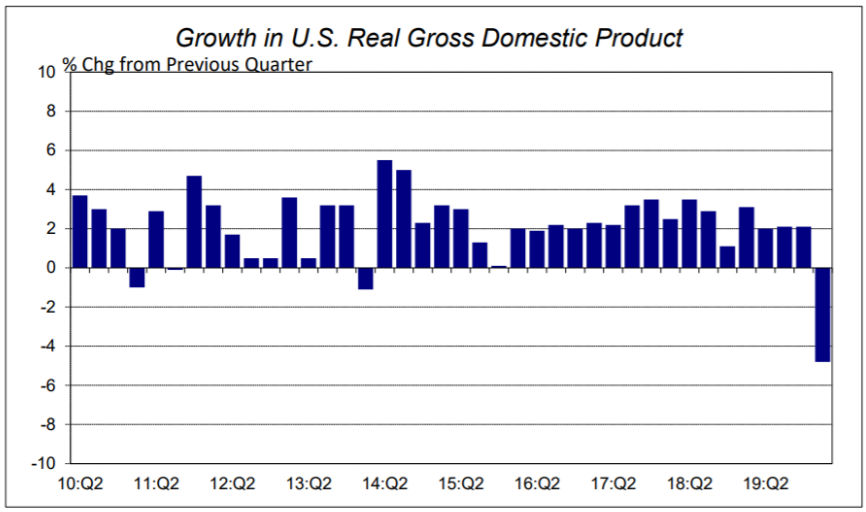


Dr. O.A. Cleveland states "the Chinese futures cotton charts offer no new trading opportunities as they did three weeks ago when market action set off this recent rally in New York prices. Chinese buying sent prices higher, but now the market must wait for a number of potentially bullish/bearish events to unfold during the northern hemisphere planting season. In the meantime, the 54.50 to 59.50 cent trading range should hold forth."

The bulls are counting on Chinese buying to bolster the demand side of the market. Additionally, they are expecting planting reductions around the globe: India, China, the U.S., Brazil and Central Asia.

The bears are just as rambunctious, suggesting that significant sanctions on China for allegedly spreading the coronavirus, will affect the cotton market. They reason that China will renege on U.S. cotton purchases and potentially cancel sales that are already on the books. In the month before buying U.S. cotton, China bought a like amount of Brazilian cotton- and can buy more. The more important bearish fundamental is the ongoing buildup of stocks in India, the world's largest cotton producer. India will see a production decline in 2020 and likely 2021, too. Indian stocks are pushing to record levels and textile mills were shuttered due to the coronavirus. Mills that have already begun to operate in Asia and the subcontinent are now beginning to complain about a buildup in yarn stocks and low yarn prices.

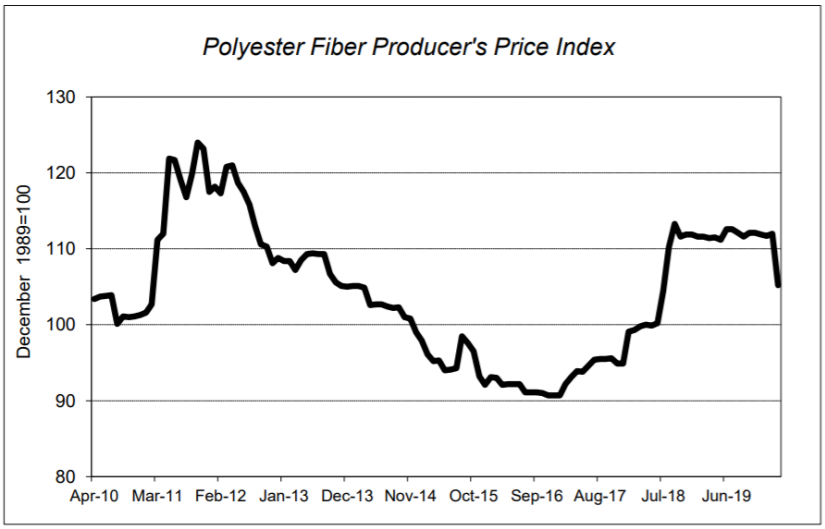
The Bureau of Economic Analysis released its first estimate for U.S. GDP growth in the first quarter. At -4.8%, the contraction is the biggest drop since the 8.4% decrease in the fourth quarter of 2008. Most state-level shutdowns in the U.S. went into effect around the middle of March. This means that only a couple weeks of the nearly complete national shutdown were covered by the first quarter. This also means that figures for the second quarter can be expected to be much worse.



Seasonally Adjusted Annual Rate; Source: Department of Commerce
*Based on chained 2005$.

The pullback in consumer spending on clothing has meant that apparel retailer revenue has evaporated. Meanwhile, costs associated with floor space, marketing, and general operations continue to accumulate. In efforts to stave off bankruptcy, cost-cutting has been widespread. Order cancelations have been making headlines for more than a month. Major retailers have also gained attention for delays in rent payments. Others have already been pushed into bankruptcy negotiations. The latest import data are for March. In March, apparel import volume was down 13% year-over-year (square meter equivalence, apparel of all fibers). Given that the full effects of the virus did not begin to be felt until the end of March, and that imports tend to have a lagged response to changes in market conditions, later decreases are expected.

Apparel import volumes have been affected by tariff increases on Chinese-made clothing since September. From September to February, the volume of U.S. cotton-dominant apparel imports from all sources fell 9.5% year-over-year (was -12.8% for apparel of all fibers). In March, cotton-dominant volumes were down 10.0% (-10.3% for apparel of all fibers).



Source: Bureau of Labor Statistics

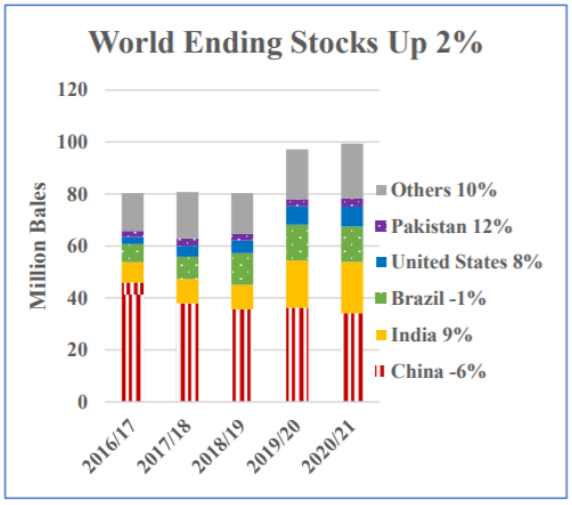
Dr. Liu, a University of Georgia Extension Economist, notes that "due to the rapid spread of COVID-19, the global cotton supply chain is severely impacted. An unexpected reduction in cotton mill use data is observed across all the major cotton spinning countries, including China, India, Pakistan, Bangladesh, Turkey, and Vietnam. Cotton spinning in China fell by upwards of 90% during the height of the pandemic in early March. The spinning industry in China has begun to recover now. However, with the anticipation of a decline in consumers' consumption of apparel, the recovery of the spinning industry is limited for the current marketing year. The virus is spreading fast in Turkey and India and Pakistan right now".

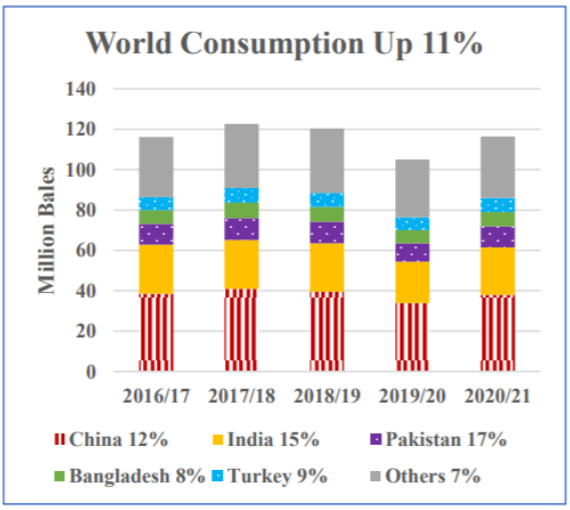
Recent travel restrictions in India, Pakistan, and Vietnam are likely to have similar impacts on their spinning industry, like China. The world retail sales of clothing and textiles have also plummeted. Many "non-essential" businesses, including apparel stores, are closed to slow down the spread of the virus. In addition, with the rising rate of unemployment globally, dispensable income from consumers on apparel is also limited. The forecast for current year's world cotton consumption dropped 6.4% (7.6 M bales) in April 2020 compared to March 2020. The current forecast of world cotton demand is at 111 M bales, while the world cotton supply is at a relatively high level of 122 M bales. The world ending stocks are also projected to increase at the third-highest level for the past decade at 91 M bales.

With supply outpacing demand and rising global ending stocks, we have seen downward pressure on global cotton prices. U.S. cotton acreage is projected nearly unchanged at approximately 13.7 M acres in 2020 after a decline in 2019, according to the USDA Prospective Plantings Report. However, the survey was conducted in early March, and may not have captured effects of the full decline in cotton prices since then. U.S. cotton exports are currently forecasted at 15 M bales, down 1.5 M bales from last month's forecast. Since the Sino - U.S. trade dispute, the U.S. lost part of its cotton market share in China. Brazil and Australia have benefited from the loss of market opportunity of U.S. cotton in China. In the global export market, Brazil is becoming the largest competitor for U.S. cotton. The U.S. ending stocks for the 2019-2020 crop year are expected to increase to the highest ending stocks for the past decade at 6.7 M bales.

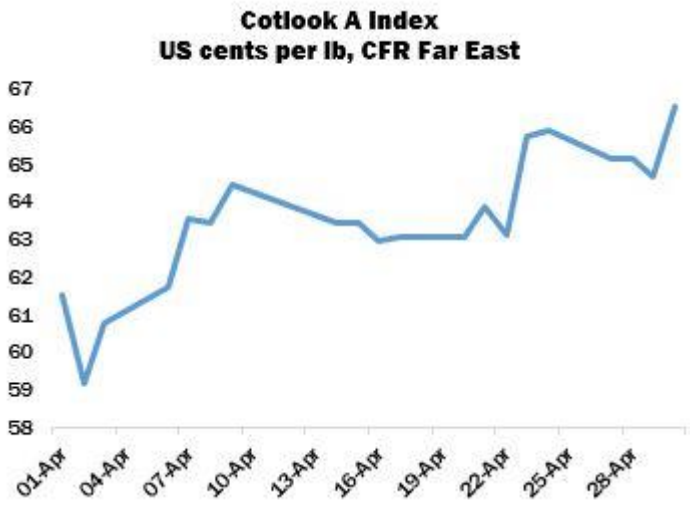
The decline of global cotton demand, trade uncertainty, increased level of global competition, and economic recession due to Covid-19, all of these factors combined creates continued downward pressure for U.S. cotton prices. July cotton futures for old crops closed at 55.84 cents per pound, and new crop December futures closed at 57.52 cents per pound on May 1st, 2020.

The USDA's first forecast for the 2020/21 marketing year shows record global supply driving use higher as countries begin to recover from the COVID-19 pandemic (See the April 2020 circular entitled "COVID19 Spurs Record Downward Adjustments to Global Demand" for more information regarding COVID19's effects on global cotton demand). Global consumption is expected to rebound 11% to more than 116 million bales from the largest recorded drop in the USDA's PS&D database; however, use is projected only slightly above the 5-year average. All top ten consuming countries are expected to witness growth as uncertainties regarding the pandemic diminish. China and India are forecast to expand consumption by 7 million bales combined, accounting for more than two-thirds of growth in global use. Lingering disruptions are expected to cap global use to below levels witnessed 2 and 3 years prior when global consumption registered at more than 120 million bales. Spending on cotton products including clothing and home furnishings is highly correlated to changes in GDP. Recovery in global cotton demand will depend on reopening of retail outlets and employment conditions in each country. Global cotton end-use (e.g., world retail sales of cotton clothing and furnishings) in 2019/20 has plummeted due to consumer reluctance to congregate in stores, lost income, widespread stay-at-home orders, and the closure of many "non-essential" businesses including apparel stores. Global ending stocks are forecast slightly higher with the 2021's third-largest-ever carry-in expected to boost global reserves to nearly 100 million bales, almost 20 million bales above 2 years earlier.





International cotton prices regained some ground during April, owing to higher settlements in New York futures. The Cotlook A Index fell to its low point of 59.15 US cents per lb on April 2, before reversing direction to move higher for much of the rest of the month. The Index reached a high point of 66.50 cents per lb on the last day of April, a full five cents above its opening level, and its highest point since March 19. At that point, the Index's decline in the calendar year so far stood at roughly 15%, compared with 28% a month earlier.



The slowdown in economic activity that was sparked by measures to contain the spread of Covid-19 continued during April and fresh mill demand for raw cotton ground to a virtual standstill. Cotton merchants for their part were predominantly concerned with managing the financial strain of requests from mill buyers to delay shipments and payments against existing purchase contracts. Mills across the globe were either closed for much of the month, or operating at significantly reduced capacity, as they too were facing cancellations from customers in the downstream textile sectors.

The sharp advance of the No. 2 contract on April 22 was attributed to reports of Chinese buying intentions: the trade has been anticipating a significant purchase of US cotton since ratification of the Sino-US Phase One trade deal in January. The depression of the world market would provide an opportunity to replenish and rebalance, from a quality perspective, the now ageing stocks in State Reserve warehouses at advantageous prices.

In the event, the last US export sales report issued during the month revealed quite impressive new sales to China, amounting to roughly 125,000 tonnes, but widely credited to a state-owned trading company rather than the Reserve. The pace of US shipments (to all markets) declined during April to below that required to meet the USDA's exports projection for the season. On April 9, the USDA reduced its export projection from 16.5 to 15.0 million bales (of 480 lbs), which contributed to a rise in the Department's forecast of US ending stocks from 5.1 to 6.7 million bales, which would be the highest ending stock since the 2007/08 season. The Department also substantially reduced its world consumption estimate for the current season. Nevertheless, following two weeks of net reductions to the aggregate sales figure mid-month, the latest report provided some much-needed relief from the almost unremittingly negative prospects for global demand in the duration of the current season, and perhaps beyond. The trade continues to anticipate volume purchases on behalf of the State Reserve, any indication of which will be followed keenly from all sides.

Food Supply Chain Issues

In less than two months, COVID-19 has completely disrupted the food supply chain. As stay-at-home orders began rolling out, panic set in. Grocery aisles were emptied, restaurants closed, and the farm-to-fork food chain saw links start to snap. Some impacts were instantaneous, while others were slower to emerge. Farmers are quickly adapting to these challenges so their products can safely and efficiently

travel from farm to consumers. Here are just a few of the ways COVID-19 is recasting the supply chain. (Farm Futures)

1. The blueprint of food demand changed on a dime. Once schools and restaurants closed their doors and consumers rushed to stock up, pressure points emerged across the food chain. Restaurants require different types and quantities of agriculture products. With restaurants closed or at least needing significantly less amounts of products, processors had to scramble to change packaging and transportation. The National Restaurants Association estimated that restaurants lost 5.5. million jobs in April. Job loss in the restaurant sector is three times the loss sustained by other industry sectors in the U.S.

2. Most food banks aren't equipped to take mass volumes of straight-from-the-farm products. Farmers and producers would be quick to donate their products instead of dumping or disking them up. Yet, it's not that simple. After shutdowns occurred, many restaurants emptied their coolers and donated what food they had to food banks. These food banks were full but now they could use product, but getting them straight from farms takes logistics, time and money. The USDA approved $1.2 billion in contracts for the *Farmers to Families Food Box Program*, designed to connect excess dairy, meat, and produce production on-farm with families facing food insecurity. Distribution will occur from May 15th through June 30th.

3. The livestock pipeline's long tail creates ongoing bottlenecks. Many pork and beef processing plants are running at below-normal levels as they deal with the ongoing ramifications of COVID-19. As a result, bottlenecks emerged. Industry analysts estimate over 500,000 head of cattle are backlogged in feed yards now, and the number will continue to grow until harvest plants are back to running at 100%. The same is true for hogs.

4. COVID-19 will likely change the meat processing industry. As processing plants continue to close or adjust to allow for employee safety and social distancing. Some expect additional long-term changes.

5. Consumers could make long-term changes to their eating habits. The USDA has pledged to purchase and distribute $100 million a month of fresh fruits and vegetables through the *Buy Fresh* Coronavirus Farm Assistance Program. These will be distributed to a lot of families who likely didn't eat a lot of fresh fruits and vegetables. Some think long-term this could be an advantage.

PLC Farm Program Payment Projections - 2019 CY

The table below projects the national marketing year average prices for purposes of the Price Loss Coverage (PLC) program. A PLC program payment is triggered when the national Marketing Year Average (MYA) price for a commodity falls below that commodity's effective reference price. The payment rate is then multiplied by the farm's program yield and made on 85% of base acres.

Covered Commodity	*2019/20 MYA Price**	*Effective Reference Price*	*2019 CY PLC Payment Rate*
Corn	$3.60	$3.70	$0.10
Grain Sorghum	$3.25	$3.95	$0.70
Long Grain Rice	$12.00	$14.00	$2.00
Medium Grain Rice	$11.80	$14.00	$2.20
Seed Cotton	$0.3032	$0.3670	$0.0638
Soybeans	$8.50	$8.40	--
Wheat	$4.60	$5.50	$0.90

*national marketing year average (MYA) prices reflect the midpoint price level from the May 12, 2020 WASDE report.

ARC-CO Farm Program Price Parameters - 2019 CY

The table below presents the five-year Olympic average national marketing year average prices for purposes of the Agriculture Risk Coverage (ARC-CO) program in addition to the projected national MYA price used for in the calculation of actual county (parish) revenue. An ARC-CO program payment is triggered when the actual parish revenue for a particular commodity falls below that commodity's historical revenue guarantee. ARC-CO farm program payments are capped at 10% of the benchmark revenue. The payment rate is then made on 85% of base acres. No individual farm level production data is used for the purposes of ARC-CO program payment calculation.

Covered Commodity	*2019/20 MYA Price**	*2019 ARC-CO Benchmark Price (5-yr Olympic Average)*
Corn	$3.60	$3.70
Grain Sorghum	$3.25	$3.98
Long Grain Rice	$12.20	$14.00
Medium Grain Rice	$11.90	$14.00
Seed Cotton	$0.2963	$0.3670
Soybeans	$8.65	$9.63
Wheat	$4.60	$5.66

*national marketing year average (MYA) prices reflect the midpoint price level from the May 12, 2020 WASDE report.

Sources: USDA Agriculture Market Service (AMS), USDA Foreign Agriculture Service (FAS), USDA Farm Service Agency (FSA), USDA National Agriculture Statistics Service (NASS), USDA Economic Research Service (ERS), USDA FAS GAIN Report, USDA Office of Communications, USDA World Supply Demand Estimates (WASDE), AgDay, Ag Fax Media, Ag Market Network, Agri-Pulse, Ag Web, Agricultural Market Information System (AMIS), Allendale, American Farm Bureau Federation, Bloomberg News, CME Group, Cotton Grower, Cotton Incorporated, Cotton Outlook, Creed Rice Report, Delta Farm Press, DTN Progressive Farmer, Farm Futures, International Grains Council, Iowa State University, LSU AgCenter, National Cotton Council, Pro Farmer, Reuters, Rice Market Letter, Southeast Farm Press, Successful Farming, University of Illinois, U.S. Grains Council, USA Rice Federation, U.S. Soybean Export Council, and the Wall Street Journal.

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