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Is the US Agricultural Sector Recovering from COVID-19?

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As we outlined in the previous edition of Agricultural Policy Review, agriculture felt the sting of COVID-19—the pandemic lowered prices, forced significant shifts in supply chains, and disrupted markets. However, as the summer progressed, there was some recovery in prices, supply chains realigned with consumer demand, and the markets rebalanced to the new conditions under COVID-19.

To explore the extent of recovery in the US agricultural sector, we updated our previous comparison of USDA's meat, corn, and soybean projections. Our previous comparison ran from January 2020 (before the first confirmed case of COVID-19 in the United States) to USDA's June outlook. This update incorporates the changes from the most recent outlook, released in mid-October 2020, and reflects not only the impact of COVID-19, but also the progress on the US/China phase one trade deal and the natural disasters that struck the Midwest (drought and derecho).

In June, the livestock sectors took a step backward in terms of production. The January projections were for record or near-record production across the meat counter. Animal numbers increased on strong demand both domestically and internationally; however, between the closing of restaurants and schools and the COVID-19 outbreaks at processing facilities, the meat supply chain faced major challenges. The June revisions showed 2%–3% declines in meat production across the board. During the summer, however, processing plants made up some lost ground. The October update still shows declines in comparison to the January estimates, but for three of the four meats, the reductions are smaller than first thought. Beef production recovered over half of their projected declines, pork gained back 45% of projected decline, and broilers recaptured about 40%. Only the turkey industry has seen a continuation of the production shortfall, losing another half percentage point of projected production.

Price projection changes are mixed as well. The initial hit in prices from COVID-19 sent futures prices for cattle and hogs falling by 30%–40% in the depths of the outbreak. In June, USDA showed less recovery for hogs and broilers than for cattle and turkeys, with both hogs and broilers seeing prices 20% below the January estimates. The October update hasn't changed the outlook that much, but there has been slight improvement across the board. Thus, for most of the livestock sector, the 2020 outlook continues to look like a double hit financially, with both production and price losses.

Due to the timing, the COVID-19 pandemic is impacting two crop years—the crop that was harvested last year and marketed throughout the spring and summer and the crop that is now being harvested and will be marketed this fall through the summer of 2021. For the 2019 corn crop, the main COVID-19 impact was the substantial decline in corn usage for ethanol. As the stay-at-home orders rippled through the country, gasoline and ethanol consumption dropped. By June, USDA had lowered its corn usage for ethanol estimate by 475 million bushels. At that time, feed and residual usage of corn were expected to offset some of that loss. The October outlook revealed the ethanol pullback was deeper than first thought, but the feed and residual usage boost was larger than expected. Despite the ethanol usage losses, the season-average price estimate held fairly firm from June to October, coming in at \$3.56/bushel, 7.5% below the January forecast.

For the 2020 corn crop, COVID-19 was just one of the many factors shaping the crop outlook. Compared to January, the basis for the June production estimate was early planting and good crop conditions, raising expectations for record production. USDA projected feed and residual usage and export demand to increase, but cut corn usage for ethanol by 250 million bushels, showing a more drawn-out recovery path for the fuel sector. With those market shifts, USDA lowered its season-average price by \$.20/bushel, to \$3.20. Since then, the drought and derecho have lowered expected corn production by one billion bushels, which implies smaller residual use (think harvest and storage losses), and the ethanol outlook has continued to slightly erode. The only corn usage category that has increased is exports, as China's purchases have accelerated as harvest approaches. The combination of smaller supplies and increased exports have pushed prices higher, as USDA reversed direction and raised the season-average price estimate to \$3.60/bushel, \$.20 higher than the estimate in January and \$.40 higher than June.

In June, the 2019 soybean crop was experiencing increased domestic demand, mainly for livestock feed, but declining international demand. The markets had been anticipating larger sales to China than were appearing on USDA reports, so price expectations had fallen, and USDA lowered its season-average price estimate by \$.50/bushel. The October update included an additional boost in domestic demand and captured a bit of the late surge in soybean exports. However, the 2019/20 season-average price remained well below the January estimate.

The 2020 soybean market has seen the largest recovery from COVID-19. Compared to the June forecast of lower production and lower prices, the October update revealed not only higher production and prices, but also higher production and prices than the original forecast in January (pre-COVID-19). Despite the derecho and drought, USDA projects soybean production to exceed 4.25 billion bushels, over 50 million bushels more than the January estimate. Domestic crush estimates moved from 2.135 billion in January to 2.145 billion in June and 2.18 billion in October. Similarly, soybean export projections have jumped from 1.895 billion bushels in January to 2.200 billion bushels in October. Over the past couple of months, China has made a series of sizable purchases in the soybean market, providing the data behind this shift. The continuing build-up of soybean usage has been enough to offset the increasing supplies. While USDA's June season-average price estimate was \$.65 lower than the January estimate of \$8.85/bushel, the October estimate has roared past the January number and signaled that 2020 will actually be a better year than 2019 was. The new crop soybean market has recovered from the earlier COVID-19 losses and is now exceeding pre-pandemic highs for both production and prices.

The data show that while the initial impacts from COVID-19 struck nearly all US agricultural markets at the same time, the recoveries from that shock vary heavily and are still ongoing. For most of the meats and corn, the recovery thus far is partial—meats have seen better production, but lower prices, and corn has experienced lower production, but better prices, mostly due to factors other than COVID-19. Soybeans are the only commodity where we could argue the recovery is complete, as production and prices exceed pre-COVID-19 forecasts. However, 2020 is still a very challenging year in agriculture, but, at least, it's not quite as challenging as first envisioned.

Table 1. USDA 2020 Meat Production Estimates

	January	June	October	January–June	January–October
	<i>(Billion pounds)</i>			<i>(%Change)</i>	
Beef	27.44	26.67	27.14	-2.8%	-1.1%
Pork	28.65	27.77	28.16	-3.1%	-1.7%
Broiler	45.40	44.04	44.60	-3.0%	-1.8%
Turkey	5.91	5.77	5.74	-2.4%	-2.9%

Source: USDA-WAQB.

Table 2. USDA 2020 Livestock Price Estimates

	January	June	October	January–June	January–October
	<i>(\$/cwt or €/lb)</i>			<i>(%Change)</i>	
Cattle	117.25	108.58	108.71	-7.4%	-7.3%
Hogs	54.50	42.38	43.25	-22.2%	-20.6%
Broiler	86.30	69.90	70.80	-19.0%	-18.0%
Turkey	92.30	104.90	106.10	13.7%	15.0%

Source: USDA-WAQB.

Table 3. USDA 2019/20 Corn Estimates

	January	June	October	January–June	January–October
	<i>(Billion bushels)</i>			<i>(%Change)</i>	
Production	13.692	13.617	13.620	-0.5%	-0.5%
Feed and residual	5.525	5.700	5.827	3.2%	5.5%
Ethanol	5.375	4.900	4.852	-8.8%	-9.7%
Exports	1.775	1.775	1.778	0.0%	0.2%
	<i>(\$/bushel)</i>				
Price	3.85	3.60	3.56	-6.5%	-7.5%

Source: USDA-WAQB.

Table 4. USDA 2020/21 Corn Estimates

	January	June	October	January–June	January–October
	<i>(Billion bushels)</i>			<i>(%Change)</i>	
Production	15.545	15.995	14.722	2.9%	-5.3%
Feed and residual	5.775	6.050	5.775	4.8%	0.0%
Ethanol	5.450	5.200	5.050	-4.6%	-7.3%
Exports	2.100	2.150	2.325	2.4%	10.7%
	<i>(\$/bushel)</i>				
Price	3.40	3.20	3.60	-5.9%	5.9%

Source: USDA-WAQB.

Table 5. USDA 2019/20 Soybean Estimates

	January	June	October	January–June	January–October
	<i>(Billion bushels)</i>			<i>(%Change)</i>	
Production	3.558	3.552	3.552	-0.2%	-0.2%
Crush	2.105	2.140	2.165	1.7%	2.9%
Exports	1.775	1.650	1.676	-7.0%	-5.6%
	<i>(\$/bushel)</i>				
Price	9.00	8.50	8.57	-5.6%	-4.8%

Source: USDA-WAQB.

Table 6. USDA 2020/21 Soybean Estimates

	January	June	October	January–June	January–October
	<i>(Billion bushels)</i>			<i>(%Change)</i>	
Production	4.200	4.125	4.268	-1.8%	1.6%
Crush	2.135	2.145	2.180	0.5%	2.1%
Exports	1.895	2.050	2.200	8.2%	16.1%
	<i>(\$/bushel)</i>				
Price	8.85	8.20	9.80	-7.3%	10.7%

Source: USDA-WAQB.

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