

Commodity Market Outlook

Jim Hilker

Professor and MSU Extension Economist

Department of Agricultural, Food, and Resource Economics

Michigan State University

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Relative too much of the past ten years corn, wheat, and soybean prices have shown little volatility over the past few months, especially since harvest began. This relative price stability would be expected when you enter the marketing year with large beginning stocks and expect to end the marketing year with large ending stocks in all three of these major commodities. And this is even more likely when the rest of world is in the same situation, as it pretty much is.

The next question is this likely to last? One way of looking at that question, especially with storable commodities, is to look at the next marketing year out, which would be 2018-2019. And this is what I do in this issue. The USDA just released their preliminary 10 year price forecast for a number of major commodities, and while I am only forecasting a likely 2018-19, versus 10 years, the USDA 2018-19 forecasts for corn, wheat, and soybeans, while somewhat different than mine, tells the same story. Basically, without a significant production shortfall, or an unlikely new demand surge, such as the new ethanol demand ten years ago, stability to gradually getting back up to the costs of the most efficient producers is the most likely scenario.

As I look at relative returns per acres in 2018-19 for the country as a whole, soybeans appear to have a slight advantage, second would be corn, and third would be wheat. I am basing this on today prices, for both now and for new crop, and costs remaining fairly steady. This is not to say other crops do not play a role, they do, and will affect planted acreage of the big three. But I don't see the total acreage planted of the big three changing much, given returns to other crops.

CORN

Given the above statement on relative prices I expect planted corn acres to remaining about the same to fractionally down. I you can see in Table 1, I lower 2018 planted corn acres a smidgen. We have already made a substantial move to soybeans and away from wheat.

I have used a trend corn yield using 1989-2017, long enough to take out odd years, and short enough to account for the new technology. While the 171.3 bu/ac I use is lower than the last two record years it would be the third highest on record. This would give us the fourth highest production on record. But even with bigger beginning stocks total supply would be down 1%, but still massive, and the third highest on record.

And then we come to demand, how much of the massive supply do we expect to use at the expected price as shown in Table 1. I expect livestock numbers to increase marginally, and have increased projected corn for feed use a bit less marginally as I expect a slight increase in prices. Ethanol continues to be profitable on the margin, so I expect corn for ethanol use will grow in 2018-19 about what it grew in 2017-18. Other industrial uses are expected to grow at their recent rate. The projected 12,590 million bushels would be record domestic use.

Given trend yields and expected economic growth in the rest of the world, I expect exports to be about the same as last year. With a slight upwards bias. This would make total use 14,525, just under the record use in 2016-17, which was due to higher exports with the short Brazilian corn crop in that period.

This would put expected ending stocks at 2187, down a bit from the last two years, but still a relatively large 15%. This would put my 2018-2019 annual average weighted price at \$2.45.

TABLE 1																		
SUPPLY/DEMAND BALANCE SHEET FOR CORN																		
	2002-	2003-	2004-	2005-	2006-	2007-	2008-	2009-	2010-	2011-	2012-	2013-	2014-	2015-	Est.	Proj.	Hilker	
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2016-	2017-	2018-	
(million acres)																		
Acres Planted	78.9	78.6	80.9	81.8	78.3	93.5	86.0	86.4	88.2	91.9	97.3	95.4	90.6	88.0	94.0	90.4	90.3	
Acres Harvested	69.3	70.9	73.6	75.1	70.6	86.5	78.6	79.5	81.4	84.0	87.4	87.5	83.1	80.7	86.7	83.1	82.7	
Yield/Bushels	129.3	142.2	160.4	148	149.1	150.7	153.9	164.7	152.8	147.2	123.1	158.1	171.0	168.4	174.6	175.4	171.3	
(million bushels)																		
Beginning Stocks	1596	1087	958	2114	1967	1304	1624	1673	1708	1128	989	821	1232	1731	1737	2295	2487	
Production	8967	10089	11807	11114	10531	13038	12092	13092	12447	12360	10755	13829	14216	13602	15148	14578	14161	
Imports	14	14	11	9	12	20	14	8	28	29	160	36	32	68	57	50	50	
Total Supply	10578	11190	12776	13237	12510	14362	13729	14774	14182	13517	11904	14686	15479	15401	16942	16922	16698	
Use:																		
Feed & Residual	5563	5798	6158	6155	5591	5913	5182	5125	4795	4557	4315	5040	5280	5114	5463	5575	5600	
Food, Seed & Ind	2340	2537	2686	2981	3490	4387	5025	5961	6426	6428	6038	6493	6601	6648	6891	6935	6990	
Ethanol for fuel	996	1168	1323	1603	2119	3049	3709	4591	5019	5000	4641	5124	5200	5224	5439	5475	5510	
Total Domestic	7903	8335	8844	9136	9081	10300	10207	11086	11221	10985	10353	11534	11881	11763	12354	12510	12590	
Exports	1588	1897	1818	2134	2125	2437	1849	1980	1834	1543	730	1920	1867	1901	2293	1925	1935	
Total Use	9491	10232	10662	11270	11206	12737	12056	13066	13055	12528	11083	13454	13748	13664	14647	14435	14525	
Ending Stocks	1087	958	2114	1967	1304	1624	1673	1708	1128	989	821	1232	1731	1737	2295	2487	2173	
Ending Stocks,																		
%of Use	11.5	9.4	19.8	17.5	11.6	12.8	13.9	13.1	8.6	7.9	7.4	9.2	12.6	12.7	15.7	17.2	15.0	
U.S. Loan Rate	\$1.98	\$1.98	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	\$1.95	
U.S. Season Ave																		
Farm Price, \$/Bu.	\$2.32	\$2.42	\$2.06	\$2.00	\$3.04	\$4.20	\$4.06	\$3.55	\$5.18	\$6.22	\$6.89	\$4.46	\$3.70	\$3.61	\$3.36	\$3.20	\$3.45	

Source: USDA/WASDE and Jim Hilker. (12 - 4 - 17)

WHEAT

While returns to wheat generally lag behind corn and soybeans, due to rotations, spreading of workloads, and some areas, such as low moisture regions, are much more conducive to wheat than corn and soybeans. So I think the cuts in wheat acres will slow and then stop over the next few years. I am suggesting the planted wheat acreage for 2018 harvest will be 45.5 million acres, down a half million from 2017. And using a trend yield of 46.9 bu/ac, production would be 1,819 million bushels, up 78 million bushels from 2017 with a half bushel better expected yield. But when you add on the smaller beginning stocks, total supply would be down 4%. See Table 2.

I project total use to be down 2% with exports struggling to get to the projected 2017-18 levels which are expected to be down a little from the 2016-17 levels. Food use has been stagnant and is expected to stay that way. With feed use projected to be about the same to being up a little as shown in Table 2.

This would leave ending stocks at 810 million bushels, with stocks to use being 38.7%, the lowest since 2014-15. This compares with 43.8% in 2017-18. The expected annual average weighted price with this scenario would be \$4.75, up 15 cents per bushels.

	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	Est. 2016- 2017	Proj. 2017- 2018	Hilker 2018- 2019
(Million Acres)																
Acres Planted	62.1	59.7	57.2	57.3	60.5	63.2	59.2	53.6	54.4	55.3	56.2	56.8	55.0	50.1	46.0	45.5
Acres Harvested	53.1	50.0	50.1	46.8	51.0	55.7	49.9	47.6	45.7	48.8	45.3	46.4	47.3	43.9	37.6	38.7
Bu./Harvested Acre	44.2	43.2	42.0	38.6	40.2	44.9	44.5	46.3	43.7	46.2	47.1	43.7	43.6	52.7	46.3	46.9
(Million Bushels)																
Beginning Stocks	491	546	540	571	456	306	657	976	862	743	718	590	752	976	1181	935
Production	2345	2158	2105	1808	2051	2499	2218	2207	1999	2252	2135	2026	2062	2309	1741	1819
Imports	68	71	82	122	113	127	119	97	112	123	173	151	113	118	150	135
Total Supply	2904	2775	2727	2501	2620	2932	2993	3279	2974	3118	3026	2768	2927	3402	3071	2889
Use:																
Food	907	910	915	938	948	927	919	926	941	951	955	958	957	949	950	950
Seed	80	78	78	82	88	78	69	71	76	73	77	79	67	61	66	64
Feed and Residual	212	182	160	117	16	255	150	132	162	364	228	114	149	157	120	130
Total Domestic	1194	1169	1152	1137	1051	1260	1138	1128	1180	1388	1260	1151	1174	1167	1136	1144
Exports	1159	1066	1003	908	1263	1015	879	1289	1051	1012	1176	864	778	1055	1000	950
Total Use	2353	2235	2155	2045	2314	2275	2018	2417	2231	2400	2436	2015	1951	2222	2136	2094
Ending Stocks	546	540	571	456	306	657	976	862	743	718	590	752	976	1181	935	810
Ending Stocks, %of Use	23.2	24.2	26.5	22.3	13.2	28.9	48.3	35.7	33.3	29.9	24.2	37.3	50.1	53.2	43.8	38.7
U.S. Loan Rate	\$2.80	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75
U.S. Season Ave U.S. \$/Bu.	\$3.40	\$3.40	\$3.42	\$4.26	\$6.48	\$6.78	\$4.87	\$5.70	\$7.24	\$7.77	\$6.87	\$5.99	\$4.89	\$3.89	\$4.60	\$4.75

Source: USDAWASDE and Jim Hilker (12 - 4 - 2017)

SOYBEANS

While I expect producers will plant soybeans with the expectation they will have the highest relative returns, is not to say returns to soybeans are expected to be good. I project planted soybean acres for 2018-2019 will be 91 million acres, up 800,000 acres from what was planted for the 2017 crop. I use a trend yield of 48.4 for soybeans planted for the 2018 crop. This would give us the second largest crop on record, just below the record 2017 crop. Almost as big a crop, and much larger beginning stocks, would make total supply for 2018-19 a new record, up a little over 1%.

Soybean use is expected to be up close to 2%. Crushings are expected to be up 15 million bushels as livestock protein needs are expected to grow with more livestock and dairy on feed. And oil demand will hang in there with income grow, population growth, and biodiesel returns.

Exports are expected to grow 3% as China expects their soybean imports to grow close to 4% a year. And China takes about 63% of the U.S soybean exports, as they do they rest of the worlds. The total would but total use at a record 4,401 million bushels. The greater increase in use than total supply means ending stocks would drop.

Ending stocks to use are expected to be 9.2%, down from the projected 2017-18 level of 9.8%, but up from the 2016-17 7.1% of use. This would put the expected annual average weighted price at \$9.35, up 5 cents per bushel relative to the projected 2017-18 price. This would indicate fairly stable prices and relative low returns is the likely scenario.

TABLE 3																		
SUPPLY/DEMAND BALANCE SHEET FOR SOYBEANS																		
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Est. 2016-2017	Proj. 2017-2018	Hilker 2018-2019	
(Million Acres)																		
Acres Planted	74	73.4	75.2	72	75.5	64.7	75.7	77.5	77.4	75.0	77.2	76.8	83.3	82.7	83.4	90.2	91.0	
Acres Harvested	72.5	72.3	74.0	71.3	74.6	64.1	74.7	76.4	76.6	73.8	76.1	76.3	82.6	81.7	82.7	89.5	90.0	
Yield/Bushels	38.0	33.9	42.2	43.0	42.9	41.7	39.7	44.0	43.5	41.9	40.0	44.0	47.5	48.0	52.0	49.5	48.4	
(Million Bushels)																		
Beginning Stocks	208	178	112	256	449	574	205	138	151	215	169	141	92	191	197	301	425	
Production	2756	2454	3124	3063	3197	2677	2967	3359	3329	3094	3042	3358	3927	3926	4296	4425	4354	
Imports	5	6	6	3	9	10	13	15	14	16	41	72	33	24	25	25	25	
Total Supply	2969	2638	3242	3322	3656	3261	3185	3512	3495	3325	3252	3570	4052	4141	4515	4752	4804	
Use:																		
Crushings	1615	1530	1696	1739	1808	1803	1662	1752	1648	1703	1689	1734	1873	1886	1899	1940	1955	
Exports	1045	885	1097	940	1116	1159	1279	1499	1501	1365	1317	1638	1842	1942	2174	2250	2315	
Seed	89	92	88	93	80	93	90	90	87	90	89	97	96	97	105	101	101	
Residual	41	19	105	101	77	0	16	20	43	-2	16	10	50	18	36	35	30	
Total Use	2791	2526	2986	2873	3081	3056	3047	3361	3280	3155	3111	3478	3862	3944	4214	4326	4401	
Ending Stocks	178	112	256	449	574	205	138	151	215	169	141	92	191	197	301	425	403	
Ending Stocks, %of Use	6.4	4.4	8.6	15.6	18.6	6.7	4.5	4.5	6.5	5.4	4.5	2.6	4.9	5.0	7.1	9.8	9.2	
U.S. Loan Rate	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	
U.S. Season Ave Farm Price, \$/Bu.	\$5.53	\$7.34	\$5.74	\$5.66	\$6.43	\$10.10	\$9.97	\$9.59	\$11.30	\$12.50	\$14.40	\$13.00	\$10.10	\$8.95	\$9.47	\$9.30	\$9.35	

Source: USDA/WASDE and Jim Hilker. (12 - 4 - 17)