

Baseline Update for U.S. Agricultural Markets

August 28, 2019

FAPRI-MU Report #03-19

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Published by the Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri (MU), 200 Mumford Hall, Columbia, MO 65211. FAPRI–MU is part of the Division of Applied Social Sciences (DASS) in the College of Agriculture, Food and Natural Resources (CAFNR).

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This material is based upon work supported by the U.S. Department of Agriculture, under Agreement No. 58-0111-18-024 and the USDA National Institute of Food and Agriculture, Hatch project number MO-HASS0024.

Any opinion, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the U.S. Department of Agriculture nor the University of Missouri.

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Summary

Excessive spring rains, trade disputes and African swine fever (ASF) have disrupted agricultural markets. In spite of reduced 2019 U.S. corn and soybean production prospects, prices for many commodities are under downward pressure because of the many factors that have weakened demand. This report provides an update of the 2019 FAPRI-MU baseline released in April.

This update was prepared the week of August 19, 2019. Policies in place at that time, including China's 25% retaliatory tariff on U.S. soybeans and other farm products, are assumed to remain in place. The update uses 2019 acreage, yield and production estimates included in USDA's August 2019 *Crop Production* report. The economy is assumed to evolve as forecast by IHS Markit in July 2019, with slower economic growth in 2019 and 2020, but no recession.

Given all of the assumptions of the analysis, here are a few highlights of the results:

- ASF has sharply reduced hog inventories in China, which implies less demand in China for soybean meal and corn as livestock feed. The result is an increase in China's imports of pork, but a reduction in China's imports of soybeans to make soybean meal. The estimates of ASF impacts are based on information available in mid-August, recognizing that there remains great uncertainty about the likely market impacts.
- Also weighing on U.S. soybean exports are China's tariffs. In spite of a 19% year-over-year reduction in U.S. soybean production, the \$8.43 per bushel U.S. soybean price projected for the 2019/20 marketing year is slightly below the estimated 2018/19 price.
- As with soybeans, projected U.S. corn prices do not increase in 2019/20, even though estimated production is down by half a billion bushels from the previous year. Weak export sales and stagnant ethanol use are contributing factors.
- The baseline assumes a continuation of the current practice of granting small refinery exemptions to renewable fuel standard (RFS) requirements without reallocation. This contributes to lower values for the renewable identification numbers (RINs) used to monitor RFS compliance and slows expansion of the use of 15% ethanol blends (E15), despite the ability to sell E15 year-round.
- Assuming a return to more normal weather conditions in 2020, projected corn and soybean production rebounds. As a result, projected 2020/21 marketing year average prices for corn fall to \$3.39 per bushel and soybean prices to \$7.94 per bushel.
- Wheat prices average about \$5.00 per bushel over the next five years, given large global supplies and demand-side competition with corn. Cotton prices fall in 2019/20 in response to a 24% increase in U.S. production.
- U.S. beef production increases in 2019 and 2020, putting downward pressure on cattle prices, before the cycle turns in later years.
- Even though tariffs are likely to limit direct sales of U.S. pork to China, projected U.S. hog prices increase in 2019 and 2020 in response to strengthening export demand. When other exporters supply China's pork market, it provides opportunities to increase U.S. exports to other markets.
- Broiler prices have declined in 2019 in response to large U.S. meat supplies. The total amount of beef, pork and poultry meat supplied to the domestic market is projected to increase in per-capita terms through 2021.
- Milk prices have recovered in 2019 as production growth slows. Projected milk prices exceed \$18 per hundred-weight for the next several years, but remain sensitive to international market developments and changes in consumer preferences for fluid milk and butterfat.
- Consumer food price inflation has been very low in recent years, but increases to 2.2% in 2019. Projected increases in the consumer price index (CPI) for food are similar to those for the overall CPI.

Markets will continue to evolve as we get more information about the size of the 2019 crop, the state of trade disputes and the health of the general economy. For more detail on the livestock, poultry and dairy sectors and on consumer food prices, see a companion report by the MU Agricultural Markets and Policy team, at <http://amap.missouri.edu/>.

Macroeconomic assumptions*

Calendar year	2017	2018	2019	2020	2021	2022	2023	2024
Real GDP growth								
				(Percent)				
United States	2.2	2.9	2.6	1.8	1.7	1.6	1.6	1.9
China	6.7	6.6	6.2	5.9	5.8	5.7	5.7	5.7
European Union (exc. UK)	2.7	2.1	1.3	1.2	1.4	1.5	1.5	1.5
World	3.3	3.2	2.8	2.7	2.7	2.8	2.9	3.0
U.S. CPI inflation	2.1	2.4	1.9	2.2	2.2	2.2	2.2	2.2
U.S. interest rates								
Federal funds rate	1.0	1.8	2.3	2.2	2.4	2.4	2.6	2.6
Prime rate	4.1	4.9	5.4	5.3	5.5	5.5	5.7	5.7
Exchange rates				(Currency per dollar)				
Chinese yuan	6.76	6.62	6.84	6.93	6.98	6.97	6.91	6.82
Euro	0.89	0.85	0.89	0.89	0.89	0.87	0.83	0.82

*Source: IHS Markit forecast, July 2019

Policy assumptions

Year	2017	2018	2019	2020	2021	2022	2023	2024
Reference prices				(Dollars per bushel)				
Corn	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Soybeans	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40
Conservation reserve area				(Million acres)				
	23.4	22.6	22.3	22.8	23.0	23.2	23.5	23.5
Retaliatory tariffs by China				(Percent, calendar year average)				
Soybeans, other products	0.0	12.5	25.0	25.0	25.0	25.0	25.0	25.0
Market facilitation program								
Payments available?	n.a.	Yes	Yes	No	No	No	No	No
Renewable fuel standard				(Billion gallons, ethanol equivalent)				
Overall, as applied	18.8	18.3	18.9	19.3	19.6	20.2	20.3	20.3
Advanced biofuels	4.2	4.1	4.7	4.9	5.1	5.7	5.7	5.8
Biomass-based diesel	3.0	3.0	3.0	3.6	3.7	3.7	3.8	3.8
Conventional biofuel "gap"	14.6	14.2	14.2	14.4	14.5	14.5	14.5	14.5
Small refinery exemptions				(Billion RINs)				
Exempted volume obligation	1.8	1.4	1.2	0.6	0.5	0.5	0.5	0.5

U.S. soybean supply and use

September-August year	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Area				(Million acres)				
Planted area	90.2	89.2	76.7	84.4	83.1	83.2	83.5	83.6
Harvested area	89.5	88.1	75.9	83.5	82.3	82.4	82.7	82.8
Yield				(Bushels per harvested acre)				
	49.3	51.6	48.5	49.7	50.2	50.7	51.1	51.6
Supply				(Million bushels)				
Beginning stocks	4,735	4,999	4,770	4,931	4,882	4,837	4,826	4,860
Production	302	438	1,070	757	732	643	576	564
Imports	4,412	4,544	3,680	4,154	4,130	4,174	4,229	4,276
	22	17	20	20	20	20	20	20
Domestic use	2,163	2,229	2,235	2,295	2,306	2,309	2,317	2,334
Crush	2,055	2,065	2,106	2,156	2,167	2,170	2,176	2,192
Seed and residual	108	164	129	139	139	140	141	142
Exports	2,134	1,700	1,778	1,904	1,933	1,951	1,945	1,954
Total use	4,297	3,929	4,014	4,200	4,239	4,261	4,262	4,288
Ending stocks	438	1,070	757	732	643	576	564	572
Under loan	15	50	55	74	69	65	63	66
Other stocks	423	1,020	702	657	574	511	501	506
Prices, program provisions				(Dollars per bushel)				
Farm price	9.33	8.50	8.43	7.94	8.20	8.45	8.65	8.58
Illinois processor price	9.53	8.53	8.63	8.15	8.40	8.64	8.84	8.77
Loan rate	5.00	5.00	6.20	6.20	6.20	6.20	6.20	6.20
Reference price	8.40	8.40	8.40	8.40	8.40	8.40	8.40	8.40
Market returns				(Dollars)				
Gross market revenue/a.	459.68	438.35	409.08	394.65	411.53	427.86	442.19	442.98
Variable expenses/a.	161.34	162.36	160.16	158.88	160.68	163.13	166.70	170.52
Market net return/a.	298.34	275.99	248.92	235.77	250.85	264.74	275.49	272.46
Other indicators								
Soybean/corn price ratio	2.78	2.36	2.35	2.34	2.37	2.37	2.41	2.38
48% soymeal price, \$/ton	345.02	310.00	298.58	283.36	292.31	297.81	305.10	303.14
Soybean oil price, cents/lb.	30.04	28.00	30.61	30.08	30.31	31.27	31.56	31.63
Crushing margin, \$/bu.	2.21	1.99	1.99	2.05	2.04	2.04	2.05	2.08

U.S. corn supply and use

September-August year	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Area	(Million acres)							
Planted area	90.2	89.1	90.0	92.7	90.4	90.8	90.9	90.8
Harvested area	82.7	81.7	82.0	85.0	83.0	83.3	83.3	83.3
Yield	(Bushels per harvested acre)							
	176.6	176.4	169.5	176.3	178.2	179.8	181.7	183.7
Supply	(Million bushels)							
Beginning stocks	16,939	16,590	16,311	17,198	17,283	17,488	17,670	17,878
Production	2,293	2,140	2,360	2,178	2,459	2,466	2,492	2,536
Imports	14,609	14,420	13,901	14,979	14,784	14,982	15,138	15,302
	36	30	50	40	40	40	40	40
Domestic use	12,361	12,130	12,083	12,363	12,393	12,450	12,494	12,538
Feed and residual	5,304	5,275	5,189	5,406	5,355	5,345	5,363	5,375
Ethanol and coproducts	5,605	5,425	5,458	5,500	5,570	5,620	5,633	5,653
HFCS	459	445	438	442	440	445	446	445
Seed	30	31	32	32	32	32	32	33
Food and other	963	954	966	984	996	1,007	1,020	1,033
Exports	2,438	2,100	2,050	2,376	2,424	2,546	2,640	2,751
Total use	14,798	14,230	14,133	14,739	14,817	14,996	15,134	15,290
Ending stocks	2,140	2,360	2,178	2,459	2,466	2,492	2,536	2,588
Under loan	156	190	228	271	258	250	250	250
Other stocks	1,985	2,170	1,950	2,188	2,208	2,242	2,286	2,338
Prices, program provisions	(Dollars per bushel)							
Farm price	3.36	3.60	3.59	3.39	3.46	3.56	3.59	3.61
Loan rate	1.95	1.95	2.20	2.20	2.20	2.20	2.20	2.20
Reference price	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Market returns	(Dollars)							
Gross market revenue/a.	593.33	635.09	608.99	597.86	616.93	639.94	651.66	662.45
Variable expenses/a.	332.46	338.77	338.41	333.41	331.80	336.66	344.57	353.70
Market net return/a.	260.87	296.32	270.59	264.44	285.13	303.28	307.09	308.75

U.S. wheat supply and use

June-May year	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Area	(Million acres)							
Planted area	46.1	47.8	45.6	46.3	48.6	48.0	47.6	47.4
Harvested area	37.6	39.6	38.4	39.4	41.3	40.8	40.5	40.4
Yield	(Bushels per harvested acre)							
	46.4	47.6	51.6	47.6	48.2	48.5	48.9	49.3
Supply	(Million bushels)							
Beginning stocks	1,181	1,099	1,072	1,025	973	986	979	973
Production	1,741	1,884	1,980	1,874	1,991	1,982	1,981	1,990
Imports	158	135	133	143	142	143	144	145
Domestic use	1,075	1,110	1,183	1,168	1,170	1,171	1,171	1,172
Feed and residual	47	96	163	142	142	140	137	135
Seed	63	60	61	64	63	62	62	62
Food and other	964	955	959	962	966	969	972	975
Exports	906	936	978	901	950	962	960	957
Total use	1,981	2,046	2,161	2,069	2,120	2,133	2,131	2,129
Ending stocks	1,099	1,072	1,025	973	986	979	973	978
Under loan	15	36	39	39	41	39	37	37
Other stocks	1,084	1,036	985	934	945	940	936	942
Prices, program provisions	(Dollars per bushel)							
Farm price	4.72	5.16	5.00	4.92	4.91	5.02	5.11	5.15
Loan rate	2.94	2.94	3.38	3.38	3.38	3.38	3.38	3.38
Reference price	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Market returns	(Dollars)							
Gross market revenue/a.	218.80	245.52	257.66	234.52	236.78	243.82	249.72	253.78
Variable expenses/a.	109.59	111.08	113.54	112.55	112.82	115.12	118.04	121.16
Market net return/a.	109.21	134.44	144.12	121.97	123.96	128.70	131.68	132.63

U.S. upland cotton supply and use

August-July year	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Area				(Million acres)				
Planted area	12.47	13.85	13.63	13.31	13.51	13.45	13.43	13.41
Harvested area	10.85	9.96	12.38	11.14	11.32	11.27	11.25	11.23
Yield				(Pounds per harvested acre)				
	895	847	843	872	884	893	902	911
Supply				(Million bales)				
Beginning stocks	22.91	21.77	26.77	27.18	27.33	27.43	27.54	27.65
Production	2.69	4.20	5.04	6.94	6.47	6.45	6.38	6.32
Imports	20.22	17.57	21.73	20.24	20.85	20.97	21.16	21.32
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Domestic use								
Mill use	3.20	2.98	3.04	3.08	3.11	3.13	3.14	3.14
Exports	15.21	13.55	16.79	17.63	17.76	17.92	18.08	18.25
Total use	18.41	16.52	19.83	20.71	20.87	21.05	21.21	21.40
Unaccounted	0.30	0.20	0.00	0.00	0.00	0.00	0.00	0.00
Ending stocks	4.20	5.04	6.94	6.47	6.45	6.38	6.32	6.25
Prices, program provisions				(Cents per pound)				
Farm price	68.6	70.0	59.4	59.7	60.0	61.0	61.7	62.4
Loan rate	49.5	52.0	52.0	52.0	52.0	52.0	52.0	52.0
Seed cotton reference	n.a.	36.7	36.7	36.7	36.7	36.7	36.7	36.7
Seed cotton farm price	33.6	34.3	29.4	29.5	29.7	30.2	30.6	30.9
Market returns				(Dollars)				
Gross market revenue/a.	697.78	678.73	585.22	608.42	619.94	636.60	650.90	662.58
Variable expenses/a.	437.33	415.19	416.53	409.91	416.28	426.13	437.56	450.60
Market net return/a.	260.45	263.54	168.69	198.51	203.66	210.47	213.35	211.98

U.S. rice supply and use

August-July year	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Area	(Million acres)							
Planted area	2.46	2.95	2.76	2.80	2.82	2.77	2.73	2.72
Harvested area	2.37	2.92	2.71	2.75	2.77	2.72	2.68	2.67
Yield	(Pounds per harvested acre)							
	7,507	7,692	7,576	7,861	7,933	8,009	8,080	8,152
Supply	(Million hundredweight)							
Beginning stocks	251.8	282.6	285.3	293.3	300.0	301.6	298.5	295.0
Production	46.0	29.4	50.6	46.9	49.9	53.2	51.8	46.9
Imports	178.2	224.2	205.4	216.0	219.7	217.7	216.2	217.5
	27.5	29.0	29.3	30.3	30.3	30.7	30.5	30.6
Domestic use	135.4	139.0	137.1	137.3	137.4	138.0	139.1	140.6
Exports	87.1	93.0	101.2	106.0	109.4	111.9	112.5	111.2
Total use	222.4	232.0	238.3	243.4	246.8	249.8	251.6	251.8
Ending stocks	29.4	50.6	46.9	49.9	53.2	51.8	46.9	43.2
Prices, program provisions	(Dollars per hundredweight)							
Farm price	12.90	12.10	12.20	12.28	12.16	12.17	12.13	12.23
Long grain	11.50	10.80	11.00	10.90	10.82	10.67	10.67	10.83
Japonica	20.10	18.00	18.00	17.82	17.72	17.73	17.82	17.90
Other medium, short grain	11.70	12.20	11.50	11.39	11.40	11.28	11.25	11.43
Loan rate	6.50	6.50	7.00	7.00	7.00	7.00	7.00	7.00
Reference price								
Long grain	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Japonica	16.10	16.10	17.30	17.30	17.30	17.30	17.30	17.30
Other medium, short grain	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Market returns	(Dollars)							
Gross market revenue/a.	968.47	930.69	924.31	965.66	964.53	974.52	979.79	997.43
Variable expenses/a.	553.57	561.05	563.13	560.65	567.53	580.32	594.37	608.49
Market net return/a.	414.90	369.64	361.18	405.00	397.00	394.20	385.42	388.95

Other U.S. feed grains supply and use

Marketing year	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Sorghum								
				(Million acres)				
Planted area	5.63	5.69	5.29	5.67	5.69	5.70	5.67	5.66
Harvested area	5.04	5.06	4.79	5.08	5.09	5.10	5.07	5.06
				(Bushels per harvested acre)				
Yield	71.7	72.1	73.9	70.0	70.3	70.5	70.8	71.2
				(Million bushels)				
Production	362	365	354	355	358	360	359	360
Imports	2	0	1	1	1	1	1	1
Domestic use	162	255	252	243	235	234	235	234
Exports	200	85	101	111	124	127	125	127
Ending stocks	35	60	61	64	63	63	64	64
				(Dollars per bushel)				
Farm price	3.22	3.20	3.22	3.08	3.20	3.28	3.27	3.29
Reference price	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95
Barley								
				(Million acres)				
Planted area	2.49	2.54	2.86	2.76	2.68	2.63	2.58	2.55
Harvested area	1.96	1.98	2.33	2.24	2.17	2.13	2.09	2.07
				(Bushels per harvested acre)				
Yield	73.0	77.4	73.9	75.7	77.1	77.8	78.6	79.3
				(Million bushels)				
Production	143	153	172	169	168	166	164	164
Imports	9	6	11	9	8	7	8	8
Domestic use	159	162	174	170	169	169	167	166
Exports	5	5	5	5	5	6	6	6
Ending stocks	94	87	92	95	96	95	94	94
				(Dollars per bushel)				
Farm price	4.47	4.63	4.62	4.42	4.41	4.44	4.46	4.48
Reference price	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95
Oats								
				(Million acres)				
Planted area	2.59	2.75	2.55	2.75	2.81	2.76	2.73	2.73
Harvested area	0.80	0.87	0.91	0.96	0.99	0.97	0.96	0.95
				(Bushels per harvested acre)				
Yield	61.7	64.9	66.4	65.5	66.0	66.4	66.7	67.0
				(Million bushels)				
Production	50	56	60	63	65	64	64	64
Imports	89	87	95	92	91	90	90	90
Domestic use	146	145	152	151	152	152	152	152
Exports	2	2	2	2	2	2	2	2
Ending stocks	41	37	39	41	43	43	43	43
				(Dollars per bushel)				
Farm price	2.59	2.68	2.88	2.73	2.73	2.74	2.76	2.79
Reference price	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40

Other U.S. oilseeds supply and use

Marketing year	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Peanuts								
				(Million acres)				
Planted area	1.87	1.43	1.36	1.43	1.48	1.47	1.47	1.47
Harvested area	1.78	1.37	1.32	1.37	1.42	1.41	1.41	1.41
				(Pounds per harvested acre)				
Yield	4,007	3,991	4,008	4,121	4,183	4,239	4,295	4,353
				(Million pounds)				
Production	7,115	5,462	5,303	5,666	5,933	5,996	6,059	6,147
Imports	171	115	115	115	115	115	115	115
Domestic use	4,739	4,609	4,547	4,637	4,737	4,799	4,858	4,924
Exports	1,273	1,225	1,250	1,233	1,252	1,276	1,295	1,311
Ending stocks	2,717	2,460	2,080	1,992	2,051	2,087	2,108	2,134
				(Cents per pound)				
Farm price	22.90	21.00	21.55	22.76	22.98	23.22	23.45	23.62
Reference price	26.75	26.75	26.75	26.75	26.75	26.75	26.75	26.75
Sunflowerseed								
				(Million acres)				
Planted area	1.40	1.30	1.38	1.35	1.37	1.36	1.35	1.34
Harvested area	1.33	1.22	1.32	1.24	1.25	1.24	1.23	1.22
				(Pounds per harvested acre)				
Yield	1,603	1,731	1,598	1,681	1,691	1,699	1,710	1,724
				(Million pounds)				
Production	2,138	2,116	2,112	2,077	2,119	2,110	2,102	2,106
Imports	214	225	250	275	275	275	275	275
Domestic use	2,380	2,280	2,291	2,301	2,324	2,340	2,352	2,365
Exports	174	137	70	51	67	46	26	13
Ending stocks	386	311	311	311	315	314	314	316
				(Cents per pound)				
Farm price	17.20	17.20	17.07	16.42	16.76	17.08	17.27	17.25
Reference price	20.15	20.15	20.15	20.15	20.15	20.15	20.15	20.15
Canola								
				(Million acres)				
Planted area	2.08	1.99	2.02	2.01	2.01	2.01	2.01	2.01
Harvested area	2.00	1.94	1.99	1.96	1.96	1.97	1.97	1.97
				(Pounds per harvested acre)				
Yield	1,526	1,861	1,832	1,836	1,849	1,861	1,876	1,890
				(Million pounds)				
Production	3,055	3,617	3,638	3,604	3,631	3,660	3,689	3,715
Imports	1,435	1,228	1,208	1,314	1,318	1,330	1,342	1,352
Domestic use	4,197	4,315	4,405	4,494	4,524	4,560	4,595	4,630
Exports	340	399	439	423	425	430	435	436
Ending stocks	195	325	327	327	328	328	329	330
				(Cents per pound)				
Farm price	17.50	15.90	15.52	15.18	15.45	15.72	15.96	15.90
Reference price	20.15	20.15	20.15	20.15	20.15	20.15	20.15	20.15

U.S. hay supply and use

May-April year	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
				(Million acres)				
Area harvested	52.8	52.8	52.8	52.6	53.0	53.0	52.9	52.8
				(Tons per acre)				
Yield	2.43	2.34	2.48	2.42	2.43	2.43	2.44	2.45
				(Million tons)				
Production	128.2	123.6	131.1	127.1	128.6	129.0	129.1	129.3
Disappearance	137.3	124.0	129.0	128.1	128.4	128.8	129.0	129.2
Ending stocks	15.3	14.9	17.0	16.1	16.2	16.4	16.5	16.6
				(Dollars per ton)				
All hay price	142.00	164.00	153.86	162.04	163.13	163.98	164.89	165.45

U.S. planted and idled area

Marketing year	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Planted area				(Million acres)				
Corn	90.17	89.13	90.01	92.68	90.45	90.83	90.86	90.84
Soybeans	90.16	89.20	76.70	84.36	83.10	83.23	83.52	83.63
Wheat	46.05	47.80	45.61	46.26	48.55	47.96	47.61	47.43
Upland cotton	12.47	13.85	13.63	13.31	13.51	13.45	13.43	13.41
Sorghum	5.63	5.69	5.29	5.67	5.69	5.70	5.67	5.66
Barley	2.49	2.54	2.86	2.76	2.68	2.63	2.58	2.55
Oats	2.59	2.75	2.55	2.75	2.81	2.76	2.73	2.73
Rice	2.46	2.95	2.76	2.80	2.82	2.77	2.73	2.72
Sunflower seed	1.40	1.30	1.38	1.35	1.37	1.36	1.35	1.34
Peanuts	1.87	1.43	1.36	1.43	1.48	1.47	1.47	1.47
Canola	2.08	1.99	2.02	2.01	2.01	2.01	2.01	2.01
Sugar beets	1.13	1.11	1.13	1.17	1.20	1.19	1.21	1.20
Sugarcane harvested	0.90	0.91	0.92	0.91	0.91	0.90	0.89	0.89
13-crop planted	259.40	260.64	246.21	257.48	256.57	256.28	256.07	255.87
Hay area harvested	52.78	52.84	52.77	52.61	53.00	52.99	52.88	52.82
13 crops + hay	312.18	313.48	298.98	310.09	309.57	309.27	308.94	308.69
Conservation reserve (CRP)	23.43	22.63	22.35	22.80	23.00	23.20	23.50	23.50
13 crops + hay + CRP	335.61	336.11	321.33	332.89	332.57	332.47	332.44	332.19
Double crop area	3.71	3.55	2.98	3.21	3.21	3.22	3.24	3.24
Total minus double crop	331.90	332.56	318.36	329.67	329.35	329.25	329.20	328.94

U.S. soybean product supply and use

October-September year	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Soybean meal								
				(Thousand tons)				
Production	49,226	48,420	49,831	51,016	51,278	51,342	51,497	51,863
Imports	483	725	500	500	500	500	500	500
Domestic use	35,497	35,700	36,758	37,311	37,314	37,400	37,418	37,779
Exports	14,057	13,550	13,568	14,197	14,466	14,442	14,580	14,579
Ending stocks	555	450	455	464	462	462	461	466
Soybean oil								
				(Million pounds)				
Production	23,772	23,995	24,463	25,045	25,173	25,205	25,281	25,460
Imports	335	400	400	400	400	400	400	400
Domestic use	21,380	22,600	23,294	23,422	23,558	23,779	23,895	23,927
Biodiesel	7,134	8,074	8,544	8,497	8,525	8,690	8,743	8,708
Food and other	14,247	14,526	14,750	14,925	15,033	15,089	15,152	15,219
Exports	2,443	2,050	1,750	1,966	1,935	1,796	1,763	1,909
Ending stocks	1,995	1,740	1,559	1,616	1,696	1,726	1,749	1,773
Decatur prices								
				(Dollars per ton)				
Soybean meal 48% protein	345.02	310.00	298.58	283.36	292.31	297.81	305.10	303.14
				(Cents per pound)				
Soybean oil	30.04	28.00	30.61	30.08	30.31	31.27	31.56	31.63

U.S. biomass-based diesel supply and use

Calendar year	2017	2018	2019	2020	2021	2022	2023	2024
Supply and use								
				(Million gallons)				
Production	2,009	2,284	2,642	2,905	3,029	3,185	3,304	3,353
Biodiesel	1,596	1,852	2,150	2,300	2,318	2,369	2,427	2,449
From soybean oil	809	979	1,072	1,122	1,097	1,110	1,135	1,136
From corn oil	205	271	340	388	423	449	469	483
From other fats and oils	582	602	739	789	798	809	824	831
Cellulosic diesel	0	0	0	0	0	0	0	0
Renewable diesel	413	432	491	606	711	816	877	904
Net exports	-300	-61	-189	-121	-52	38	47	7
Domestic disappearance	2,399	2,328	2,819	3,019	3,076	3,144	3,255	3,345
Ending stocks	179	197	208	215	220	223	226	228
Prices and RIN values								
				(Dollars per gallon)				
Biodiesel rack, Des Moines	3.16	3.05	3.00	3.11	3.08	3.18	3.32	3.38
#2 diesel, refiner sales	1.69	2.13	2.01	1.97	2.02	2.11	2.17	2.23
Biodiesel RIN (per RIN gal.)	1.01	0.53	0.49	0.44	0.37	0.39	0.51	0.56

U.S. ethanol supply and use

Calendar year	2017	2018	2019	2020	2021	2022	2023	2024
Petroleum fuel prices (Dollars per barrel)								
Petroleum, W. Texas interm.	50.96	64.89	58.90	59.87	61.91	64.64	66.68	68.78
Petroleum, refiners acquisition	50.69	64.46	59.85	57.96	59.69	62.36	64.35	66.45
Unl. gasoline, FOB Omaha (Dollars per gallon)								
Unl. gasoline, FOB Omaha	1.81	2.11	1.98	1.93	1.99	2.08	2.14	2.20
Unleaded gasoline, retail	2.41	2.74	2.61	2.57	2.63	2.72	2.79	2.85
Motor gasoline supplied (Million gallons)								
Motor gasoline supplied	142,976	142,864	142,851	143,078	143,412	143,640	143,727	143,693
Ethanol supply and use								
Production	15,936	16,052	15,860	15,955	16,116	16,364	16,491	16,522
From corn	15,782	15,947	15,762	15,864	16,029	16,278	16,405	16,433
From other feedstocks	144	96	85	76	72	69	67	68
Cellulosic	10	8	13	15	16	18	19	21
Imports	77	54	61	58	56	55	58	60
Domestic disappearance	14,485	14,372	14,342	14,343	14,361	14,523	14,609	14,619
In low-level blends	14,162	13,959	13,846	13,812	13,755	13,639	13,598	13,582
In mid-level blends	132	182	250	301	385	670	797	835
In flex fuel vehicles	192	231	247	230	221	214	214	202
Exports	1,390	1,721	1,569	1,660	1,802	1,885	1,930	1,954
Ending stocks	968	980	990	1,000	1,010	1,021	1,031	1,041
Ethanol prices (Dollars per gallon)								
Conventional rack, Omaha	1.45	1.23	1.31	1.29	1.28	1.31	1.34	1.36
Other advanced rack	1.75	1.43	1.65	1.63	1.56	1.58	1.72	1.81
Effective retail	1.35	1.56	1.80	1.83	1.83	1.84	1.86	1.90
Ethanol/gasoline retail ratio	56%	57%	69%	71%	70%	67%	67%	67%
RIN values (Dollars per gallon)								
Conventional ethanol	0.70	0.31	0.15	0.10	0.09	0.12	0.13	0.12
Other advanced ethanol	1.00	0.51	0.49	0.44	0.37	0.39	0.51	0.56

U.S. beef sector

Calendar year	2017	2018	2019	2020	2021	2022	2023	2024
				(Million head)				
Beef cows (Jan. 1)	31.2	31.5	31.8	31.8	31.6	31.3	31.0	30.7
Dairy cows (Jan. 1)	9.4	9.4	9.4	9.3	9.3	9.3	9.3	9.3
Cattle and calves (Jan. 1)	93.6	94.3	94.8	94.8	94.2	93.7	93.3	92.8
				(Million pounds)				
Beef supply and use								
Production	26,250	26,938	27,278	28,022	28,134	28,076	28,013	27,958
Imports	2,993	2,998	3,045	3,004	3,057	3,093	3,131	3,189
Domestic use	26,492	26,762	27,162	27,710	27,790	27,813	27,834	27,892
Exports	2,859	3,161	3,167	3,296	3,393	3,354	3,310	3,253
Ending stocks	649	662	656	676	685	686	686	687
				(Dollars per hundredweight)				
Prices								
Total all grades, 5-area direct steers	121.52	117.12	116.58	113.64	113.83	116.62	121.34	126.05
600 - 650 lb. Oklahoma City feeder steers	155.82	159.20	153.61	145.28	149.66	154.30	162.33	170.42
Boxed beef cutout	209.74	214.05	218.79	218.98	222.44	230.74	242.11	252.32
				(Dollars per pound)				
Beef retail	5.91	5.92	6.06	6.08	6.22	6.44	6.71	6.98

U.S. pork sector

Calendar year	2017	2018	2019	2020	2021	2022	2023	2024
				(Million head)				
Breeding herd (Dec. 1*)	6.11	6.18	6.33	6.38	6.37	6.27	6.13	5.99
Market hogs (Dec. 1*)	65.2	67.0	68.6	69.6	70.4	70.7	70.2	69.5
				(Million pounds)				
Pork supply and use								
Production	25,598	26,330	27,267	28,029	28,396	28,525	28,417	28,321
Imports	1,116	1,042	956	929	977	1,018	1,044	1,066
Domestic use	21,034	21,491	22,043	22,251	22,865	23,110	23,026	22,841
Exports	5,632	5,876	6,174	6,688	6,490	6,425	6,440	6,550
Ending stocks	554	559	565	585	602	610	605	601
				(Dollars per hundredweight)				
Prices								
Barrows & gilts, national base								
51-52% lean equivalent	50.48	45.93	48.12	51.87	49.64	49.64	51.60	53.81
Pork cutout value	84.02	75.19	78.55	85.05	83.39	83.31	87.41	91.94
				(Dollars per pound)				
Pork retail	3.78	3.74	3.84	4.02	4.00	3.98	4.09	4.21

* Preceding year

U.S. poultry supply and use

Calendar year	2017	2018	2019	2020	2021	2022	2023	2024
Broiler								
	(Million pounds)							
Production	41,217	42,145	42,985	43,595	44,239	44,795	45,344	45,903
Imports	126	139	128	132	132	133	134	135
Domestic use	34,479	35,227	35,990	36,444	36,930	37,319	37,688	38,061
Exports	6,786	7,069	7,121	7,287	7,435	7,607	7,787	7,974
Ending stocks	856	845	846	842	848	850	852	855
Turkey								
Production	5,981	5,878	5,851	5,881	5,945	5,999	6,032	6,066
Imports	25	19	15	16	17	17	18	18
Domestic use	5,352	5,293	5,251	5,267	5,321	5,368	5,396	5,422
Exports	622	611	627	630	639	647	655	663
Ending stocks	310	303	291	291	292	293	292	291
Prices								
	(Cents per pound)							
National composite								
wholesale broiler	93.54	97.80	90.10	89.66	90.27	92.04	94.03	96.01
Broiler retail	187.56	187.29	187.05	186.84	189.61	193.43	197.61	201.88
8-16 lb. national turkey hens	96.08	80.20	87.99	90.61	92.10	93.60	95.15	96.33
Turkey retail	158.21	150.08	154.26	160.15	163.86	167.32	170.86	174.24

U.S. per-capita meat consumption

Calendar year	2017	2018	2019	2020	2021	2022	2023	2024
(Pounds)								
Beef	57.0	57.2	57.7	58.4	58.2	57.8	57.5	57.2
Pork	50.2	50.9	51.9	52.0	53.1	53.3	52.7	51.9
Broiler	91.0	92.4	93.7	94.3	94.9	95.2	95.5	95.8
Turkey	16.4	16.2	15.9	15.9	15.9	15.9	15.9	15.9
Sum	214.6	216.7	219.2	220.5	222.0	222.2	221.6	220.8

U.S. dairy sector

Calendar year	2017	2018	2019	2020	2021	2022	2023	2024
Milk supply								
Dairy cows (thou. head)	9,406	9,399	9,322	9,321	9,326	9,333	9,332	9,345
Milk yield (lbs. per cow)	22,914	23,149	23,402	23,717	24,026	24,327	24,631	24,924
Milk production (bil. lbs.)	215.5	217.6	218.2	221.1	224.1	227.1	229.9	232.9
(Dollars per hundredweight)								
All milk price	17.69	16.28	18.21	18.50	18.31	18.28	18.46	18.59
Wholesale prices								
(Dollars per pound)								
Butter, CME	2.33	2.25	2.31	2.21	2.17	2.18	2.21	2.22
Cheese, Am., 40#, CME	1.61	1.55	1.66	1.69	1.69	1.69	1.70	1.72
Nonfat dry milk, AA	0.88	0.81	1.02	1.08	1.06	1.05	1.06	1.05
Dairy product production								
(Million pounds)								
American cheese	5,072	5,254	5,273	5,350	5,436	5,515	5,588	5,669
Other cheese	7,568	7,771	7,861	8,011	8,158	8,294	8,425	8,564
Butter	1,847	1,891	1,927	1,988	2,041	2,079	2,113	2,150
Nonfat dry milk	2,365	2,340	2,246	2,324	2,373	2,440	2,511	2,594

U.S. consumer food price inflation

Calendar year	2017	2018	2019	2020	2021	2022	2023	2024
(Change from the previous year)								
Food	0.9%	1.4%	2.2%	2.3%	2.0%	2.3%	2.6%	2.6%
Food at home	-0.2%	0.4%	1.4%	2.1%	1.9%	2.2%	2.5%	2.5%
Cereal and bakery	-0.5%	0.4%	1.9%	2.1%	1.9%	2.3%	2.5%	2.4%
Meat	-0.7%	1.2%	0.6%	2.0%	1.9%	2.5%	3.0%	3.1%
Dairy	0.1%	-0.5%	1.2%	2.6%	2.1%	2.3%	2.6%	2.6%
Fruits and vegetables	-0.2%	0.7%	2.0%	2.1%	1.7%	1.8%	1.9%	1.9%
Other food at home	0.2%	0.2%	1.1%	1.5%	1.7%	1.9%	2.3%	2.2%
Food away from home	2.3%	2.6%	3.0%	2.5%	2.2%	2.4%	2.6%	2.7%