

Baseline Update for U.S. Agricultural Markets

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Summary

Increases in production result in continued downward pressure on prices for most crop and livestock commodities in 2016. This report provides an update of the 2016 FAPRI-MU long-term baseline to reflect information available in mid-August 2016.

The baseline update uses 2016 acreage, yield and production estimates included in USDA's August 2016 *Crop Production* report. It assumes that current agricultural and biofuel policies will continue, and that the global economy will evolve as forecast by IHS Global Insight in July 2016.

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

- Record U.S. and world corn crops push corn prices lower, to \$3.19 per bushel for the 2016/17 marketing year average. Projected prices begin to recover in 2017/18 with reduced acreage and lower yields, but remain below \$3.90 per bushel through 2021/22.
- Unfavorable weather reduced soybean production in South America in early 2016. In spite of a record U.S. soybean crop, this allows projected 2016/17 soybean prices to increase slightly. Projected average soybean prices remain below \$10.00 per bushel over the next five years.
- Wheat prices are sharply lower in response to record U.S. and world production in 2016. Reduced production in 2017 could help prices begin to recover.
- Projected U.S. upland cotton prices remain near 60 cents per pound over the next five years, as large Chinese cotton stocks continue to overhang the market.
- Ethanol production growth has slowed in recent years. Projected declines in gasoline consumption and assumptions about implementation of the renewable fuel standard (RFS) result in only small increases in projected U.S. ethanol production.
- Increased supplies of beef, pork, poultry and milk have pushed prices lower. Fed cattle prices are down by more than \$20 per hundredweight this year compared to 2015, and further declines are projected until prices reach their low point in 2020.
- Lower retail prices for meat and dairy products mean that average consumer prices for food consumed at home are projected to decline in 2016, and overall food price inflation is just 0.9 percent. Food inflation begins to pick up again in 2017 and exceeds 2 percent in 2018.

This baseline update provides a snapshot of what agricultural markets might look like under a particular set of assumptions. As more is learned about the size of the 2016 crop, the implementation of policies and the outlook for the general economy, these projections will need to be updated. In the meantime, they can be used as a point of reference in examining alternative scenarios.

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/>.

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Macroeconomic assumptions*

Calendar year	2014	2015	2016	2017	2018	2019	2020	2021
Real GDP growth								
				(Percent)				
United States	2.4	2.4	1.9	2.4	2.4	2.3	2.3	2.3
China	7.3	6.9	6.5	6.2	6.4	6.4	6.5	6.5
World	2.7	2.6	2.5	2.7	3.1	3.2	3.3	3.4
U.S. CPI inflation	1.6	0.1	1.2	2.4	2.4	2.4	2.6	2.7
U.S. interest rates								
Federal funds rate	0.1	0.1	0.4	1.0	1.7	2.7	3.0	3.0
Prime rate	3.3	3.3	3.5	4.0	4.7	5.7	6.0	6.0
Exchange rates				(Currency per dollar)				
Euro	0.75	0.90	0.90	0.87	0.82	0.79	0.78	0.76
Brazilian real	2.35	3.33	3.60	3.73	3.86	4.03	4.20	4.28
Chinese yuan	6.16	6.28	6.65	6.86	7.02	7.16	7.15	7.07

*Source: IHS Global Insight forecast, July 2016

Policy assumptions

Year	2014	2015	2016	2017	2018	2019	2020	2021
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
Wheat	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
				(Million acres)				
Conservation reserve area	25.4	24.2	23.9	23.0	23.0	23.0	23.0	23.0
				(Dollars per gallon)				
Biodiesel tax credit	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Renewable fuel standard				(Billion gallons, ethanol equivalent)				
Overall	16.3	16.9	18.2	18.8	19.0	19.0	19.1	19.1
Advanced biofuels	2.7	2.9	3.6	4.0	4.0	4.0	4.1	4.1
Biomass-based diesel	2.5	2.7	2.9	3.0	3.1	3.1	3.1	3.2
Conventional biofuel "gap"	13.6	14.1	14.6	14.8	15.0	15.0	15.0	15.0

U.S. corn supply and use

September-August year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Area	(Million acres)							
Planted area	90.6	88.0	94.1	90.6	91.8	92.8	92.6	92.4
Harvested area	83.1	80.7	86.6	82.8	83.9	84.7	84.6	84.4
Yield	(Bushels per harvested acre)							
	171.0	168.4	175.1	168.3	169.8	171.7	173.6	175.1
Supply	(Million bushels)							
Beginning stocks	1,232	1,731	1,706	2,386	2,095	1,978	1,978	2,013
Production	14,216	13,601	15,153	13,936	14,246	14,547	14,688	14,781
Imports	32	65	50	50	50	50	50	50
Domestic use	11,881	11,767	12,332	12,160	12,223	12,289	12,308	12,333
Feed and residual	5,314	5,200	5,674	5,479	5,523	5,588	5,623	5,656
Ethanol and coproducts	5,200	5,200	5,304	5,321	5,341	5,340	5,318	5,301
HFCS	479	470	446	450	448	445	444	447
Seed	29	31	30	30	30	30	30	30
Food and other	859	866	878	879	881	886	893	900
Exports	1,867	1,925	2,192	2,116	2,190	2,308	2,395	2,477
Total use	13,748	13,692	14,523	14,276	14,413	14,598	14,703	14,810
Ending stocks	1,731	1,706	2,386	2,095	1,978	1,978	2,013	2,034
Under loan	101	199	228	155	131	126	129	128
Other stocks	1,630	1,507	2,158	1,940	1,847	1,852	1,884	1,905
Prices, program provisions	(Dollars per bushel)							
Farm price	3.70	3.60	3.19	3.57	3.80	3.87	3.86	3.87
Loan rate	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
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.	632.67	606.38	559.20	600.29	645.76	665.21	670.13	678.11
Variable expenses/a.	360.08	337.97	318.30	315.77	324.43	332.97	342.26	352.61
Market net return/a.	272.59	268.41	240.90	284.52	321.34	332.24	327.87	325.50

U.S. soybean supply and use

September-August year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Area	(Million acres)							
Planted area	83.3	82.7	83.7	85.7	85.4	84.8	84.9	85.0
Harvested area	82.6	81.8	83.0	85.0	84.6	84.1	84.2	84.3
Yield	(Bushels per harvested acre)							
	47.5	48.0	48.9	46.2	46.6	47.0	47.5	47.9
Supply	(Million bushels)							
Beginning stocks	4,052	4,145	4,345	4,289	4,295	4,300	4,332	4,369
Production	92	191	255	332	324	317	307	307
Imports	3,927	3,929	4,060	3,928	3,941	3,953	3,995	4,033
	33	25	30	30	30	30	30	30
Domestic use	2,018	2,010	2,054	2,042	2,048	2,054	2,066	2,083
Crush	1,873	1,900	1,929	1,920	1,926	1,933	1,943	1,959
Seed and residual	145	110	125	122	122	122	123	125
Exports	1,843	1,880	1,960	1,924	1,930	1,938	1,959	1,982
Total use	3,862	3,890	4,013	3,966	3,978	3,992	4,026	4,065
Ending stocks	191	255	332	324	317	307	307	304
Under loan	9	15	14	13	13	12	12	13
Other stocks	182	240	318	310	304	296	294	292
Prices, program provisions	(Dollars per bushel)							
Farm price	10.10	8.95	9.29	9.44	9.64	9.94	9.93	9.99
Illinois processor price	10.10	9.54	9.59	9.74	9.94	10.22	10.22	10.27
Loan rate	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
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.	480.24	429.83	454.26	436.44	449.15	467.23	471.38	477.97
Variable expenses/a.	183.75	174.31	169.90	170.10	172.62	176.84	182.49	188.43
Market net return/a.	296.49	255.52	284.36	266.34	276.52	290.38	288.88	289.54
Other indicators								
Soybean/corn price ratio	2.73	2.49	2.91	2.65	2.54	2.56	2.57	2.58
48% soymeal price, \$/ton	368.49	325.00	322.52	331.85	344.57	352.18	351.10	352.40
Soybean oil price, cents/lb.	31.60	29.50	31.10	29.28	28.72	29.61	29.79	30.33
Crushing margin, \$/bu.	2.37	1.57	1.68	1.54	1.59	1.59	1.59	1.63

U.S. wheat supply and use

June-May year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Area	(Million acres)							
Planted area	56.8	54.6	50.8	49.6	49.6	49.7	49.9	49.9
Harvested area	46.4	47.1	44.1	42.1	42.1	42.2	42.4	42.4
Yield	(Bushels per harvested acre)							
	43.7	43.6	52.6	45.9	46.2	46.5	47.0	47.3
Supply	(Million bushels)							
Beginning stocks	2,768	2,917	3,416	3,148	3,052	3,009	3,000	3,005
Production	590	752	981	1,097	982	917	884	873
Imports	2,026	2,052	2,321	1,933	1,947	1,966	1,989	2,004
	151	113	114	118	123	126	127	127
Domestic use	1,151	1,161	1,367	1,252	1,236	1,232	1,236	1,243
Feed and residual	114	135	329	212	192	181	178	176
Seed	79	68	68	68	69	69	69	69
Food and other	958	957	971	972	976	982	989	997
Exports	864	775	951	914	899	893	890	895
Total use	2,015	1,936	2,319	2,166	2,135	2,125	2,126	2,137
Ending stocks	752	981	1,097	982	917	884	873	867
Under loan	21	46	72	40	30	27	26	26
Other stocks	731	936	1,025	942	886	857	847	841
Prices, program provisions	(Dollars per bushel)							
Farm price	5.99	4.89	3.74	4.52	5.02	5.28	5.34	5.38
Loan rate	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94
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.	261.67	213.04	196.81	207.68	232.04	245.78	250.75	254.03
Variable expenses/a.	128.71	117.77	111.03	108.15	113.27	117.96	122.19	126.25
Market net return/a.	132.96	95.27	85.79	99.53	118.77	127.82	128.56	127.78

U.S. upland cotton supply and use

August-July year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Area	(Million acres)							
Planted area	10.85	8.42	9.82	10.16	9.57	9.52	9.42	9.36
Harvested area	9.16	7.92	9.34	8.71	8.19	8.14	8.06	8.00
Yield	(Pounds per harvested acre)							
	826	755	787	826	830	839	848	855
Supply	(Million bales)							
Beginning stocks	17.99	15.93	19.09	19.54	19.15	19.11	19.14	19.26
Production	2.23	3.44	3.76	4.55	4.97	4.86	4.90	5.00
Imports	15.75	12.46	15.31	14.98	14.16	14.24	14.23	14.25
	0.01	0.03	0.01	0.01	0.01	0.01	0.01	0.01
Domestic use								
Mill use	3.55	3.48	3.56	3.62	3.64	3.65	3.67	3.68
Exports	10.84	8.67	10.98	10.94	10.65	10.56	10.47	10.57
Total use	14.39	12.14	14.54	14.56	14.29	14.21	14.14	14.25
Unaccounted	0.16	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Ending stocks	3.44	3.76	4.55	4.97	4.86	4.90	5.00	5.02
Prices, program provisions	(Cents per pound)							
Farm price	61.3	58.0	62.3	59.4	61.5	62.2	62.0	62.9
Adjusted world price	49.7	49.1	56.9	54.1	56.4	57.3	57.2	58.4
Loan rate	52.0	52.0	52.0	49.4	52.0	52.0	52.0	52.0
User payment	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Market returns	(Dollars)							
Gross market revenue/a.	614.77	554.20	604.63	617.29	644.97	661.28	666.54	679.90
Variable expenses/a.	532.38	514.03	496.36	505.05	514.09	526.29	542.36	559.53
Market net return/a.	82.39	40.17	108.27	112.24	130.89	134.99	124.17	120.37

U.S. rice supply and use

August-July year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Area	(Million acres)							
Planted area	2.95	2.61	3.21	3.11	3.10	3.08	3.06	3.05
Harvested area	2.93	2.58	3.19	3.08	3.07	3.05	3.03	3.02
Yield	(Pounds per harvested acre)							
	7,576	7,470	7,646	7,724	7,787	7,842	7,903	7,971
Supply	(Million hundredweight)							
Beginning stocks	278.7	264.9	307.0	316.1	318.4	318.5	319.3	320.9
Production	31.8	48.5	39.4	54.0	55.1	54.6	54.5	54.5
Imports	222.2	192.3	243.9	238.0	238.7	238.8	239.2	240.5
Domestic use	24.7	24.0	23.7	24.1	24.6	25.1	25.6	25.9
Exports	134.5	121.0	130.8	133.7	133.9	134.9	135.9	136.9
Total use	95.7	104.5	122.1	127.3	129.9	129.1	128.9	129.1
Ending stocks	230.2	225.5	253.0	261.0	263.8	264.0	264.8	266.0
Prices, program provisions	(Dollars per hundredweight)							
Farm price	48.5	39.4	54.0	55.1	54.6	54.5	54.5	54.8
Long grain	13.40	12.30	11.07	11.21	11.60	11.60	11.74	11.78
Medium and short grain	11.90	11.00	10.23	9.82	10.35	10.45	10.61	10.68
Loan rate	18.30	15.40	14.38	15.71	15.56	15.49	15.64	15.63
Reference price	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Long grain	10.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Japonica	10.50	16.10	16.10	16.10	16.10	16.10	16.10	16.10
Other medium, short grain	10.50	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Market returns	(Dollars)							
Gross market revenue/a.	1015.23	918.76	846.37	865.83	903.23	909.62	928.19	939.26
Variable expenses/a.	628.11	569.33	556.55	559.20	573.94	592.73	613.48	637.03
Market net return/a.	387.12	349.43	289.82	306.63	329.29	316.88	314.71	302.23

Other U.S. feed grains supply and use

Marketing year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Sorghum								
	(Million acres)							
Planted area	7.14	8.46	7.23	7.34	7.33	7.31	7.30	7.30
Harvested area	6.40	7.85	6.46	6.53	6.52	6.50	6.49	6.49
	(Bushels per harvested acre)							
Yield	67.6	76.0	73.5	66.0	66.1	66.4	66.7	66.8
	(Million bushels)							
Production	433	597	475	431	431	432	433	433
Imports	0	5	1	1	1	1	1	1
Domestic use	97	240	226	227	221	215	211	209
Exports	352	345	237	215	215	219	222	224
Ending stocks	18	35	48	39	34	33	34	35
	(Dollars per bushel)							
Farm price	4.03	3.30	3.00	3.26	3.49	3.57	3.57	3.57
Reference price	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95
Barley								
	(Million acres)							
Planted area	3.03	3.56	2.97	3.00	2.87	2.83	2.79	2.73
Harvested area	2.50	3.11	2.58	2.60	2.49	2.46	2.43	2.37
	(Bushels per harvested acre)							
Yield	72.7	68.9	73.6	72.2	73.0	73.6	74.4	75.3
	(Million bushels)							
Production	182	214	190	188	182	181	180	179
Imports	24	19	20	27	26	26	27	28
Domestic use	194	198	202	210	207	203	201	199
Exports	14	11	13	9	9	9	9	8
Ending stocks	79	102	97	93	86	80	78	76
	(Dollars per bushel)							
Farm price	5.30	5.52	4.58	4.52	4.74	4.90	4.94	4.96
Reference price	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95
Oats								
	(Million acres)							
Planted area	2.75	3.09	3.03	3.14	3.12	3.05	3.04	3.05
Harvested area	1.04	1.28	1.17	1.19	1.18	1.16	1.15	1.15
	(Bushels per harvested acre)							
Yield	67.9	70.2	66.0	65.4	65.8	66.3	66.8	67.3
	(Million bushels)							
Production	70	90	77	78	78	77	77	78
Imports	109	86	96	98	100	100	100	100
Domestic use	148	170	168	177	177	176	175	175
Exports	2	2	2	2	2	2	2	2
Ending stocks	54	57	59	57	55	54	55	55
	(Dollars per bushel)							
Farm price	3.21	2.12	1.94	2.17	2.29	2.35	2.37	2.38
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	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Peanuts								
	(Million acres)							
Planted area	1.35	1.63	1.56	1.52	1.51	1.49	1.49	1.48
Harvested area	1.32	1.57	1.53	1.48	1.47	1.46	1.45	1.45
	(Pounds per harvested acre)							
Yield	3,923	3,963	3,990	3,955	4,014	4,073	4,130	4,186
	(Million pounds)							
Production	5,189	6,211	6,109	5,864	5,913	5,928	5,995	6,050
Imports	90	95	85	85	85	85	85	85
Domestic use	3,954	3,607	4,516	4,506	4,545	4,579	4,624	4,671
Exports	1,081	1,500	1,527	1,514	1,506	1,501	1,497	1,498
Ending stocks	2,101	3,300	3,451	3,380	3,326	3,259	3,218	3,183
	(Cents per pound)							
Farm price	22.00	19.30	18.67	18.74	19.00	19.56	19.78	19.92
Reference price	26.75	26.75	26.75	26.75	26.75	26.75	26.75	26.75
Sunflowerseed								
	(Million acres)							
Planted area	1.57	1.86	1.65	1.71	1.64	1.60	1.58	1.57
Harvested area	1.51	1.80	1.58	1.60	1.54	1.50	1.48	1.47
	(Pounds per harvested acre)							
Yield	1,469	1,625	1,581	1,569	1,572	1,578	1,587	1,592
	(Million pounds)							
Production	2,219	2,924	2,506	2,517	2,421	2,365	2,351	2,337
Imports	165	152	152	152	152	152	152	152
Domestic use	2,090	2,725	2,590	2,508	2,400	2,323	2,295	2,280
Exports	256	227	125	152	184	205	201	206
Ending stocks	238	362	305	314	303	293	301	305
	(Cents per pound)							
Farm price	21.70	19.70	18.14	18.23	18.56	19.14	19.00	19.06
Reference price	20.15	20.15	20.15	20.15	20.15	20.15	20.15	20.15
Canola								
	(Million acres)							
Planted area	1.72	1.78	1.70	1.68	1.65	1.64	1.63	1.62
Harvested area	1.56	1.71	1.66	1.63	1.61	1.59	1.58	1.57
	(Bushels per harvested acre)							
Yield	1,748	1,614	1,648	1,686	1,695	1,702	1,709	1,717
	(Million pounds)							
Production	2,513	2,875	2,816	2,858	2,831	2,815	2,814	2,815
Imports	1,698	787	1,077	1,077	1,099	1,113	1,131	1,143
Domestic use	3,902	3,166	3,532	3,563	3,571	3,580	3,596	3,616
Exports	353	384	366	370	358	350	344	339
Ending stocks	241	353	349	352	352	351	355	357
	(Cents per pound)							
Farm price	16.90	15.70	15.83	16.04	16.38	16.91	16.82	16.98
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	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
				(Million acres)				
Area harvested	57.1	54.4	56.1	55.7	56.1	56.4	56.6	56.6
				(Tons per acre)				
Yield	2.45	2.47	2.50	2.42	2.42	2.43	2.44	2.45
				(Million tons)				
Production	139.9	134.4	140.5	134.6	135.9	137.2	138.3	138.9
Disappearance	134.6	133.8	137.7	136.6	136.8	137.5	138.2	138.6
Ending stocks	24.5	25.1	28.0	26.0	25.1	24.8	24.9	25.2
				(Dollars per ton)				
All hay price	172.00	148.00	134.20	148.43	157.79	163.03	164.19	163.48

U.S. planted and idled area

Marketing year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Planted area				(Million acres)				
Corn	90.60	88.00	94.15	90.63	91.83	92.75	92.63	92.39
Soybeans	83.28	82.65	83.69	85.74	85.38	84.82	84.92	85.01
Wheat	56.84	54.64	50.82	49.57	49.65	49.75	49.88	49.94
Upland cotton	10.85	8.42	9.82	10.16	9.57	9.52	9.42	9.36
Sorghum	7.14	8.46	7.23	7.34	7.33	7.31	7.30	7.30
Barley	3.03	3.56	2.97	3.00	2.87	2.83	2.79	2.73
Oats	2.75	3.09	3.03	3.14	3.12	3.05	3.04	3.05
Rice	2.95	2.61	3.21	3.11	3.10	3.08	3.06	3.05
Sunflower seed	1.57	1.86	1.65	1.71	1.64	1.60	1.58	1.57
Peanuts	1.35	1.63	1.56	1.52	1.51	1.49	1.49	1.48
Canola	1.72	1.78	1.70	1.68	1.65	1.64	1.63	1.62
Sugar beets	1.16	1.16	1.16	1.21	1.27	1.24	1.22	1.24
Sugarcane harvested	0.87	0.89	0.93	0.95	0.96	0.96	0.94	0.94
13-crop planted	264.10	258.75	261.91	259.77	259.89	260.03	259.90	259.67
Hay area harvested	57.06	54.44	56.13	55.73	56.09	56.41	56.60	56.60
13 crops + hay	321.17	313.19	318.04	315.50	315.97	316.45	316.51	316.27
Conservation reserve (CRP)	25.45	24.18	23.90	23.00	23.00	23.00	23.00	23.00
13 crops + hay + CRP	346.62	337.37	341.93	338.50	338.97	339.45	339.51	339.27
Double crop area	5.60	4.76	3.97	4.20	4.26	4.29	4.32	4.32
Total minus double crop	341.02	332.61	337.96	334.30	334.71	335.15	335.19	334.96

U.S. crop farm prices

Marketing year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Corn (\$/bu.)	3.70	3.60	3.19	3.57	3.80	3.87	3.86	3.87
Soybeans (\$/bu.)	10.10	8.95	9.29	9.44	9.64	9.94	9.93	9.99
Wheat (\$/bu.)	5.99	4.89	3.74	4.52	5.02	5.28	5.34	5.38
Durum	8.81	7.36	5.24	5.38	5.99	6.30	6.37	6.42
Other spring	5.75	4.78	3.89	4.73	5.26	5.53	5.59	5.63
Winter	5.92	4.80	3.61	4.39	4.87	5.12	5.18	5.21
Upland cotton (cents/lb.)	61.30	58.00	62.27	59.41	61.51	62.19	61.99	62.88
Sorghum (\$/bu.)	4.03	3.30	3.00	3.26	3.49	3.57	3.57	3.57
Rice (\$/cwt)	13.40	12.30	11.07	11.21	11.60	11.60	11.74	11.78
Long grain	11.90	11.00	10.23	9.82	10.35	10.45	10.61	10.68
Medium/short (exc. Japonica)	14.40	11.30	11.38	12.50	12.75	12.70	12.82	12.80
Japonica	21.60	18.00	16.00	17.44	17.08	17.01	17.16	17.14
Barley (\$/bu.)	5.30	5.52	4.58	4.52	4.74	4.90	4.94	4.96
Oats (\$/bu.)	3.21	2.12	1.94	2.17	2.29	2.35	2.37	2.38
Peanuts (cents/lb.)	22.00	19.30	18.67	18.74	19.00	19.56	19.78	19.92
Sunflower seed (\$/cwt)	21.70	19.70	18.14	18.23	18.56	19.14	19.00	19.06
Canola (\$/cwt)	16.90	15.70	15.83	16.04	16.38	16.91	16.82	16.98
Flaxseed (\$/bu.)	11.80	9.00	8.97	9.22	9.44	9.67	9.68	9.72
Lentils (\$/cwt)	24.40	30.90	30.67	31.21	31.66	32.08	32.11	32.18
Safflower (\$/cwt)	25.00	24.50	22.96	23.60	24.12	24.60	24.63	24.71
Mustard seed (\$/cwt)	34.80	31.80	30.83	31.95	32.79	33.45	33.52	33.63
Dry peas (\$/cwt)	12.00	12.80	11.90	12.67	13.20	13.55	13.60	13.65
Rapeseed (\$/cwt)	34.90	43.20	32.19	32.31	32.58	33.07	33.07	33.19
Large chickpeas (\$/cwt)	28.60	31.00	29.04	30.76	31.96	32.77	32.88	33.01
Small chickpeas (\$/cwt)	20.80	25.00	23.53	24.82	25.72	26.33	26.41	26.51
Crambe (\$/cwt)	41.90	51.80	37.19	38.90	40.11	40.92	41.03	41.16
Sesame seed (\$/cwt)	46.00	39.00	36.40	38.75	40.40	41.54	41.69	41.87

U.S. soybean product supply and use

October-September year	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Soybean meal (Thousand tons)								
Production	45,062	44,915	45,858	45,641	45,795	45,943	46,191	46,564
Imports	333	425	325	325	325	325	325	325
Domestic use	32,277	33,500	33,958	34,847	35,308	35,504	35,780	36,219
Exports	13,108	11,800	12,247	11,118	10,815	10,764	10,731	10,666
Ending stocks	260	300	278	279	277	277	282	286
Soybean oil (Million pounds)								
Production	21,399	22,095	22,388	22,282	22,357	22,429	22,551	22,733
Imports	264	300	250	250	250	250	250	250
Domestic use	18,959	19,900	20,363	20,487	20,562	20,540	20,524	20,588
Biodiesel	5,039	5,500	5,952	5,920	5,841	5,716	5,601	5,580
Food and other	13,920	14,400	14,411	14,566	14,721	14,824	14,922	15,008
Exports	2,014	2,400	2,351	1,898	1,973	2,135	2,246	2,378
Ending stocks	1,855	1,950	1,874	2,021	2,093	2,098	2,129	2,146
Decatur prices (Dollars per ton)								
Soybean meal 48% protein	368.49	325.00	322.52	331.85	344.57	352.18	351.10	352.40
(Cents per pound)								
Soybean oil	31.60	29.50	31.10	29.28	28.72	29.61	29.79	30.33

U.S. biomass-based diesel supply and use

Calendar year	2014	2015	2016	2017	2018	2019	2020	2021
Supply and use (Million gallons)								
Production	1,606	1,571	1,799	1,776	1,874	1,976	2,030	2,075
Biodiesel	1,279	1,263	1,485	1,458	1,547	1,639	1,679	1,711
From soybean oil	632	637	785	769	769	755	738	724
From corn oil	127	137	128	129	166	224	243	257
From other fats and oils	520	488	572	560	612	660	698	730
Cellulosic diesel	0	0	0	0	1	2	3	4
Renewable diesel	327	308	314	317	326	335	348	360
Net imports	104	246	645	534	639	609	620	561
Domestic disappearance	1,744	1,788	2,479	2,327	2,522	2,588	2,652	2,637
Ending stocks	131	160	126	109	101	98	97	96
Prices and RIN values (Dollars per gallon)								
Biodiesel rack, Des Moines	3.47	2.84	3.71	3.55	3.54	3.51	3.55	3.56
#2 diesel, refiner sales	2.82	1.67	1.33	1.70	1.86	2.05	2.27	2.54
Biodiesel RIN (per RIN gal.)	0.56	0.75	0.95	1.12	1.04	0.90	0.78	0.59

U.S. ethanol supply and use

Calendar year	2014	2015	2016	2017	2018	2019	2020	2021
Petroleum fuel prices								
	(Dollars per barrel)							
Petroleum, W. Texas interm.	92.97	48.83	44.07	56.16	61.08	68.61	76.82	86.52
Petroleum, refiners acquisition	92.23	48.40	39.07	50.60	57.09	64.62	72.55	82.43
	(Dollars per gallon)							
Unl. gasoline, FOB Omaha	2.66	1.88	1.47	1.73	1.90	2.09	2.31	2.57
Unleaded gasoline, retail	3.37	2.45	2.07	2.28	2.43	2.63	2.84	3.09
	(Million gallons)							
Motor gasoline supplied	136,757	140,432	143,126	142,988	142,820	142,363	141,598	140,404
Ethanol supply and use								
Production	14,313	14,806	14,826	15,116	15,088	15,216	15,181	15,140
From corn	14,222	14,439	14,467	14,744	14,716	14,847	14,816	14,777
From other feedstocks	90	365	356	363	357	348	339	332
Cellulosic	1	2	4	9	15	20	26	31
Imports	75	92	6	33	86	92	111	124
Domestic disappearance	13,444	13,940	14,071	14,495	14,472	14,610	14,588	14,574
In low-level blends	13,261	13,704	13,798	13,932	13,931	13,860	13,765	13,613
In mid-level blends	7	51	82	168	163	206	282	335
In flex fuel vehicles	176	184	190	395	378	544	542	626
Exports	846	844	810	695	739	731	733	718
Ending stocks	787	900	853	812	774	742	712	686
Ethanol prices								
	(Dollars per gallon)							
Conventional rack, Omaha	2.34	1.61	1.86	1.85	1.94	2.01	2.03	2.03
Other advanced rack	2.40	1.76	1.97	1.97	2.11	2.01	2.03	2.03
Effective retail	2.56	1.63	1.62	1.40	1.60	1.66	1.78	1.95
Ethanol/gasoline retail ratio	0.76	0.66	0.78	0.61	0.66	0.63	0.63	0.63
RIN values								
	(Dollars per gallon)							
Conventional ethanol	0.49	0.55	0.84	1.00	0.88	0.90	0.78	0.59
Other advanced ethanol	0.54	0.71	0.95	1.12	1.04	0.90	0.78	0.59

U.S. beef sector

Calendar year	2014	2015	2016	2017	2018	2019	2020	2021
				(Million head)				
Beef cows (Jan. 1)	29.1	29.3	30.3	30.8	31.1	31.3	31.2	30.7
Dairy cows (Jan. 1)	9.2	9.3	9.3	9.3	9.3	9.3	9.3	9.3
Cattle and calves (Jan. 1)	88.5	89.1	92.0	94.1	95.3	95.7	95.5	94.8
				(Million pounds)				
Beef supply and use								
Production	24,316	23,760	24,837	25,956	26,756	27,462	27,777	27,749
Imports	2,947	3,371	2,955	2,639	2,599	2,581	2,628	2,691
Domestic use	24,683	24,773	25,417	25,991	26,665	27,208	27,477	27,479
Exports	2,572	2,265	2,435	2,580	2,673	2,811	2,912	2,955
Ending stocks	591	683	623	646	664	688	703	710
				(Dollars per hundredweight)				
Prices								
Total all grades, 5-area direct steers	154.56	148.12	126.42	119.23	114.02	111.09	110.90	113.16
600 - 650 lb. Oklahoma City feeder steers	225.07	226.52	160.60	150.53	141.38	135.04	134.94	140.38
Boxed beef cutout	239.21	236.93	213.52	200.51	193.72	189.97	189.87	193.04
				(Dollars per pound)				
Beef retail	5.97	6.29	6.03	5.78	5.67	5.62	5.62	5.74

U.S. pork sector

Calendar year	2014	2015	2016	2017	2018	2019	2020	2021
				(Million head)				
Breeding herd (Dec. 1*)	5.76	5.94	6.00	5.98	5.93	5.81	5.67	5.56
Market hogs (Dec. 1*)	59.0	61.8	62.9	64.2	64.6	64.6	64.1	63.6
				(Million pounds)				
Pork supply and use								
Production	22,858	24,517	24,922	25,442	25,656	25,718	25,645	25,690
Imports	1,011	1,115	1,147	1,145	1,061	1,022	993	1,005
Domestic use	18,836	20,592	20,932	21,236	21,233	21,071	20,826	20,687
Exports	5,092	5,009	5,133	5,323	5,478	5,671	5,819	6,009
Ending stocks	559	590	594	621	627	626	619	618
				(Dollars per hundredweight)				
Prices								
Barrows & gilts, national base 51-52% lean equivalent	76.03	50.23	48.48	44.07	45.70	48.52	51.49	54.77
Pork cutout value	110.10	78.96	78.87	71.19	71.76	76.04	81.50	87.17
				(Dollars per pound)				
Pork retail	4.02	3.85	3.79	3.67	3.71	3.85	4.03	4.16

* Preceding year

U.S. poultry supply and use

Calendar year	2014	2015	2016	2017	2018	2019	2020	2021
Broiler	(Million pounds)							
Production	38,153	39,620	40,585	41,643	42,203	42,698	43,350	43,999
Imports	117	130	131	132	134	136	138	140
Domestic use	30,960	33,277	34,125	34,790	35,049	35,326	35,790	36,281
Exports	7,298	6,321	6,642	6,964	7,285	7,508	7,691	7,850
Ending stocks	680	832	782	803	806	806	813	820
Turkey								
Production	5,756	5,627	5,911	6,158	6,226	6,253	6,289	6,333
Imports	28	45	48	40	41	41	42	42
Domestic use	5,053	5,136	5,334	5,488	5,563	5,583	5,603	5,631
Exports	775	529	605	670	691	709	725	741
Ending stocks	193	201	221	261	273	274	276	280
Prices								
National composite	(Cents per pound)							
wholesale broiler	104.88	90.52	85.75	83.88	85.67	88.53	89.52	90.37
Broiler retail	196.27	196.67	190.62	190.13	192.88	197.01	200.28	203.28
8-16 lb. national turkey hens	107.59	116.15	119.17	104.62	100.56	102.40	103.77	104.57
Turkey retail	160.13	150.54	153.80	151.04	149.02	152.69	156.27	159.38

U.S. per-capita meat consumption

Calendar year	2014	2015	2016	2017	2018	2019	2020	2021
	(Pounds)							
Beef	54.1	53.9	54.9	55.7	56.6	57.3	57.5	57.0
Pork	45.8	49.7	50.1	50.4	50.0	49.2	48.3	47.6
Broiler	83.3	88.9	90.4	91.4	91.4	91.4	91.8	92.4
Turkey	15.8	16.0	16.5	16.8	16.9	16.8	16.7	16.7
Sum	199.0	208.4	211.8	214.3	214.9	214.8	214.3	213.7

U.S. dairy sector

Calendar year	2014	2015	2016	2017	2018	2019	2020	2021
Milk supply								
Dairy cows (thou. head)	9,257	9,317	9,328	9,323	9,319	9,325	9,333	9,335
Milk yield (lbs. per cow)	22,259	22,393	22,734	23,073	23,442	23,763	24,042	24,331
Milk production (bil. lbs.)	206.1	208.6	212.1	215.1	218.5	221.6	224.4	227.1
(Dollars per hundredweight)								
All milk price	24.07	17.21	16.09	16.86	17.85	18.16	18.15	18.17
Wholesale prices								
(Dollars per pound)								
Butter, CME	2.16	2.09	2.14	2.09	2.06	2.04	2.02	2.00
Cheese, Am., 40#, CME	2.11	1.61	1.55	1.58	1.62	1.63	1.62	1.63
Nonfat dry milk, AA	1.74	0.94	0.84	1.01	1.17	1.22	1.23	1.25
Dairy product production								
(Million pounds)								
American cheese	4,588	4,695	4,749	4,830	4,897	4,964	5,025	5,084
Other cheese	6,924	7,144	7,338	7,457	7,564	7,680	7,791	7,903
Butter	1,855	1,858	1,995	2,035	2,088	2,126	2,160	2,193
Nonfat dry milk	2,308	2,269	2,269	2,341	2,436	2,495	2,543	2,591

U.S. consumer food price inflation

Calendar year	2014	2015	2016	2017	2018	2019	2020	2021
(Change from the previous year)								
Food	2.4%	1.9%	0.9%	1.7%	2.2%	2.5%	2.5%	2.5%
Food at home	2.4%	1.2%	-0.7%	1.1%	2.1%	2.4%	2.4%	2.4%
Cereal and bakery	0.2%	1.1%	0.1%	0.7%	2.2%	2.4%	2.2%	2.0%
Meat	7.2%	2.9%	-4.3%	-0.8%	1.1%	2.2%	2.5%	2.8%
Dairy	3.6%	-1.3%	-1.6%	2.2%	3.2%	2.9%	2.4%	2.3%
Fruits and vegetables	1.5%	-0.2%	1.9%	2.5%	2.3%	2.3%	2.1%	2.1%
Other food at home	0.7%	1.5%	1.2%	1.7%	2.3%	2.4%	2.3%	2.2%
Food away from home	2.4%	2.9%	2.9%	2.3%	2.2%	2.6%	2.6%	2.6%