
U.S. LIVESTOCK AND DAIRY

U.S. Beef

Returns to cow-calf producers have declined from the high profitability levels of 2003-05. The next few years could be financially difficult, as high and rising input costs coincide with lower feeder cattle prices. Despite the absence of large declines in fed steer prices, high corn prices will force feedlots to lower the amount of money they can pay for feeder cattle.

Uncertainty over BSE-induced trade barriers, extremely dry weather in various parts of the country, and other external factors limited the amount of growth in the beef cow herd that would typically result from the profitability levels of 2003-05. With returns expected at low or negative levels for the next few years, the window for expansion of the beef cow herd inventory has likely closed.

Cattle imports from Canada and Mexico topped 2.5 million head in 2007. This is the second-highest total ever, although imports still account for less than 7% of the domestic calf crop. Beef exports have recovered about half of the quantity lost from the BSE-related disruptions that began in late 2003. Exports will continue to improve at a slow pace because of high beef prices and limited penetration into Asian markets.

U.S. Beef Supply and Utilization

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	(Million Head)										
Beef Cows (Jan. 1)	32.9	32.8	32.9	32.9	32.9	32.9	32.9	32.8	32.8	32.7	32.7
Dairy Cows (Jan. 1)	9.1	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
Cattle and Calves (Jan. 1)	97.0	96.9	97.2	97.5	97.7	97.7	97.3	97.0	96.5	96.1	95.9
Calf Crop	37.4	37.4	37.5	37.6	37.8	37.8	37.8	37.8	37.8	37.8	37.8
Calf Death Loss	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2
Calf Slaughter	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Beef Cow Slaughter	3.3	3.0	2.9	2.7	2.6	2.5	2.6	2.7	2.8	2.8	2.8
Dairy Cow Slaughter	2.6	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7
Bull Slaughter	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Steer and Heifer Slaughter	28.0	27.9	28.3	28.9	29.5	29.9	29.9	29.7	29.5	29.2	29.1
Total Slaughter	35.2	35.1	35.3	35.7	36.1	36.5	36.6	36.5	36.4	36.2	36.0
Cattle Imports	2.5	2.7	2.7	2.7	2.8	2.8	2.8	2.9	2.9	3.0	3.0
Cattle Exports	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.4	0.5	0.5	0.5
Cattle Death Loss	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3
Residual	-0.1	0.0	0.1	0.3	0.4	0.4	0.4	0.4	0.3	0.2	0.2
Cattle and Calves (Dec. 31)	96.9	97.2	97.5	97.7	97.7	97.3	97.0	96.5	96.1	95.9	95.8
Cattle on Feed (Jan. 1)	14.3	14.4	14.3	14.3	14.5	14.6	14.5	14.3	14.2	14.2	14.2
Supply	(Million Pounds)										
Beginning Stocks	630	600	603	608	632	680	697	706	707	706	701
Imports	3,165	3,313	3,475	3,565	3,585	3,534	3,541	3,531	3,574	3,621	3,698
Production	26,515	26,465	26,811	27,338	27,861	28,336	28,455	28,485	28,482	28,440	28,450
Total	30,310	30,378	30,889	31,512	32,079	32,551	32,694	32,721	32,764	32,768	32,849
Disappearance											
Domestic Use	28,260	27,923	28,217	28,615	28,967	29,217	29,254	29,272	29,298	29,289	29,304
Exports	1,450	1,852	2,064	2,264	2,431	2,637	2,734	2,742	2,760	2,778	2,847
Total	29,710	29,775	30,280	30,879	31,398	31,854	31,988	32,014	32,058	32,067	32,151
Ending Stocks	600	603	608	632	680	697	706	707	706	701	698
Per Capita Consumption	(Pounds)										
Carcass Weight	93.3	91.4	91.6	92.1	92.4	92.4	91.7	91.0	90.3	89.6	88.9
Retail Weight	65.3	64.0	64.1	64.4	64.7	64.7	64.2	63.7	63.2	62.7	62.2
Change	-0.5%	-2.1%	0.2%	0.5%	0.4%	0.0%	-0.7%	-0.8%	-0.7%	-0.9%	-0.8%
Prices	(U.S. Dollars per Hundredweight)										
1100 - 1300 #, Nebraska Direct Steers	91.82	94.12	91.95	90.71	89.76	89.40	90.15	91.49	93.12	95.06	96.96
Change	7.5%	2.5%	-2.3%	-1.3%	-1.0%	-0.4%	0.8%	1.5%	1.8%	2.1%	2.0%
600 - 650 #, Oklahoma City Feeder Steers	115.52	108.79	102.17	98.23	96.58	96.04	98.98	102.39	106.70	110.45	114.95
Change	-1.8%	-5.8%	-6.1%	-3.9%	-1.7%	-0.6%	3.1%	3.5%	4.2%	3.5%	4.1%
Utility Cows, Sioux Falls	51.93	53.94	52.20	51.62	51.40	51.36	52.78	53.93	55.53	57.35	58.76
Change	9.2%	3.9%	-3.2%	-1.1%	-0.4%	-0.1%	2.8%	2.2%	3.0%	3.3%	2.4%
Boxed Beef Cutout	149.89	155.42	154.21	154.15	153.86	153.63	154.63	156.67	159.37	162.56	165.20
Change	2.1%	3.7%	-0.8%	0.0%	-0.2%	-0.1%	0.7%	1.3%	1.7%	2.0%	1.6%
	(U.S. Dollars per Pound)										
Beef Retail	4.16	4.29	4.29	4.27	4.26	4.26	4.30	4.40	4.50	4.62	4.74
Change	4.7%	3.3%	-0.1%	-0.5%	-0.1%	-0.1%	1.1%	2.2%	2.4%	2.6%	2.6%
Net Returns	(U.S. Dollars per Cow)										
Cow - Calf	33.97	15.25	-17.62	-38.05	-47.10	-51.87	-40.44	-28.53	-13.55	1.15	17.66

U.S. Pork

Hog supplies were large in 2007. The sow herd posted annual increases for the past 11 quarters, and hog import growth was strong. Slaughter numbers will remain large this year, as recent decisions to cut the sow herd will have little effect on 2008 supply. Slaughter capacity has not been a major issue yet as it was in 1998-99. Recent increases in hog slaughter capacity have improved the demand for live hogs.

Canada continues to send increasing volumes of hogs to the U.S. because its hog processing sector is less competitive. Pork exports grow every year, placing hog returns at much higher levels than the supply increases of the past few years would typically provide. While pork production was two billion pounds (10%) higher in 2007 than in 2003, exports were 1.4 billion pounds (84%) higher.

Hog prices were down only slightly in 2007 on an annual basis, though prices were down sharply from 2006 during the last three months of the year. Low 2008 hog prices will lead to large financial losses for hog producers. As a result, sow numbers for the second half of 2008 and 2009 will be lower. Given expected input costs, hog prices will need to average \$50-\$55 per cwt in order to provide producers with historical average return levels.

U.S. Pork Supply and Utilization

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	(Million Head)										
Breeding Herd (Dec. 1*)	6.09	6.16	6.05	5.88	5.82	5.84	5.88	5.93	5.93	5.88	5.84
Gilts Added	3.51	3.44	3.29	3.27	3.29	3.33	3.36	3.36	3.32	3.29	3.22
Sows Slaughter	3.38	3.49	3.40	3.27	3.22	3.23	3.26	3.30	3.30	3.27	3.24
Sows Farrowed	11.96	11.99	11.80	11.65	11.68	11.81	11.97	12.08	12.10	12.09	12.05
Pigs per Litter (Head)	9.19	9.24	9.29	9.33	9.38	9.42	9.46	9.51	9.55	9.59	9.63
Market Hogs (Dec. 1*)	56.4	59.0	59.3	59.1	58.6	58.9	59.7	60.5	61.0	61.2	61.4
Pig Crop	109.9	110.8	109.6	108.7	109.5	111.3	113.3	114.8	115.6	116.0	116.1
Barrow and Gilt Slaughter	105.2	108.6	108.8	108.4	108.4	109.7	111.7	113.6	114.8	115.2	115.6
Hog Imports	9.9	10.0	10.5	10.5	10.7	10.8	11.0	11.2	11.4	11.5	11.5
Hog Exports	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Death Loss/Residual	11.9	11.8	11.4	11.3	11.3	11.5	11.6	11.8	11.9	11.9	12.0
Market Hogs (Nov. 30)	59.0	59.3	59.1	58.6	58.9	59.7	60.5	61.0	61.2	61.4	61.3
	(Million Pounds)										
Supply											
Beginning Stocks	514	560	580	579	572	572	582	599	616	629	635
Imports	1,001	976	1,070	1,117	1,137	1,144	1,117	1,082	1,066	1,052	1,092
Production	21,959	22,692	22,786	22,751	22,836	23,174	23,675	24,167	24,509	24,699	24,887
Total	23,474	24,228	24,436	24,447	24,545	24,890	25,374	25,847	26,192	26,380	26,613
Disappearance											
Domestic Use	19,754	20,242	20,312	20,184	20,136	20,296	20,587	20,866	21,100	21,170	21,291
Exports	3,160	3,405	3,545	3,691	3,837	4,012	4,189	4,365	4,463	4,576	4,682
Total	22,914	23,648	23,857	23,875	23,973	24,309	24,776	25,231	25,563	25,745	25,973
Ending Stocks	560	580	579	572	572	582	599	616	629	635	640
	(Pounds)										
Per Capita Consumption											
Carcass Weight	65.2	66.3	65.9	64.9	64.2	64.2	64.6	64.9	65.1	64.7	64.6
Retail Weight	50.6	51.4	51.1	50.4	49.8	49.8	50.1	50.3	50.5	50.2	50.1
Change	2.7%	1.6%	-0.5%	-1.5%	-1.1%	-0.1%	0.6%	0.5%	0.3%	-0.5%	-0.2%
Prices											
Barrows & Gilts, Natl. Base	(U.S. Dollars per Hundredweight)										
51-52% lean equiv.	47.09	43.90	47.21	51.69	53.99	54.56	53.43	51.30	50.29	51.86	53.13
Change	-0.4%	-6.8%	7.5%	9.5%	4.4%	1.1%	-2.1%	-4.0%	-2.0%	3.1%	2.5%
Sows, IA-S. Minn. #1-2, 300-400 lb	35.56	33.73	37.78	42.91	45.43	46.16	44.93	42.88	41.47	42.71	43.56
Change	-1.9%	-5.2%	12.0%	13.6%	5.9%	1.6%	-2.7%	-4.6%	-3.3%	3.0%	2.0%
Pork Cutout Value	67.54	66.43	70.68	76.43	79.41	80.84	80.29	79.08	78.40	79.67	80.52
Change	-0.1%	-1.6%	6.4%	8.1%	3.9%	1.8%	-0.7%	-1.5%	-0.9%	1.6%	1.1%
	(U.S. Dollars per Pound)										
Pork Retail	2.87	2.86	2.90	3.04	3.19	3.27	3.27	3.25	3.24	3.29	3.36
Change	2.2%	-0.5%	1.7%	4.6%	4.9%	2.7%	-0.3%	-0.4%	-0.3%	1.3%	2.2%
Net Returns	(U.S. Dollars per Hundredweight)										
Farrow - Finish	1.16	-9.84	-5.15	0.94	4.11	4.52	2.95	0.41	-0.80	0.77	2.25

* Preceding year.

U.S. Poultry

Chicken producers have rapidly adjusted production since 2006 in response to volatile profitability. Four consecutive quarters of production declines, resulting from low chicken prices in early 2006, gave way to strong growth at the end of 2007 as returns improved. Ample supplies of chicken and pork in early 2008 will again cause producers to limit growth. Long-term production growth is expected to be 1% to 2%.

All poultry prices increased in 2007, led by wholesale egg prices, which jumped by nearly 60%. Despite the output price increases for chicken and turkey, profitability, as measured by feed-price ratios, fell to the second-lowest levels since 1997. High expected corn and soybean meal prices will require historically high poultry prices in order to allow producers to remain viable.

The importance of exports to the poultry industry is not fully captured by merely measuring exports as a percentage of production, because dark-meat products less favored by U.S. consumers are most popular to international buyers. The sporadic outbreaks of avian influenza around the world in recent years have not yet significantly impacted world poultry demand, though this threat remains a risk factor for U.S. export levels.

U.S. Broiler Supply and Utilization

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Supply	(Million Pounds)										
Beginning Stocks	745	675	732	823	885	899	900	901	901	904	910
Imports	61	60	66	71	75	78	81	84	87	90	93
Production	35,492	36,354	36,812	37,119	37,583	38,059	38,531	38,989	39,525	40,104	40,741
Total	36,298	37,089	37,610	38,013	38,543	39,036	39,512	39,974	40,513	41,099	41,744
Disappearance											
Domestic Use	29,921	30,408	30,707	30,973	31,424	31,801	32,147	32,407	32,762	33,140	33,537
Exports	5,701	5,949	6,080	6,156	6,220	6,334	6,464	6,666	6,846	7,049	7,291
Total	35,622	36,357	36,787	37,129	37,643	38,136	38,611	39,073	39,609	40,189	40,827
Ending Stocks	675	732	823	885	899	900	901	901	904	910	917
Per Capita Consumption	(Pounds)										
RTC Weight	98.8	99.5	99.6	99.6	100.2	100.6	100.8	100.8	101.0	101.3	101.7
Retail Weight	84.9	85.5	85.6	85.6	86.1	86.4	86.6	86.6	86.8	87.1	87.4
Change	-2.4%	0.7%	0.1%	0.0%	0.6%	0.3%	0.2%	0.0%	0.3%	0.3%	0.4%
Prices	(Cents per Pound)										
12-City Wholesale	76.37	74.75	74.39	74.16	73.99	74.94	75.80	77.22	78.43	79.24	79.93
Change	18.7%	-2.1%	-0.5%	-0.3%	-0.2%	1.3%	1.1%	1.9%	1.6%	1.0%	0.9%
Broiler Retail	165.11	167.57	170.62	172.53	173.91	176.20	178.26	181.26	184.27	186.60	188.51
Change	5.1%	1.5%	1.8%	1.1%	0.8%	1.3%	1.2%	1.7%	1.7%	1.3%	1.0%
Broiler - Feed Ratio	5.4	4.7	5.0	5.2	5.3	5.4	5.4	5.5	5.6	5.7	5.8

U.S. Turkey Supply and Utilization

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Supply	(Million Pounds)										
Beginning Stocks	218	235	249	257	258	258	257	256	257	258	261
Imports	10	12	13	14	15	16	17	18	19	20	21
Production	5,825	5,841	5,800	5,785	5,801	5,838	5,882	5,927	5,977	6,032	6,094
Total	6,053	6,088	6,062	6,056	6,073	6,112	6,156	6,202	6,253	6,311	6,376
Disappearance											
Domestic Use	5,256	5,235	5,187	5,172	5,183	5,211	5,242	5,267	5,296	5,329	5,368
Exports	562	605	618	626	633	644	657	678	699	721	743
Total	5,818	5,840	5,805	5,798	5,816	5,855	5,900	5,944	5,995	6,050	6,112
Ending Stocks	235	249	257	258	258	257	256	257	258	261	264
Per Capita Consumption	(Pounds)										
Change	17.4	17.1	16.8	16.6	16.5	16.5	16.4	16.4	16.3	16.3	16.3
Change	2.8%	-1.3%	-1.8%	-1.1%	-0.6%	-0.3%	-0.2%	-0.4%	-0.3%	-0.2%	-0.1%
Prices	(U.S. Cents per Pound)										
East. Region, Wholesale	82.14	82.73	84.50	85.20	86.12	87.36	87.98	88.80	89.66	90.06	90.18
Change	6.7%	0.7%	2.1%	0.8%	1.1%	1.4%	0.7%	0.9%	1.0%	0.4%	0.1%
Turkey Retail	114.99	116.90	118.27	120.11	121.90	123.60	124.86	126.25	127.57	128.42	128.84
Change	3.8%	1.7%	1.2%	1.6%	1.5%	1.4%	1.0%	1.1%	1.0%	0.7%	0.3%
Turkey - Feed Ratio	5.9	5.2	5.7	6.0	6.3	6.4	6.4	6.4	6.5	6.5	6.6

U.S. Egg Supply and Utilization

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Supply	(Million Dozen)										
Beginning Stocks	13	13	12	12	12	12	12	12	12	12	12
Production	7,518	7,569	7,631	7,680	7,737	7,794	7,842	7,888	7,936	7,989	8,048
Imports	15	14	14	15	15	15	16	16	16	16	17
Total	7,545	7,596	7,657	7,707	7,764	7,821	7,870	7,915	7,964	8,018	8,077
Disappearance											
Civilian Disappearance											
Shell Egg	4,309	4,347	4,362	4,374	4,388	4,401	4,417	4,430	4,444	4,461	4,481
Breaking Egg	1,966	1,999	2,036	2,064	2,095	2,126	2,145	2,166	2,187	2,211	2,237
Hatching Egg	1,012	1,008	1,009	1,008	1,011	1,014	1,017	1,021	1,027	1,033	1,041
Exports	246	230	239	249	259	269	278	287	294	300	306
Total	7,532	7,584	7,645	7,695	7,752	7,809	7,858	7,903	7,952	8,006	8,065
Ending Stock	13	12	12	12	12	12	12	12	12	12	12
Per Capita Consumption	(Eggs)										
Shell Egg	170.7	170.8	169.8	168.9	167.9	167.0	166.2	165.3	164.4	163.7	163.1
Change	-3.2%	0.0%	-0.5%	-0.6%	-0.5%	-0.6%	-0.5%	-0.6%	-0.5%	-0.4%	-0.4%
Breaking Egg	77.9	78.5	79.3	79.7	80.2	80.7	80.7	80.8	80.9	81.2	81.4
Change	-1.7%	0.8%	0.9%	0.5%	0.6%	0.6%	0.1%	0.1%	0.2%	0.3%	0.3%
Total	248.6	249.3	249.1	248.5	248.1	247.7	246.9	246.1	245.4	244.9	244.5
Prices	(U.S. Cents per Dozen)										
NY Grade A Lg. Wholesale	114.36	107.12	102.41	101.16	101.46	102.76	103.91	105.09	106.31	106.92	107.12
Change	59.4%	-6.3%	-4.4%	-1.2%	0.3%	1.3%	1.1%	1.1%	1.2%	0.6%	0.2%
Shell Egg Retail	167.63	163.85	159.02	157.43	158.71	161.30	164.04	167.13	170.35	173.02	175.29
Change	28.3%	-2.3%	-2.9%	-1.0%	0.8%	1.6%	1.7%	1.9%	1.9%	1.6%	1.3%
Egg - Feed Ratio	10.1	8.3	8.0	8.1	8.2	8.3	8.4	8.4	8.5	8.6	8.7

U.S. Dairy

Class III and Class IV prices in 2007 were at record levels of \$18.04 and \$18.36 per cwt, respectively. For the first time since 2002, the 2007 Class IV price exceeded the Class III price because of strong international skim milk powder prices. The Class III price is expected to exceed the Class IV price throughout the baseline because of weaker world skim milk powder prices.

Strong international demand led to record nonfat dry milk and cheese prices in 2007. World dairy prices are expected to soften in 2008 but still remain at high levels relative to historical standards. U.S. wholesale butter prices are closest to the government support level, which suggests a greater chance of butter entering government storage than other dairy products.

The 2007 all-milk price set an all-time record of \$19.15 per cwt. The 2008 all-milk price is projected to decline to \$17.38 per cwt, still the second-highest level on record. The volatility in milk prices that has occurred over the past 10 years is expected to continue. Stochastic analysis indicates that 80% of model outcomes result in an all-milk price between \$15 and \$19 per cwt.

U.S. Milk Component Supply and Utilization

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Milk-Fat Basis	(Million Pounds)										
Fluid Use	1,733	1,721	1,733	1,747	1,764	1,779	1,792	1,802	1,812	1,823	1,834
Whole Milk	564	545	536	528	520	511	502	491	481	470	460
2% Milk	400	398	404	410	417	423	428	432	436	441	445
1% and Skim Milk	85	83	83	83	83	83	83	83	83	82	82
Other	684	694	709	726	744	762	779	796	812	829	846
Product Use	4,763	4,907	4,969	5,069	5,146	5,218	5,274	5,326	5,377	5,428	5,483
American Cheese	1,248	1,315	1,325	1,346	1,370	1,392	1,414	1,434	1,453	1,471	1,489
Other Cheese	1,420	1,470	1,501	1,538	1,577	1,613	1,651	1,686	1,723	1,759	1,795
Butter	1,249	1,267	1,287	1,326	1,337	1,347	1,340	1,336	1,330	1,326	1,325
Nonfat Dry	3	3	3	3	3	3	3	4	4	4	4
Evap. and Condensed	59	56	55	55	55	55	55	55	55	55	54
Frozen Products	696	703	704	707	710	712	714	716	717	718	720
Whey Products	11	11	11	11	11	11	11	11	11	11	11
Other	78	82	82	82	83	83	84	84	85	85	85
Farm Use	40	41	41	41	41	41	42	42	42	42	42
Milk Production	185,599	189,677	191,731	194,882	197,950	200,828	203,264	205,516	207,738	210,005	212,385
% Fat	3.69%	3.69%	3.69%	3.69%	3.68%	3.67%	3.66%	3.65%	3.64%	3.63%	3.62%
Total Fat Supply	6,849	6,999	7,075	7,191	7,285	7,370	7,439	7,501	7,562	7,623	7,688
Residual Fat	314	331	332	334	333	332	333	332	331	330	330
Solids-Not-Fat Basis											
Fluid Use	5,173	5,096	5,104	5,119	5,142	5,154	5,158	5,154	5,150	5,146	5,144
Whole Milk	1,496	1,446	1,422	1,399	1,379	1,356	1,330	1,302	1,275	1,247	1,221
2% Milk	1,827	1,821	1,847	1,874	1,905	1,932	1,955	1,975	1,995	2,015	2,035
1% and Skim Milk	1,501	1,474	1,473	1,474	1,478	1,478	1,475	1,470	1,465	1,460	1,456
Other	349	354	362	371	380	389	398	407	415	424	432
Product Use	6,884	7,157	7,273	7,463	7,635	7,803	7,934	8,064	8,188	8,316	8,452
American Cheese	1,159	1,222	1,231	1,251	1,273	1,293	1,314	1,332	1,350	1,366	1,383
Other Cheese	1,488	1,541	1,573	1,612	1,653	1,691	1,730	1,767	1,806	1,843	1,881
Butter	47	47	48	49	50	50	50	50	50	49	49
Nonfat Dry	581	620	687	795	871	955	1,003	1,058	1,112	1,180	1,261
Total Nonfat Dry	1,413	1,459	1,524	1,636	1,716	1,802	1,853	1,910	1,965	2,034	2,116
Nonfat Dry in Other	-831	-839	-837	-840	-844	-847	-850	-851	-853	-854	-856
Evap. and Condensed	500	474	472	471	471	470	470	468	466	464	461
Frozen Products	961	971	974	977	981	985	988	989	991	993	995
Whey Products	1,629	1,738	1,743	1,758	1,783	1,802	1,820	1,836	1,848	1,853	1,853
Other	518	544	546	549	553	556	560	563	566	567	568
Farm Use	94	97	97	97	97	98	98	98	99	99	99
Milk Production	185,599	189,677	191,731	194,882	197,950	200,828	203,264	205,516	207,738	210,005	212,385
% SNF	8.70%	8.70%	8.70%	8.70%	8.70%	8.70%	8.70%	8.70%	8.70%	8.70%	8.70%
Total SNF Supply	16,147	16,502	16,681	16,955	17,222	17,472	17,684	17,880	18,073	18,270	18,478
Residual Whey	2,620	2,724	2,775	2,839	2,906	2,972	3,042	3,107	3,177	3,246	3,315
Residual SNF	1,377	1,428	1,431	1,437	1,441	1,445	1,452	1,456	1,460	1,463	1,467
Min. FMMO Class Prices	(U.S. Dollars per Hundredweight)										
Class I Mover	18.14	15.46	15.45	15.52	15.56	15.64	15.54	15.55	15.62	15.75	15.91
Class II	18.36	15.37	15.43	15.35	15.21	15.16	14.92	14.84	14.85	14.91	14.99
Class III	18.04	15.69	15.67	15.74	15.78	15.86	15.76	15.77	15.84	15.97	16.13
Class IV	18.36	15.37	15.43	15.35	15.21	15.16	14.92	14.84	14.85	14.91	14.99
All Milk Price	19.15	16.68	16.67	16.69	16.67	16.70	16.56	16.53	16.58	16.69	16.82

U.S. State-Level Dairy Supply

The cost of producing milk has increased rapidly because of higher feed costs and energy-related inputs. Even with the second-highest all-milk price expected in 2008, receipts will barely reach breakeven levels. The growth in milk production costs is expected to level off after 2008 but remain at historically high levels.

The dairy cow herd has increased every year since 2005, and 2008 is expected to show continued growth. The growth in cow numbers reverses a long-term trend of declining dairy cow inventories. The growth in milk per cow is expected to stay between 1% and 2% over the baseline. New technology or adverse weather could move the industry outside of this range for any given year.

After expanding by only 5.6 billion pounds during the 2001 to 2004 period, milk production growth accelerated to 14.7 billion pounds from 2004 to 2007. Milk production is projected to grow by 1.4% annually over the baseline. The pace of the regional movement of milk production is expected to continue but at a slower rate than that of the past decade.

U.S. Dairy Cows by State

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	(Thousand Head)										
Alabama	13	13	12	12	11	11	11	11	10	10	10
Alaska	1	1	1	1	1	1	1	1	1	1	1
Arizona	181	189	194	200	205	209	214	217	221	224	226
Arkansas	17	15	13	11	10	9	8	8	7	7	7
California	1,810	1,856	1,876	1,902	1,927	1,949	1,968	1,984	1,998	2,012	2,025
Colorado	118	124	128	132	135	137	139	140	140	141	141
Connecticut	19	19	18	18	18	17	17	17	16	16	16
Delaware	7	7	6	6	6	6	5	5	5	5	4
Florida	127	124	118	115	112	110	108	106	104	103	101
Georgia	77	77	76	76	75	75	74	74	73	72	71
Hawaii	3	3	3	3	3	3	3	3	3	3	3
Idaho	513	538	553	569	585	599	611	622	632	642	651
Illinois	103	103	100	98	96	94	92	90	88	86	85
Indiana	167	167	164	163	162	161	161	160	159	159	159
Iowa	213	220	222	225	227	229	230	230	230	229	229
Kansas	109	109	108	108	109	110	110	110	109	109	109
Kentucky	90	88	84	81	78	76	73	71	68	66	64
Louisiana	29	27	25	23	22	21	19	18	17	16	15
Maine	33	33	32	31	31	31	30	30	30	30	30
Maryland	58	55	51	47	44	42	39	37	35	33	32
Massachusetts	15	14	12	11	11	10	10	9	9	9	9
Michigan	334	342	342	342	342	342	341	340	339	337	336
Minnesota	460	470	471	474	477	478	479	478	477	476	474
Mississippi	21	20	18	17	16	15	14	14	13	12	12
Missouri	112	108	102	97	92	88	84	80	76	72	69
Montana	18	17	16	16	16	16	16	16	16	16	16
Nebraska	59	56	53	50	49	47	46	44	44	43	43
Nevada	27	27	27	27	27	27	27	27	27	27	27
New Hampshire	14	13	12	12	11	11	11	11	10	10	10
New Jersey	10	10	9	8	8	7	7	6	6	6	6
New Mexico	342	334	320	311	304	299	296	293	291	291	291
New York	627	619	607	602	597	593	590	587	584	582	580
North Carolina	48	45	42	39	37	35	34	32	31	31	30
North Dakota	29	27	24	21	19	17	16	14	13	12	11
Ohio	276	278	274	273	273	272	271	271	270	270	270
Oklahoma	69	67	65	64	63	62	62	61	60	59	59
Oregon	113	111	110	109	109	109	108	108	107	106	106
Pennsylvania	550	549	544	541	537	534	530	525	519	514	509
Rhode Island	1	1	1	1	1	1	1	1	1	1	1
South Carolina	18	18	18	18	18	18	17	17	17	16	16
South Dakota	85	88	87	87	87	87	86	86	85	85	84
Tennessee	63	60	54	50	46	43	39	36	33	31	29
Texas	348	367	377	387	397	406	413	419	424	428	432
Utah	85	85	82	80	79	78	77	76	75	74	74
Vermont	140	140	138	137	136	135	134	132	131	129	127
Virginia	100	98	95	92	90	88	86	85	83	82	81
Washington	238	241	240	241	241	241	241	240	239	238	237
West Virginia	13	13	12	12	12	12	11	11	11	11	10
Wisconsin	1,248	1,255	1,242	1,237	1,234	1,231	1,228	1,225	1,222	1,220	1,220
Wyoming	7	7	8	8	8	8	8	9	9	9	9
United States	9,153	9,245	9,186	9,187	9,195	9,199	9,196	9,184	9,171	9,161	9,156

U.S. Milk Production by State

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	(Million Pounds)										
Alabama	199	201	192	187	183	181	178	175	172	170	168
Alaska	9	9	9	9	10	10	10	10	10	11	11
Arizona	4,198	4,393	4,570	4,757	4,927	5,075	5,210	5,336	5,454	5,565	5,670
Arkansas	220	196	167	147	131	119	110	104	101	101	104
California	40,660	42,049	43,137	44,369	45,519	46,610	47,523	48,356	49,168	49,970	50,769
Colorado	2,692	2,873	3,022	3,169	3,285	3,378	3,452	3,513	3,567	3,615	3,659
Connecticut	366	367	366	367	367	368	367	367	366	365	365
Delaware	113	110	108	105	102	99	96	94	91	88	85
Florida	2,117	2,062	1,998	1,980	1,970	1,963	1,955	1,946	1,938	1,932	1,930
Georgia	1,399	1,413	1,422	1,438	1,453	1,467	1,477	1,485	1,493	1,500	1,507
Hawaii	36	35	34	33	33	33	34	34	35	37	38
Idaho	11,543	12,232	12,778	13,364	13,922	14,429	14,864	15,272	15,664	16,043	16,414
Illinois	1,917	1,933	1,917	1,914	1,911	1,907	1,899	1,889	1,878	1,868	1,860
Indiana	3,373	3,339	3,326	3,341	3,361	3,384	3,404	3,425	3,451	3,484	3,523
Iowa	4,276	4,417	4,503	4,603	4,689	4,762	4,817	4,861	4,896	4,927	4,954
Kansas	2,264	2,284	2,303	2,367	2,427	2,481	2,527	2,568	2,607	2,636	2,661
Kentucky	1,252	1,241	1,214	1,195	1,175	1,157	1,138	1,119	1,102	1,087	1,075
Louisiana	351	338	313	294	278	264	250	236	222	209	197
Maine	586	595	585	582	582	583	584	585	587	589	594
Maryland	1,040	985	923	872	826	783	745	710	679	653	632
Massachusetts	253	241	220	206	196	189	183	179	176	175	176
Michigan	7,541	7,764	7,876	8,016	8,144	8,249	8,320	8,381	8,434	8,484	8,531
Minnesota	8,663	9,004	9,168	9,365	9,547	9,710	9,848	9,968	10,077	10,180	10,278
Mississippi	324	311	289	272	260	250	240	232	224	217	211
Missouri	1,678	1,638	1,570	1,517	1,467	1,418	1,368	1,318	1,270	1,225	1,184
Montana	334	322	324	329	334	340	346	352	358	365	373
Nebraska	1,077	1,040	998	971	951	936	924	916	914	918	929
Nevada	584	590	594	604	614	625	635	644	651	660	669
New Hampshire	291	279	265	257	254	251	250	249	249	249	249
New Jersey	169	159	148	138	130	123	117	112	108	104	102
New Mexico	7,310	7,249	7,004	6,862	6,767	6,705	6,659	6,634	6,640	6,679	6,751
New York	12,102	12,155	12,096	12,135	12,196	12,268	12,341	12,418	12,505	12,608	12,727
North Carolina	921	869	817	775	741	712	688	670	657	651	651
North Dakota	447	415	377	345	317	291	267	246	227	212	199
Ohio	4,975	5,037	5,045	5,090	5,137	5,184	5,227	5,269	5,315	5,367	5,426
Oklahoma	1,144	1,123	1,120	1,124	1,128	1,133	1,137	1,142	1,149	1,156	1,166
Oregon	2,173	2,141	2,150	2,170	2,190	2,207	2,219	2,229	2,239	2,251	2,265
Pennsylvania	10,689	10,829	10,867	10,955	11,032	11,095	11,139	11,169	11,195	11,219	11,245
Rhode Island	18	18	18	17	17	17	17	17	17	17	17
South Carolina	319	324	328	331	334	334	334	333	331	328	325
South Dakota	1,641	1,702	1,739	1,784	1,826	1,865	1,899	1,931	1,962	1,992	2,023
Tennessee	992	947	883	831	783	737	692	649	609	573	541
Texas	7,374	7,828	8,209	8,617	9,007	9,372	9,703	10,011	10,276	10,516	10,748
Utah	1,753	1,738	1,708	1,694	1,685	1,679	1,673	1,669	1,669	1,674	1,684
Vermont	2,531	2,558	2,559	2,570	2,578	2,582	2,582	2,579	2,575	2,569	2,564
Virginia	1,753	1,736	1,698	1,677	1,661	1,648	1,636	1,626	1,618	1,613	1,613
Washington	5,531	5,590	5,651	5,729	5,792	5,834	5,863	5,885	5,904	5,921	5,936
West Virginia	199	200	196	194	193	191	189	188	186	185	185
Wisconsin	24,068	24,656	24,781	25,060	25,359	25,664	25,956	26,242	26,540	26,861	27,213
Wyoming	134	140	147	153	159	165	170	175	180	184	189
United States	185,599	189,677	191,731	194,882	197,950	200,828	203,264	205,516	207,738	210,005	212,385

U.S. All-Milk Prices by State

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	(Dollars per Hundredweight)										
Alabama	21.37	18.70	18.69	18.74	18.75	18.81	18.69	18.68	18.74	18.86	19.01
Alaska	27.90	25.25	25.26	25.28	25.25	25.28	25.13	25.10	25.14	25.25	25.38
Arizona	19.25	16.57	16.58	16.60	16.58	16.61	16.47	16.44	16.49	16.60	16.73
Arkansas	19.01	16.36	16.36	16.41	16.41	16.47	16.34	16.33	16.39	16.51	16.66
California	18.07	15.76	15.78	15.78	15.72	15.73	15.57	15.53	15.56	15.66	15.78
Colorado	19.17	16.63	16.63	16.66	16.65	16.69	16.55	16.53	16.58	16.69	16.83
Connecticut	19.99	17.37	17.38	17.40	17.39	17.43	17.29	17.27	17.32	17.43	17.57
Delaware	19.71	17.04	17.05	17.08	17.07	17.11	16.97	16.95	17.01	17.12	17.26
Florida	22.25	19.55	19.55	19.60	19.61	19.67	19.56	19.55	19.62	19.74	19.89
Georgia	19.99	17.30	17.30	17.35	17.36	17.42	17.30	17.29	17.35	17.47	17.62
Hawaii	36.09	33.39	33.40	33.42	33.39	33.43	33.28	33.26	33.31	33.41	33.55
Idaho	17.83	15.22	15.23	15.25	15.22	15.25	15.11	15.08	15.13	15.24	15.37
Illinois	19.90	17.46	17.46	17.50	17.50	17.55	17.42	17.41	17.47	17.58	17.73
Indiana	19.30	16.69	16.69	16.73	16.72	16.77	16.64	16.63	16.68	16.80	16.94
Iowa	19.13	16.67	16.67	16.70	16.70	16.75	16.62	16.61	16.66	16.78	16.92
Kansas	19.33	16.82	16.82	16.86	16.85	16.89	16.76	16.74	16.80	16.91	17.05
Kentucky	20.48	17.78	17.78	17.82	17.82	17.87	17.74	17.73	17.78	17.90	18.04
Louisiana	19.99	17.32	17.31	17.36	17.37	17.43	17.31	17.30	17.36	17.48	17.62
Maine	20.40	17.79	17.79	17.82	17.80	17.84	17.71	17.68	17.74	17.85	17.98
Maryland	19.57	16.95	16.95	16.98	16.97	17.01	16.87	16.85	16.90	17.01	17.15
Massachusetts	19.99	17.37	17.38	17.40	17.39	17.43	17.29	17.27	17.32	17.43	17.57
Michigan	19.71	17.15	17.15	17.19	17.18	17.23	17.10	17.08	17.14	17.26	17.40
Minnesota	19.34	17.07	17.06	17.12	17.14	17.21	17.10	17.10	17.16	17.29	17.44
Mississippi	20.26	17.59	17.59	17.64	17.64	17.70	17.58	17.57	17.64	17.75	17.90
Missouri	19.64	17.02	17.02	17.06	17.06	17.11	16.99	16.97	17.03	17.14	17.29
Montana	18.18	15.91	15.91	15.96	15.98	16.05	15.94	15.94	16.01	16.13	16.28
Nebraska	18.60	16.06	16.06	16.09	16.08	16.12	15.98	15.96	16.01	16.12	16.26
Nevada	17.35	15.04	15.04	15.08	15.08	15.13	15.01	14.99	15.05	15.16	15.31
New Hampshire	19.71	17.09	17.10	17.13	17.11	17.15	17.01	16.99	17.04	17.15	17.29
New Jersey	18.60	15.98	15.99	16.02	16.00	16.04	15.90	15.88	15.93	16.04	16.18
New Mexico	18.79	16.40	16.40	16.44	16.44	16.49	16.36	16.35	16.41	16.52	16.66
New York	19.73	17.12	17.13	17.16	17.14	17.18	17.05	17.02	17.08	17.19	17.33
North Carolina	20.68	17.95	17.95	17.98	17.98	18.02	17.89	17.88	17.93	18.05	18.19
North Dakota	17.35	15.07	15.06	15.12	15.13	15.20	15.09	15.09	15.15	15.27	15.43
Ohio	19.92	17.36	17.36	17.40	17.39	17.44	17.31	17.29	17.35	17.46	17.60
Oklahoma	20.54	18.03	18.03	18.07	18.06	18.11	17.98	17.97	18.02	18.14	18.28
Oregon	18.33	15.70	15.71	15.72	15.69	15.72	15.57	15.54	15.59	15.69	15.82
Pennsylvania	20.91	18.29	18.30	18.33	18.31	18.36	18.22	18.20	18.25	18.36	18.50
Rhode Island	20.54	17.92	17.93	17.96	17.94	17.98	17.84	17.82	17.88	17.99	18.12
South Carolina	21.37	18.64	18.64	18.68	18.67	18.72	18.59	18.57	18.63	18.74	18.88
South Dakota	18.18	15.75	15.75	15.79	15.79	15.84	15.72	15.70	15.76	15.88	16.02
Tennessee	19.71	17.00	17.00	17.04	17.04	17.10	16.97	16.96	17.01	17.13	17.27
Texas	19.81	17.41	17.41	17.45	17.45	17.50	17.38	17.37	17.42	17.54	17.68
Utah	17.49	15.17	15.17	15.21	15.20	15.25	15.13	15.11	15.17	15.28	15.43
Vermont	20.47	17.85	17.86	17.88	17.87	17.91	17.77	17.75	17.80	17.91	18.05
Virginia	21.33	18.60	18.61	18.64	18.63	18.68	18.55	18.53	18.59	18.70	18.84
Washington	19.20	16.55	16.57	16.58	16.55	16.58	16.43	16.40	16.45	16.55	16.68
West Virginia	18.60	15.97	15.98	16.01	16.00	16.05	15.91	15.90	15.95	16.06	16.20
Wisconsin	19.22	16.92	16.91	16.97	16.99	17.05	16.94	16.94	17.00	17.12	17.28
Wyoming	17.77	15.22	15.23	15.26	15.24	15.29	15.15	15.13	15.18	15.29	15.43
United States	19.15	16.68	16.67	16.69	16.67	16.70	16.56	16.53	16.58	16.69	16.82

U.S. Dairy Products

Butter consumption is expected to remain near five pounds per person over the baseline. Modest growth in per capita nonfat dry milk consumption is projected over the baseline, as nonfat dry milk prices recede from their record-setting levels of 2007. Stronger international markets for powder products would limit the growth in nonfat dry milk consumption.

Growth in per capita cheese consumption remains important to the overall dairy outlook. A slowdown in consumption growth will limit the growth in milk supplies. A majority of the growth in per capita cheese consumption occurs in types other than American cheese. Total per capita cheese consumption reaches 37 pounds by 2017, an increase of 4.5 pounds from the 2007 level.

U.S. trade in butter and cheese is small relative to production. Thus, domestic production and consumption are similar except when stocks build or decline. The drawdown of government nonfat dry milk stocks allowed for large exports without compromising domestic availability in 2004 and 2005. With over 40% of domestic nonfat dry milk production now consumed outside of the U.S., a new source of volatility for the U.S. dairy market has emerged.

U.S. Dairy Product Supply and Utilization

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Butter	(Million Pounds)										
Production	1,540	1,562	1,587	1,635	1,648	1,661	1,652	1,647	1,640	1,635	1,634
Imports	37	38	39	40	41	42	43	44	45	46	47
Domestic Use	1,468	1,512	1,535	1,558	1,573	1,611	1,633	1,646	1,649	1,650	1,655
Total Foreign Use	78	81	96	116	116	91	61	46	36	31	26
Ending Stocks	140	148	143	145	146	146	147	146	146	146	147
Government	0	0	0	0	0	0	0	0	0	0	0
Commercial	140	148	143	145	146	146	147	146	146	146	146
CCC Net Rem. inc DEIP	0	0	0	0	0	0	0	0	0	0	0
American Cheese											
Production	3,878	4,087	4,120	4,185	4,258	4,326	4,396	4,457	4,516	4,572	4,628
Imports	51	51	51	51	51	51	51	51	51	51	51
Domestic Use	3,881	4,031	4,104	4,163	4,235	4,304	4,373	4,436	4,495	4,552	4,608
Total Foreign Use	60	60	60	60	60	60	60	60	60	60	60
Ending Stocks	522	570	577	590	605	618	633	645	657	668	679
Government	0	0	0	0	0	0	0	0	0	0	0
Commercial	522	570	577	590	605	618	632	645	657	668	679
CCC Net Rem. inc DEIP	0	0	0	0	0	0	0	0	0	0	0
Other Cheese											
Production	5,790	5,995	6,119	6,270	6,428	6,578	6,731	6,875	7,024	7,171	7,317
Imports	375	405	409	413	417	421	426	430	434	439	443
Domestic Use	5,969	6,214	6,363	6,523	6,684	6,839	6,995	7,144	7,297	7,448	7,599
Total Foreign Use	189	179	169	159	159	159	159	159	159	159	159
Ending Stocks	290	297	293	295	298	300	303	305	308	310	312
Nonfat Dry Milk											
Production	1,476	1,524	1,593	1,709	1,793	1,883	1,936	1,996	2,053	2,125	2,211
Imports	5	5	5	5	5	5	5	5	5	5	5
Domestic Use	832	903	923	950	984	1,015	1,050	1,087	1,125	1,163	1,201
Total Foreign Use	600	619	674	760	811	871	890	913	932	966	1,013
Ending Stocks	157	164	165	169	172	174	175	176	177	178	180
Government	0	0	0	0	0	0	0	0	0	0	0
Commercial	157	164	165	169	172	174	175	176	177	178	180
CCC Net Rem. inc DEIP	-27	0	0	0	0	0	0	0	0	0	0
Evap. and Condensed Milk											
Production	664	630	626	625	625	624	623	622	619	616	613
Imports	12	12	12	12	12	12	12	12	12	12	12
Domestic Use	621	585	582	581	581	580	579	577	575	572	569
Total Foreign Use	56	56	56	56	56	56	56	56	56	56	56
Ending Stocks	30	31	31	31	31	31	32	32	32	32	32

U.S. Dairy Product Supply and Utilization (continued)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Per Capita Consumption											
						(Pounds)					
Butter	4.8	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.1	5.0	5.0
Nonfat Dry Milk	2.7	3.0	3.0	3.1	3.1	3.2	3.3	3.4	3.5	3.6	3.6
Total Cheese	32.5	33.5	34.0	34.4	34.8	35.2	35.6	36.0	36.4	36.7	37.0
American	12.8	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	13.9	14.0
Other	19.7	20.3	20.6	21.0	21.3	21.6	21.9	22.2	22.5	22.8	23.1
Total Fluid Milk	206.2	201.5	200.2	199.2	198.5	197.5	196.1	194.5	192.9	191.3	189.9
Whole	57.0	54.6	53.2	51.9	50.7	49.5	48.1	46.7	45.3	44.0	42.7
2%	61.1	60.3	60.6	61.0	61.5	61.8	62.0	62.2	62.3	62.4	62.5
Lowfat	63.1	61.4	60.8	60.4	60.0	59.5	58.9	58.2	57.5	56.8	56.2
Other	25.1	25.2	25.5	25.9	26.3	26.7	27.1	27.4	27.8	28.1	28.5
Ice Cream	23.8	23.9	23.8	23.7	23.6	23.5	23.4	23.3	23.2	23.1	23.0
Wholesale Prices											
						(Cents per Pound)					
Butter, CME	136.8	117.4	117.5	118.3	121.5	124.5	123.7	125.4	127.5	127.8	126.3
Cheese, Am., 40#, CME	175.8	159.8	159.6	160.4	160.8	161.5	160.7	160.8	161.4	162.7	164.3
Nonfat Dry Milk, AA	180.4	152.7	153.4	152.1	148.9	146.8	144.4	142.6	141.7	142.3	144.0
Evaporated	193.8	175.3	176.0	176.6	176.9	177.3	177.3	177.6	178.3	179.3	180.5
Retail Prices											
						(Dollars per Pound)					
Butter, Salted, AA, Stick	3.03	2.84	2.89	2.97	3.05	3.13	3.14	3.19	3.24	3.27	3.28
Cheese, Natural Cheddar	4.23	3.95	3.96	4.02	4.08	4.15	4.18	4.23	4.30	4.38	4.47
Milk, Fresh, Whole Fortified	3.50	3.57	3.57	3.58	3.59	3.60	3.58	3.58	3.59	3.61	3.63
Ice Cream (half gallon)	3.95	3.81	3.84	3.89	3.95	4.00	4.02	4.04	4.07	4.10	4.13