# Livestock

Projections for the livestock sector reflect production adjustments in response to sharply higher grain prices due to the expansion of corn-based ethanol production. Returns to U.S. meat and poultry production fall from those in recent years, slowing increases in or reducing production of all meats over the next several years. Once the sector adjusts, lower overall production combined with strong domestic demand and some strengthening in meat exports result in higher prices and higher returns, providing economic incentives for expansion in the sector and a resumption in meat production gains.



### Livestock inventories and broiler production

Production of all meats slows or declines in the first half of the projection period, reflecting higher feed costs as more corn is used in ethanol production. Distillers grains, a coproduct of ethanol production, can be used in livestock rations, substituting for corn and sometimes for soybean meal (see box, page 52).

- Higher grain prices in tandem with drought impacts in 2006 hold down cattle inventories, pushing U.S. beef production down in 2009-11. Production then rises in the remainder of the projection period as returns improve. The cattle inventory remains in a range of 97-99 million head through 2011, and then expands to over 102 million by 2016. Rising slaughter weights augment this herd expansion, leading to annual beef production gains of 1 percent or more starting in 2013. Higher costs of feedlot gain will result in stocker cattle remaining on pasture to heavier weights before entering feedlots.
- Pork production declines in 2008-10 in response to higher feed prices and then grows for several years as higher hog prices improve returns. Expansion slows again at the end of the projections as returns narrow. Production coordination and market integration between the United States and Canada continue in the hog sector. Canada is the major supplier of live swine imported by the United States. Imported feeder pigs from Canada are finished and processed in the United States, where both finishing and processing costs are lower.
- Poultry production continues to rise, but less rapidly than during the 1990s due to the maturity of domestic demand, slower export growth, and adjustment to higher feed costs.

## Livestock Sector Use of Distillers Grains, a Coproduct of Ethanol Production

With the expansion of the U.S. ethanol industry and higher prices for corn, a reduced share of the corn crop is used directly for domestic livestock feeding. However, a coproduct of ethanol production, distillers grains, may substitute for corn in some livestock rations, particularly for beef and dairy cattle. Cattle feedlots located close to an ethanol plant will benefit from a steady supply of distillers grains. Meanwhile, distillers grains are less suitable in poultry and hog rations. The divergent effects of ethanol expansion on the different categories of livestock and in different regions of the country could result in structural changes in some parts of the U.S. livestock sector. For each 56-pound bushel of corn used in the production of ethanol, about 17.5 pounds of dried distillers grains are produced. (See box, page 22, for additional discussion of domestic biofuel issues.)

The use of distillers grains in livestock feeding and their overall substitution for direct corn feed use in the projections reflect a number of important underlying assumptions.

- The projections assume that 75 percent of distillers grains is used in domestic livestock sector feeding. Exports of distillers grains are assumed to account for 10 percent of production. The remaining 15 percent of production is assumed to go to other nonfeed, domestic uses.
- Of the portion of distillers grains used for domestic livestock feeding, 80 percent is assumed to be used for beef cattle, 10 percent for dairy, and 5 percent each for poultry and hogs. These assumptions reflect the relatively easier use of distillers grains by ruminants compared to monogastric animals. The high usage by beef cattle also reflects the ability of those animals to use the wet form of distillers grains.
- Based on the animal nutrition studies listed below, distillers grains on a dry matter basis are assumed to replace corn in rations of beef cattle pound for pound; dairy rations, 1 pound distillers grains for 0.45 pound corn; hog rations, 1 pound distillers grains for 0.85 pound corn; and poultry rations, 1 pound distillers grains for 0.55 pound corn. For each animal type, other ration components are adjusted to rebalance the ration. Protein adjustments affect soybean meal feeding for hogs, poultry, and dairy cattle. Most distillers grains used for cattle feeding displace urea as the protein source rather than soybean meal.

Using these assumptions, each bushel of corn used to produce ethanol results in a reduction of about a fifth of a bushel of direct corn feeding due to the use of distillers grains in rations. Since beef cattle are assumed to be the largest users of distillers grains, only a small offset is expected in soybean meal use.

## References

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#### Per capita meat consumption



Annual per capita consumption of red meats and poultry falls from 223 pounds in 2007 to a low of 213 pounds in 2012, reflecting livestock sector production adjustments to higher feed costs due to increased ethanol production as well as gains in meat and poultry exports. Per capita consumption of red meats and poultry then resumes growth but, at about 219 pounds in 2016, remains lower than in recent years.

- Per capita beef consumption declines through the first half of the projection period reflecting lower production due to drought in 2006 and adjustments in the industry to higher feed costs and reduced returns. Use of distillers grains in cattle rations and reductions in corn prices later in the projections lead to production gains and increases in per capita beef consumption in 2013-16.
- Although U.S. beef exports do not return to the levels reached prior to the December 2003 discovery of bovine spongiform encephalopathy (BSE) in Washington State, a gradual rebuilding of U.S. beef exports to Japan and South Korea is assumed in the projections, further limiting domestic per capita beef consumption.
- Strong demand for consistent, high-quality beef continues in the domestic hotel and restaurant market, and increasingly in the retail market. Beef export markets are also primarily for high-quality beef. An important development will be how beef quality is affected by the increased use of distillers grains in beef cattle rations.
- Higher feed costs lead to reductions in pork production which combine with rising pork exports to push per capita pork consumption down through 2011. A gradual rebound in per capita pork consumption occurs over the remainder of the projection period.
- Poultry prices remain lower than red meat prices. However, as returns are squeezed, production gains slow and per capita consumption declines for several years. Following these adjustments, production strengthens and per capita poultry consumption resumes growth later in the projections.

#### Nominal livestock prices



Livestock prices are projected to move to higher levels following near-term production adjustments in the sector in response to higher feed costs. As production rebounds later in the projections, prices decline somewhat although they remain historically high.



Percent of U.S. income spent on meat

Rising incomes facilitate gains in consumer spending on meat. Nonetheless, overall meat expenditures represent a declining proportion of disposable income, continuing a long-term trend.

#### U.S. meat exports

Billion pounds



Although the domestic market remains the dominant source of overall meat demand, exports account for a growing share U.S. meat use. Despite higher prices, U.S. meat exports rise throughout the projections as global economic growth supports increases in demand.

## Beef

- U.S. beef exports primarily reflect demand for high-quality fed beef, with most U.S. beef exports typically going to Mexico, Canada, and markets in Pacific Rim nations. U.S. beef exports are projected to rise slowly as a gradual recovery is assumed in the Japanese and South Korean export markets lost following the first U.S. BSE case in December 2003.
- U.S. imports of processing beef from Australia and New Zealand increase in the projections. With more of demand in the East Asian market being met by U.S. beef exports, exports to that market from Australia and New Zealand are reduced, resulting in more of their product being shipped to the United States. The United States is a net beef importer by volume throughout the projection period as the recovery of high-quality fed beef exports does not reach levels of 2000-03.

## Pork

- U.S. pork exports continue to benefit from lower levels of beef exports as import demand shifts among competing meats. Pacific Rim nations and Mexico remain key markets for long-term growth of U.S. pork exports. Canada continues to be a competitor in these markets. Brazil also is a major pork exporter. However, the projections assume that Brazil will not be recognized as free of foot-and-mouth disease (FMD) nationwide, thus limiting Brazilian pork producers' ability to compete in some markets. Consequently, Brazil's pork exports expand to markets with less stringent import restrictions regarding FMD, including Russia, Argentina, and Asian markets other than Japan and South Korea.
- Despite higher feed costs, increased efficiency in U.S. pork production limits production-cost increases and enhances the competitiveness of U.S. pork products. Nonetheless, longer term gains in U.S. pork exports will be determined by costs of production and environmental regulations relative to competitors. Such costs tend to be lower in countries with pork industries in the early stages of development and integration, such as Brazil.

## Poultry

• U.S. broiler export growth is expected to slow from the rate of the 1990s. Major U.S. export markets include Asia, Russia, and Mexico. Gains in these markets reflect strong economic growth and rising consumer demand for meats. Demand for poultry also remains strong due to its lower cost relative to beef and pork. U.S. producers will face strong competition from other major broiler exporting countries, particularly Brazil. Poultry exports from countries affected by avian influenza, such as Thailand and China, are expected to be limited to fully cooked products.

#### Milk production and dairy herd



Relatively high farm milk prices in 2004-05 encouraged increases in milk cow numbers in 2005-06. Combined with an upward trend in output per cow, this resulted in relatively strong gains in milk production in 2005-06 and reductions in milk prices. Smaller production gains are projected over the rest of the projection period, particularly in the next several years as the sector adjusts to higher feed costs.

- Milk output per cow is projected to increase, although some slowing in these gains occurs early in the projection period in response to higher feed costs. Nonetheless, further development of large, specialized operations in most regions will contribute to a continuation of gains in output per cow.
- Milk cow numbers are expected to decline after 2006, with the largest reductions in 2008-10 as feed costs rise. Longer term reductions are smaller as increasing specialization of dairy farms over time slows exit rates from milk production compared with past decades.
- Commercial use increases slightly faster than the growth in population, reflecting slow growth in domestic demand for dairy products. Cheese and butter demand benefit from greater consumption of prepared foods and increased away-from-home eating. Per capita consumption of fluid milk, however, is expected to continue to decline slowly.
- Farm-level milk prices increase after 2006 as milk production gains are smaller than those in 2005-06. Price increases are largest through 2011 as the sector adjusts to higher feed costs. Milk price increases are then projected to be less than the general inflation rate through the rest of the projections.

**Note:** Milk price projections do not reflect interim changes to the manufacturing allowance announced December 29, 2006.

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
						Pou	nds					
Total beef	65.3	65.5	66.5	65.8	64.4	62.8	62.0	61.6	61.6	62.3	62.9	63.2
Total veal	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
Total pork	50.0	49.5	50.9	49.1	48.0	47.3	47.0	47.1	47.4	47.9	48.4	48.7
Lamb and mutton	1.1	1.0	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total red meat	117.0	116.5	119.0	116.5	114.1	111.7	110.5	110.2	110.5	111.6	112.7	113.3
Broilers	85.7	86.9	86.4	86.9	86.6	86.0	85.4	85.4	85.8	86.7	87.3	87.8
Other chicken	1.3	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Turkeys	16.7	16.8	16.7	17.0	16.8	16.6	16.5	16.5	16.5	16.5	16.5	16.5
Total poultry	103.7	105.0	104.5	105.2	104.7	104.0	103.2	103.2	103.6	104.5	105.1	105.7
Red meat & poultry	220.7	221.5	223.4	221.8	218.8	215.7	213.8	213.3	214.1	216.1	217.8	218.9

Table 21. Per capita meat consumption, retail weight

Table 22. Consumer expenditures	for meats											
Item	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Beef, dollars per person	267.18	260.63	263.25	269.09	276.59	280.46	284.71	285.66	285.94	289.05	292.24	295.30
Percent of income	0.87	0.80	0.77	0.75	0.74	0.72	0.70	0.67	0.64	0.62	0.60	0.58
Percent of meat expenditures	46.40	47.02	47.28	47.03	46.71	46.12	45.78	45.36	45.06	45.12	45.13	45.02
Pork, dollars per person	141.49	139.02	140.46	142.29	144.84	147.68	149.78	152.72	155.08	156.65	158.49	160.65
Percent of income	0.46	0.43	0.41	0.40	0.39	0.38	0.37	0.36	0.35	0.34	0.33	0.32
Percent of meat expenditures	24.57	25.08	25.22	24.87	24.46	24.29	24.08	24.25	24.44	24.45	24.48	24.49
Broilers, dollars per person	149.24	135.68	134.85	142.36	152.08	160.91	168.30	172.32	174.67	176.52	178.81	182.27
Percent of income	0.48	0.42	0.40	0.40	0.41	0.41	0.41	0.40	0.39	0.38	0.37	0.36
Percent of meat expenditures	25.92	24.48	24.22	24.88	25.68	26.46	27.06	27.36	27.53	27.56	27.61	27.79
Turkevs, dollars per person	17.89	18.92	18.27	18.43	18.65	18.99	19.12	19.07	18.84	18.39	17.98	17.69
Percent of income	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03
Percent of meat expenditures	3.11	3.41	3.28	3.22	3.15	3.12	3.07	3.03	2.97	2.87	2.78	2.70
Total meat dollars per person	575 80	554 25	556 82	572 17	592 16	608.05	621 91	629 77	634 53	640 61	647 53	655 91
Percent of income	1.86	1.71	1.63	1.61	1.59	1.56	1.53	1.48	1.42	1.37	1.33	1.29

Table 23. Beef long-term projections													
ltem	Units	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Poginning stocks	Milling	627	571	625	600	600	600	600	600	600	600	600	600
Commercial production	Mil Ibs	24 683	25 970	26 700	26 744	26 449	26.036	25 9/8	26.068	26 365	26 977	27 547	28 031
Change from previous year	Percent	24,005	23,370	20,700	20,744	-1 1	-1.6	-0.3	20,000	20,303	20,311	21,547	20,001
Change nom previous year	Feiceni	0.5	5.2	2.0	0.2	-1.1	-1.0	-0.3	0.5	1.1	2.5	2.1	1.0
Farm production	Mil. Ibs.	101	102	102	102	102	102	102	102	102	102	102	102
Total production	Mil. lbs.	24,784	26,072	26,802	26,846	26,551	26,138	26,050	26,170	26,467	27,079	27,649	28,133
Imports	Mil. lbs.	3,599	3,152	3,360	3,366	3,389	3,413	3,437	3,462	3,486	3,512	3,538	3,564
Total supply	Mil. Ibs.	29,020	29,795	30,787	30,812	30,540	30,151	30,087	30,232	30,553	31,191	31,787	32,297
Exports	Mil. lbs.	697	1,164	1,500	1,556	1,633	1,711	1,789	1,865	1,942	2,040	2,124	2,258
Ending stocks	Mil. lbs.	571	625	600	600	600	600	600	600	600	600	600	600
Total consumption	Mil. lbs.	27.752	28.006	28.687	28.656	28.307	27.840	27.698	27.767	28.011	28.551	29.063	29.439
Per capita, carcass weight	Pounds	93.3	93.5	95.0	94.0	92.1	89.8	88.6	88.0	88.0	89.0	89.8	90.2
Per capita, retail weight	Pounds	65.3	65.5	66.5	65.8	64.4	62.8	62.0	61.6	61.6	62.3	62.9	63.2
Change from previous year	Percent	-1.2	0.2	1.5	-1.0	-2.1	-2.5	-1.4	-0.6	0.0	1.1	0.9	0.5
Prices:													
Beef cattle, farm	\$/cwt	89.55	88.25	87.75	88.98	94.98	98.33	99.77	98.55	97.07	95.59	94.27	93.38
Calves, farm	\$/cwt	135.42	132.73	126.79	122.44	123.56	128.16	134.55	134.93	132.15	129.34	126.81	124.72
Choice steers, Nebraska	\$/cwt	87.28	85.76	85.25	86.44	92.28	95.53	96.93	95.75	94.31	92.87	91.59	90.73
Deflated price	\$/cwt	44.99	43.08	41.78	41.33	43.05	43.48	43.04	41.48	39.86	38.29	36.84	35.60
Yearling steers. Okla. City	\$/cwt	110.94	107.26	102.25	98.74	99.64	103.36	108.51	108.82	106.57	104.30	102.27	100.58
Deflated price	\$/cwt	57.18	53.88	50.11	47.21	46.48	47.04	48.18	47.14	45.04	43.01	41.14	39.47
Retail: Beef and veal	1982-84=100	200.4	202.1	201.0	207.5	217.8	226.5	233.1	235.4	235.5	235.6	235.9	237.3
Retail: Other meats	1982-84=100	177.5	180.7	177.0	181.5	185.6	189.6	192.9	196.1	198.9	201.2	203.6	206.4
ERS retail beef	\$/lb.	4.09	3.98	3.96	4.09	4.29	4.46	4.59	4.64	4.64	4.64	4.65	4.68
Costs and returns, cow-calf enterprise:													
Variable expenses	\$/cow	237.03	247.76	261.99	271.97	277.63	283.71	283.15	285.90	288.80	291.91	295.02	295.27
Fixed expenses	\$/cow	127.04	130.49	135.54	139.89	142.63	145.03	147.28	149.48	151.65	153.95	156.21	158.54
Total cash expenses	\$/cow	364.07	378.25	397.53	411.87	420.26	428.74	430.44	435.38	440.45	445.86	451.23	453.81
Returns above cash costs	\$/cow	174.62	148.23	141.12	117.34	123.66	144.15	179.17	184.96	176.58	167.46	159.52	156.37
Cattle inventory	1 000 head	95 438	97 102	98 400	98 600	98,308	97 976	97 796	98.066	99 282	100 643	101 771	102 601
Beef cow inventory	1 000 head	32 915	33 253	33 406	33 404	33 400	33 269	33 272	33 583	34,336	35 124	35 774	36 284
Total apprentant	1,000 hood	41,020	40.011	42,400	42.052	41 060	41 740	41 690	44,040	40,040	40,000	40,000	44.455

Item	Units	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
		- 10											
Beginning stocks	Mil. Ibs.	543	494	550	550	550	550	550	550	550	550	550	550
Commercial production	Mil. Ibs.	20,685	21,069	21,850	21,400	21,183	21,086	21,151	21,372	21,699	22,090	22,515	22,848
Change from previous year	Percent	0.9	1.9	3.7	-2.1	-1.0	-0.5	0.3	1.0	1.5	1.8	1.9	1.5
Farm production	Mil. Ibs.	21	20	20	20	20	20	20	20	20	20	20	20
Total production	Mil. Ibs.	20,706	21,089	21,870	21,420	21,203	21,106	21,171	21,392	21,719	22,110	22,535	22,868
Imports	Mil. Ibs.	1,025	1,021	1,030	1,043	1,059	1,077	1,099	1,121	1,143	1,166	1,189	1,213
Total supply	Mil. lbs.	22,274	22,604	23,450	23,013	22,812	22,733	22,820	23,063	23,412	23,826	24,274	24,631
Exports	Mil. lbs.	2,665	2,968	3,090	3,183	3,230	3,279	3,328	3,378	3,429	3,480	3,532	3,585
Ending stocks	Mil. lbs.	494	550	550	550	550	550	550	550	550	550	550	550
Total consumption	Mil. lbs.	19,115	19,086	19,810	19,280	19,032	18,904	18,942	19,135	19,433	19,796	20,192	20,496
Per capita, carcass weight	Pounds	64.4	63.8	65.6	63.3	61.9	61.0	60.6	60.7	61.1	61.7	62.4	62.8
Per capita, retail weight	Pounds	50.0	49.5	50.9	49.1	48.0	47.3	47.0	47.1	47.4	47.9	48.4	48.7
Change from previous year	Percent	-2.6	-1.0	2.9	-3.5	-2.2	-1.5	-0.7	0.2	0.7	1.0	1.1	0.7
Prices:													
Hogs, farm	\$/cwt	49.62	46.32	40.96	47.44	50.44	53.12	54.58	55.44	55.39	54.63	53.82	53.70
National base, live equivalent	\$/cwt	50.05	47.23	41.76	48.47	51.63	54.38	55.87	56.76	56.71	55.93	55.10	54.98
Deflated price	\$/cwt	25.51	23.68	21.46	22.76	23.65	24.30	24.36	24.15	23.54	22.65	21.77	21.19
Retail: pork	1982-84=100	177.7	177.3	174.0	182.7	190.1	196.8	200.9	204.6	206.3	206.3	206.4	207.8
ERS retail pork	\$/Ib.	2.83	2.81	2.76	2.90	3.02	3.12	3.19	3.24	3.27	3.27	3.27	3.30
Costs and returns, farrow to finish:													
Variable expenses	\$/cwt	33.57	33.53	39.87	44.19	44.37	45.92	44.69	44.71	44.78	44.90	45.01	45.39
Fixed expenses	\$/cwt	7.60	7.72	7.81	7.86	7.89	7.93	7.96	8.01	8.05	8.10	8.16	8.19
Total cash expenses	\$/cwt	41.16	41.25	47.68	52.04	52.25	53.84	52.65	52.72	52.83	53.01	53.17	53.58
Returns above cash costs	\$/cwt	8.84	6.80	-3.04	-3.51	-0.42	0.75	3.44	4.27	4.11	3.14	2.14	0.87
Hog inventory,													
Dec. 1, previous year	1,000 head	60,975	61,449	62,500	61,800	61,209	60,945	61,12 <u>3</u>	61,723	62,612	63,674	64,829	65,736

Table 25. Young chicken long-te	erm projection	S											
Item	Units	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Beginning stocks	Mil. Ibs.	713	924	725	770	770	770	770	770	770	770	770	770
Federally inspected slaughter	Mil. lbs.	35.365	35.846	36.325	36.691	36.928	37.058	37.205	37.537	38.064	38.739	39.354	39.921
Change from previous year	Percent	3.8	1.4	1.3	1.0	0.6	0.4	0.4	0.9	1.4	1.8	1.6	1.4
Production	Mil. Ibs.	34,986	35,462	35,936	36,324	36,559	36,687	36,833	37,162	37,683	38,352	38,960	39,522
Total supply	Mil. Ibs.	35,733	36,427	36,697	37,130	37,365	37,493	37,639	37,968	38,489	39,158	39,766	40,328
Change from previous year	Percent	4.1	1.9	0.7	1.2	0.6	0.3	0.4	0.9	1.4	1.7	1.6	1.4
Exports	Mil. lbs.	5,203	5,411	5,530	5,516	5,583	5,664	5,762	5,842	5,932	6,017	6,106	6,196
Ending stocks	Mil. Ibs.	924	725	770	770	770	770	770	770	770	770	770	770
Consumption	Mil. Ibs.	29,606	30,291	30,397	30,844	31,012	31,059	31,107	31,356	31,787	32,371	32,890	33,362
Per capita, carcass weight	Pounds	99.8	101.2	100.6	101.2	100.9	100.2	99.4	99.4	99.9	100.9	101.6	102.2
Per capita, retail weight	Pounds	85.7	86.9	86.4	86.9	86.6	86.0	85.4	85.4	85.8	86.7	87.3	87.8
Change from previous year	Percent	1.7	1.4	-0.5	0.6	-0.3	-0.7	-0.7	-0.1	0.5	1.0	0.8	0.6
Prices:													
Broilers, farm	Cents/lb.	43.3	38.6	39.4	40.6	42.8	45.0	46.8	47.6	47.6	47.3	47.1	47.3
12-city market price	Cents/lb.	70.8	63.9	65.3	67.3	71.0	74.6	77.6	78.9	78.8	78.2	78.0	78.3
Deflated wholesale price	Cents/lb.	36.8	32.1	32.0	32.2	33.1	34.0	34.5	34.2	33.3	32.3	31.4	30.7
Change from previous year	Percent	-6.2	-12.6	-0.3	0.5	2.9	2.5	1.5	-0.9	-2.5	-3.2	-2.8	-2.1
Composite retail broiler price	Cents/lb.	174.1	156.1	156.0	163.8	175.5	187.0	197.0	201.8	203.5	203.7	204.8	207.5
Costs and returns:													
Total costs	Cents/lb.	66.75	66.41	68.78	71.71	72.44	74.17	73.73	74.18	74.67	75.23	75.80	76.61
Net returns	Cents/lb.	4.05	-2.48	-3.43	-4.37	-1.44	0.45	3.88	4.68	4.15	3.01	2.19	1.68

Item	Units	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Beginning stocks	Mil. lbs.	288	206	225	280	280	280	280	280	280	280	280	280
Federally inspected slaughter	Mil. lbs.	5,504	5,668	5,760	5,799	5,783	5,791	5,809	5,852	5,906	5,960	6,014	6,072
Change from previous year	Percent	0.9	3.0	1.6	0.7	-0.3	0.1	0.3	0.7	0.9	0.9	0.9	1.0
Production	Mil. Ibs.	5,432	5,594	5,685	5,724	5,708	5,716	5,734	5,776	5,830	5,882	5,935	5,993
Total supply	Mil. lbs.	5,720	5,800	5,910	6,004	5,988	5,996	6,014	6,056	6,110	6,162	6,215	6,273
Change from previous year	Percent	-0.3	1.4	1.9	1.6	-0.3	0.1	0.3	0.7	0.9	0.9	0.9	0.9
Exports	Mil. lbs.	570	544	585	543	549	557	567	575	584	592	601	610
Ending stocks	Mil. lbs.	206	225	280	280	280	280	280	280	280	280	280	280
Consumption	Mil. Ibs.	4952	5,040	5,049	5,185	5,163	5,163	5,171	5,205	5,250	5,294	5,339	5,387
Per capita	Pounds	16.7	16.8	16.7	17.0	16.8	16.6	16.5	16.5	16.5	16.5	16.5	16.5
Change from previous year	Percent	-2.1	0.9	-0.7	1.8	-1.3	-0.9	-0.7	-0.2	0.0	0.0	0.0	0.1
Prices:													
Turkey, farm	Cents/lb.	44.8	48.6	45.4	45.0	46.5	49.3	51.4	52.8	53.6	53.5	53.6	54.0
Hen turkey (whsle.) East	Cents/lb.	73.4	78.0	73.0	72.4	74.7	79.2	82.7	84.9	86.1	86.1	86.2	86.9
Deflated hen turkey	Cents/lb.	37.8	39.2	35.8	34.6	34.9	36.1	36.7	36.8	36.4	35.5	34.7	34.1
Retail frozen turkey	Cents/lb.	107.2	112.4	109.3	108.3	111.1	114.1	115.7	115.6	114.2	111.4	109.0	107.2
Retail: poultry	1982-84=100	185.3	182.0	184.0	191.0	202.9	214.7	224.4	228.8	229.8	228.8	228.8	230.5
Costs and returns:													
Total costs	Cents/lb.	68.80	62.55	66.97	70.15	71.56	72.91	72.13	72.43	72.72	73.06	73.36	73.90
Net returns	Cents/lb.	4.60	15.44	6.04	2.25	3.18	6.31	10.58	12.51	13.39	12.99	12.83	12.99

Table 27. Egg long-term projec	tions												
Item	Units	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Poginning stocks	Mil doz	14	16	16	16	16	16	16	16	16	16	16	16
Broduction	Mil. doz.	7 504	7 572	7 692	7 720	7 726	7 775	7 9 2 0	7 900	7 079	010	0 1 5 5	0 245
Change from previous year	Percent	0.9	0.9	1.5	0.5	0.2	0.5	0.7	0.9	1.0	1.1	0,155 1.1	0,245 1.1
0 1 9													
Imports	Mil. doz.	9	8	9	10	10	10	10	10	10	10	10	10
Total supply	Mil. doz.	7,527	7,596	7,707	7,746	7,761	7,800	7,854	7,925	8,004	8,092	8,180	8,270
Change from previous year	Percent	0.8	0.9	1.5	0.5	0.2	0.5	0.7	0.9	1.0	1.1	1.1	1.1
Hatching use	Mil. doz.	1,000	995	990	998	1,003	1,007	1,009	1,015	1,024	1,036	1,048	1,060
Exports	Mil. doz.	203	187	195	198	201	204	207	210	213	216	219	222
Ending stocks	Mil. doz.	16	16	16	16	16	16	16	16	16	16	16	16
Consumption	Mil. doz.	6,308	6,397	6,506	6,534	6,541	6,573	6,622	6,684	6,751	6,824	6,897	6,973
Per capita	Number	255.1	256.4	258.4	257.3	255.3	254.4	254.0	254.2	254.6	255.2	255.8	256.4
Change from previous year	Percent	-0.8	0.5	0.8	-0.5	-0.8	-0.4	-0.1	0.1	0.1	0.2	0.2	0.3
Prices:													
Eggs, farm	Cents/doz.	54.5	57.2	65.6	73.1	79.8	84.0	85.7	86.5	87.4	88.2	89.0	89.9
New York, Grade A large	Cents/doz.	65.5	69.0	78.0	87.0	95.0	100.0	102.0	103.0	104.0	105.0	106.0	107.0
Deflated wholesale prices	Cents/doz.	33.8	34.7	38.2	41.6	44.3	45.5	45.3	44.6	44.0	43.3	42.6	42.0
Retail, Grade A, large	Cents/doz.	122	130	139	156	171	180	184	185	187	189	191	193
Retail: Eggs	1982-84=100	144.1	151.2	162.0	182.5	201.4	213.0	218.3	221.4	224.5	227.7	230.9	234.0
Costs and returns:													
Total costs	Cents/doz.	71.91	71.84	85.41	94.66	97.19	99.97	97.35	97.40	97.54	97.81	98.04	98.85
Net returns	Cents/doz.	-6.41	-2.84	-7.41	-7.66	-2.19	0.03	4.65	5.60	6.46	7.19	7.96	8.15

Table 28. Dairy long-term p	rojections												
Item	Units	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Production data:													
Number of cows	1.000	9.041	9.110	9.045	8.950	8.860	8.775	8.710	8.650	8.595	8.550	8.510	8.465
Milk per cow	Pounds	19,577	19,955	20,235	20,545	20,750	21,030	21,340	21,730	22,010	22,355	22,705	23,120
Milk production	Bil. lbs.	177.0	181.9	183.0	183.9	183.8	184.5	185.9	188.0	189.2	191.1	193.2	195.7
Farm use	Bil. lbs.	1.1	1.1	1.0	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.4	0.4
Commercial use, milk equiva	alent:												
Milkfat basis	Bil. lbs.	179.7	184.3	188.6	189.0	188.8	189.8	191.2	193.4	194.8	196.8	199.1	201.7
Skim solids basis	Bil. lbs.	180.6	184.8	188.2	188.6	188.6	189.3	190.6	192.8	194.2	196.2	198.4	201.0
Net removals, milk equivaler	nt:												
Milkfat basis	Bil. lbs.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Skim solids basis	Bil. lbs.	-1.0	0.7	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prices:													
All milk	\$/cwt	15.14	12.85	13.85	14.80	15.45	16.00	16.35	16.60	16.65	16.80	16.80	16.90
Retail, all dairy products	1982-84=100	182.4	181.4	185.5	191.5	196.5	201.0	205.0	206.0	206.0	206.5	206.5	207.0