

Lots of Pork Will Keep Margins Thin

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Pork production is going to surge by five percent this fall and remain two to four percent higher through 2008. Slaughter rates this fall will be near capacity at times. There will be comparisons to the fall of 1998 when slaughter rates exceeded capacity, but that situation is not expected this fall. Unfortunately, low hog prices and high costs will likely depress margins into the red this fall and winter. Profit prospects for next and summer are near breakeven with considerable uncertainty regarding corn and especially soybean meal prices.

Export expansion has been an important demand stimulant for the pork industry in recent years. However in 2007, pork exports may fall a bit and are expected to grow at a slower rate in 2008. A slower export growth rate may mean the industry needs to slow down their rate of production growth. In addition, the industry has not adjusted production to higher feed and other input costs. Some downward adjustments in supply may be necessary in late-2008/09.

Feed price uncertainty and volatility are expected to continue into 2008. Corn prices may have an upper limit established by weak ethanol margins. However, soybean meal and other protein ingredients may present greater threats for upside price movements.

The Numbers

Higher than expected hog numbers were released in the latest *Hogs and Pigs* report from USDA. Fall slaughter is now expected to be up 4.5 percent with slaughter rates near capacity. This has generated discussion of the similarities to the disastrous fall of 1998 and has cast a bearish tint on price expectations.

In addition to more market hogs than anticipated the government's quarterly inventory report found a few more sows than expected. The sow inventory was up about one percent and demonstrates how the pork industry has continued to expand output even in the face of dramatic increases in costs of production led by feed prices and other inputs.

The breeding herd was up by seven percent in Missouri, by four percent in Nebraska, by three percent in both Minnesota and Kansas, and two percent in both Illinois and North Carolina. Notable decreases were a six percent decline in Indiana and a one percent drop in Iowa.

Compounding the slaughter capacity issue this fall will be continuing record live hog imports from Canada. Canadian live imports are up 10 percent so far in 2007 which is composed of 20 percent more slaughter hogs and seven percent more SEW pigs. Live imports from Canada are

projected to reach 9.5 million head and will represent over nine percent of total U.S. slaughter this year, a new record.

Current slaughter capacity is estimated by Dr. Steve Meyer of Paragon Economics, Inc. to be 428,000 head per day. In the first two weeks of October, actual slaughter has run very close to that number assuming one-half day of capacity on Saturday's. Slaughter for this short period has been a surprising eight percent above year-earlier levels. This high rate in early October continues to raise concerns that hog numbers could be higher than the 4.5 percent projected in this report.

Supply, Demand and Prices

Growing export demand has enabled the industry to continue on its expansion path in recent years, but that support is giving way this year. From 2000 to 2006, growing pork exports required an average annual increase in U.S. production of 1.2 percent per year. In 2007, exports so far are down one percent (data through August). Mexico represents the largest portion of reduced exports and were down 29 percent through August. On a positive note, shipments to Mainland China are growing and will help exports end 2007 on a more optimistic note. For 2007, USDA expects pork exports for the year to be down slightly less than one percent. In summary, the pork industry continues to expand for growth in the export market that has not occurred in 2007. In 2008, the industry will need to monitor export growth closely and adjust the size of breeding herd accordingly.

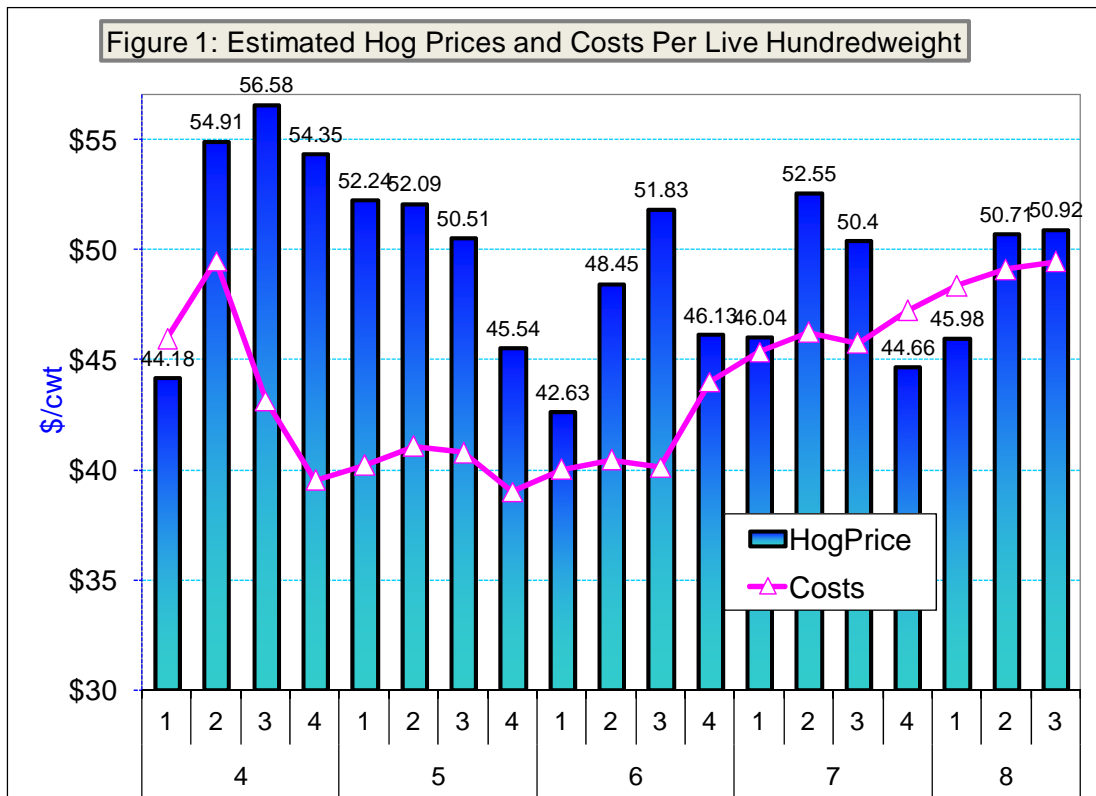
Pork supplies are expected to be up about five percent this fall, three percent this winter, four percent next spring, and two percent in the summer of 2008 (see Table 4). With slowing growth in export sales, this means that pork availability for U.S. consumers will be higher by about two percent. Pork will also face added competition from chicken production, which is expected to be up three percent in 2008, but beef supplies will remain moderate. Overall domestic per capita supplies of red meat and poultry are expected to rise by 1.7 percent in 2008 which again will keep some downward pressure on pork prices.

Prices and Production Returns

Hog prices this fall are expected to average in a range from \$43 to \$47 on a live weight basis for 51-52 percent lean carcasses. Absolute daily lows could move into the lower \$40s. Late-October or early-November tend to be the historic seasonal lows. Winter prices are expected to improve about \$2 and to average in a range from \$44 to \$48. Spring and summer prices should be much better and are expected to average in the very low \$50's.

Concerns have grown once more about feed prices in the upcoming year. Using current futures prices for corn and soybean meal and adjusting for the expected basis, costs of production are

expected to be \$47 to \$48 resulting in losses this fall and winter of \$2 to \$4 per hundred. Costs are expected to move higher into the spring and summer reaching the higher \$40. If hog prices do average in the very low \$50s, this may provide a modest positive return during this time. My estimates suggest the industry will operate at an estimated loss of about 50 cents per hundred in the next 12 months compared to an estimated profit of \$3.50 per hundred over the past 12 months, see Figure 1.



The pork industry has escaped making adjustments to higher feed prices so far. However, some downward adjustments in the breeding herd may be needed in the coming year as the industry is forced to respond to both higher feed and other input costs and to the potential slowing of export growth.

Pork producers had a great profit run stretching back to early 2004, but that long-run of pleasant financial days appears ready to come to an end.

PRODUCTION			Percent
Year	Quarter	Production Million#s	Change vs. Year-ago
2005	I	5,136	0.1%
	II	5,022	2.6%
	III	4,999	-0.9%
	IV	5,526	1.7%
	Year	20,683	0.9%
2006	I	5,335	3.9%
	II	5,008	-0.3%
	III	5,087	1.8%
	IV	5,625	1.8%
	Year	21,055	1.8%
2007	I	5,395	1.1%
	II	5,127	2.4%
	III	5,339	5.0%
	IV	5,888	4.7%
	Year	21,749	3.3%
2008	I	5,581	3.4%
	II	5,329	3.9%
	III	5,438	1.8%
	IV	5,975	1.5%
	Year	22,323	2.6%

PRICES			Liveweight	Percent
Year	Quarter	Price \$/cwt.	Price	Change vs. Year-ago
2005	I	\$52.24	18.2%	
	II	\$52.09	-5.1%	
	III	\$50.51	-10.7%	
	IV	\$45.54	-16.2%	
	Year	\$50.10	-4.6%	
2006	I	\$42.63	-18.4%	
	II	\$48.45	-7.0%	
	III	\$51.83	2.6%	
	IV	\$46.13	1.3%	
	Year	\$47.26	-5.7%	
2007	I	\$46.04	8.0%	
	II	\$52.55	8.5%	
	III	\$50.40	-2.8%	
	IV	\$44.66	-3.2%	
	Year	\$48.41	2.4%	
2008	I	\$45.98	-0.1%	
	II	\$50.71	-3.5%	
	III	\$50.92	1.0%	
	IV	\$43.50	-2.6%	
	Year	\$47.78	-1.3%	

Implication for Industry

The pork industry has had a long profit run dating back to early 2004. Losses are expected this fall and winter, with modest returns next spring and summer. The growth of exports has been a critical component that has enabled the U.S. industry to expand at a faster pace. However, modest declines in exports in 2007 raise the caution that the industry needs to closely monitor the export pace in 2008. At this time, prospects for increasing exports to Mainland China put a positive tilt on export growth into 2008.

The industry has not yet reduced production in reaction to higher feed and other input costs. The coming year, may be a time when margins thin and the industry needs to slow production growth. That slowing will probably not occur until margins move into the red, and the profit outlook fades.

Feed costs are expected to be highly variable in the upcoming year. While corn inventories are comfortable for the 2007 crop, acreage reductions in 2008 will keep both 2007 and 2008 crop prices relatively strong. The ethanol industry will likely experience growing pains for much of

the next year. Ethanol output is likely to mushroom as new plants open, yet ethanol blending capacity appears to be lagging. This likely means a period of narrow margins for ethanol producers, and could result in both slow-downs in plant construction and in reduced usage of corn compared to current estimates. My estimates are that as cash corn prices move above \$3.50 per bushel, some ethanol plants could begin to slow-down or consider shutdowns. Ethanol margins are of course dynamic and the levels at which plants will consider shut-down will vary with ethanol prices, distillers grain prices, natural gas prices, and of course corn prices. The point however, is that the ethanol industry probably cannot complete for extremely high corn prices like \$4.00 per bushel or higher.

While corn prices may have upper limits due to weak ethanol margins, the same cannot be said for soybeans and soybean meal. Soybean inventories will be very tight this marketing year. Another bullish run on meal prices could occur if soybean exports are larger than USDA's current estimate of 975 million bushels and/or if weather threats develop for the South America soybean crop. The biggest swing factor may well be the final size of the South American crop. This means that both planted acres and yield will be important, but the biggest of these will be yields. Thus, there is the potential for wide volatility late this fall and winter based upon weather patterns in the Southern Hemisphere.

Table 1. Hogs and Pigs in the United States, September 1

	2006	2007	2007 as % of 2006
		thousand head	percent
<i>Inventory</i>			
All hogs and pigs	62,914	64,648	102.8
Kept for breeding	6,079	6,145	101.1
Kept for market	56,835	58,503	102.9
<i>Market hogs by weight</i>			
Under 60 pounds	20,708	21,318	102.9
60-119	14,231	14,614	102.7
120-179	11,685	12,015	102.8
180 and over	10,212	10,556	103.4
<i>Sows farrowing</i>			
March 07 - May 07	2,927	2,966	101.3
June 07 - Aug 07	2,912	2,986	102.5
Sept 07 - Nov 07 ¹	2,949	2,964	100.5
Dec 07 - Feb 08	25,661	26,393	102.9
<i>Pigs saved per litter</i>			
March 07 - May 07	9.08	9.15	100.8
June 07 - Aug 07	9.11	9.19	100.9
<i>Pig crop</i>			
March 07 - May 07	26,579	27,141	102.1
June 07 - Aug 07	26,518	27,452	103.5

¹ Intentions

Table 2. U.S. Market Hogs Weighing 60 to 179 Pounds on September 1, and Commercial Slaughter in Calendar Quarter from October to December

	<u>Head Inventory</u>	<u>Slaughter</u>	<u>percent</u>
	-----thousand head-----		
1990	22,350	22,628	101.2
1991	23,680	24,367	102.9
1992	24,509	25,138	102.6
1993	22,720	24,573	108.2
1994	25,130	26,322	104.7
1995	24,517	25,198	102.8
1996	23,370	23,833	102.0
1997	24,061	25,152	104.5
1998	25,587	27,584	107.8
1999	24,543	26,723	108.9
2000	23,872	25,714	107.7
2001	24,292	26,470	109.0
2002	24,745	26,715	108.0
2003	25,063	27,608	110.2
2004	24,756	27,192	109.8
2005	24,519	27,486	112.1
2006	25,916	27,880	107.6
2007 ^A	26,629	29,249	109.8 ^B

^A Projected

^B Mean of previous three years

Table 3. U.S. Sow Farrowings and Pig Crop Compared to U.S. Commercial Slaughter (1,000 head) with 7-month Lag 1993 to 2008

Year	Sows Farrow	Pig Crop	Pigs/ Litter	Year	Commercial Slaughter	Ratio ^b Slau/PigCrop
1994	3,390	27,984	8.26	1994	26,315	94.1
1995	3,170	26,373	8.32	1995	25,197	95.5
1996	2,930	24,833	8.48	1996	23,832	96.0
1997	2,911	25,229	8.67	1997	25,143	99.7
1998	3,086	26,989	8.75	1998	27,586	102.2
1999	2,986	26,272	8.80	1999	26,723	101.7
2000	2,885	25,565	8.86	2000	25,714	100.6
2001	2,870	25,509	8.89	2001	26,470	103.8
2002	2,941	26,001	8.84	2002	26,715	102.7
2003	2,886	25,629	8.88	2003	27,608	107.7
2004	2,870	25,633	8.93	2004	27,192	106.1
2005	2,882	25,986	9.02	2005	27,486	105.8
2006	2,927	26,579	9.08	2006	27,880	104.9
2007 ^a	2,966	27,141	9.15	2007 ^{ab}	29,016	106.9
June-August			January-March			
1994	3,107	25,547	8.22	1995	24,224	94.8
1995	2,976	24,813	8.34	1996	23,651	95.3
1996	2,718	23,244	8.55	1997	22,308	96.1
1997	2,946	25,696	8.72	1998	24,775	96.4
1998	3,054	26,634	8.72	1999	25,579	96.0
1999	2,920	25,862	8.86	2000	25,019	96.7
2000	2,889	25,548	8.84	2001	24,578	96.2
2001	2,878	25,539	8.87	2002	24,148	94.6
2002	2,883	25,725	8.92	2003	24,654	95.8
2003	2,918	25,974	8.90	2004	25,717	99.0
2004	2,905	26,162	9.01	2005	25,538	97.6
2005	2,918	26,449	9.06	2006	26,208	99.1
2006	2,912	26,518	9.11	2007	26,686	100.6
2007 ^a	2,986	27,452	9.19	2008 ^{ab}	27,465	100.0
September-November			April-June			
1994	2,997	24,517	8.18	1995	23,644	96.5
1995	2,815	23,479	8.34	1996	22,201	94.6
1996	2,731	23,327	8.54	1997	21,831	93.6
1997	2,939	25,494	8.67	1998	23,628	92.7
1998	2,993	25,902	8.66	1999	24,288	93.8
1999	2,844	24,973	8.78	2000	23,105	92.5
2000	2,838	25,112	8.85	2001	23,280	92.7
2001	2,889	25,492	8.82	2002	24,280	95.2
2002	2,833	25,094	8.86	2003	23,922	95.3
2003	2,856	25,488	8.93	2004	24,803	97.3
2004	2,888	25,881	8.96	2005	25,031	96.7
2005	2,900	26,187	9.03	2006	24,839	94.9
2006	2,949	26,501	9.11	2007	25,525	96.3
2007 ^a	2,960	27,143	9.17	2008 ^{ab}	26,344	97.1
December-February			July-September			
94/95	2,886	23,851	8.27	1995	23,261	97.5
95/96	2,735	23,054	8.43	1996	22,710	98.5
96/97	2,684	23,164	8.63	1997	22,679	97.9
97/98	2,929	25,480	8.70	1998	25,039	98.3
98/99	2,891	25,247	8.73	1999	24,953	98.8
99/00	2,798	24,522	8.76	2000	24,097	98.3
00/01	2,748	23,963	8.72	2001	23,635	98.6
01/02	2,835	24,857	8.77	2002	25,120	101.1
02/03	2,769	24,400	8.81	2003	24,747	101.4
03/04	2,836	25,105	8.85	2004	25,817	102.8
04/05	2,835	25,343	8.94	2005	25,528	100.7
05/06	2,840	25,661	9.03	2006	25,810	100.6
06/07	2,905	26,393	9.09	2007	27,128	102.8
07/08 ^a	2,943	26,928	9.15	2008 ^{ab}	27,463	102.0

^a Estimates

^b Last entry is the mean of previous three years including Canadian live imports (not shown).

Table 4. U.S. Commercial Slaughter, Carcass Weights, and Quarterly Pork Production 1998-2008

Year	Quarter	Commercial Slaughter (1,000 head)	Carcass Weight Per Hog	Pork Production (million #'s)	Percent Change Year-Ago
1998	I	24,776	189.2	4,688	11.8
	II	23,631	187.5	4,429	8.3
	III	25,038	184.7	4,625	10.2
	IV	27,523	188.9	5,239	9.9
1999	I	25,571	190.3	4,865	3.8
	II	24,292	190.6	4,630	4.5
	III	24,960	187.2	4,672	1.0
	IV	26,732	191.2	5,110	-2.5
2000	I	25,019	192.8	4,824	-0.8
	II	23,107	193.8	4,478	-3.3
	III	24,097	191.1	4,606	-1.4
	IV	25,714	194.8	5,010	-2.0
2001	I	24,578	195.5	4,805	-0.4
	II	23,280	195.3	4,546	1.5
	III	23,635	192.4	4,548	-1.3
	IV	26,470	197.9	5,239	4.6
2002	I	24,148	197.9	4,780	-0.5
	II	24,280	197.6	4,797	5.5
	III	25,120	192.4	4,832	6.2
	IV	26,715	196.7	5,255	0.3
2003	I	24,654	198.7	4,898	2.5
	II	23,922	198.2	4,741	-1.2
	III	24,747	194.2	4,807	-0.5
	IV	27,608	199.2	5,499	4.6
2004	I	25,717	199.5	5,130	4.7
	II	24,803	197.4	4,897	3.3
	III	25,817	195.5	5,046	5.0
	IV	27,192	199.9	5,435	-1.2
2005	I	25,538	201.2	5,138	0.2
	II	25,031	200.6	5,021	2.5
	III	25,528	195.9	5,001	-0.9
	IV	27,486	201.0	5,526	1.7
2006	I	26,208	203.6	5,335	3.8
	II	24,839	201.6	5,008	-0.3
	III	25,810	197.1	5,087	1.7
	IV	27,880	201.8	5,625	1.8
2007	I	26,686	202.2	5,395	1.1
	II	25,525	200.9	5,127	2.4
	III ^P	27,128	196.8	5,339	5.0
	IV ^{AC}	29,133	202.1	5,888	4.7
2008	I ^A	27,465	203.2	5,581	3.4
	II ^A	26,344	202.3	5,329	3.9
	III ^A	27,463	198.0	5,438	1.8

^A Projected

^C Average of the two estimation methods (Table 2 and 3)

^P Preliminary

Table 5. Actual and Forecast Live Hog Prices, Lean Carcass Prices, and Retail Pork Prices^a

Year	Quarter	Barrow and Gilts 6-Mkt Price (\$/cwt)	Lean Value (Live Price/74.5 yield) (\$/carcass cwt)	Retail Pork ¢/carcass cwt
1998	I	\$34.74	\$46.63	233.0
	II	\$39.42	\$52.91	226.9
	III	\$33.95	\$45.57	231.0
	IV	\$19.30	\$25.91	226.9
1999	I	\$28.83	\$38.70	235.8
	II	\$35.18	\$47.22	238.4
	III	\$35.70	\$47.92	246.4
	IV	\$36.29	\$48.71	245.2
2000	I	\$41.14	\$55.22	249.8
	II	\$50.43	\$67.69	257.3
	III	\$46.43	\$62.32	264.3
	IV	\$40.78	\$54.74	261.3
2001	I	\$42.83	\$57.49	262.5
	II	\$52.05	\$69.87	267.0
	III	\$51.05	\$68.52	275.0
	IV	\$37.30	\$50.07	273.0
2002	I	\$39.43	\$52.93	270.9
	II	\$34.99	\$46.97	267.7
	III	\$33.86	\$45.45	264.1
	IV	\$31.34	\$42.07	260.2
2003	I	\$35.38	\$47.49	260.9
	II	\$42.64	\$57.23	262.2
	III	\$42.90	\$57.58	269.8
	IV	\$36.89	\$49.52	270.2
2004	I	\$44.18	\$59.30	269.3
	II	\$54.91	\$73.70	276.8
	III	\$56.58	\$75.95	287.7
	IV	\$54.35	\$72.95	282.8
2005	I	\$51.92	\$69.69	282.9
	II	\$52.09	\$69.92	286.7
	III	\$50.51	\$67.80	282.9
	IV	\$45.54	\$61.13	278.3
2006	I	\$42.63	\$57.22	277.4
	II	\$48.45	\$65.03	278.7
	III	\$51.83	\$69.57	285.8
	IV	\$46.13	\$61.92	281.0
2007	I	\$46.04	\$61.80	280.8
	II	\$52.55	\$70.54	286.5
	III ^P	\$50.40	\$67.65	291.5
	IV ^{AC}	\$44.66	\$59.95	
2008	I ^C	\$45.98	\$61.72	
	II ^C	\$50.71	\$68.07	
	III ^C	\$50.92	\$68.35	

^A Predicted prices for 2007 (IV) forward are made with two equations with the results averaged.

^P Preliminary

^C Estimated