

# Prediction of 2004 Pork Prices and Production

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## ■ One Cow in Alberta

Because of the diligent work of the Canadian meat inspectors who found that one Alberta cow with BSE, 2003 may well be the most memorable year in the history of North American cattle production. The impact was equally dramatic on both sides of the 49<sup>th</sup> parallel. U.S. cattle prices reached peaks in 2003 that were 30% higher than previous records while Canadian prices plunged by more than 50%. While there are always things that can be improved about the way these situations are handled, there is one item that was truly outstanding about this incident – the reaction of North American consumers. It speaks volumes for the intelligence of Canadian and U.S. consumers and the high degree of confidence they place in our respective food safety systems that North American beef consumption didn't plunge as it did in Europe and Japan following the discovery of BSE.

Dramatic events in the cattle market have spillover impact on the pork industry. In this case, the southward movement of Canadian slaughter hogs was accelerated, in part due to the closing of the Spring Hill slaughter facility. Canadian hog slaughter during the third quarter of 2003 was below year-ago levels for the first time in years. It appears that the number of hogs shipped from Canada to the U.S. in 2003 for slaughter was nearly 20% higher than in 2002. The record high U.S. beef prices in 2003 provided very little support to pork prices. In the U.S., the beef-pork cross price elasticity in 2003 was close to zero.

## ■ Hog Cycle

The hog cycle has been a major force in the U.S. hog industry for over a century. Profitable times lead to an expansion in hog numbers that leads to low prices and a reduction in hog numbers that leads to higher prices. Although the average length of the hog cycle hasn't changed, there has been a steady decline in the amplitude of the hog cycle over the last 30 years. In the 1970s, a 20% year-over-year change in quarterly hog slaughter was not unusual. In the last five years, it has been rare for quarterly hog slaughter to deviate more than 5% from year-earlier levels.

Historically, changes in U.S. hog slaughter have lagged profitability by an average of 15 months. Back-to-back profits in 1996 and 1997 yielded a 9.9% increase in U.S. hog slaughter in 1998. Back-to-back profits in 1990 and 1991 led to a 7.6% increase in hog slaughter in 1992. However, 2002 hog slaughter was up only 2.3% following profitable years in 2000 and 2001. The same is true for cutbacks following periods of red ink. U.S. hog slaughter declined by 10.2% following back-to-back losses in 1980 and 1981. Hog slaughter in 1996 was down 4.1% after negative returns in 1995 and 1995. Two consecutive years of huge losses in 1998 and 1999 produced only a 3.5% drop in U.S. hog slaughter in 2000. The last two years were money losers, but it appears that 2004 U.S. hog slaughter will be little different from 2003.

Why are producers responding less to profitability today than they did in the past? Modern, large-scale hog production is simply not very flexible. Buildings are costly and time consuming to permit and build. Once built, there is little alternative but to operate them at capacity through good times and bad.

## ■ Productivity Growth

Although the growth is not as rapid as during the late 1990s, the number of pigs produced per sow per year continues to increase. Rapid growth in productivity means that there is no need for an increase in sow numbers. In fact, the combined number of sows in the U.S. and Canada is the smallest in over a century.

The U.S. trails Canada in breeding herd productivity. In 2002, the U.S. averaged 16.4 pigs per animal in the swine breeding herd and Canada averaged 19.3 pigs per animal in the breeding herd. (Differences in how USDA and Statistics Canada define and collect data may account for part of this difference.) Not only are Canadian producers ahead on this key factor, Canada's lead is increasing. Canadian 2002 productivity was up 22.3% from 1996 while pigs per breeding animal in the U.S. were up only 16.1%.

## ■ Domestic Pork Demand

Last year was not a good one for domestic pork demand in the U.S. Both deflated retail pork prices and per capita pork consumption were lower than in 2002. My 2003 pork demand index was down nearly 3% compared to the year before. This was surprising given the record U.S. beef prices and that the total meat supply in the U.S. was lower than in 2002

## ■ Export Demand

As of the end of August, the U.S. was well on its way to the 12<sup>th</sup> consecutive record year for pork exports. Canadian pork exports during 2003 were expected to be a record high for the ninth consecutive year. Both our countries continue to hold very strong positions in world pork trade. The 15-member European Union is the world's top pork exporter followed by Canada, the U.S. and Brazil. Over the last five years, E.U. pork exports have held steady, U.S. pork exports have increased by 37%, Canadian exports have increased by 126% and Brazil has increased its pork exports by 490%. Brazil is poised to become the dominant force in world pork exports.

Last year, the U.S. exported about 8.5% of its pork production while Canada exported 50%. The level of Canadian pork exports is so high that any disease outbreak, such as FMD, that would close the border would have disastrous consequences for the Canadian pork industry.

In 2002 the U.S. imported a record 5.74 million Canadian hogs. It appears that 2003 imports from Canada exceeded 6 million head of hogs and pigs. I expect 2004 shipments of live hogs to the U.S. to be close to the 2003 total.

## ■ Country of Origin Labelling

The U.S. farm bill includes a controversial provision mandating country of origin labelling (COOL) for red meats, fish, peanuts, and fresh and frozen fruits and vegetables. Because of the large amount of Canadian pork and hogs shipped to the U.S., this is an important issue to Canadian producers. USDA announced proposed procedures for the mandatory COOL program in late October. Beginning on September 30, 2004, grocery stores that annually market over \$230,000 of fruits and vegetables must label their fresh and frozen red meat by country of origin.

The law applies to non-restaurant retail sales of non-mixed, unprocessed products. COOL applies to the packaged pork sold in a grocery store. Pork

that is served in a restaurant or is an ingredient in a food product such as frozen pizza is not covered by COOL, nor are processed products such as bacon. Merely adding water or flavouring, e.g. lemon flavoured pork loin, does not exempt the product from the requirements of COOL.

The law specifies that to have a U.S. country of origin label, meat must be exclusively from animals that are born, raised and slaughtered in the U.S. About 5% of the pork consumed in the U.S. is imported as pork. Another 6% of the pork consumed in the U.S. comes from Canadian born pigs that are slaughtered in the U.S. Thus, about 89% of the pork Americans eat qualifies for a U.S. origin label.

USDA's guidelines call for a label that specifies where the animal was raised and where processing has occurred. For example, a pork chop from a hog that was born, raised, slaughtered and processed in the U.S. would be labelled simply a product of the U.S. However, ground beef that is a mixture of trimmings imported from Australia, trimmings from feeder cattle imported from Mexico, and trimmings from U.S. born cattle would be labelled - "Product of Australia, From Mexican Cattle Raised and Slaughtered in the U.S., and Product of U.S." COOL is popular among livestock producers who believe that U.S. consumers are willing to pay a premium for U.S. meat. Some argue that providing consumers with more information on the origin of their food will increase food demand. Others hope that the hassle of labelling will cause packers, processors and grocery stores to boycott meat that does not qualify for a U.S. origin label.

COOL is not as popular with those farmers who fear that the premiums consumers may be willing to pay for U.S. origin meat are less than the estimated \$2 billion annual implementation cost that comes with COOL. Congress appropriated no money to implement and monitor COOL. Consequently, the cost of labelling meat is likely to be borne by farmers and ranchers through wider marketing margins and a smaller share of the consumer's food dollar.

Mandating country of origin labels may also create a niche market for certain meats available in limited quantity. Once labelled, some consumers may find they prefer the taste of Argentine beef or Canadian pork, allowing it to sell at a premium to the U.S. product, much a Danish pork and New Zealand lamb do today.

Nor is COOL popular with the management of grocery stores. It is the retailer who faces the threat of \$10,000 per day fines for not labelling and verifying the country of origin of the meat they sell. USDA guidelines allow this \$10,000 per day fine to be levied back down the food chain when mislabelling is not the fault of the retailer.

The farm bill prohibits USDA from implementing a mandatory animal tracking system to certify the country of origin. Grocers will have to rely on industry tracking systems to verify the country of origin of the meat they sell. This should put pressure on the marketing system to move to a much more tightly integrated structure. Potential fines of \$10,000 per day are likely to cause grocery stores to require the industry put some sort of system in place to track meat from the farm to the store.

## ■ Forecast for 2004

USDA's October cold storage report was very encouraging. On September 30, the U.S. had smaller stocks of frozen beef (down 23%), pork (down 9%), chicken (down 28%), and turkey (down 3%) than 12 months earlier.

The reduction in the U.S. breeding herd appears to be at an end. U.S. sow slaughter has been consistently below year-ago levels since the start of summer. Gilt slaughter data collected by colleague, Glenn Grimes, indicates more gilts are being retained for breeding than is needed to hold sow numbers constant.

The expected breakeven price for U.S. slaughter hogs in 2004 is likely to average close to 41 cents per pound of live weight or 55 cents per pound of carcass. The U.S. produced a record corn crop in 2003, but corn demand is very strong, so prices are above year-earlier levels. Last year's U.S. soybean crop was the smallest since 1996 and soybean meal costs are likely to stay high for a while.

USDA's Hogs and Pigs reports indicate the swine breeding herd is slightly below year-earlier levels. The combined data on US and Canadian farrowing intentions indicate that first quarter 2004 farrowings will be unchanged from a year earlier. However, given the trend to larger litter size and heavier slaughter weights, those litters are very likely to result in more pork being produced than in 2003.

My forecast for hog slaughter and prices for 2004 follows (as of November 2003).

**Table 1. Actual and Forecasted Hog Slaughter, U.S. & Canada**

Year	Qtr	US		Canada		Combined	
		1000s	%YrAgo	1000s	%YrAgo	1000s	%YrAgo
2003	1	24,620	101.9	5,825	107.4	30,445	102.9
2003	2	23,890	98.4	5,514	103.6	29,404	99.3
2003	3	24,700	98.3	5,404	97.5	30,104	98.2
2003	4*	26,900	100.7	5,795	99.0	32,695	100.4
2003	Year*	100,110	99.9	22,538	101.8	122,648	100.2
2004	1*	24,900	101.1	5,830	100.1	30,730	100.9
2004	2*	24,150	101.1	5,525	100.0	29,675	100.9
2004	3*	25,000	101.2	5,565	103.0	30,565	101.5
2004	4*	26,900	100.0	5,940	102.5	32,840	100.4
2004	Year*	100,950	100.8	22,860	101.4	123,810	100.9
2005	Year*	101,500	100.5	23,000	100.6	124,500	100.6

\*forecast

**Table 2. Iowa Barrow & Gilt Prices - Index 100 Hog Prices**

Year	Qtr	U.S. dollars/cwt		Manitoba	Ontario
		live	carcass		
2003	1	34.19	46.20	62.45	60.18
2003	2	41.80	56.48	68.34	66.64
2003	3	41.40	55.95	69.40	65.17
2003	4*	35 - 38	47 - 51	58 - 62	56 - 60
2003	Year*	38 - 39	51 - 52	64 - 66	62 - 63
2004	1*	36 - 39	49 - 52	60 - 64	58 - 62
2004	2*	39 - 42	53 - 56	66 - 70	64 - 68
2004	3*	38 - 41	51 - 54	64 - 68	63 - 67
2004	4*	34 - 37	47 - 51	58 - 62	57 - 61
2004	Year*	37 - 40	50 - 53	62 - 66	61 - 65
2005	Year*	36 - 39	49 - 52	61 - 65	61 - 65

\*forecast