Long Term Meat Production and Consumption Trends

We often spend a lot of time focusing on short term market situation and outlook. These quarter-to-quarter and year-to-year supply and price forecasts are important for business planning. It is also important to step back and take a longer term perspective on occasion, not only where we have been but what factors will carry us forward.

Figure 1 is a graph of US per capita red meat and poultry consumption for 1980 to 2007. The 2006 and 2007 forecast are from USDA and do not show much change from 2005 levels. Per capita red meat and poultry consumption has increased 8% between 1980 and 2005 and now stands at 187.5 pounds per person on a boneless equivalent basis. This amount is just over a half a pound a day. The increase is entirely from chicken (up 83%, 27.5 lbs) and turkey (up 63%, 5.1 lbs) from 1980 while beef and pork consumption declined 13% (9.7 lbs) and 11% (5.6 lbs), respectively over the same period.
Consumption shown in Figure 1 is not measured, but rather calculated as production + imports – exports + inventory adjustments. Figure 2 shows the annual production on a carcass equivalent basis since 1980 through 2007. Notice that production of all categories, except veal and lamb, has increased. In particular, chicken production has increased dramatically. Beef and pork increased 15% and 25%, respectively from 1980 to 2005 while turkey and chicken increased 131% and 202%.

Chick production sets a new record every year, as has pork in recent years. Turkey production has been relatively stable. Beef production set a record in 2002 and is expected to be near that record by 2007.

Comparing Figures 1 and 2 we see similar trends, but different relative changes. Part of the difference between categories is due to the boneless yield from a carcass for red meat versus poultry, but the major difference is due to trade. Figure 3 shows the net exports for the categories. Note that veal + lamb and turkey trade balance is small relative to the other categories. However, in the case of lamb, imports are nearly equal to US production.

The US has been a net exporter of chicken throughout the time period, and has exported more pounds of chicken that beef and pork combined each year since the early 1990s. Pork became a net exporter in 1995. The beef trade balance had been slightly negative on a volume basis until 2004 with exports were restricted because of BSE.
Looking Ahead

Demographics are important drivers of meat demand. Trends in population, age, and income in the US and export customer countries are reasonably predictable and have differing implications for the livestock and poultry sectors. More people require more food and, in general, older populations tend to eat less meat than younger populations. We also have a lot of experience that meat consumption increases as economies move beyond subsistence levels of income.

Asia has over half of the world’s population (Figure 4). Africa has the fastest population growth, but unless the economy of these countries can be improved, perhaps through agriculture, they will not have the income to buy US meat exports. South America and Asia have populations expected to grow 19% and 17%, respectively, by 2020 and have growing economies. North America, including Mexico, is growing more slowly than the developing economies and Europe’s population is expected to decline in 15 years.

Europe and North America have the most mature populations and economies. Consumers in these two regions are not likely to consume more meat as their income grows as we would expect to see in the developing economies. However, they will spend more on food in total meaning they are willing to spend
more on convenience and quality not just calories. Thus, there will be opportunities for higher quality
higher, priced products in the US, Canada, Europe, and other developed economies like Japan. However,
but the growth of red meat and poultry industries focusing on commodity production depends on being
globally competitive at producing safe wholesome and affordable products to serve growing populations
and economies particularly in Asia and South America.

Figure 5

John Lawrence
Will Farmers Plant More Soybeans and Less Corn in 2006?

Grain producers face sharply higher prices than a year ago for diesel fuel and fertilizer, as well as higher prices for natural gas in irrigated areas of the Great Plains. Natural gas often is used as the fuel for running irrigation pumps. Also, in some years, corn requires a substantial expense for artificial drying. Since corn needs more fertilizer than soybeans, and with some types of tillage may require more diesel fuel, an important question influencing new-crop corn and soybean prices is whether farmers will switch some corn acres to soybeans. Farmer cropping decisions also may be influenced by the rapid expansion in corn processing for ethanol and its impact on the corn basis. At times this winter in central Iowa, we have seen ethanol plants bidding as much as 15 to 20 cents higher prices for summer corn delivery than local elevators. Possibly offsetting the stronger corn basis in areas that have ethanol plants, soybean yields in much of the western Corn Belt set new records last year. Bean yields in the eastern Corn Belt, while not quite as good, were a pleasant surprise to farmers.

Will Recent Acreage Trends be Reversed?
A key question in assessing new-crop pricing opportunities is whether these developments will cause a decrease in corn acres for 2006 and an increase in soybeans. If so, that would be a reversal of the trend of last year’s pattern and the trend in Iowa and Illinois for the last few years. The ratio of November soybean prices to December corn at this writing is 2.42. A year ago at this time, before the markets had discerned that Brazil’s soybean yields were being cut by widespread drought, it was 2.29. By mid April last year as producers were finalizing cropping plans, the ratio was 2.62. A higher ratio favors planting of soybeans.

A leading private crop forecasting firm has projected that U.S. soybean plantings will increase by about 4 million acres this year, and that corn plantings will decline by about 2.5 million acres. These changes probably are larger than generally expected by the grain trade, and are substantially larger than we have been projecting. The larger change in soybeans than in corn reflects some acreage in North Dakota and Minnesota that did not get planted last year because of a wet spring. It also may reflect some anticipated replanting of failed winter wheat in the southern plains to soybeans, and some increase in double cropping of soybeans after soft red wheat in the extreme southern part of the eastern Corn Belt and the south central U.S. If these projections materialize, they are a strong caution that November soybean futures have considerable down-side risk, barring major Corn Belt weather problems. New-crop corn prices are reflecting some anticipated decrease in planted acreage and/or weather problems that may reduce yields. Last fall, December futures dropped below $1.90 per bushel near the end of harvest. At this writing, December corn futures are about $0.65 above that level. USDA’s March 31 planting intentions report will provide a better indication of prospective acreage.

USDA February 9 Supply-Demand Reports
USDA’s World Supply-Demand reports provided updated projections of potential corn and soybean production in Brazil and Argentina. At the time they were released, I was in Brazil and was unable to analyze the reports. Trade analysts anticipated a small decline in projected Brazilian soybean production as well as a small decline in Argentine corn production.

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