# Beef Outlook in Uncertain Times

Derrell Peel, Oklahoma State University and John D. Lawrence, Iowa State University

Forecasting beef and cattle markets by definition deals with the unknown, but conditions at the start of 2009 are more uncertain than usual. Typically, economists assume that demand is relatively stable from year to year and supply is the primary source of forecast error. However, as we have seen in recent months, both supply and demand are in play and many of the historic relationships used in predicting the future may not hold water in volatile markets. Following a lengthy discussion about the factors that impact the cattle market and how they have changed, we will provide our outlook for prices in 2009 and beyond and strategies for managers in uncertain times.

# **Supply Situation**

Beef supply in late 2008, most or all of 2009 and for the coming two to three years is expected to contract. The sources of supply are fed and non-fed slaughter, carcass weights and imports. Fed slaughter begins with the calf crop, heifer retention decisions and feeder cattle imports. The 2008 calf crop was 111,000 (0.3%) smaller than the year before and the smallest since the early 1950s. The July inventory of beef cows and heifers was down 300,000 head and cow slaughter continued ahead of the 2007 pace, suggesting that the 2009 calf crop will be smaller yet. The November calf:hay price ratio was 0.92, equal to 1996 and the lowest since at least 1982. Herd liquidation is expected to continue in 2009 and perhaps beyond. This contraction will add heifers to the fed slaughter supply in 2009 but reduce the calf crop and fed slaughter the following year.

The timing of fed cattle slaughter is driven by feedlot marketings, inventories and placements. The inventory of cattle in feedlots with 1000-head capacity or larger reported monthly by USDA has posted year-over-year declines since May. The December cattle on feed inventory was 11.345 million head, 6.2% below December 2007 and the smallest December since 2004. Part of the reason for lower COF inventory is delayed placements. The number of cattle placed weighing less than 700 pounds has declined and placements weighing over 700 pounds has increased. Thus, marketings will be postponed and carcass weights will continue heavy. The 1000+ capacity feedlots represent approximately 85% of cattle on feed each January and there is reason to believe that the inventory in the smaller feedlots has declined further than the larger feedlots. Iowa Agricultural Statistics reported that the number of cattle on feed in feedlots with less than 1000-head capacity was down 27% from December 2007. Another reason for reduced placements was the significant losses by cattle feeders in 2008. On the Iowa State University Estimated Returns Series it was the worse year for cattle feeding since at least 1974. Finishing one yearling each month resulted in average losses of \$115/head with the largest one-month loss of \$209/head on October sales. Two thousand eight marks the fourth consecutive annual loss. Thus, feedlots are cautious bidders on feeder cattle and have pressured prices lower.

Weekly steer and heifer slaughter has been lower than the previous year since the first of June and is expected to continue lower through at least the second quarter of 2009. During the second half of 2008, steer and heifer slaughter was down 2.1% and 1.3%, respectively.

While fed slaughter has declined, non-fed slaughter increased in 2008 compared to 2007. Dairy cow slaughter increased 2.8% and beef cow slaughter increased 12.6%. Heavier carcass weights contributed to beef supplies in 2008. Steer and heifer carcasses were one percent heavier than they were in 2007 and cow carcasses were 1.2% lighter. In total, cattle slaughter in 2008 finished near 2007 levels as did total beef supplies.

Imports of beef and cattle are part of the U.S. beef supply. Beef import data are released well after the fact. January-October imports were 22% (589 million pounds) lower in 2008 compared to the same period in 2007. This reduction is equivalent to 758,000 carcasses at the U.S. average carcass weight. Imports from Canada, the largest supplier to the United States, increased 3.2% as did New Zealand (+1.1%) and Central America (+23%). Imports from other suppliers declined: Australia and Brazil each down 32%, Argentina down 30%, Uruguay down 87% and Mexico down 13%.

Imported cattle are already included in the slaughter and inventory numbers discussed earlier. Cattle imports from Canada increased 79,000 head or six percent in 2008 compared to 2007. The number of steers and heifers for slaughter imported from Canada totaled approximately 640,000 head, equal to about on average slaughter week, which is 158,000 (20%) fewer than in 2007. Cows imported for slaughter totaled approximately 160,000, dramatically higher than the 15,000 imported in July-December 2007. Feeder cattle imports increased 60,000 to total about 575,000 head for the year. Adding feeder cattle and fed and non-fed slaughter cattle from Canada are equivalent to four percent of U.S. cattle slaughter. Fed and feeder cattle imports from Canada decreased in the last part of 2008, as Canadian cattle numbers tightened. This trend is expected to continue in 2009. The U.S. imports only feeder cattle from Mexico and imported 700,000 head in 2008, down 36% or 380,000 head from 2007. This amount accounts for another two percent of the U.S. supply. Like Canada, imports of Mexican cattle are likely to continue at relatively low levels in 2009.

## **Demand Situation**

Demand drivers that economists watch include the price of substitutes, consumer income and preferences and exports. Generally, pork and poultry supplies and consumer income are predictable and preferences are stable year-to-year, leaving exports as the wild card in forecast. The upheaval in the U.S. and global economy is causing significant uncertainty in consumer income, purchasing patterns and trade flow. Historically, demand factors were often considered relatively constant and supplies were difficult to predict. Today, while supplies have their challenges, demand factors are the bigger challenge to forecast.

The supply and price of substitutes for beef, primarily pork and poultry, are favorable for beef demand. USDA predicts the production of chicken, turkey and pork as well as beef to be lower in 2009. Egg set and chick placements have been running below year earlier levels since spring 2008 and chicken supplies began to decline relative to 2007 levels after Labor Day and are expected to continue. Pork supplies that were up as much as 10% in parts of 2008 are forecast to be lower in 2009. Pork production had showed signs of declining in the fourth quarter of 2008 and is expected to be down through the third quarter of 2009. The lower supplies of chicken and pork are expected to lead to higher prices of these meats at the grocery and restaurant checkout and should be favorable for beef as consumers will be less likely to switch meats if all prices are higher.

Export demand for beef in the first 10 months (latest data) of 2008 was very good and accounted for approximately seven percent of U.S. production. Third quarter 2008 U.S. beef exports were 90% of the third quarter 2003 export; pre-BSE and the largest quarterly export amount on record. It was the first time since 2003 and the fifth quarter in modern history that exports exceeded imports on a tonnage basis. However, weekly data indicated a slow down in beef exports late in the year as the value of the dollar increased. The U.S. dollar had been weak relative to competitors (Australia, Canada and Brazil) through the first three quarters of 2008, but increased significantly in the fourth quarter as the global economy worsened. Similarly, the dollar rallied against major beef customer currencies like Mexico and South Korea, but actually weakened against Japan. Thus, the stronger U.S. dollar makes U.S. beef more expensive, except in Japan, hurting exports.

The challenge for beef demand has come from consumer income. The U.S. economy entered a recession in the first quarter of 2008. Restaurant trade had begun to slow before then and continues to be problematic for beef demand. Food service is important for beef demand, but is complicated. For example, it includes a range of eating experiences and menus from burgers to white tablecloth restaurants. Surveys for this industry showed that traffic declined and the average amount spent also declined as 2008 progressed and consumers become more concerned about the economy. As a result, the price of middle meats has declined while the price of end meats has increased. The fourth quarter 2008 price of Choice rib and loin primals were down 6.2% and 12.8% while the chuck and round prices increased 17.3% and 11.8%. The brisket, short plate and flank also increased in price this year by 12-23%. The other source of revenue from cattle, hide and offal, has also been volatile and ended 2008 at less than two-thirds the value of the year before.

# **Beef Supply Forecast**

Beef supply in 2009 is expected to be less than 2008 in the first, second and fourth quarters. Cattle slaughter will be lower on lower COF inventories. Dairy cow slaughter is expected to increase from 2008 levels. Beef cow slaughter should moderate on smaller cow inventories but will not drop sharply due to continued economic pressures on cowherds and continued imports of Canadian cull cows. Weather and feed supplies will also impact cow slaughter. Carcass weights are expected to increase at near the trend line rate due to heavier placement weights and lower feed costs than 2008. Domestic beef supplies are expected to be one to two percent lower in 2009 than 2008 and continue to decline in 2010 and beyond. Current forecasts are for lower U.S. beef production until 2012 or later.

Beef and cattle imports will be impacted by the value of the U.S. dollar relative to currency of importers. The U.S. dollar was weak through most of the year, but strengthened dramatically after Labor Day. The weaker dollar discouraged imports early in 2008, but encouraged it late in the year. Imports in 2009 will also depend heavily on exchange rates, which are impacted by actions of the Federal Reserve and by Central Bankers in other countries. Current expectations are that the U.S. dollar will return to a value similar to the first half of 2008, which will discourage imports and support exports.

#### **Beef Demand Forecast**

Smaller supplies of poultry and pork and the resulting higher prices for these competing meats should be supportive of beef prices. However, poultry production can react quickly to improved margins and sow slaughter indicates that the pork contraction may be ending. Thus, supplies of proteins could increase later in the year. These are variable that we can predict and will have updated USDA data to monitor progress. The remaining demand factors are important, uncertain and difficult to forecast.

Export demand will depend heavily on the global economy and the U.S. dollar. If the U.S. dollar weakens as the economy recovers, exports should improve. However, it is starting the year at its highest level since 2005 against Canada and Brazil, as well as the highest since 2003 against Australia and Argentina. Under these conditions, these competitor's products will be relatively cheaper than the United State's due to exchange rates. Depending on how the United States and other governments react to the current economic crisis, the U.S. dollar may return to levels of early 2008 later in 2009 or beyond.

Beef demand will depend heavily on what happens in the domestic economy. Government spending on infrastructure, economic stimulus packages and financial bailout programs will all impact the U.S. economy, but ultimately it will take an improvement in consumer confidence to turn the economy around. Unemployment, which grew throughout 2008, is expected to continue increasing into 2009. There is opportunity for good news in the spring when seasonal construction projects begin and the new administration has had time to announce the specifics on its stimulus programs. Many economists are not looking for a recovery to begin until the third or fourth quarter of 2009. A recovery is defined as a year-over-year increase in GDP and it is possible to have growth and still not be back to the 2007 economy before the recession started.

Value-conscious consumers will continue to dine out less than they did in 2007 and will conserve on home meals. The smaller supply of beef will support higher prices, but demand for beef will continue to struggle until the economy improves.

## **Cattle Price Forecast**

Fed cattle prices are forecast to average in the low to mid \$90s in 2009. First and third quarter 2009 prices should average in the low \$90s and second and fourth quarter in the mid to upper \$90s. The forecast for 2010 is for fed prices to average over \$1/pound. The wild cards that can shift the forecast higher or lower have been discussed. Supplies are important, but demand factors are keys to fed cattle prices.

Feeder cattle and calf prices will depend on fed prices and corn prices. The current forecast for 2009 is for 700-800 pound steers to average \$105-110/cwt and steer calves \$112-117. The forecast for 2010 is \$5/cwt higher for both weight classes. Factors that impact beef demand and fed prices will impact feeder prices also as will cost of gain time to grain prices.

Another factor that may weaken demand for fed and feeder cattle is the potential consolidation in the packing and feedlot sector. Feedlot inventories are their smallest in four years. Higher feed costs encourage more gain before the feedlot and fewer days at the bunk. The calf crop is expected to decrease over the next three years on more. Small feedlots continue to exit the sector and the financial losses in recent years may close moderate to larger feedlots as the feeding sector downsizes. The packing sector will likely make a similar adjustment and may close additional plants as cattle numbers and operating margins shrink in the years ahead.