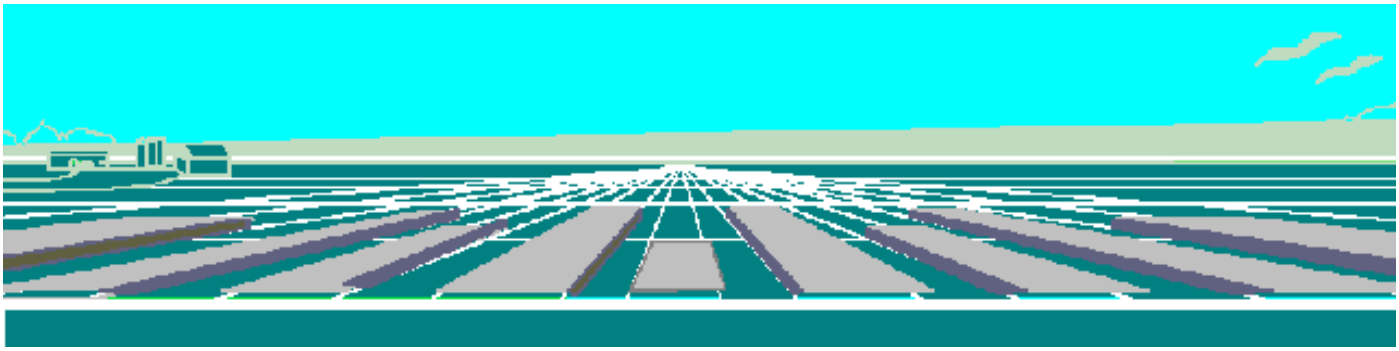
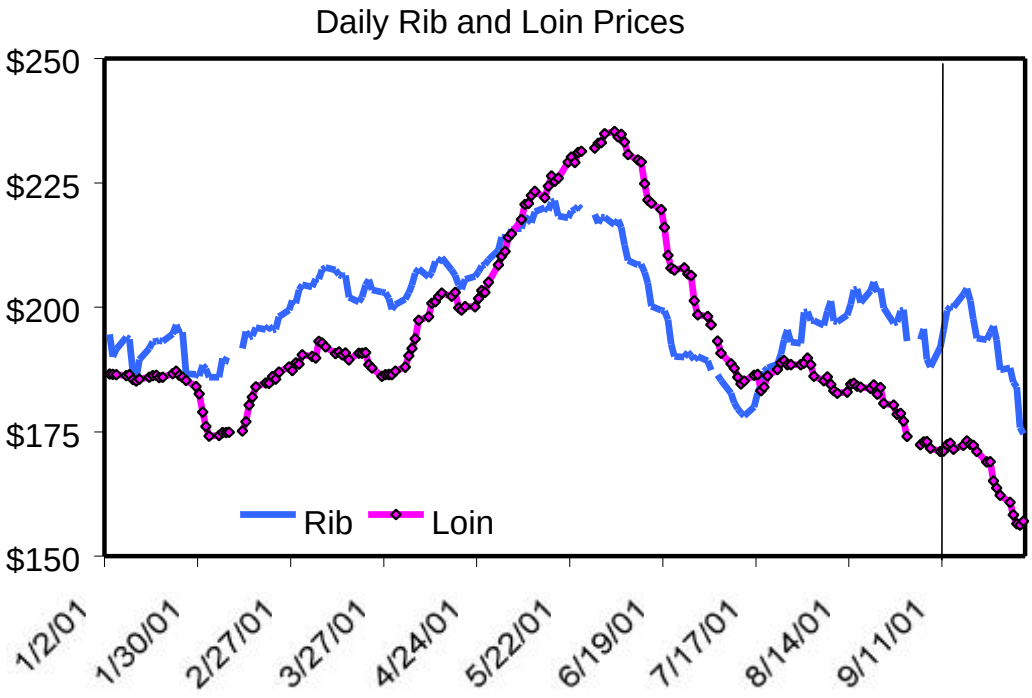


October 15, 2001 **Ames, Iowa** **Econ. Info. 1824**

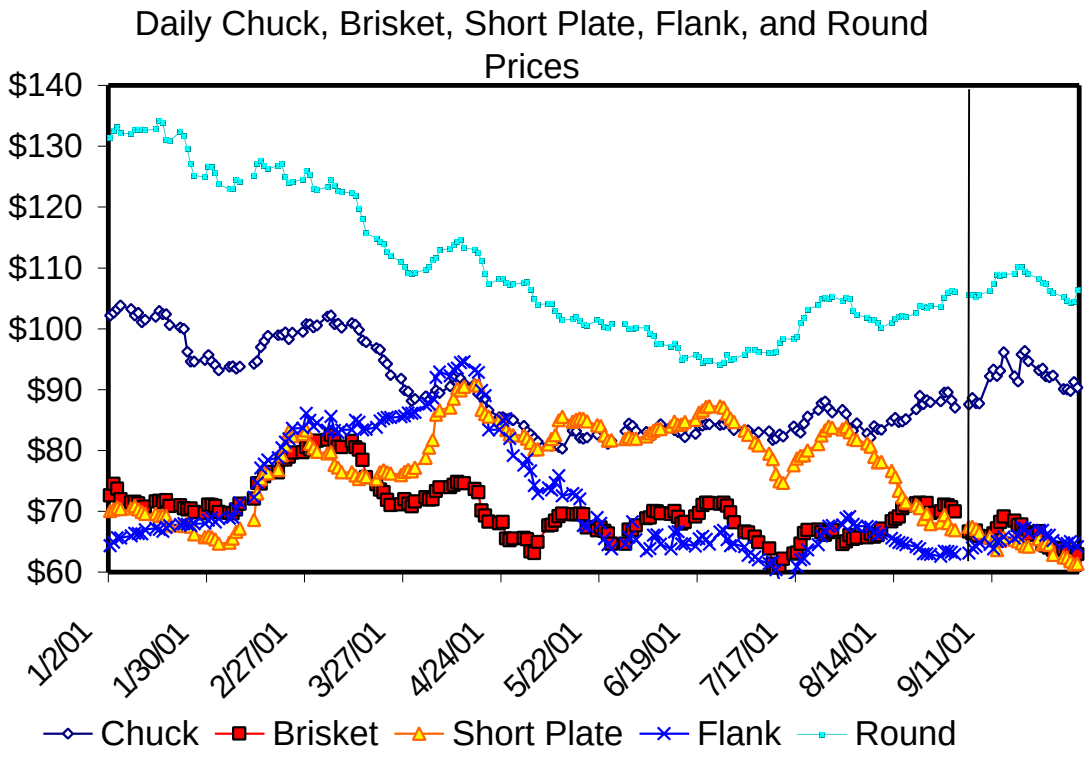
BEEF PRICES SINCE SEPTEMBER 11

The terrorist attack of September 11 dramatically impacted the lives of all Americans. The grounding of airlines and reduced travel to New York and other vacation destinations, and the sudden slowdown in the US economy have also impacted the beef sector. However, much like the US economy, the beef market was headed into a slump before September 11. Record high cattle on feed numbers and record high dressed weights provide a burdensome supply that is now faced with a weaker demand and prices have fallen.

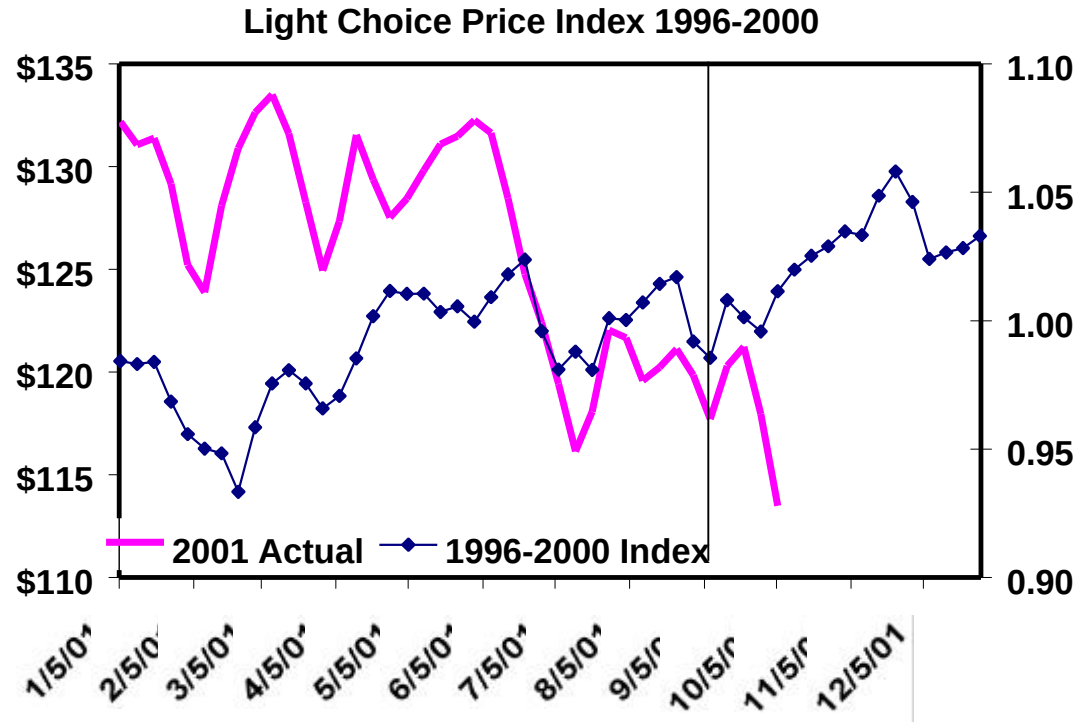
Figure 1 shows daily prices for the Beef Loin and Rib cuts reported by USDA. These are the highest priced primal in the carcass. They make up approximately 25 percent of the carcass by weight, but 40-50 percent of the value. As might be expected, prices for these high-end cuts peaked in early summer at the start of the grilling season. They declined sharply until mid-July and, in the case of the Rib had rebounded, or had leveled off in the case of the Loin. Approximately a week after the attack, their prices began to decline again.



The remainder of the beef primal cuts declined from earlier in the year, but they have been relatively stable since early summer. The chuck and round are the two largest primals by weight (over 50 percent) and have actually increased in price since mid-year and September 11 (Figure 2).



The net result however, is a weaker boxed beef price (Figure 3). The light weight Choice boxed beef prices was relatively stable through the end of May. It declined $16/cwt (12 percent) from the week ending June 1 until the week ending July 13 before rebounding. The price also increased slightly in the first full week following September 11, but by the first week of October had dropped to its lowest price in a year (October 20, 2000).



Also note that the seasonal index for light Choice boxed beef prices for the 1996-2000 period is for prices to trend higher throughout the year and particularly from Labor Day on. This year doesn't appear to be following the recent trend. Keep in mind that these 5 years had years when prices increased in the second half of the year for a variety of reasons that may not be expected to repeat themselves. High corn prices and very low cattle prices in early summer 1996 resulted in higher fed cattle prices late in the year. The demand for steaks for the millennium parties in late 1999 pushed Choice middle meat prices higher. Late 2000 saw the start of a harsh winter that reduced weights and feedlots pulling cattle ahead due to higher prices.

It is doubtful that we will see a late year resurgence in high value primal cuts, boxed beef, or fed cattle prices. The decline from late May to mid July was twice the typical percentage decline, and thus, a rally back to June prices as we have seen in recent years, was unlikely before the disruptions to the economy. Given the projected marketings and heavy carcass weights, feedlots will have to be ready sellers. The uncertainty about the HRI business will make retailers, wholesalers, and packers cautious buyers—at least until the economy returns to normal business. However, the events of September 11, coupled with advancements in inventory control, may cause a permanent change in how retailers purchase beef.

John D. Lawrence

LARGER-THAN-EXPECTED CROPS REDUCE PRICE PROSPECTS, TEMPER EXPECTED POST-HARVEST PRICE RECOVERY

USDA's October 12 crop report placed this year's corn and soybean harvests above even the most optimistic private crop forecasts. That news points to a little further weakness in corn and soybean cash and futures prices in the next few days, and very possibly for the next two weeks as corn harvesting accelerates. ***Analysis of similar years in the U.S. strongly suggests that both corn and soybean crop estimates may increase again in the November 9 and mid-January crop estimates. Weakness in soybean prices will be reinforced by sharp increases in estimates and projections of South American soybean production.*** While corn carryover stocks are still expected to decline in the year ahead, the indicated decrease is not as large as expected earlier. Late August and September rains helped corn and soybean yields from Iowa and Minnesota eastward. For soybeans, carryover stocks may increase slightly this marketing year. If prices are not already there as you read this, price charts show downside objectives of about $2.04 on December corn and $4.39-$4.45 on November soybean futures. These levels seem likely to provide support under the market, at least for corn.

Although corn carryover stocks are expected to decline in the year ahead, the indicated decrease is not as large as expected earlier. August 31, 2002 stocks should still leave a modest reserve to help offset possible weather problems next year. That prospect will temper spring and early summer price volatility somewhat, as will the sluggish global economy. Cash corn prices appear likely to show a normal to slightly above normal rise from fall to spring. For soybeans, prospects for slightly increased carryover stocks, the first increase in three years, may produce a less than normal increase in spring prices. Normal increases in monthly average Iowa corn and soybean prices are about 25 and 39 cents per bushel from the October low to the peak in May.

Marketing Considerations

July corn futures prices (including normal basis improvement) on October 12 were offering around 40 cents gross returns for corn to be hedged and stored into the spring fieldwork season. If you have operating loans that could be paid down if the corn is sold at harvest, the monthly interest cost probably will be around 1.3 cents per bushel per month. For on-farm storage, extra shrinkage to dry the corn from 15 to 13 percent moisture for safe storage will cost about 4.3 cents per bushel. Drying cost may add another 4.0 cents, depending on when you bought the propane. Additional on-farm costs include handling, possible quality deterioration, and insurance if it is not already covered in your policy. With 2.0 cents each for handling and quality deterioration, these costs would total about 22.7 cents for eight months of storage, excluding ownership costs of the bin. This means the futures market is offering a net return for on-farm storage of around 17.3 cents per bushel over variable costs, for hedging and storing into May. For a properly executed hedge, the main types of risk in this strategy are basis (cash-futures price spread) and quality deterioration risks. Basis risk, in cents per bushel, typically has been much lower than price risk. Potential hedging profits for off-farm storage are considerably lower because of elevator storage charges.

For on-farm soybean storage, the largest cost is interest. With 9% annual interest cost, this would amount to about 3 cents per bushel per month or 24 cents for eight months of storage. To update these calculations, current futures and Iowa cash grain prices can be found on our web site at http://www.econ.iastate.edu/faculty/wisner/index.html.

On October 12, July soybean futures were offering about 26 cents per bushel (including 8 cents basis improvement plus 18 cents premium of July 2002 futures over November 2001) for storing beans until next May. ***Given the interest costs plus handling and possible quality deterioration, soybean storage hedging profit potential is quite limited, even for on-farm storage.***

Alternatives to storage include price-later and basis contracts, storing without pricing the soybeans, buying distant call options, or buying distant futures contracts***. All of these alternatives should be viewed as having at least moderate risk.*** Purchases of call options limit the maximum risk exposure to the cost of buying the call options. For the other alternatives, downside risk depends on how far prices might decline from current levels. Potential declines from recent prices appear to be relatively small, at least until late winter when the market will begin to reflect the 2002 South American soybean harvest.

Unpriced storage of both corn and soybeans has historically been a high-risk marketing alternative that pays large dividends in occasional years when the next year's growing season weather is unfavorable over much of the Midwest***. On average, farm storage of both corn and soybeans (without pricing) has been profitable in central Iowa only about half of the years since 1979-80.*** For those using off-farm storage, it will be important to watch price and basis behavior in December and January. Basis often strengthens in December as the grain trade attempts to move out as much grain as possible before the Upper Mississippi River is closed for the winter.

Soybean LDPs may have rather limited upward potential since the harvest is nearing completion in most areas and harvest pressure on prices is diminishing. However, corn LDPs may have more upside potential since the harvest is still in its early stages and may push cash prices a bit lower as harvesting pressures increase. The FSA lock-in feature for LDPs may be a useful tool to help protect an attractive LDP while retaining some flexibility. After harvest, LDPs for both corn and soybeans appear likely to decline gradually into the spring.

U.S. Production Estimates

Corn production is now estimated at 9.430 billion bushels***, down 5.4 % or 538 million bushels from last year***, while utilization is expected to increase modestly. ***The nation's soybean crop is estimated at a record 2.907 billion bushels, up 5.4% or 149 million bushels from the record 2000 crop.*** Last year's U.S. soybean production rose 104 million bushels from the previous year. The large crop was absorbed by record world utilization as the EU feed industry was forced to replace meat and bone meal and related products with vegetable protein to prevent the spread of "Mad Cow Disease." Much of the growth in EU use of soybeans and meal came from Brazil because of EU preference for non-GMO soybeans, but EU's additional demand reduced Brazilian competition in other world markets. Our latest supply-demand and price projections can be seen at http://www.econ.iastate.edu/faculty/wisner/index.html

Yield Changes by States

Higher-than-expected corn yields occurred in most of the Midwest from Iowa and Minnesota eastward, along with Kansas. Yield estimates in Nebraska and the Dakotas were unchanged from last year. The largest increases from last month were in Indiana and Kentucky, where corn yields were up 8 and 10 bushels respectively from the September forecasts. The estimated Iowa and Illinois yields were 141 and 149 bushels per acre respectively, both up three bushels per acre from last month. Iowa's average corn yield is estimated to be down four bushels from last year. Further detail on yields is available by going to our web site. Click on "U.S. and World Crop Projections," then click on NASS, and on "crop production--monthly."

As with corn, increases in soybean yields were primarily from Iowa and Minnesota eastward. Exceptions were Michigan and Wisconsin. The Iowa average soybean yield is now estimated at 43 bushels per acre along with yields of 44 bushels per acre in Illinois and 49 bushels per acre in Indiana. Iowa's yield is estimated to be down 0.5 bushels from last year.

Crop Estimates

Over the last 20 years, final corn crop estimates have been above and below the October estimates equal percentages of the time. ***Further analysis indicates that 100% of the time since 1965, U.S. corn yield estimates have increased from October to the season final estimate (currently in January) if the estimates increased from August to September and October, as they did this year.*** Thirty six percent of the years since 1965 had increasing yield estimates from August

through October. The average percent increase in yields from October to January in these years was 2.85%, with extremes from +6.149% to +0.14%. Thus, history indicates there is a high probability that the U.S. average corn yield will increase further between now and the January estimates. The average percentage increase in similar years since 1965 would push the U.S. average yield up to a record 140.2 bushels per acre and would produce about 270 million bushels more corn than currently estimated. A yield at that level would be expected to hold 2001-02 corn prices near the $1.75 Iowa average of last season.

For soybeans, the October estimate has tended to be a little too high. Final crop estimates were above the October estimate in only seven of the 20 years. ***For years when the soybean crop estimate increased from August to October as it did this year, it increased further in the January estimates two-thirds of the time.*** An August to October increase occurred in ¼ of the years from 1965-2000. For these years, extremes in changes from October to January ranged from a 3.89% increase to a 3.14% decrease. The average increase was 0.4%. An increase of this amount would raise the U.S. average soybean yield to 39.36 bushels per acre, up from the current estimate of 39.2 bushels per acre. That, in turn, would add only about 12 million bushels to U.S. production, with minimal price impact.

World Feed Grain Crop Up Slightly

USDA's world feed grain crop estimate increased about 120 million bushels (corn equivalent) from last month, with projected ending 2001-02 carryover stocks up about 47 million bushels. This increase is small, but slightly negative for late fall and winter price prospects. However, in comparison with last year, world feed grain production is projected to be down 0.9% and world feed grain carryover stocks are projected to decline 16% from ending 2000-01 levels. World wheat production is indicated to be down 2% from last year, with stocks falling14%. Thus, global supplies of both wheat and feed grains are expected to tighten modestly in the year ahead. Feed grain production estimates were increased from last month for China, Eastern Europe, and the Former Soviet Union. All three of these areas suffered severe drought last year. China's corn crop estimate was raised 120 million bushels from the September forecast, and further increases would not be surprising. Russia, once a huge grain importer, is projected to have approximately140 million bushels (corn equivalent) of grain available for export this marketing year. The former Soviet Union in total is projected to have about 560 million bushels of grain available for export this year, along with approximately 320 million bushels in Eastern Europe. Larger crops in these areas partially offset reduced production in Western Europe, Canada, and India.

South American Soybean Crop

Changes in South American soybean production estimates and projections were even more significant and potentially more negative to prices than those for the U.S. Combined Brazilian and Argentine soybean production projections for the spring 2002 harvest were increased 129 million bushels from a month ago. Brazil's 2002 harvest is now projected to be up 8% from last spring, along with a two percent increase for Argentina. Combined production estimates for last spring's harvest were increased 52 million bushels from last month. Thus, total soybean production from the 2001 and 2002 crops in these two countries was increased about 180 million bushels from the September report.

Combining the South American and U.S. production increases, world soybean supplies in the latest World Crop Report rose from a month earlier by the equivalent of eight percent of U.S. production or 3.6 % of world production. World utilization of soybeans increased by an estimated 6.8% last season. The increase was accelerated by EU's ban on feeding of animal-derived proteins and fats to all types of livestock and pets. Japan has just announced a similar ban on use of animal by-products for animal feeds, although it is not known for certain whether this will become permanent for all types of livestock and poultry. Feed and rendering groups in the EU are attempting to make a case for use of animal products in pork and poultry feeds in a system similar to that of the U.S. Current USDA projections indicate world use of soybeans will increase by about four percent in the year ahead.

Robert Wisner