

Cornhusker Economics

Cooperative Extension

Institute of Agriculture & Natural Resources
Department of Agricultural Economics
University of Nebraska – Lincoln

Improved Beef Demand Benefits Nebraska Cattle Producers

Market Report	Yr Ago	4 Wks Ago	9/22/00
<u>Livestock and Products,</u>			
<u>Average Prices for Week Ending</u>			
Slaughter Steers, Ch. 204, 1100-1300 lb Omaha, cwt	\$66.01	\$65.83	\$65.19
Feeder Steers, Med. Frame, 600-650 lb Dodge City, KS, cwt	81.64	82.00	94.91
Feeder Steers, Med. Frame 600-650 lb, Nebraska Auction Wght. Avg	89.54	99.95	97.67
Carcass Price, Ch. 1-3, 550-700 lb Cent. US, Equiv. Index Value, cwt	103.49	101.74	98.94
Hogs, US 1-2, 220-230 lb Sioux Falls, SD, cwt	33.63	45.00	43.50
Feeder Pigs, US 1-2, 40-45 lb Sioux Falls, SD, hd	*	41.20	29.00
Vacuum Packed Pork Loins, Wholesale, 13-19 lb, 1/4" Trim, Cent. US, cwt	102.85	115.75	120.60
Slaughter Lambs, Ch. & Pr., 115-125 lb Sioux Falls, SD, cwt	72.00	74.13	70.05
Carcass Lambs, Ch. & Pr., 1-4, 55-65 lb FOB Midwest, cwt	164.00	168.00	158.00
<u>Crops,</u>			
<u>Cash Truck Prices for Date Shown</u>			
Wheat, No. 1, H.W. Omaha, bu	2.90	2.99	2.98
Corn, No. 2, Yellow Omaha, bu	1.66	1.49	1.53
Soybeans, No. 1, Yellow Omaha, bu	4.35	4.42	4.61
Grain Sorghum, No. 2, Yellow Kansas City, cwt	2.92	2.73	2.68
Oats, No. 2, Heavy Sioux City, IA, bu	1.08	1.18	1.16
<u>Hay,</u>			
<u>First Day of Week Pile Prices</u>			
Alfalfa, Sm. Square, RFV 150 or better Platte Valley, ton	92.50	110.00	90.00
Alfalfa, Lg. Round, Good Northeast Nebraska, ton	32.50	77.50	65.00
Prairie, Sm. Square, Good Northeast Nebraska, ton	*	77.50	82.50
* No market.			

From 1979 until 1997 inflation-adjusted, retail beef prices in the U.S. declined by over 30%. During this same time period, per capita consumption declined about 10 pounds. These two facts, declining prices and declining consumption, lead to the conclusion that demand for beef in the U.S. declined over this time period.

However, beginning in 1998 this downward trend in beef demand was reversed. Demand in 1998 was essentially unchanged from 1997. During 1999 per capita consumption increased and beef was sold at a higher inflation-adjusted retail price: evidence of an increase in beef demand. It would also appear that beef demand through August 2000 has continued to increase. The average USDA Choice retail beef price has averaged \$3.04 per pound from January through August 2000, a 7% increase over a \$2.89 per pound price from the same time period in 1999. The increase in the price of beef is not sufficient evidence by itself to conclude that beef demand has increased. However, the quantity of beef sold has also increased in 2000 relative to 1999. This provides strong evidence that beef demand is continuing to increase.

What factors contributed to the loss of beef demand in the 1980's and through most of the 1990's? Often demand for a product is influenced by the price of other goods that can be substituted for the product. Pork and poultry are generally considered substitute sources of protein for beef. However, during this time period, beef prices declined relative to pork and poultry. This should have been positive for beef demand. Consumer disposable income has also in



creased over this time period, and this too should have been positive for beef demand. So what were the negative factors: consumer tastes and preferences.

There are a number of consumer issues that negatively impacted beef demand. During the 1980's health concerns, particularly cholesterol, turned many consumers away from beef. As the health concerns decreased in the 1990's, the safety concerns increased. BSE, "mad cow disease" in England spooked many consumers and negatively impacted beef demand abroad as well as here in the U.S. Product recalls due to contamination of E. coli eroded consumer confidence in beef as a safe product. But perhaps the greatest negative impact on beef demand was the change in what consumers wanted in a product. With more women entering the work force, consumers wanted convenience in the kitchen. Quite frankly, the beef industry was slow to recognize this change and offer products that met consumers' needs.

However, it appears that beef industry efforts in the mid to late 1990's to meet consumer needs by offering various heat-and-eat, pre-cooked products is now paying off. The growth in the number of steak house restaurants throughout the country would indicate it is becoming popular again to consume beef. Positive beef advertising has probably helped to curb health and safety concerns. But, above all, a strong economy has consumers spending more on beef.

How does improved beef demand impact cattle producers? By using the concept of the price elasticity of demand, a measure of how responsive price is to a change in quantity, one can begin to answer this question. Previous research in the beef industry has estimated the price elasticity of demand at -0.60. This means that if the quantity of beef on the market increased by one percent, then the price would be expected to decrease by 1.67 percent.

Let's look at the situation in the first eight months of this year. There has been a two percent increase in the quantity of beef supplied to the market. If demand had remained constant, unchanged from 1999, then the price of beef would have declined from the 1999 average of \$2.89 per pound to \$2.74 per pound (Figure 1). However, the actual price of beef has average \$3.04 per pound through August of 2000. Clearly, this could only occur if demand had improved (Figure 1).

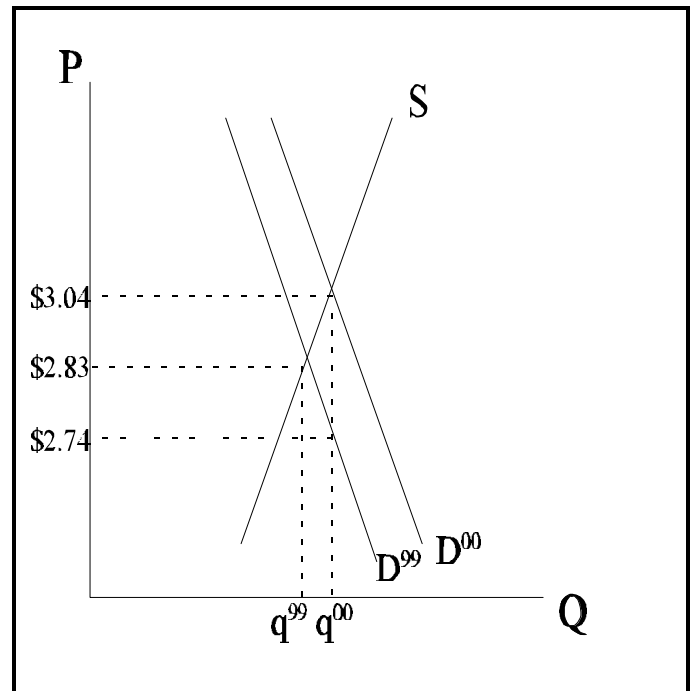


Figure 1. 2000 beef market.

The number of fed cattle marketed through August 2000 is nearly identical with the number marketed in the same time period for 1999. With a constant supply, and if demand remained constant, then one would expect prices to remain fairly constant as well. However, the seven percent increase in the price of beef, resulting from improved demand, translated into an eight percent increase in the price of fed cattle from \$63.91 per cwt. through August of 1999 to \$69.24 per cwt. through August of 2000.

Demand for fed cattle is a derived demand from demand for beef. Likewise, demand for feeder cattle and calves is a derived demand from the demand for fed cattle. So, what has happened with the calf market this year compared to last year? Calf prices through August 2000 have averaged \$104.59 per cwt. That is 17 percent higher than the \$89.25 per cwt for the same period in 1999. Not all of this 17 percent increase in price can be attributed to increased demand. The nation's beef cow herd has been declining in number for the last few years. Supply of calves in 2000 is probably 1-2 percent less than in 1999. The combination of a decrease in supply and an increase in demand is depicted in Figure 2. Cow-calf producers are receiving the benefit of a reduced supply and an improved demand situation.

What will 2001 look like? The supply of calves and fed cattle should decrease in 2001. As long as demand

remains stable, prices for calves and fed cattle should be higher in 2001 than in 2000. If demand continues to improve, there should be even greater year-over-year price increases.

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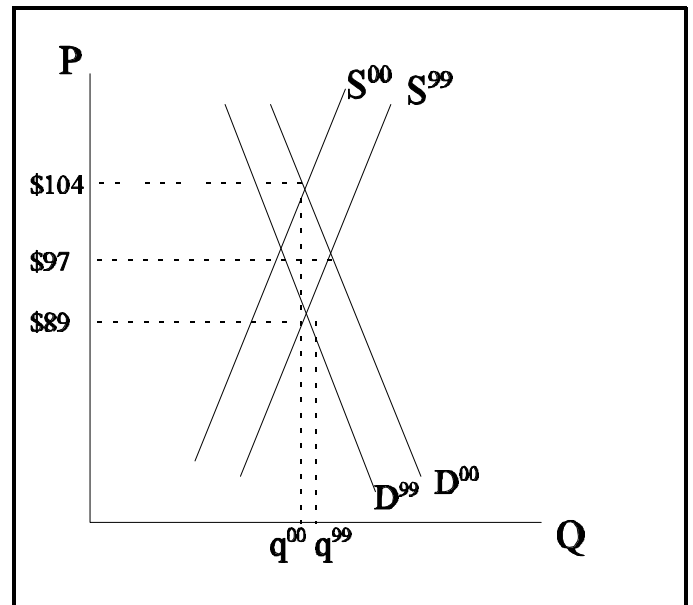


Figure 2. 2000 calf market.

