Factors affecting beef prices

According to the United States Department of Agriculture (USDA), the number of cattle reported in the nation has declined to its lowest in 60 years. As of January 1, 2012 there were 90. 8 million cattle nationwide; which is 2. 7 million more than the record low of 88. 1 million cattle in 1952. There have been two primary factors that have contributed to the decline in cattle, which resulted in increased beef prices for consumers. Initially the beef cattle market was affected by increases in feed prices, and then the beef cattle market was hit with one of the worst droughts in the history of the Southern Plains. As a result of high feed prices, the beef industry could not pass higher feed costs on to consumers in following years; but instead had to suffer negative margins. These poor returns led to the liquidation of cows. Additionally the drought in the Southern Plains resulted in further liquidation of cows due to limited grazing areas for many southern cattle producers. With beef supplies shifting downward, cattle prices are sharply rising; therefore beef cows have become an extremely valuable property due to the shortage. The objective of this paper is to examine the economic theory that supports the factors the affect the beef cattle market.

Hurt, C. “ Weekly Outlook”. The Farmdoc: University of Illinois, (October 2012).

During the time when the demand for grilling and holiday cooking hits its peak, the supply for beef is considerably low. The effects of the 2012 drought have influenced the beef industry impacted by the higher feed cost. Several droughts in the Southern Region, followed by an overwhelming drought within the Midwestern area, have many wondering about the state of cattle through 2013. The drought started in the Eastern Region and later migrated west in the late summer and fall. According to the U. S. Drought Monitor, drought conditions cover 62 percent of the lower continental. Nebraska suffers the most with 95 percent of the state in drought conditions, followed by Oklahoma, Colorado, Wyoming, South Dakota, and Iowa suffering with 50 percent (Hurt, 2012). Although some areas have received a break in drought conditions, others have a disappointing view of things. Improvements in moisture pressure can be seen within the Eastern Corn Belt but the drought is predicted to continue and possibly worsen as we approach winter from Chicago to Texas. Until feed and forage supplies are sustained, these negative implications are expected to continue. Predictions of two to three percent decrease of beef numbers are likely in the January inventory report. As a result, higher feed prices, fewer calf crops, and an abundance of feedlots have influenced many of the losses. The placement of cattle was at its lowest since the USDA’s series in 1996. A typical 1000 plus feedlot saw a 19 percent decrease (Hurt, 2012). As a result of the lingering placement, the number of cattle on-feed dropped significantly. As the cattle on-feed numbers continue to drop, the beef supplies purchased will decrease as well. With this decrease, comes the expectation of higher cattle prices. Prices are presumed to hit $125 for the final part of 2012 and be well in $130 for the first quarter of 2013 (Hurt, 2012). Until feed prices are stable, calf prices will be slower to recover. Stabilization could start with lower soybean meal prices and a better grazing season during the spring and summer. With an improved fed supply comes price recovery.

Eckbald, Marshall. (2012). “ Beef Prices Balloon as Herd Thins.” The Wall Street Journal, C4. (September 2012)

Ranchers are suffering with the effects of the dry weather conditions brought on by 2011’s drought. During this time of the year pastures are normally growing and prosperous enough for the cattle to feed on. But with the continued drought, these grazing lands are now dried out and the corn, hay and soybean production have become very limited. In 2011 ranchers were forced to sell more cattle to slaughter instead of paying to feed them. Because the feed is scarce, many consumers and wholesalers are stuck with paying higher prices. Around 12. 5 million of cattle entered the supply chain to be butchered this year through July (Eckblad, 2012). According to Daniel Vaught, President of Futures Insights, “ It’s hard to argue with the forecasts for higher beef prices.” (2012). Because the number of cattle entering the supply chain is expected to be significantly lower, beef prices remain uncertain. Prices jumped significantly over three weeks while retailers struggled with sparse supplies of meats like, steaks, ribs and briskets. Some of these retailers were forced to import beef from places like Canada, Australia, and New Zealand (Eckblad, 2012). These imports have shadowed much of the exports for the 2nd Quarter. If the pattern continues well into the end of the 4th Quarter, the U. S. will import more beef than it has exported since 2009. During previous years when prices of beef went up, consumers were willing to buy more chicken and pork. Although buyers haven’t flinched much as beef prices continue to rise, the greatest threat to suppliers will be how consumers respond to demand.

Gasparro, Annie. " Restaurants Face Higher Food Costs." The Wall Street Journal,

(August 2012).

Many national restaurant chains are confronted with the possibility of raising food prices due to the recent dry weather in the Midwest. According to Will Slabaugh, restaurant analyst at Stephens Inc., drought and corn prices are at the forefront of investor concerns. These concerns stem from the future harvest to come and the impacts it could create for this industry. Fast food giants like McDonald's believe they will be able to sustain the effects of the drought with minimal impacts. They managed to secure quite a bit of grain and supplies at a decent price before the prices started to rise. Wendy's on the other hand, did not have a contractual agreement on their beef prices; as a result, they were left to deal with a 10% increase in cost (Gasparro, 2012). Temporary relief was provided as ranchers sent cattle to slaughter sooner, which in turn increased supply. However as higher feed cost are required, a sparser herd of cattle is the return. Some chicken suppliers have even begun breeding larger chickens to withstand the affects of having several birds to feed. Chicken franchises like Buffalo Wild Wings (BWW) have noticed a 70% increase in what they normally pay for each pound. This is because the chickens they now receive are a lot larger. As a result BWW was forced to raise prices, even considering charging by the weight for their wings. Although some have chosen to raise prices to stabilize their sales, others like Pizza Hut have chosen not to alter prices. They feel the need to remain consistent in their pricing, because they view the recent effects of the drought as, " a few more hurdles we have to jump…". Some restaurant operators have begun licensing franchisees to handle and run the business, collecting a flat-rate royalty fee, which protects them from the unstableness of the food market in times like these.

Analysis

The summaries of the issues affecting increasing beef prices are backed by the economic theory of supply and demand. The theory of supply and demand is one of the most basic concepts of economics and relates directly to the issues within the beef cattle market. Before discussing what how supply and demand work together, it is imperative to define what supply and demand are separately. Supply is the amount of a product, in this case beef, which producers are willing and able to offer for sale at each possible price during a specific time frame, given that everything else is held constant, ceteris paribus. Figure 1 illustrates a supply curve, and distinguishes the positive relationship between price and quantity supplied. As price increases, the quantity supplied increases; and as price decreases, the quantity supplied decreases. Some of the determinants that change supply are prices of resources, technology and productivity, expectations of producers, number of producers, and prices of related goods or service. The beef cattle market is hindered by three of these determinants.

First the beef market is altered by the change in prices of resources. With corn prices rapidly increasing the price of feed increases as well, because corn is an ingredient for feed. It cattle producers are investing more money in feed, then they are increasing their input cost; therefore the market price for cattle will increase, and as a result consumers will be required to be higher beef prices. Farmers are expected to request his market prices for cattle in order to sustain the increase in input prices; otherwise they will be unable to make a profit off of their cow-calf operation.

Secondly, the beef market is altered by the change in expectations of producers. Cattle producers have seen the increasing cost of corn, and have adapted accordingly. In other words, they have noticed there rising cost and adjusted the market price for cattle accordingly. Additionally, cattle producers have adapted to the horrendous drought conditions and adjusted their herd numbers appropriately. For example cattle producers who were unable to withstand the drought sold their cattle and pushed an excessive amount of beef in the market at; which originally resulted moderate to high prices for cattle (depending on quality) and low beef prices for consumers, but the low beef prices did not last for long. Eventually cattle suppliers began to bring fewer cattle to slaughter because the sudden sale of cattle resulted in an excess of beef within the market; which meant low prices for their hard work. As the price for a beef cows decreased, suppliers, began to decrease the number of quantity supplied within the market. Cattle producers begin to practice heifer retention not only due to decreased prices for cattle, but in order to grow their cow-calf operations due to the damage cause by the drought. Therefore, what was now considered an excess of cattle was now considered a shortage of cattle, and caused high beef prices for consumers.

Lastly, the change in number of sellers changed cattle prices for producers and beef prices for consumers. If the number of sellers increases in the market, then supply increases; however when the number of sellers decrease in the market, supply decreases. High feed and the serve drought caused many producers to sale their entire herd, and put many people out of business. Given that not every producer could withstand these conditions, the nation served from the lowest cattle count in the past 60 years.

Demand refers to the quantity of a product, once again beef, which a consumer is willing and able to purchase at each possible price during a specific period of time, given that everything else is held constant, ceteris paribus. Figure 2 illustrates a demand curve. Price and quantity demanded of a good have an inverse relationship. For example as price rises, the quantity demanded of falls; and as price falls, the quantity demanded rises. Some of the determinants that change demand are consumer income, prices of related goods, tastes and preferences, number of buyers, price expectations, and exchange rate. The raising cost of beef results can result in preferences for consumers due to hard economic times. For example as consumers see the increasing price of beef, they no longer desire to continually eat beef. As a result the demand for beef will decrease and the quantity demanded rises. Through increasing beef prices we also see an increase in the demand for related, or substitute, goods. A substitute good is a good that a consumer would purchase over another good. Often times, when looking at substitute goods, we can conclude that if price of a good rises, then demand for its substitute will rise. In other words as beef prices rise, the demand for chicken or pork will rise as well.

There are four scenarios for the law of supply and demand. These scenarios are: 1) If demand increases and supply remains constant a shortage occurs, increasing the equilibrium price. A shortage occurs whenever quantity demanded is greater than quantity supplied. This can be seen in Figure 3. 2) If demand decreases and supply remains constant, a surplus occurs, which decreases the equilibrium price. A surplus occurs whenever quantity demanded is less than quantity supplied. This can be seen in Figure 4. 3) If supply increases and demand is unchanged, a surplus occurs, decreasing the equilibrium price. 4). If supply decreases and demand is unchanged, this will cause an increase in the equilibrium price.

The affects of the drought within the past year have had a significant effect on the amount of cattle that farmers can supply to the market. The demand for beef has remained steady therefore, there has been a shortage in cattle and the price consumer’s pay has increased. Our situation falls under first rule of the law of supply and demand. Since late 2011, there has been a persistent decrease in the amount of cattle being slaughtered. This decrease in beef production guarantees that both retail and wholesale prices for beef will go even higher.

While the supply of cattle that farmers bring to market is the leading cause in high beef price, consumers demand will dictate how high the prices will go. The article Beef Prices Balloon as Herds Thin states, “ Prices for beef at the grocer’s meat case are up over 6% compared to this time last year, according to the Labor Department” (Eckblad). Usually, when key factors remain constant, consumers will pay more when quantity is smaller and will purchase bigger amounts for a cheaper price. This is an indication that prices for beef will be higher since beef production is low. Nonetheless, there are other aspects that can affect the overall demand of beef. Recent studies show that overall there is no true sign of consumer preferences for beef decreasing. Although many consumers have had to alter their spending patterns, the desire for beef has remained prominent.

Conclusion

The number of cattle reported in the nation has declined to its lowest in 60 years, and as a result cattle prices are high. These high prices can be attributed to high feed and the drought in the Southern Plains. Some experts are predicting that if serve drought states, such as Texas and Oklahoma, were to receive an abundant amount of rain, it could still take up to three years to restore their cattle herd to pre-drought levels. On top of a long recovery process, the calf crop is expected to be down over two percent in 2012. Therefore, if heifer retention continues to grow in 2012 and 2013, beef supplies will not increase until 2015 (Hurts 2012). Beef prices are predicated to hit record highs in 2012 and 2013. With continual increases in feed price and the unpredictable effects of Mother Nature, it is hard to determine when the consumers can expect a decrease in beef prices. As a result, beef cows have become an extremely valuable property during a time of shortage in the beef industry. Farmers are in the process of expanding, through heifer retention, in order to increase their herd. Expansion proposes a greater shortage in the beef industry, because expanding herds through heifer retention reduces slaughter supplies and beef supplies. Consequently, a reduction in beef supplies results in an increase in beef prices; therefore all beef lovers should be prepared for a potentially long and expensive journey.