

Review of Pricing in the Beef Industry

March 2004

Background

With the announcement of a single case of Bovine Spongiform Encephalopathy (BSE) in Alberta on May 20, 2003, the province's cattle and beef industry irrevocably changed. In mere days a thriving billion-dollar value chain virtually ground to a halt as critical export markets vanished when borders closed to Canadian beef.

With no North American experience to draw upon, the future was far from certain. And no one in the value chain, from cow/calf producers, backgrounders, feedlots, packers, processors, wholesalers and retailers, could clearly anticipate short or long-term impacts precipitated by the supply and demand imbalance quickly emerging.

As weeks ensued, industry and government saw troubling indicators that signaled near collapse in the value chain. Packers laid off employees and shortened work weeks. Auction markets closed doors and truckers parked vehicles. Most critically, animals began to back up in a system designed for continuous throughput. Unlike other export-based commodities such as oil, lumber or grain, the cattle industry could not stockpile its inventory until markets re-emerged. In addition to serious economic concerns for every part of the value chain, genuine issues began to arise around animal welfare. The environmental impact and consumer concern for animals either dying or destroyed rose to heightened debate.

The Alberta government, in full consultation with the cattle and beef industry, the federal government and other provinces, began discussions on a compensation program designed to keep cattle moving through the value chain so that when borders did reopen, the industry would be in good working order.

The Canada-Alberta Bovine Spongiform Encephalopathy (BSE) Recovery Program was introduced to provide compensation for cattle in Alberta feedlots. Those animals were judged to be the most at risk in the value chain -- and at most risk of toppling the value chain -- because feedlots had the least flexibility to weather weeks of stoppage in the system. Next, the Alberta Fed Cattle Competitive Bid Program was introduced as an incentive for producers to sell or set aside fat steers and heifers. Further, the Alberta Fed Cattle Market Adjustment Program continued to help move fed cattle ready for slaughter through the system. The aim of all three programs was to top up prices paid to producers who owned and sold fed cattle, encouraging them to break the log jam of product.

Other programs followed until in all, the Alberta government committed \$400 million towards BSE recovery programs in addition to \$200 million in federal compensation flowing to Alberta producers. While aimed primarily at the feedlot industry, the provincial government and the industry who designed the programs knew that other producers such as cow/calf operators and spin-off industries such as trucking would indirectly benefit from 1.2 million head moving through the value chain.

While fully opening old borders and exploring new markets remained a priority for government and industry, stabilizing the cattle and beef market for the benefit of all Albertans was the primary purpose of the BSE recovery effort.

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Executive Summary

The current supply and demand imbalance in the Canadian beef industry created by the Bovine Spongiform Encephalopathy (BSE) crisis has focused much attention on the perceived disparities in packer and retail price spreads and the most visible prices in the supply chain – what the producer receives from the packer and what the consumer pays at retail or in the restaurant.

Alberta Agriculture, Food and Rural Development (AAFRD) has been directed by its Minister, the Honourable Shirley McClellan, to conduct a review of the beef supply chain to determine if there is any evidence of price manipulation by the packing industry or retail industry, in light of the BSE crisis, for the purpose of gaining profit.

The purpose of this paper is to assess claims of unfair pricing in the beef supply chain. An attempt will also be made to describe the rationale behind some of the changes seen in both packer and retail price spreads. This study is meant as a review of pricing information in the beef supply chain and will not seek to prove or disprove any claims of unfair profits by major packers or retailers in Alberta.

Findings

Pricing in the Retail and Packing Industry

Information available and used to complete this review does not suggest evidence to support claims of unfair pricing in the beef supply chain. Consumers have enjoyed a 20% decline in the average price of beef in retail stores in Alberta from a high of \$10.00/kg in May to \$8.00/kg in December 2003. The most significant declines in price occurred in cheaper cuts of meat such as ground beef and chuck.

The price of fed cattle has certainly been impacted by the BSE crisis. In the summer of 2003, prices declined by as much as 70% before partially recovering to current levels, which vary around 18%-20% below pre-BSE levels. However, these lower prices are primarily due to three factors: lost revenues from export markets; higher costs associated with processing beef; and a surplus supply of slaughter weight cattle in Canada.

Profits in The Packing Industry

Based on available data used in this review, there does not appear to be support for claims of unfair packer profits. Packer profits, as viewed by lay persons, are actually price spreads. They are defined as the difference between fed cattle prices and the average wholesale price of boxed beef. The terms “profit” and “price spread” are sometimes used interchangeably and do not reflect the costs of processing and delivering beef products.

As a result of BSE, the packing industry has been faced with higher costs due to changing standards for testing and regulation. It can be argued that BSE has created a new

environment in which price spreads have to increase to account for the higher costs facing packers. Therefore, comparing price spreads before BSE and after BSE is not necessarily relevant.

Detailed information on costs facing the packers and how these costs may have changed in light of BSE is needed before any valid conclusions can be made about profits. This information may become clear through the review process currently being conducted through the federal government by the Standing Committee on Agriculture and Agri-Food.

1.0 Review of Pricing in the Alberta Beef Industry

1.1 Introduction

Many in the beef industry agree that the discovery of Bovine Spongiform Encephalopathy (BSE) in the Alberta cow on May 20th, 2003 has been the most significant disaster in Canadian agriculture history. The fallout from this event has had a profound impact on incomes in the beef industry and has significantly disrupted normal marketing patterns throughout the beef supply chain.

The supply and demand imbalance created by BSE has focused much attention on the perceived disparities in packer and retail price spreads and the most visible prices in the supply chain – what the producer receives from the packer and what the consumer pays at retail or in the restaurant. The contention is that packers have reaped unfair profits at the expense of beef producers and that prices at the retail level have not declined, or at least have not declined enough.

The purpose of this paper is to assess claims of unfair pricing in the beef supply chain in light of the BSE crisis. An attempt will also be made to describe the rationale behind some of the changes seen in both packer and retail price spreads. This study by AAFRD is meant as a review of pricing information in the beef supply chain and will not seek to prove or disprove if any claims of unfair profits by major packers or retailers in Alberta.

Conclusions and observations throughout this paper will rely on available pricing data from CanFaxⁱ, ACNielsenⁱⁱ, and Statistics Canada as well as interviews with representatives from the packing, processing and retail sectors. Data on actual costs facing the packing industry are not available.

The study is divided into two sections. These sections will examine pricing in the packing and retail sectors and explain some of the main reasons behind the changes in packer and retail margins.

ⁱ CanFax is the market analysis division of the Canadian Cattlemen's Association.

ⁱⁱ ACNielsen, a VNU company, is a global provider of retail market data. The retail beef data used in this analysis was based on weekly consumer sales in Alberta through grocery supermarket banners, as reported in ACNielsen FreshTrack. This proprietary service uses point-of-sale transaction data provided to ACNielsen by participating grocery supermarket banners.

2.0 Impact of BSE on Pricing of Fed Cattle

Some in the industry and general public have expressed concern over the decline in price of fed weight steers and heifers. The contention is that packers are profiting at the expense of producers.

Market prices throughout the beef supply chain are highly integrated. In the case of fed weight cattle, prices depend on the value of the beef carcass once the cattle have been processed in the packing plant and the relevant packing plant cost structures. The BSE crisis created a situation where fed cattle prices were under pressure as a result of three factors: a lower overall demand for beef products in export markets; an excess supply of domestically produced beef; and higher costs associated with the production of beef due to new regulatory and testing standards.

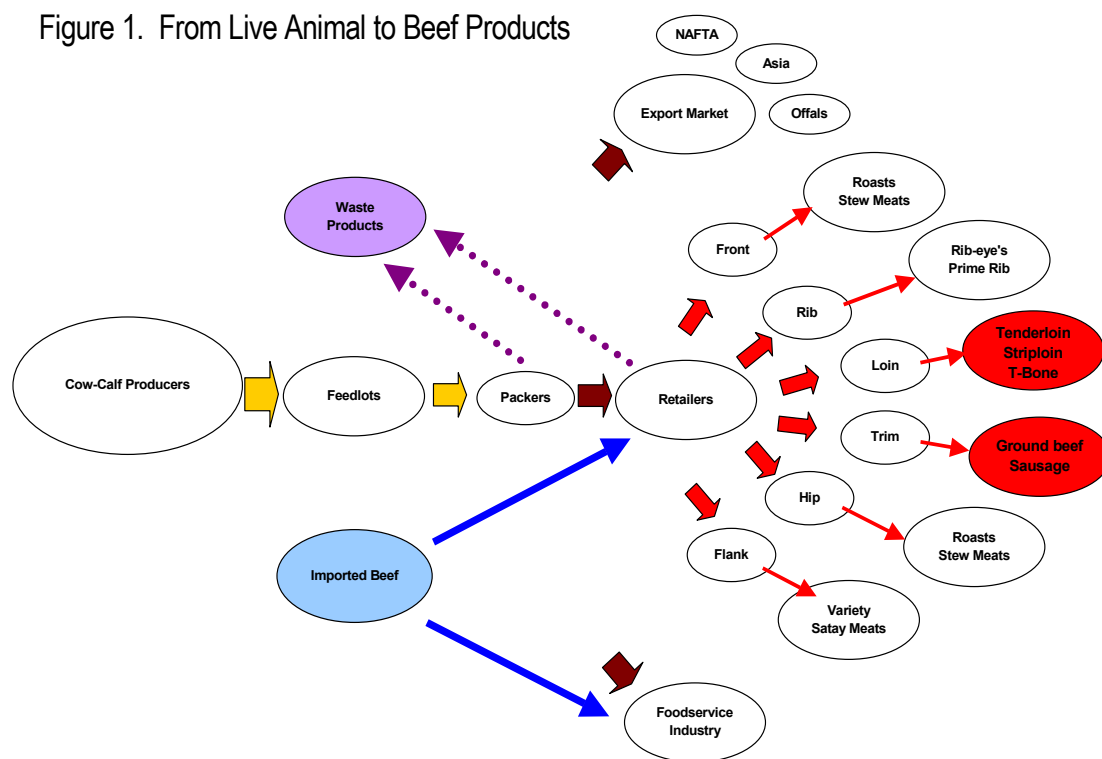
The packing industry is a margin-based industry, which means that profits are highly sensitive to changes in both revenues and costs. Increases in costs or declines in revenue must be either passed down the supply chain or up the supply chain so that packers can continue to cover their operating and fixed costs.

In order to understand the impact of BSE on fed cattle prices, we have to first understand how packer costs and revenues were affected by BSE. The following sections provide a discussion on these impacts.

2.1 Revenue in the Packing Industry

The pricing of fed cattle is largely dependent on the value the packer receives for the carcass. The beef carcass value is often viewed in simplistic terms; however, pricing a carcass is a complicated process. Figure 1 illustrates the complexity of analyzing the value of beef products that are derived from a live animal. The beef carcass produces numerous cuts for the retail, export and food service industry. Packers also receive value for by-products – the hide, variety meats, offals, rendering materials, blood meal, tallow, and other items. All of these parts contribute to the overall carcass value.

Figure 1. From Live Animal to Beef Products



The closure of export markets had a significant impact on carcass value. Prior to May 20th, over 60 per cent of the beef produced in Canada was exported. For some, but not all of the beef cuts, the value that can be attained in the export market is higher than the value in the domestic market. The Canadian Beef Export Federation estimates that the value of select cuts in Asian markets can represent over \$190 per head more than what could be achieved in the domestic market. A portion of this value is being recovered through sales into Mexico, however, a minimum of \$100 is lost with our current market situation.ⁱⁱⁱ

Through interviews with packers, other revenue losses were identified. For instance, Canadian beef cuts moving into the U.S. traditionally experience a discount ranging from 4 to 6 cents per pound compared to similar cuts of U.S. beef. This is largely due to differences in the beef grading systems in Canada and the U.S. and American loyalty to U.S.D.A. labeled product. According to industry representatives, this discount increased to 25 to 30 cents a pound after May 20th as Alberta beef was then considered at a much lower grade and value in the U.S. However, the discovery of BSE in the U.S. helped to narrow the discount to a more traditional discount relationship between Canadian and U.S. beef cuts since the quality of beef in both countries was considered more equal.

ⁱⁱⁱ Cargill Foods and Better Beef Limited, December 7, 2003

Rendering materials, which were a source of revenue prior to May 20th, 2003, became a cost after May 20th. Rendering materials include mostly waste products from the beef carcass such as paunch manure, blood, and other tissues. These products are used in the production of animal feed, tallow and a number of other products. After May 20th, export markets were closed to these products (with the exception of tallow) - dramatically devaluing them. The Canadian Beef Export Federation estimates the increased rendering costs to be approximately \$20/head.

Exchange rates are often ignored when discussing factors that have reduced revenue in the beef industry in the last year. However, the rapid appreciation of the Canadian dollar relative to the U.S. dollar has had almost as dramatic an impact on beef revenues in 2003 as the BSE crisis. Additionally, a good portion of that appreciation has occurred after May 20th.

This is not good news for companies that export into the U.S. because they are paid in Canadian dollars for a U.S. equivalent price. As the Canadian dollar appreciates in relation to the U.S. dollar, the value received for beef being exported into the U.S will decline in terms of the Canadian dollar equivalent. In 2003, the value of the Canadian dollar appreciated by over 20% against the US currency, rising from 64 cents per US dollar to over 77 cents per US dollar by year end.^{iv} This means that exporters such as Alberta's major packing plants, are receiving 20 per cent less for their product.

Finally, one-time-only losses in revenue were also experienced. In the first two weeks of the BSE crisis, packers were caught with inventory that had been pre-purchased that suddenly lost considerable value.

These lost revenues were subsequently passed down to producers in the form of lower prices since Canadian cattle no longer had the value they did prior to BSE. This was particularly true in the early stages of the BSE crisis when international borders were closed to both live cattle and boxed beef.

2.12 New Costs to Packers

BSE has also had a dramatic impact on costs. Although there is no quantitative information available, interviews with packers have highlighted some of the cost increases including:

- Extra labour costs associated with segregating cattle “over thirty months” of age, from those under thirty months to meet age-related export requirements^v. For instance, industry representatives indicated that there has been an unforeseen number of youthful cattle with mature teething that classified them as over thirty

^{iv} Bank of Canada, “Daily closing price for US dollars,” web site accessed March 8, 2004 at <http://www.bankofcanada.ca/en/exchange.htm>.

^v For the purposes of current export protocols, cattle are considered to be aged thirty months or older when they have more than two permanent incisor teeth erupted.

- months. In such cases, the carcass is downgraded and the packing plant must absorb the lost revenue and costs associated with these cattle.
- Operational adjustments for export markets - ensuring there is no cross contamination from the slaughter of cattle over thirty months old with those under thirty months. In some cases, this requires extra storage costs since cows must be killed at different times of the work shift. Also, meat that is extracted from the beef carcass by mechanical separation machines are no longer permitted into export markets.
 - Changing product mix from 70% boneless mix to 100% boneless mix to meet export requirements. To achieve this, more labour is required to produce the same amount of output.
 - Costs associated with removal and disposal of Specified Risk Materials (SRMs)^{vi} from cattle aged over thirty months and distal ileum (lower small intestine) from cattle of all ages. For major packing plants in Alberta, which kill an average of 8,000 cattle per day, slowing the line speeds to remove SRMs has resulted in significant costs due to lost efficiency. SRMs are not permitted to enter the human food chain.
 - One-time costs associated with recalling products that were en route or had already arrived in Asia and other parts of the world when BSE was discovered in Canada and disposing of these products in domestic landfills.

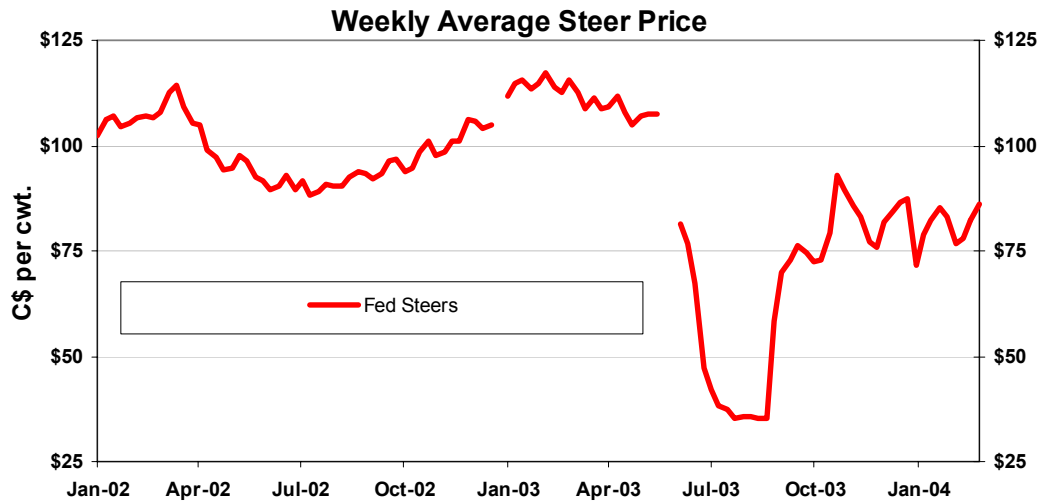
Future policy decisions being considered, such as the removal of all animal proteins from feed, could increase costs even further.

Higher costs to the packer can be either passed up the supply chain to retailers or wholesalers or down the supply chain to producers. Since consumers are reluctant to pay more for retail cuts of beef, packers had to pass on costs to producers in the form of lower prices for their fed cattle. Passing on these costs allows the packer to cover their fixed and operating costs and stay in business.

Lower carcass values combined with higher costs facing the packers translated into lower fed cattle prices, particularly in the early stages of BSE during the summer of 2003. Figure 2, provides a summary of fed cattle prices for the past two years.

^{vi} Specified risk materials refers to the skull, brain, trigeminal ganglia, eyes, tonsils, spinal cord, and dorsal root ganglia of cattle aged 30 months or older, and the distal ileum (lower small intestine) of cattle of all ages. These parts are designated as SRM because, in BSE infected cattle, these tissues contain higher concentrations of the BSE agent and are more likely to transmit the disease.

Figure 2. **Alberta Cattle Markets**



Source: Canfax; Alberta Agriculture, Food & Rural Development

Once the U.S. and Mexican borders were opened to certain cuts of beef in September, prices began to recover in the fall of 2003 as demonstrated above. Prices declined again, although not as dramatically, after the discovery of BSE in the U.S. on December 23, 2003, on the speculation that there would be excess supplies of beef in the U.S. Since then, prices have varied between 75 cents and 85 cents per pound for fed cattle.

2.13 Supply of Cattle

In addition to pressures from lower revenues and higher costs in the packing sector, producers also had to face an unprecedented surplus supply of cattle. The closure of international borders meant that live slaughter weight cattle normally destined for the U.S. market place, now had to be sold and processed domestically.

Statistics Canada estimates for cattle inventories indicate there are 14.7 million head of cattle in Canada as of January 1, 2004 up from 13.6 million head of cattle one year earlier. Looking forward into 2004, it appears the supply of cattle will continue to place downward pressure on live cattle prices. Statistics Canada indicates that there are 4.9 million calves in Canada as of January 1, 2004.^{vii} The maximum slaughter capacity in Canada is approximately 3.5 million per year. This means that there could be an over supply of 1.4 million slaughter weight cattle in Canada in 2004.

Estimating the precise number of cattle on feed at any point in time is a difficult task. Statistics Canada produces semi-annual estimates of livestock inventories of cattle across Canada which do not capture month-to-month feedlot activity. The Alberta and

^{vii} Statistics Canada, Cattle Statistics, 2004, vol.3, no.1

Saskatchewan Cattle-on-Feed Report published monthly by Canfax is a voluntary, provincially focused, survey-based attempt by industry to report the stocks and flows of cattle through the terminal feeding system. This report only tracks feedlots with more than 1,000 head on feed and makes no attempt to capture feeder cattle that remain outside the terminal feedlot system in cow-calf operations or in backgrounding operations. Improved industry estimates of the volumes of cattle on feed will be needed to improve predictability of cattle inventories and help increase price transparency.

2.14 Impact of Ad Hoc Government Assistance Programs

It has been suggested that ad hoc government assistance could have played a role in helping to keep fed cattle prices low. In this section, we will assess the impact of government programs on fed cattle prices.

In the summer of 2003, the BSE crisis resulted in a brief stand-off between feedlots and packers. Packers needed to bid lower prices for fed cattle because they were getting less for their product in the retail and food service markets and their costs were increasing. Feedlots, on the other hand, were reluctant to let their fed cattle go at the lower prices being offered by the packers since they would incur significant losses for cattle within the production system.

On June 18th, 2003, Canada and Alberta announced the Canada Alberta BSE Recovery Program (CABSERP). This program essentially paid producers the difference between the weekly average U.S. fed cattle price (in Canadian dollars) and the weekly average Alberta market price up to a maximum of 50% of the U.S. reference price. Payments were based on a progressive sliding scale, which changed according to market price. The program is cost shared between the federal and provincial governments on a 60:40 cost share basis – 60 percent federal government and 40 per cent provincial government. To date approximately \$245 million has been paid to producers.

The program was designed to help unplug the backlog of cattle being created by the stand-off between packers and producers and inject some equity into the feedlot industry to keep this important industry viable during the initial stages of the BSE crisis. The impact of this program can be seen in Figure 3.

Although prices declined by as much as 70%, the price received by the feedlot owner did not fall below 80 cents per pound after accounting for government payments. These payments significantly reduced the price impact on producers, which helped to maintain the viability of many feedlot operations following May 20th when borders were closed to both live cattle and beef. Also, it is clear that slaughter rates dramatically increased after the program was announced, allowing more cattle to be pushed through the packing plants and alleviating the backlog of cattle in the system. Alberta steer and heifer slaughter rates were halved after May 20th, 2003, from an average of about 44,000 head per week to a low of 18,000 head per week in the first month of the BSE crisis. Following the announcement of CABSERP slaughter rates gradually returned to the 40,000 head per week level of slaughter.

Several design issues of the program may have delayed the recovery of fed cattle prices, particularly during the summer of 2003. First, producers were not eligible for a payment under the program unless cattle were being sold for slaughter to an eligible packing plant. This reduced the opportunity for speculation and price discovery. Second, CABSERP contained defined end dates and pre-programmed budget announcements, which encouraged a rush to market fed cattle to packing plants. These factors could have contributed to the depressed market conditions.

Subsequent provincial programs were announced to offset some of the market impacts of CABSERP and bring some price discovery back into the marketplace. These include the Alberta Fed Cattle Competitive Bid program (AFCCBP), the Alberta Fed Cattle Market Adjustment Program (AFCCMAP), the Alberta Mature Market Animal Transition Program (AMMATP), and the Alberta Steer and Heifer Market Transition Program (SHMTP). It is projected that a total of \$350 million in provincial dollars will be paid to producers through all of the programs listed above. Another \$50 million in provincial dollars will be distributed through other initiatives.^{viii} The federal government is projected to contribute \$200 million in funding under CABSERP and the Canada Cull Animal Program. A brief description of the provincial BSE programs and the Canada Cull Animal Program is provided in Appendix A.

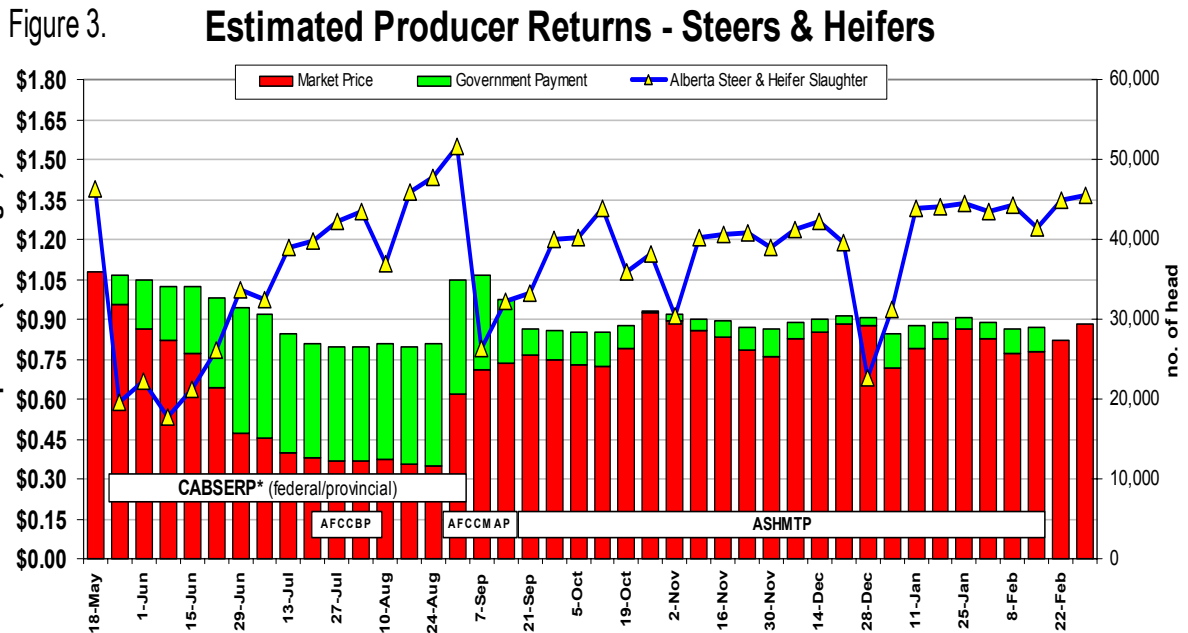


Figure 3 also illustrates the impact of the provincial programs. Prices for fed cattle increased nearly 75% from August to mid- September 2003. Most of this is likely due to

^{viii} These initiatives include lab upgrading , increased testing and surveillance, product and market development, food bank initiatives, etc.

the opening of the U.S. and Mexican border, which allowed Canadian packers the opportunity to recapture a premium for some cuts of beef. However, the price rise also coincided with the announcement of AFCCBP and AFCMAP. Both programs encouraged speculative bidding on fed cattle by non-packer entities, which contributed to price discovery. AFCCBP required that fed cattle be removed from the market for eight weeks, temporarily restricting supplies of fed cattle and placing upward pressure on fed cattle prices. Approximately 108,000 cattle were registered under AFCCBP.

2.15 Conclusions

Higher costs and lower revenues facing the packer combined with the excess supply of cattle have placed considerable pressure on fed cattle prices. From this evidence, it appears that lower prices for fed cattle are the result of the supply and demand imbalance created by the BSE crisis and not the actions of packers.

It has been speculated that CABSERP could have played a role in prolonging the period of time that fed cattle prices remained at historically low levels. However, it is certain that prices would have fallen dramatically for reasons provided above. Subsequent programs announced by the province have also served to offset some of the market impacts of CABSERP.

3.0 Impact on Packer Margins

The BSE situation has placed the packing industry under close scrutiny. The contention has been that packers are enjoying unfair profits at the expense of others in the beef supply chain.

Many in the industry and general public have chosen to use wholesale values of boxed beef and the price spreads between fed cattle prices and retail beef prices as an indication of packer profits. This definition of profit is considerably different from the more widely understood concept of profits as the difference between revenues and costs.

Costs to the packer are composed of variable costs and fixed costs. Variable costs include expenditures such as labour, machinery, repairs, supplies for packaging and cleaning and input costs for purchased cattle among other things. These costs vary with the volume of beef being processed in the plant. Fixed costs include things such as building costs, utilities, and regulatory costs to meet Hazard Analysis Critical Control Point (HACCP) protocols and other Canadian Food Inspection Agency (CFIA) regulatory standards. As discussed earlier, BSE has resulted in changes to many of the variable and fixed costs facing the packing plant.

In a normal year, the price spread between the fed cattle price and the price of boxed beef will fluctuate – increasing in the summer during the traditional barbeque season and decreasing in the winter. The Canadian Boxed Beef Report data suggests that the price

spread between fed cattle prices and wholesale boxed beef prices is likely in the range of \$250 per head for the first week of March 2004.^{ix}

However, this data reveals almost nothing about the profits of the packing industry during the BSE crisis. In order to analyse packer profits, detailed information would be needed on the cost structures of the packing plant and how those structures have changed as a result of BSE.

In light of the discussion above, it could be argued that price spreads need to increase in the new market reality created by BSE since the costs associated with processing are much higher as a result of changing regulatory and testing standards. Comparing price spreads before BSE to those after BSE is not likely relevant given the dramatic changes that have occurred in the marketing patterns of the beef industry as a result of BSE.

3.1 Conclusions

Information available for this review, does not suggest evidence of unfair packer profits. The data most often used as evidence that packers are enjoying historically high profits does not account for the increased costs and declining revenues facing packers. Furthermore, it may not be relevant to compare price spreads before BSE to those after BSE since marketing patterns have been significantly disrupted by the crisis. More information on costs and how they have changed for the packing industry may become clear through the review process of the Standing Committee on Agriculture and Agri-Food.

4.0 Review of Pricing in the Retail Sector

Once the packer has converted the carcass into boxed beef, the product moves into a number of streams including further processing, retail, or the hotel, restaurant, and institutional markets. Beef by-products and waste materials are destined for further processing in rendering plants, tanneries, feed mills, and other processing industries producing a wide range of edible and non-edible products.

The focus of this section is to assess whether unfair pricing practices are occurring in the retail sector. Retail sales account for only about half of all beef sold in Canada. Hotels, restaurants, and institutions (such as hospitals), a growing sector of domestic beef sales, account for the balance.

^{ix} The Canadian Boxed Beef Report is published weekly by the Canadian Cattlemen's Association and is available on the web at http://www.canfax.ca/cbbr/cbbr_main.htm. The packing industry has expressed concern with the cutout data in the past. In many cases, they feel it overstates packer margins as carcass revenues are based on buyer price lists for different beef cuts. These lists do not necessarily reflect the value that packers actually receive for a carcass, as market conditions may dictate that certain beef cuts get downgraded to lower grades of meat such as grind. It is our understanding that the Canadian Meat Council is involved in a joint project with the CCA to ensure more accurate reporting of packer price spreads.

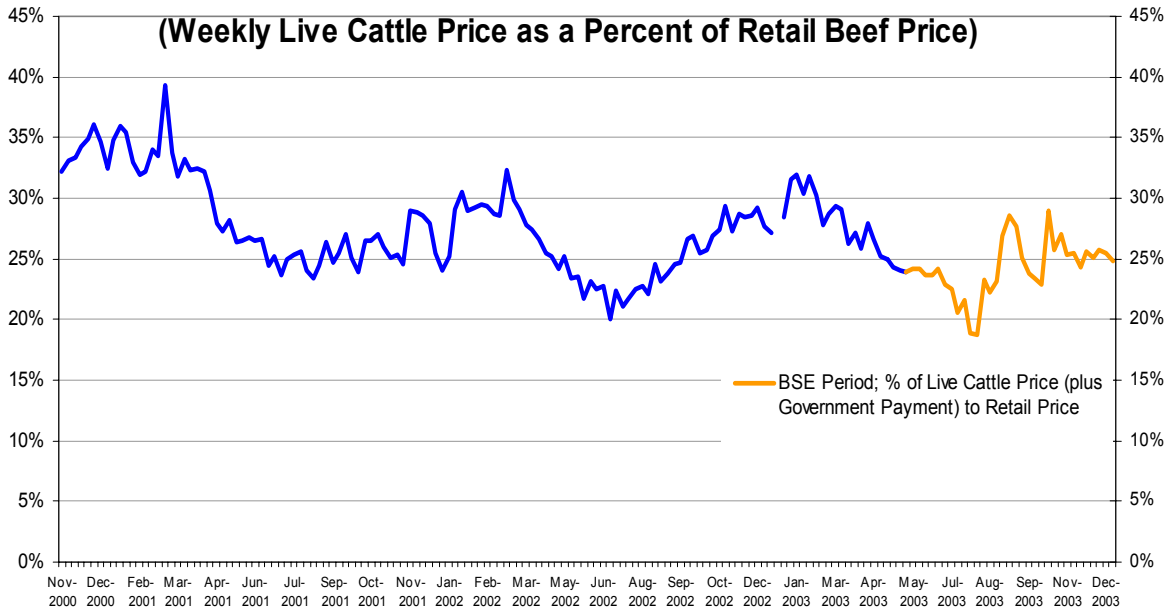
Over the short term, fresh beef prices at retail outlets are determined by a combination of retail merchandizing strategies and level of competition. Retailers like to maintain the integrity of the meat case, meaning that the consistency of price and quality of all proteins is important. If prices are temporarily downgraded, it is difficult to recover to previous pricing levels. Over time, competition among grocery or alternate sales channels keeps price changes to a minimum.

In-store features or sales are planned weeks, if not months, in advance. The normal buying cycle actually begins five to seven weeks before the product gets to the shelves. Consumer perception of the beef meat case typically revolves around steaks and ground beef. The demand for steak cuts, such as top sirloin, is high year-round.

It is a common perception that a decrease in the price of a raw product should result in an equal decrease in price at the retail level. Beef changes hands many times before reaching the retail self – from the producer to the packer, the packer to the wholesaler or processor, and the wholesaler to the retailer. Each time the product moves up the supply chain, value is added and costs are incurred in some way.

By the time it reaches the retail store, the cost of a steer only represents a fraction of the retail price of beef. For instance, as Figure 4 illustrates, if the cost of a steer represents 25%-30% of the cost beef cuts at retail, then if the price of cattle dropped by 70 cents a pound, we would only expect the retail price to decline by 21 cents (70 cents x 30%).

Figure 4. **Alberta Fed Cattle to Retail Beef Sales**

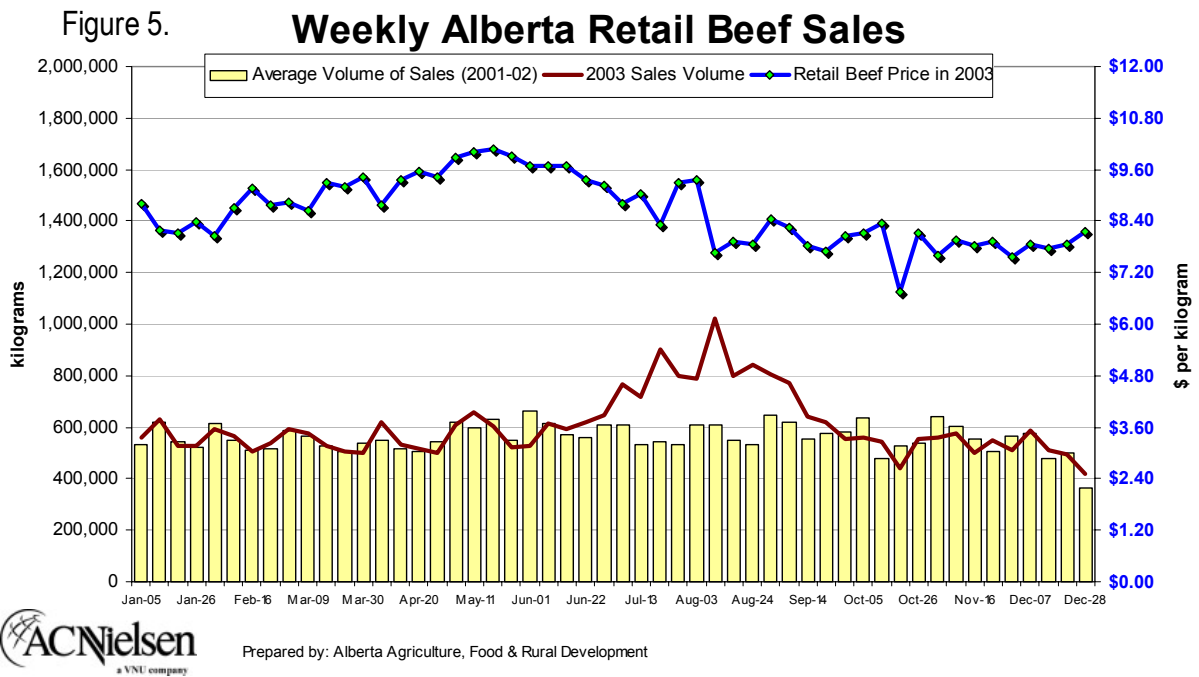


Prepared by: Alberta Agriculture, Food & Rural Development

4.1 Impact of BSE on Retail Pricing

Figure 5 provides a review of retail beef sales and volumes in 2003 in Alberta. The beef price includes all cuts of beef. It is important to note that the average retail price of beef in Alberta declined 20% in the summer of 2003 from a high of \$10.00/kg in May to \$8.00/kg in December 2003. The price decline coincides with a dramatic spike in the volume of beef available from the packers.

Canadians spend on average about \$106 per person per year on beef at retail, or about \$5.20 per household per week.^x Retail beef prices declined by up to 20% over the summer months in Alberta. By the end of August, the volume of beef cuts available from



the packers began to decline noticeably once the U.S. and Mexican markets were open to certain cuts of beef. The opening of borders reduced the over supply of beef, which stabilized beef prices at around \$8.00 per kilogram.

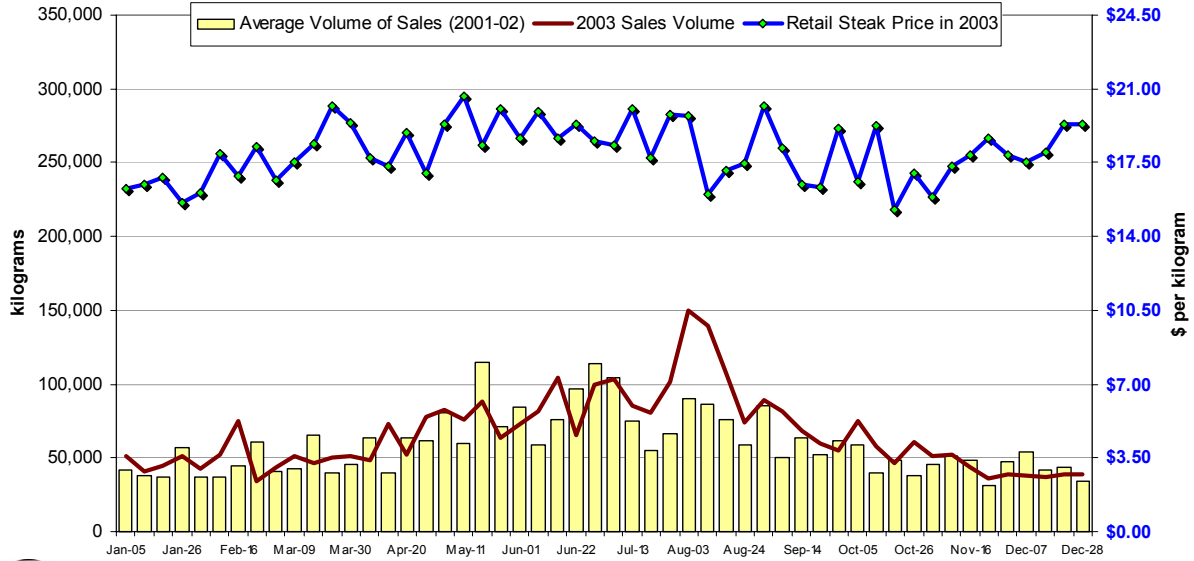
The data available on average beef prices illustrate that retail prices responded in a predictable manner to the supply and demand dynamics created by the BSE situation. It should be recognized that different cuts of beef are less responsive to the pressures of excess supply. For example, historically there has always been strong demand for high-end cuts of steak. Figure 6 illustrates the price of top loin cuts in 2003. It appears that the prices remained fairly constant throughout the summer. This is due, in part, to efforts by retailers to keep price consistent; however, the biggest reason is that demand for steak

^x Statistics Canada, Food Expenditure Survey, 2001.

remained strong throughout the BSE crisis, which helped to maintain the buoyancy of steak prices.

Canadian consumers responded very well to the BSE crisis in 2003. For the period, May 20 to Dec 31, 2003 consumption of beef was up 11% compared to previous year. For the period from July through September (the main grilling season), consumer purchases were up 30%. In many cases, consumers chose to support the beef industry by purchasing steak, which was already in high demand.

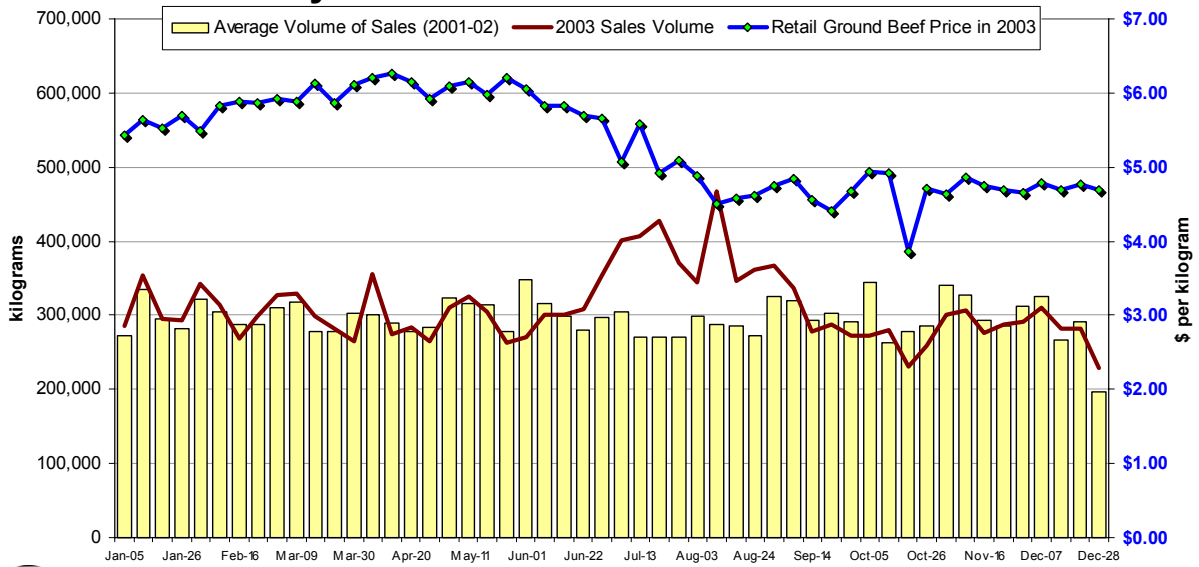
Figure 6. **Weekly Alberta Retail Sales of Loin Cuts**



Prepared by: Alberta Agriculture, Food & Rural Development

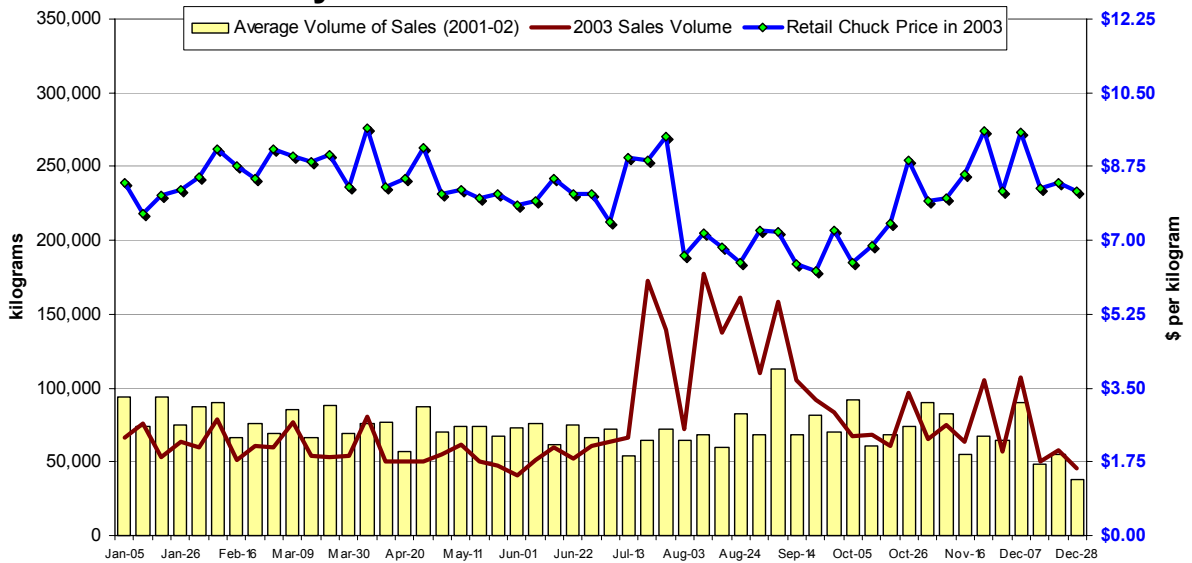
Cheaper cuts of beef such as ground beef and chuck experienced a noticeable decline in price as evidenced in Figures 7 and 8. In both cases, the price of these cuts was very responsive to volumes. After adjusting for volume, the overall average price of all beef cuts did decline as demonstrated above and was responsive to the excess supply available.

Figure 7. **Weekly Alberta Retail Sales of Ground Beef**



Prepared by: Alberta Agriculture, Food & Rural Development

Figure 8. **Weekly Alberta Retail Sales of Chuck Cuts**



Prepared by: Alberta Agriculture, Food & Rural Development

4.2 Conclusions

The data essentially demonstrates three things: 1) beef prices at the retail level have declined at least 20% in response to the BSE crisis; 2) the price of some of the cheaper cuts of beef such as ground beef, have declined even more than 20%; 3) The opening of

the U.S. and Mexican border to certain cuts of beef has increased the demand for some of the cheaper cuts such as chuck resulting in some stabilization of prices.

In the case of steak, strong demand likely prevented the price from falling. However, on average beef prices were responsive to the excess supply of beef available. Based on this information, there does not appear to be any evidence that retailers were pricing in a manner that was inconsistent with the supply and demand pressures created by the BSE situation.

5.0 Impact of BSE on Prices in the Cow Calf Sector

This last section will discuss the impact of BSE on the cow-calf sector. This will shed some light on how impacts have filtered down the beef supply chain.

Alberta calves are predominantly weaned in the fall months from September through to December. Calf sales through the summer periods tend to be modest in relation to the volumes that are sold to feeding operations over the fall and winter months. Calf prices for 500 to 600 pound steers during the fall of 2003 were almost at par with prices from the previous year. For instance, steer calves that sold during November of 2003, sold for prices in the range of \$1.19 per pound versus \$1.24 per pound in November 2002, a difference of about \$25 to \$30 per head.

Government assistance to cattle feeders likely insulated the cow-calf producers from more dramatic declines in prices since feeders were in a better position to reinvest in their operations and bid more for feeder cattle originating from cow calf operations. As a result, cow calf producers did not suffer a significant drop in prices in 2003.

Looking forward into 2004, the situation looks like it could be more challenging for the cow calf producer, particularly for those who held on to their cattle. The discovery of BSE in Washington state had an even bigger impact on calf prices in Canada and the surplus supplies of cattle in the system will likely put downward pressure on prices for light weight feeders (400-600 lbs).

6.0 Overall Conclusions and Observations

Impact of BSE on Fed Cattle Prices

The beef supply chain is highly integrated, which means that prices for fed cattle depend on the cost and revenue structures facing the packing industry. We know from interviews with packers that costs are higher and revenues are lower as a result of the BSE situation. What we do not know is the extent that changing revenues and costs have impacted packer profit levels. Perhaps this information will come to light during the review process currently being conducted by the federal government through the Standing Committee on Agriculture and Agri-Food.

A number of increased costs were identified that were associated with segregation and cleaning of production lines, increased surveillance to identify cattle under/over 30 months of age, removal of specified risk material, and increased rendering costs of non-marketable product. Closed export markets also meant that packers quickly experienced lost revenues compared to before May 20, 2003.

The BSE crisis has meant that the costs to packers have changed. These costs can be passed up the value chain to retail or down the value chain to producers. Packers can only pass on higher costs to the retail chain if there is a shortage in market ready cattle, not when there is a surplus supply. Therefore, prices for slaughter weight cattle were certain to drop with or without government intervention.

In addition to the changing cost and revenue structure facing the packers, feedlots are faced with an unprecedented excess supply of fed weight cattle. Canada normally exports about 25 per cent of the live cattle it produces every year (1 million cattle). The closure of the U.S. border to live cattle meant that all these cattle had to be processed and marketed through domestic channels. Canada simply does not have the capacity to comfortably slaughter and process all the cattle produced in Canada.

It can be suggested that the real issue facing the beef industry is not ownership of packing plants but overall slaughter capacity. Therefore, the focus should be on lack of capacity and markets for the surplus inventory, not the fact that there are limited numbers of slaughter plants.

Packers were able to adjust input or variable costs through lower prices on slaughter ready cattle allowing them to increase slaughter volumes to the extent that over 1 million head of cattle have been slaughtered since May 20, 2003. This contributed to the reduction in surplus cattle inventory.

Impact of Government Programs

The introduction of the CABSERP, a national program with participation from all provinces, had two primary objectives: 1) encourage feed lots to sell into a depressed market, and 2) increase volumes of slaughter at the packing plant.

As demonstrated in the report above, the program achieved both objectives as slaughter volumes increased substantially after June 18, 2003. Owners of fed cattle were assured of reasonable returns through the combination of market prices and government assistance.

The national program related to the link between program payments and slaughter and an end date to the program, which coincided with the border opening to certain cuts of beef. Many provincial governments, including Alberta, suggested that an adjustment period was required (Alberta recommended 30 days) once international markets, primarily the US market, were opened to both beef and live animals. Subsequent provincial programs recognized the need for an adjustment period during the supply/demand imbalance

created by BSE. Provincial programs were also designed to stimulate market and price discovery and helped to increase prices for fat cattle during the fall of 2003. No end dates or budget limits were announced under the provincial programs.

Impact on Retail Prices in Alberta

The available data from AC Neilson clearly shows that consumers have benefited from the BSE situation as the average retail price of beef cuts in Alberta has dropped by at least 20% from \$10.00/kg to \$8.00/kg. In the early stages of BSE, the stand-off between packers and feedlots resulted in a shortage of middle cuts such as steaks. In some cases, packers had to bring in these cuts from their subsidiary plants in the U.S. to fulfill their commitments to the retail and wholesale customers. The CABSERP program helped to unplug the backlog of cattle and move an unprecedented volume of beef in the summer of 2003. Not surprisingly, the larger volumes of meat resulted in a decline in retail prices, which ultimately benefited consumers.

Although there is limited relationship between the price of slaughter ready cattle and retail prices, the sheer volume of surplus beef in the domestic market allowed Packers, wholesalers, and retailers to offer special deals for the benefit of consumers.

Without question, the support of Canadian consumers was paramount to sustaining the industry throughout 2003.

Impact on the Cow Calf Sector

Feedlot sector operators were able to maintain prices closer to historical levels as a result of government programs. This, in turn, instilled confidence in the cattle industry and allowed feedlot operators to bid for fall calves at prices equal or greater than those experienced in 2002. As a result, cow-calf producers who marketed fall-run calves did not experience any significant income shortfalls in 2003 as a result of the BSE situation.

Summary

Based on the review by Alberta Agriculture, Food & Rural Development, it is our view that market functions have responded accordingly considering the supply/demand imbalance created by the BSE situation.

Intervention by federal and provincial governments across Canada have stimulated the value chain, have helped to maintain income levels for cow-calf, backgrounder and feedlot operators, helped to reduce the surplus cattle inventory that was building, and, allowed consumers to benefit from reduced prices in the overall beef retail complex.

Appendix A: Summary of Major Bovine Spongiform Encephalopathy (BSE) Recovery Programs^{xi}

Federal-Provincial Program

1. Canada-Alberta BSE Recovery Program (CABSERP)

Announced: June 18, 2003

Under the federal-provincial Canada-Alberta BSE Recovery Program (CABSERP), provisions were made for the slaughter of cattle on feed as of May 20, 2003. The program ended in August 2003, at which time the program objectives were met.

Made in Alberta Programs

The aim of made-in-Alberta programs is to keep the agriculture industry functioning in near-normal market conditions so that when the border fully opens we will have an industry that is ready to meet market demand.

2. Alberta Fed Cattle Competitive Bid Program

Announced: July 25, 2003

Through this program producers were encouraged to set aside fat steers and heifers or sell these animals to purchasers; animals sold or set aside were removed from the slaughter queue for at least an 8-week period.

3. Alberta Fed Cattle Market Transition Program

Announced: August 22, 2003

This program encouraged competition in the marketplace through providing funding only where there were sales evidence of at least three competitive bids. Payments were based on a sliding scale, which covered 90 per cent of the spread between the weekly average US price for slaughter cattle and the greater of the actual sale price or weekly average program price.

4. The Alberta Bovine Spongiform Encephalopathy (BSE) Slaughter Market Adjustment Program for Other Ruminants (ABESMAP-OR)

Announced: September 23, 2003

ABESMAP-OR is very similar to the Canada-Alberta BSE Recovery Program. Producers who sell their animals for slaughter are entitled to compensation on a sliding scale equal to the difference between a base price and an average weekly market price. The program is retroactive for veal and young bison, sheep and goats slaughtered after August 31, 2003.

5. Alberta Steer and Heifer Market Transition Program (ASHMTP)

Announced: October 9, 2003

This program will provide producers with compensation for slaughter weight steers and heifers on a market differential basis. Slaughter or set aside of approximately 750,000

^{xi} For more information on these programs, consult the AAFRD website at <http://www1.agric.gov.ab.ca/app21/rtw/index.jsp>

head was facilitated under the first BSE programs. Industry indicated that a substantial number of head remained on inventory and the ASHMTP was intended to provide assistance for these remaining animals.

Details of the payment calculated under this program were announced on February 20, 2004 with applications mailed out to registered producers beginning the week of February 24, 2004.

6. Albert Mature Market Animal Transition Program (AMMATP)

Announced: November 24, 2003

The Alberta Mature Market Animal Transition (AMMATP) is intended to help producers deal with mature cows, bulls and other ruminants while the industry moves towards new market realities.

Under the AMMATP, producers may choose one of two payment options: option one is the up-front per head payment, and option two is a differential payment calculated for the week that the animals are sold to slaughter or auction. The program will be monitored weekly to ensure program purposes are being met. If market signals do not respond appropriately, the program may be adjusted.

7. Winter Feed Program

Announced: November 24, 2003

The Winter Feed Program was announced on November 24, 2003 and is intended to assist producers to cover winter feed costs for their deer, elk, llama and alpaca.

8. Beef Product and Market Development Program

Announced: October 24, 2003

Deadline: March 31, 2004

This program is one of two in place to help meat processors deal with the surplus of cattle more than 30 months of age. The Beef Product and Market Development Program promotes secondary beef processing expansion, new product development, market reentry and new market development. The program also encourages feasibility studies into alternative meat processing so that canning or drying or other alternatives to refrigeration may be studied.

9. Food Processor Assistance Initiative

Announced: October 24, 2003

The Food Processor Assistance Initiative will help companies that now have inventory that they were unable to export. Payments under this program would partially cover the extra costs of storage, transportation, or re-marketing of processed food products in anticipation of export markets reopening or for new markets that are immediately available.

Federal Program

10. Canada Cull Animal Program

Announced: November 21, 2003

In mid-February 2004 the federal government agreed to remove the requirement that cull cows be slaughtered to access federal payments. Alberta producers are eligible for a federal payment of \$192 per head. Those who registered their Alberta inventory will receive \$180 (Alberta) for the up-front option and payments will begin February 23, 2004. Federal monies, however, are not expected to flow until this spring.

Note: Alberta will administer the federal option using the breeding herd inventories provided by Alberta producers.

Alberta producers of cattle, bison, cervids, sheep or goats are able to apply for both the federal and the provincial programs.

APPENDIX B: List of Industry Members Interviewed

Garnet Altwasser	Lakeside Packers
Brent Altwasser	Lakeside Packers
Willie Van Solkema	Cargill Foods
Robert Kalef	Centennial Foods
Bryan Walton	Canadian Council of Grocery Distributors