

The Future of the Beef Business, Beef Demand, and Opportunities for Producers

Wayne D. Purcell

Alumni Distinguished Professor
Director, Research Institute on Livestock Pricing
Department of Agricultural & Applied Economics
Virginia Tech
Blacksburg, VA 24061

Introduction

Where any business area or sector of the economy has been is going to largely determine its future and the outlook for investments and potential profits. The beef cattle industry is no exception. This is a sector that has gone through dramatic change and forced adjustment across the past 20 to 25 years. It behooves us to understand what has happened at least partly because we need to guard against some of those difficulties occurring again in the future.

Figure 1 shows a long-term plot of total cattle inventory numbers and the beef cow herd. This is an industry that has traditionally moved through cycles that are about 10 years in length. If you go back and look across many decades, you would see a tendency for numbers to peak, for example, in the mid-1950s and again in the mid-1960s. After the peak in 1965, there was a leveling off at those cattle numbers, about a six-year period of herd build up, and the inventory numbers peaked again in 1975. Every 10 years, the cattle industry moved through a build-up phase that lasted typically about six to seven years, a liquidation that came quicker and usually ran three to four years, and then the industry was sweeping through another 10-year cycle.

Examination of the numbers in Figure 1 indicates that this pattern was not repeated when numbers started to increase in the late 1970s and into the early 1980s. Historically, we would have expected a six to seven year period of

build up that would have carried numbers higher toward about 1985, but the reliable and traditional supply-side cycle was aborted in the early 1980s. It is important that we understand what happened in the 1980s and why the industry moved into a pattern of behavior that was not typical of what we had seen for decades.

During the period of rhythmic and repetitive 10-year cycles in the cattle business, demand was either relatively stable or increasing slightly. Demand was not constituting a disruptive factor in terms of the length and magnitude of the cattle cycle. But that all changed in the early 1980s, and we will come back later and document the severity of the demand problems that hit and why they occurred. At this point, it is important that we recognize that the industry spent some 20 years after that aborted build-up phase of the cattle cycle in the early 1980s trying to find an equilibrium or market-clearing price that could be sustained. That process involved a substantial decrease in supply of beef as the industry tried to adjust to sustained and dramatic decreases in demand. When prices decline due to decreases in demand, the marketplace will discover still lower prices, trying to run resources out of production to decrease supply and find a market-clearing price. An equilibrium or market-clearing price is the price where quantity offered is equal to quantity taken by buyers. It was and continues to be an interesting and volatile period for the industry since 1980, extending through what we

we see happening in 2001.

Having recognized that there were disruptive factors that broke the routine of the cattle cycle during the 1980s and 1990s, it is nonetheless the case that we are currently starting a build-up phase of another cattle cycle. Table 1 shows the January 1, 2001, cattle inventory report. There is no dramatic evidence of herd build up in this report, but most analysts agree that we are moving through a transition period during which we will move away from continued liquidation and a decrease in numbers and toward a herd-building phase. Arguably, the most interesting number in the report is the modest 2 percent increase in beef heifers held for herd replacement. This may be signaling the intent of producers to build their herds during 2001. Unless the industry is rocked by some outside influence such as extremely high corn prices, which is unlikely, or some impact from E.Coli or the now widely discussed BSE issues, we will likely see herd building actions at the producer level start during 2001.

It usually takes more than one year of attractive calf prices to put producers in a herd-building mode. This time around, it has taken even longer than normal, and that shouldn't be surprising. Producers have gone through dramatic forced changes during the 1980s and 1990s, and many have been pushed to the wall and forced out of business by the continued and sustained problems coming from the demand side. With the exception of the period from the mid-1980s to the early 1990s when corn was very cheap, it has been hard to make money as a cow-calf producer. Figure 2 shows an estimate of the returns for cow-calf operators in the form of a histogram, and it is clear that there have been fairly long and sustained periods of losses facing producers. Bankers, Farm Credit, and any other financial institution involved in loaning money for cow-calf operations get a bit cautious and conservative. I think that caution

by producer and banker explains the fact that we have seen calf prices top \$1.00 per pound for the last three years, and we are just starting to show some signs of rebuilding the herd.

If demand stays where it is in late spring 2001, this cycle will create strong prices and, in all likelihood, record prices for calves, yearling cattle, and the fed cattle market. If corn stays cheap, and in the presence of current farm policy I expect that to be the case, we will see calf prices spend a lot of time above \$100 across the next few years. Yearlings will move back up into the \$90 area and better. We will see a tight supply of yearling cattle create problems for the cattle feeder, and we will see cattle feeders bid yearlings so high that breakevens on fed cattle will be almost unattainable.¹ Because we will see per capita offerings, and therefore per capita consumption, of beef decline across the next few years and bring in a renewed period of a loss of market share to the industry, we will see the higher prices being paid for that smaller quantity at retail generate \$80 and higher prices in the fed cattle market.

The Current Setting

In moving through our look at the supply side cycle in the cattle business, it is useful to document what has happened to the various meats sectors across the past few decades. Figure 3 shows per capita consumption of beef, pork, and chicken. The data behind this report use retail weights for pork and beef and ready-to-cook weight for chicken. If you move to edible weights for all three, the line plot for the chicken sector would drop compared to the beef

¹ If you own the feedlot facilities, economic rules suggest you will bid up yearlings to keep the pens occupied so long as the expected selling price exceeds the variable costs of feeding the cattle.

and pork sectors, but that does not change the patterns in the data.

Note that after per capita consumption peaked in beef at almost 95 lb in 1976, that measure trended lower and approached the 65 lb level in the early 1990s. This was a huge loss of market share as the production levels in the industry declined due to sustained periods of lack of profitability at the cow-calf level and profit difficulties up through the system. Per capita consumption in no way measures demand; rather, it measures per capita supply. If you consider the fact that we export a quantity that is roughly 10 percent of domestic production and import a quantity of primarily processing beef that is, again, roughly 10 percent of domestic production, we have a per capita supply in the U.S. that plunged across a 20-year time period by over 30 percent. Per capita consumption just mirrors that decline in per capita availability since for any perishable commodity, we eat what is produced within a particular year. It is a tautology that per capita consumption will decline again across the next few years as we move the herd-building phase of the cycle and take some heifers out of the feedyards and put them in the breeding herd. That is not necessarily bad for the industry. We have to expand the cow herd before we can start to generate a bigger per capita offering in the future and work toward regaining some of that lost market share.

Even a quick glance at the plot for chicken shows a gain in per capita consumption that matches or exceeds the loss in beef. Across this time period, there was only a modest upward trend in total meat consumption, and basically the consumer switched from beef to chicken. Per capita consumption of pork showed less dramatic changes and tended to drift sideways during the last two decades until the increase in per capita consumption started to occur back in the late 1990s.

It is important to recognize what per capita consumption documents, and it is worth some additional time and reflection. Per capita consumption measures per capita supply and not demand, but the pattern in per capita consumption over time is revealing. There has to be a reason for per capita offerings in beef to decline from 95 lb to 65 lb, and we need to look for that reason. It is always possible that the resources employed in beef cattle production would earn a higher rate of return in some alternative use, and that could be a reason that resources flee the beef industry and go to some alternative use that earns a higher return. There was probably some of that happening across the past two decades as capital invested in cow-calf businesses was often not earning any positive return, and that tends to push capital out. Investment dollars always chase profits, and there were not many profits to be had in the cow-calf business.

It is important, then, to recognize why beef cattle production was not profitable. It is not that we didn't see an increase in productivity and new technology brought into beef cattle production. Figure 4 shows beef production per cow in the beef cow herd, and there were dramatic improvements in the early 1980s and during the 1990s. That pattern doesn't indicate that resources that could be used in cattle production, whether it is capital equipment or labor, were not being productive. Lack of productivity is not why they were taken out of the beef cattle business. It is the other side of the coin that is the causal factor. In spite of a tremendous increase in productivity per cow, it was still hard and sometimes impossible to make a dollar in the cow-calf business, and that suggests the big problems were on the demand side. Thus, when we look at a pattern of long-term declines in per capita consumption, it is probably the case that something was wrong on the demand side. If demand is weak or declining, that suggests that the final consumer

of the product is not willing to pay a price sufficient to keep resources in production down through the beef supply chain. That conclusion, in turn, argues that the big problems facing the industry may not be production efficiency of supply side technology at all, but difficulties on the demand side.

Looking at Demand

The supply side cycle seems to be currently positioned to bring good prices and profitability back to cow-calf producers. This does not necessarily mean that stocker operators or cattle feeders or packers who have to operate on a margin will see sustained profitability. Whether there is a decent chance to make profits up and down the supply chain from the cow-calf producer through the packer/processor that prepares the final consumer-level product will depend on what happens from this point forward in demand. If the pending predictable developments in the supply-side cycle are combined with continuation of the improvement in demand that we have seen since it finally bottomed in 1998, the next five to seven years in the beef cattle business could be very interesting indeed. The combination of reduced per capita supplies, because the cattle herd is being built, and increased demand for beef could carry us to record level prices at the retail level, in boxed beef values, and down through the system to the fed cattle market, yearling prices, and calf prices. That type of environment offers the efficient and well managed producer program a chance to make a buck and get back some of the equity that may have been lost in past years.

In looking at beef demand, I am going to start with a line plot of inflation-adjusted Choice beef prices at retail and per capita consumption as a measure of the available supplies of beef each year since 1960. Average prices for each year have to be adjusted for

inflation so we can look at what is going on behind the scenes in terms of demand and supply and not have the message complicated by the tendency for all prices to inflate. We saw overall price inflation as high as 10 percent in the late 1970s and early 1980s, and in recent years it has been running more nearly 3 to 4 percent, but any movement up in price just because all prices in or economy tend to inflate distorts the picture. Thus, we adjust for inflation, and in this particular instance, all of the prices are expressed in terms of the now widely used base period for the Consumer Price Index of 1982-84. The 1982-84 period is assigned an index value of 100, and then we can use the Consumer Price Index for each year, now running around 174, to adjust the price series.

Having said that, the line plot in Figure 5 starts to build a basic and intuitive understanding of what is happening in demand. It is not difficult to recognize that for whatever product or service you might be offering the marketplace, you have some problems if the only way you can sell a quantity as big as last year's, or even a smaller quantity, is at a lower price. There are long periods on this line plot which show both price for Choice beef and per capita consumption coming down. That is the epitome of a major problem in demand and is an economic hit of major proportions. In fact, I am not sure I could find any other food commodity that suffered the long-standing and sustained demand problem that beef suffered from about 1979 or 1980 through 1998, when it appears that it finally bottomed.

Figure 6 shows a scatter plot of prices with inflation-adjusted prices and per capita consumption with the years identified in the body of the plot. It is easy to recognize what happened starting with about 1979 or 1980. Per capita supply was maintained around 78 lb through 1986, but the inflation-adjusted price

came down over 30 percent. That is a dramatic hit to the industry when price has to fall over 30 percent to get the buyers to continue to take the same per capita quantity they took in prior years. That was the period which saw dramatic increases in output per beef cow and almost frantic efforts to maintain a level of production in the industry as prices were pushed down at the consumer level, and the decreases plunged down through the system to calf prices. From 1987 through the early 1990s, it is apparent that many in the industry who had been able to hang on through the mid-1980s gave up. Liquidation occurred and even large cow-calf producers who were on the cutting edge of technology adoption and management were pushed out. Per capita supply dropped dramatically into the 60s. We have basically spent time since the early 1990s in and around the 66 to 68 lb per capita supply levels.

It is important to recognize that any move from one year to the next that is down or down and to the left on the scatter plot constitutes a decrease in demand. Visualize, for simplicity, a straight line with about a 45 degree slope that runs through any one of the particular price-quantity combinations such as that for 1980. You will then recognize that a straight line or curve of similar slope that passes through the price-quantity combination that developed for 1986 would be down and to the left of the prior demand surface. If you reflect on this graphic for a moment, you will recognize that starting in 1979 and 1980, the demand surface shifted down and to the left every year until about 1999 or 2000. There were a couple of years in the mid-1990s where it is not clear that the shift was down and to the left, and we may have had two consecutive years on a similar demand curve. But most of the related analytical work I have done on this subject indicates there was a continued decrease in demand each of those years until 1998.

Reflect on the distance that the demand surface moved down and to the left. The industry went through a long period of forcing resources out of business to try to get the per capita supply down sufficiently to generate a market-clearing price, given the weak demand, that would keep the smaller and remaining number of resources in the beef business. We apparently finally found that price level in 1997 and 1998, and now the trend seems to be headed in the other direction.

Before leaving this discussion on the scatter plot, it is useful to look at similar scatter plots for pork and for chicken. Figures 7 and 8 provide these plots, and it is apparent that pork endured some of the same decreases in demand that beef encountered. Those decreases started at about the same time, around 1980. This scatter plot and more sophisticated analyses of the situation suggests that the magnitude of the decline in demand for pork was not as great as the magnitude in beef either in absolute terms or in percentage terms, and the problems were not sustained across a very long time period as was the case in beef. Nonetheless, we have to recognize that there were demand problems in pork that extended up through about 1997, and it is useful to look ahead and reflect on the fact that those problems did not start to go away until restructuring occurred in the pork sector that brought vertical coordination and quality control into the hands of the large processors. The largest processor, Smithfield Foods, Inc., controls from the same genetic base roughly 70 percent of all hogs that they slaughter. In the presence of coordination of the various phases in pork and the quality control in terms of palatability, tenderness, portion size, etc., that the common genetics provided, Smithfield and other large pork processors have invested in development of new branded pork products. It is that type of response to the consumer that has occurred across the past few years that started to turn the demand picture for pork around.

Without the quality control and coordination, those investments in new products might not have occurred.

The plot for chicken is a plot that uses whole bird prices. That is the only price series that goes back as far as the pork and beef series, and it understates the progress that has been made on the demand side in chicken. Nonetheless, it shows a pattern that is distinctly different from the pattern that we saw in both beef and pork. Note that in recent years we see an increase in per capita offerings and therefore increased per capita consumption at essentially a flat inflation-adjusted price. If you look at that pattern of moving to the right with little or no decline in price and look at some years across the past 15 years in which you clearly see a year-to-year movement up and to the right, you see a much stronger demand pattern here than you see in beef. It is over simplifying, but if you visualize a curve or a line with about a 45 degree slope that goes through each of those price-quantity points for any particular year, you have to draw across the past 10 to 15 years new demand curves going through each price-quantity combination that are moving to the right. That is the textbook requirement for an increase in demand. It means that a larger quantity will be taken as a constant price, a higher price will be paid for a constant quantity, or, more likely, both price and quantity are moving up over time. That type of pattern of growth in demand will pull resources into production and will sustain a growth industry. Clearly, that is what is going on across the past 20 years as chicken grabbed a much larger share of the combined meat and poultry market in this country.

There is a study (under "publications") on changes in demand for beef, pork, and chicken from 1975-2000 on the Research Institute on Livestock Pricing website at www.aaec.vt.edu/rilp. The models used in these

analyses use a "shift" variable to capture the change in demand for each of the meats after the traditional demand-shifting influences like changes in income and changes in prices of competing products are allowed for. It is informative to look at those in terms of a way to monitor and measure what is apparent on the scatter plots for beef, pork, and chicken, respectively. The model results confirm the massive decrease in beef, the significant decrease in pork, and the increase in chicken demand.

The demand indices that are updated quarterly and annually for the industry are also available at that website. Click on "Demand Index" on the home page of the site. These measures of demand grew out of efforts of a demand study group put together by the industry back in 1997 and show the change in demand for beef with 1980 as a base year. If you examine those website pages, you will find that we also transformed the data to show 1997=100 as a base year so that progress, if any, could be monitored from a new base period of 1997. Both the quarterly and annual indices that are available show that demand appears to be up 6 to 8 percent since 1997, and that is of huge importance to the industry and to every producer in the industry. It will be, without question, what happens to demand that is going to set the future for the beef business, and we need to move into a discussion of what it will take to sustain improvements in demand.

Issues Surrounding Beef Demand

Demand for beef does appear to have improved in the past few years. That improvement came when we moved to contracts with pricing grids and to alliances and other forms of non-price coordination that allowed the quality control that we were not able to accomplish with the price-based system. The quality grades for beef cattle have been

hopelessly inadequate for at least 20 years. There are a lot of factors that determine the quality of the eating experience in addition to marbling. Tenderness is one of them, perhaps the most important one. It is very difficult to enjoy eating a steak that you cannot chew. We know from studies that marbling only explains about 30 to 40 percent of the variation in tenderness. A logical response to this situation would have been to change the grades to include three, four, or five categories of tenderness within Choice. But that has not been done. The USDA's policy position is that they will change the grades only if the industry demands that they be changed. They were castigated vehemently for the change a few years ago that got the B maturity cattle out of the Select and Choice grades and out of the counter for the fresh beef offering in the grocery store. Obviously, they are not inclined to get out front, and their policy position does not allow them to make aggressive and progressive changes in grades. With roughly 50 percent of fed cattle selling at prices above their true value, there will be no easy consensus from the industry that the grades need changing. I do not expect to see a change in the quality grades within the next five years.

With that continuing situation in place, demand continued to decline. The failure rate of the Choice steak or roast in the fresh meat market was 20 to 25 percent according to beef quality audits that the industry completed in the mid-1990s. With that type of poor product performance, there was little or no interest on the part of processors and value-added further processors in branding fresh beef. That attitude toward branding started to change when pricing grids, contract arrangements, and vertical alliances started to provide non-price means by which processors could effect at least a degree of quality control. We saw pre-cooked beef products coming from some of the value-added further processors, and now we have seen the

big 3 packers turn away from being low-cost commodity operators to producers of branded value-added product. That change gives them a chance to increase their per-head margins as the numbers of cattle they will have to work with start to decline due to the supply-side cycle.

There can be little doubt of the importance of these changes. They are changes that were encouraged and facilitated by industry programs that use check-off dollars to put the right processor and outlet together and, in other ways, to encourage product development. Frankly, I would encourage a much bigger percentage of the check-off dollars to this type of use and away from generic advertising. Getting to a product offering that more nearly fits what the modern consumer wants is much more important than just promoting consumption of beef in a generic context.

It is not difficult to know what the consumer wants. We have known that for 20 years. They want a consistent, high-quality eating experience, and they want convenience. Early in the period, they were more concerned than they may be at this point about cholesterol and fat levels, but we do need to offer closely trimmed product and get away from the appearance of high levels of fat and the related concerns about cholesterol. We have known from surveys and focus group work what the problems were. It just took a long time for the industry to restructure itself and rearrange the way it is operated in such a fashion that somebody saw fit to make investments in the much needed new product offering. We are starting to see those investments now, and those are the necessary conditions for continued improvement in demand and for a bright future for the beef business.

There have been some obstacles to improvement that are inherent to the beef business. Figure 9 suggests that there are a

number of profit centers between the point of original production and the point of final consumption in the beef business. Those profit centers have often had adversarial relationships with the center above or below them. There has been little, if any, coordination of effort between what is produced at the bottom end with the needs of the consumer at the top. It is important to recognize that we drifted for nearly 20 years without any one of the players in this system, which is made up of a price-driven system with separate profit centers at the various levels, seeing fit to make the investments in new product development that were so desperately needed. And at least part of the reason that they were not making those investments was the heterogeneous and highly variable quality profile offered by cattle that came up through the system. We really didn't start to see the quality control programs and the efforts to serve a modern consumer with a high-quality, pre-cooked beef item that is convenient to prepare in the microwave until we went to contracts, pricing grids, and vertical alliances as non-price ways of gaining coordination and quality control. The price system has been allowed to fail with inadequate grades making coordination in a "price signaling" and price-driven system impossible.

Looking Ahead

In this section, I want to look ahead to what I expect to see in the beef business. There are lots of factors and forces that will influence how well we will do and the opportunities that producers will see. Without trying to be exhaustive in the listing, I would identify at least the following four factors that are going to be important.

1. The supply-side cycle is moving into a herd-building phase, which, other things equal, should boost cattle prices at all levels of the system. That helps the

chances for profits at the cow-calf level but does not generate profits for stocker operators, feeders, and packers who operate on a margin.

2. Demand appears to have stopped its nearly 20-year slide that brought a cumulative decrease of almost 50 percent, and there is evidence that in about 1998, year-to-year changes in demand have turned to the positive side and that demand is increasing.
3. There is growing publicity of beef-related diseases and issues such as BSE that will add an element of risk to any investment in the beef business.
4. At least partly because of the increased publicity about E.Coli, residues, BSE, and other issues, producers may face more market-related risk than they have in past years.

It bears repeating that the supply-side cycle is poised to generate higher prices. How quickly we will build the cattle herd remains to be seen, but I suspect we will see the January 1 inventory reports for the next few years show not a 2 percent increase in beef heifers held for herd replacement but increases in the 3 to 8 percent range. We have seen those historically and I wouldn't be surprised to see those levels again. We are in the process of rebuilding this herd, but we are also tending to move toward a two-stage industry where we have larger operators who know genetics and are into understanding what they need to do to boost the value of their cattle, and they are making those changes. On the other side we find many small producers who still hold a substantial percentage of the beef cows in this country that are not making those progressive changes and are continuing to offer product that will have to be called a commodity product as compared to a

quality-controlled and high-value product. The fact that we are seeing a split in the industry also complicates any efforts to anticipate how quickly we will build the herds. Cattle producers who are retaining ownership of the cattle and are getting increased values that range up to \$50 per head and more in an alliance or by selling on a price grid will be motivated to move fairly aggressively in terms of expansion. That other side of the industry may or may not expand and they may not be paying any attention to the economic incentives. We will have to watch and see how all this goes. But abstracting from all that, the supply-side cycle is going to generate better prices across the next few years unless we get some unpleasant surprises from the corn market or some publicity that does impact the demand side of the beef business.

There is no apparent reason why the recent growth in demand cannot be continued. It is built on solid investments in the revised product offering that moves what we are trying to sell consumers toward what they have been telling us they wanted. One of my big concerns is that we not over-regulate the marketplace to the extent that the big packers will not want to continue those investments. We may have up to 10 million check-off dollars in any particular year to help facilitate new product development and try to put supplier and buyer together to get something done. It is that type of effort that generated a steak sandwich on the menu of all of the Dairy Queen restaurants in the U.S., but in spite of the contribution that that type of program makes, the check-off dollars will not be enough. One of the large packers who is rolling out a pre-cooked and branded product line and trying to get it introduced may well spend a billion dollars on product development and all the related things that happen as the new product is introduced in the marketplace and efforts are made to differentiate a brand. We desperately need those investments because that

is exactly what we weren't getting up through the mid-1990s when some of the large operators were still following a business model of being the low-cost commodity operator. It bears repeating that we need to be careful with legislation to ban processor ownership of livestock, to ban contract arrangements, or in other ways to regulate the ways that buyers and sellers can do business. That type of legislation might stop these investments from the big packers that we need so badly in revising the product offering and moving to "consumer driven." The "hot current topic" at the www.aaec.vt.edu/rilp website expands on these concerns and provides more detail. It was placed on the web on February 1, 2001, and should be relevant for the rest of the year.

The one thing that worries me about the demand side, assuming we do continue to make progress in terms of moving the product offering toward what the consumer wants and is willing to pay for, is the publicity over various beef-related diseases such as BSE. That is adding a component of risk to this market that we have not always had, and it has the capacity to be a major dampening influence on the positive outlook that we see in this business. There has been no evidence of BSE problems in North America and no confirmation that anybody has ever experienced problems related to this, but it is still a very volatile area and it could be a factor in terms of consumers' attitudes toward our product.

At least partly related is the fact that the markets will be nervous as long as the publicity about BSE, E.Coli, and other problems abounds. I think producers are going to face the need to ratchet up their efforts to have a good risk management program. Historically, I have never wanted to carry ownership of light cattle through the growing season for corn, when a widespread drought could bump corn prices up and push calf and yearling prices down. For the

700-800 lb yearling market, you are going to see about \$1.25 per hundredweight decline in price for every \$.10 per bushel increase in corn, and if corn goes up \$1.00-2.00 or even more as we saw in 1996-1997, light cattle prices can be devastated. Now, we have the risk component that comes from the publicity about demand-side diseases that would reinforce my tendency to want to keep the cattle priced to the extent possible. Producers who are not comfortable using futures or options to forward price feeder cattle or fed cattle if they maintain ownership really need to take a look at the opportunities that risk management offers and get involved. We saw the dramatic decline in slaughter hog prices in late 1998 break and drive out of business some of the largest corporate and private producers of slaughter hogs. There was a tendency to say, "If I'm buying and selling every day or each week, I don't need to worry about price risk management," but that is not good enough when the selling price goes down dramatically and stays down for several weeks or months. Calf prices went below \$50 per cwt. in 1996 when corn went to \$5 a bushel. It is important that we pay attention to the risk management possibilities, and as part of the in-conference presentation I will take a look at those pricing opportunities as we move into the summer months.

Closing Observations

It is going to be an interesting decade for cattle producers, and it is going to be full of opportunities. For the first time in 20 years, there is reason to argue that investments in the cow-calf business give the good manager at least a chance to make some profits. There is going to be risk, and there are going to be cyclical moves in this market, but it is much easier to have a successful business when demand is increasing than when it is decreasing. For 20 years, we faced the problem, as we looked at declining prices, of having to get costs

down enough to allow the operation to continue. It has not always been possible to do that, and we saw a dramatic loss in market share and an equally dramatic decline in beef cow numbers and total cattle inventory numbers as the marketplace forced people out of business, especially at the cow-calf level.

Sometimes, I get criticized for not paying attention to the tremendous opportunities for improvement we have on the cost side of our business. There are huge differences in efficiencies of operations and huge differences in the cost of producing a weaned calf. The range in cost of keeping a cow is up to \$200 and sometimes even more on a per-head basis per year. I appreciate that efficiency is important and that keeping costs down is an obvious way to improve the profitability of the business. But that is apparent to any manager of a for-profit business, and if you can get costs down by improving efficiency or adopting new technology, that goes right to the bottom line on the balance sheet. Thus, there is a built-in and obvious motivation for a manager to get costs down, and I count on that motivation and that basic logic to encourage decision makers to be efficient.

There is no equally obvious reason why anybody in the beef business should invest in new product work or invest in efforts to modernize the product line. That is talking about the demand side of the profit equation, and the impact on the individual's business is a lot harder to see. Thus, I put a lot of my time and energy in trying to help people understand why the demand side is important and is, in fact, the long-term determinant of profitability in any business, whether it is beef production and processing or other business activities. By all means, get costs down if you can, but let's understand and contribute to efforts at the state level, and especially the national level, to improve demand and try to appreciate and

understand the importance of the large firms at the processing level who are finally making investments in revising the product offering. Before we get behind state and national policy efforts or resolutions to further regulate the marketplace in which buyers and sellers interact, let's recognize that those acts can have very important, if unintended, consequences. Reflecting on what is happening with the mandatory price reporting legislation as it moves into action helps clarify this point. It may well be that we will lose some of the price series that we had. It is not at all clear that after this huge expenditure and huge effort to expand coverage of transactions to the entire population as compared to what used to be a really large sample that we are going to have any better price information. Since it will add costs that packers will pass on as they protect their margins, the net impact may be lower cattle prices. We have to step back and think about all the ramifications of policy and legislative actions before we push them.

It is also important to recognize as we look ahead that the price-based system hasn't been given a chance to compete. We didn't have public agencies developing the refined grades that would allow us to price tenderness and other contributors to palatability so that those price signals would reach the cow-calf producer and impact decisions on genetics. A horrific product failure rate of 20-25 percent for Choice cuts in the fresh meat counter devastated this industry, and it was not until we moved away from price-based coordination and into contract arrangements, pricing grids, and vertical alliances that we started seeing some quality control and started to see the basis for improved demand begin to build. As a producer, I would look at getting involved in some of these arrangements so that I would get compensated for true value. You may be surprised to find that your cattle are not as good in the feedyard and on the breaking table as you have always

thought, but you need to know that. The price system is not likely to be the way that we coordinate all of these various functions up and down the supply chain in the future. We are selling most of the fed cattle each week at one average price, and that is surely not what should be done. Such a price system is not rewarding those who have truly high-value cattle for what they have done in terms of investments in genetics and management.

My closing observation would be, let's don't talk so much about what alliances are doing to the industry, and think about the other side of coin and reflect on what alliances are doing for the industry. We have to have an open mind and recognize that we need vertical coordination and quality control if we are going to tap into the consumer's pocket and get more of those dollars. The consumer's dollar is all we have to divide among the various players from the original cow-calf producer to the final retailer. The only way you can improve the outlook for this sector in its entirety is to serve that consumer and capture a larger percentage of their food dollar. On the basis of that, the beef business can be profitable, grow as an industry, and take back some of the market share we lost across the past 20 years. To get that done, we must see continued improvement in coordination and quality control in order to get a product line to the consumer that is of consistent high quality and is convenient to prepare. Keep that need in mind in what you do and in what you propose in your state and national associations.

Table 1. Cattle and Calves: Number by Class and Calf Crop, United States, January 1, 1999-2001

Class	1999	2000	2001	2001 as % of 2000
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Percent</i>
Cattle and Calves	99,115	98,198	97,309	99
Cow and Heifers That Have Calved	42,878	42,759	42,603	100
Beef Cows	33,745	33,569	33,400	99
Milk Cows	9,133	9,190	9,203	100
Heifers 500 Pounds and Over	19,774	19,649	19,775	101
For Beef Cow Replacement	5,535	5,503	5,588	102
Expected to Calve*			3,142	
For Milk Cow Replacement	4,069	4,000	4,047	101
Expected to Calve*			2,544	
Other Heifers	10,170	10,147	10,140	100
Steers 500 Pounds and Over	16,891	16,682	16,438	99
Bulls 500 Pounds and Over	2,281	2,293	2,272	99
Calves Under 500 Pounds	17,290	16,815	16,221	96
Cattle on Feed	13,219	14,003	14,199	101
<hr style="border-top: 3px double black;"/>				
	1998	1999	2000	2000 as % of 1999
Calf Crop	38,812	38,796	38,621	100

*Replacement heifers expected to calve during the year. Data not available prior to 2001.
 Source: *Cattle*, USDA/NASS Agricultural Statistics Board, January 2001.

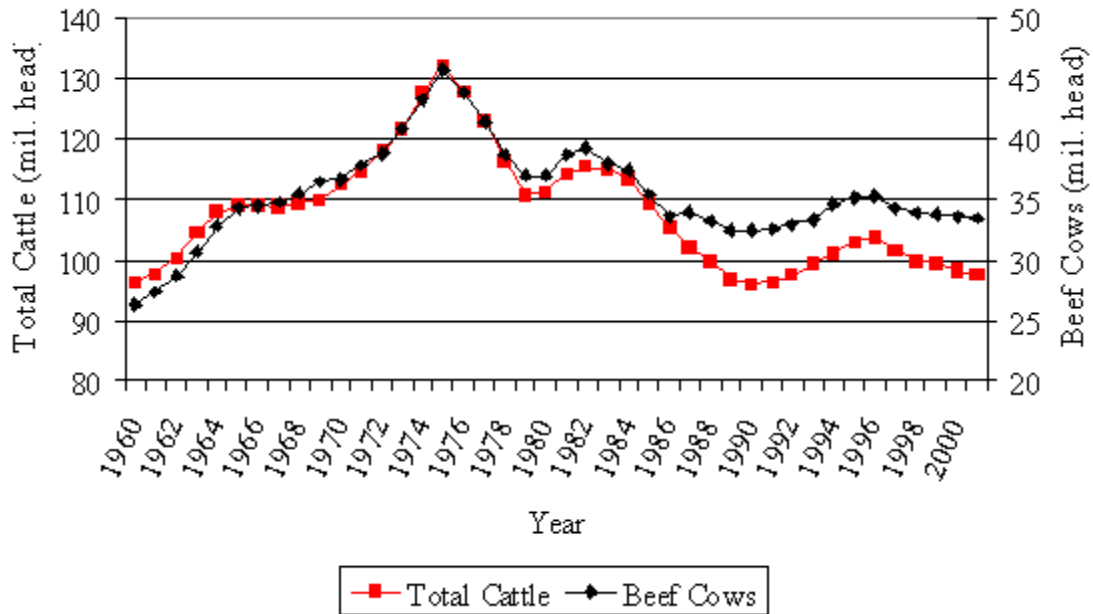
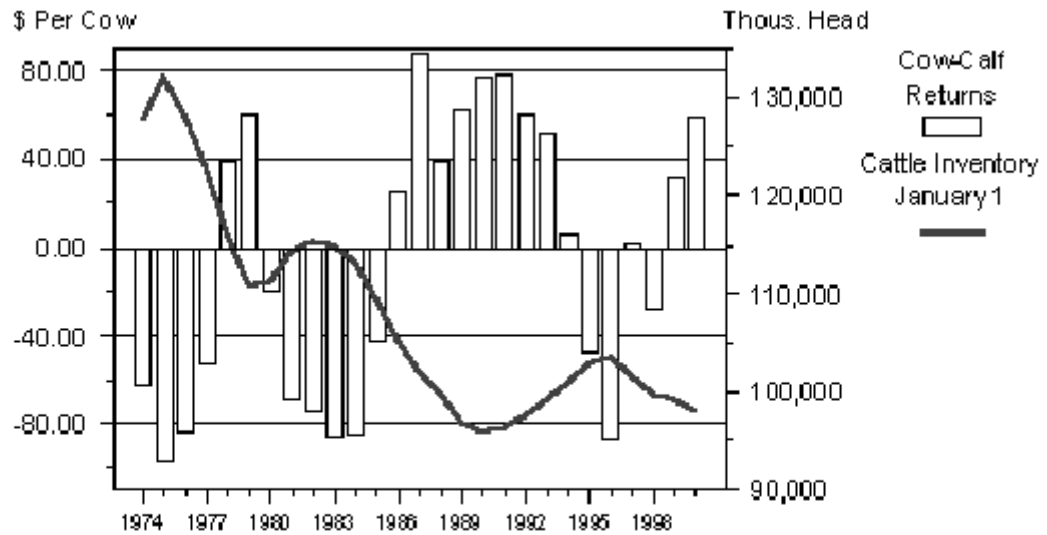


Figure 1. January 1 Cattle and Beef Cow Inventory, 1960-2001



Livestock Marketing Information Center

C-P-67
02/08/00

Figure 2. Cow-Calf Returns and Cattle Inventory, 1974-2000

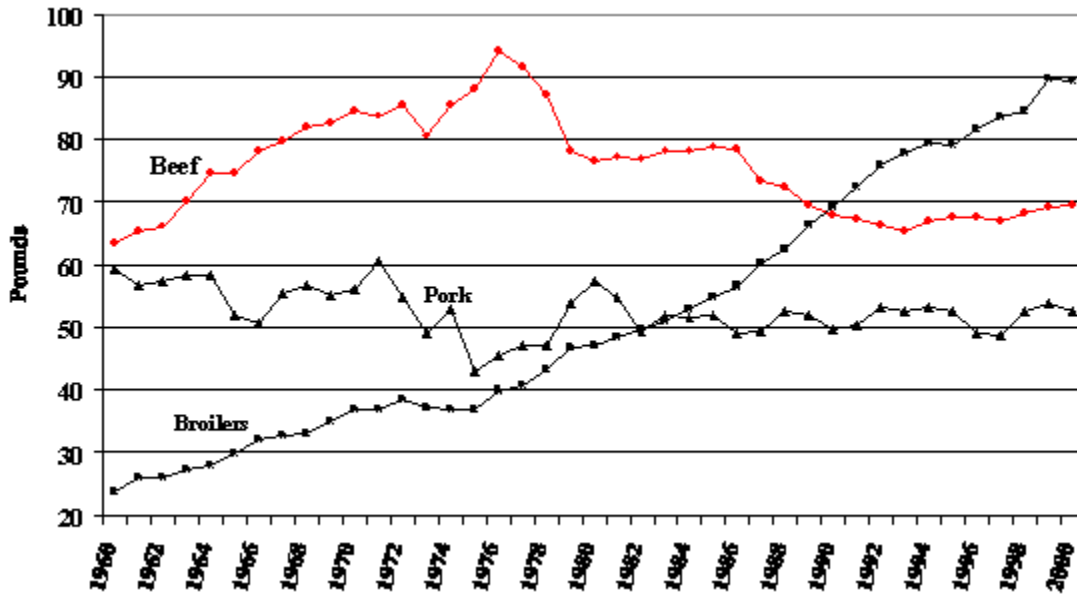


Figure 3. Per Capita Consumption of Beef, Pork, and Chicken, 1960-2000

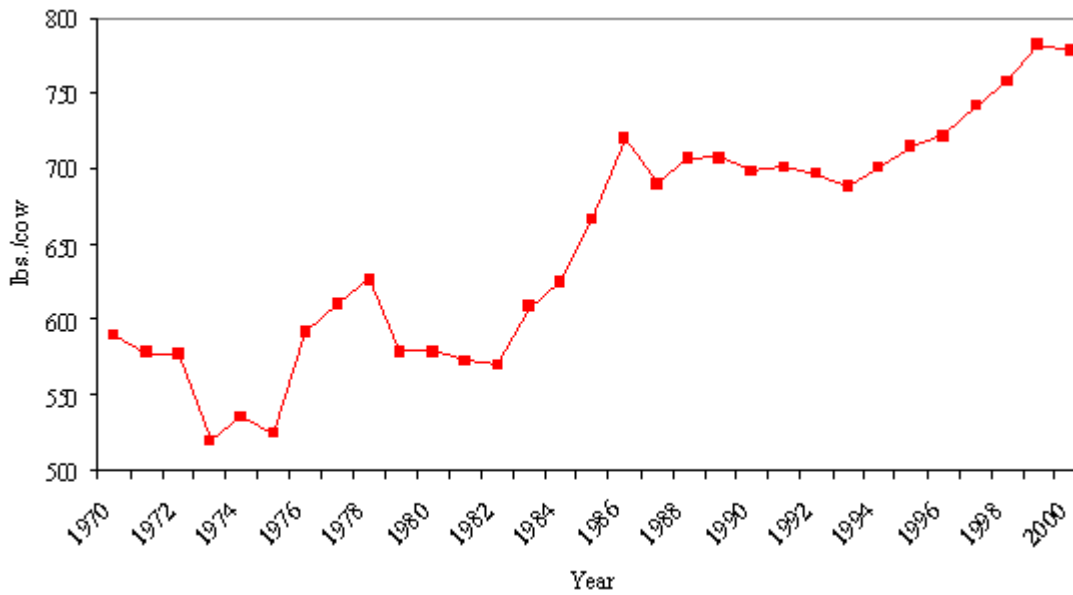


Figure 4. Beef Production Per Cow, 1970-2000

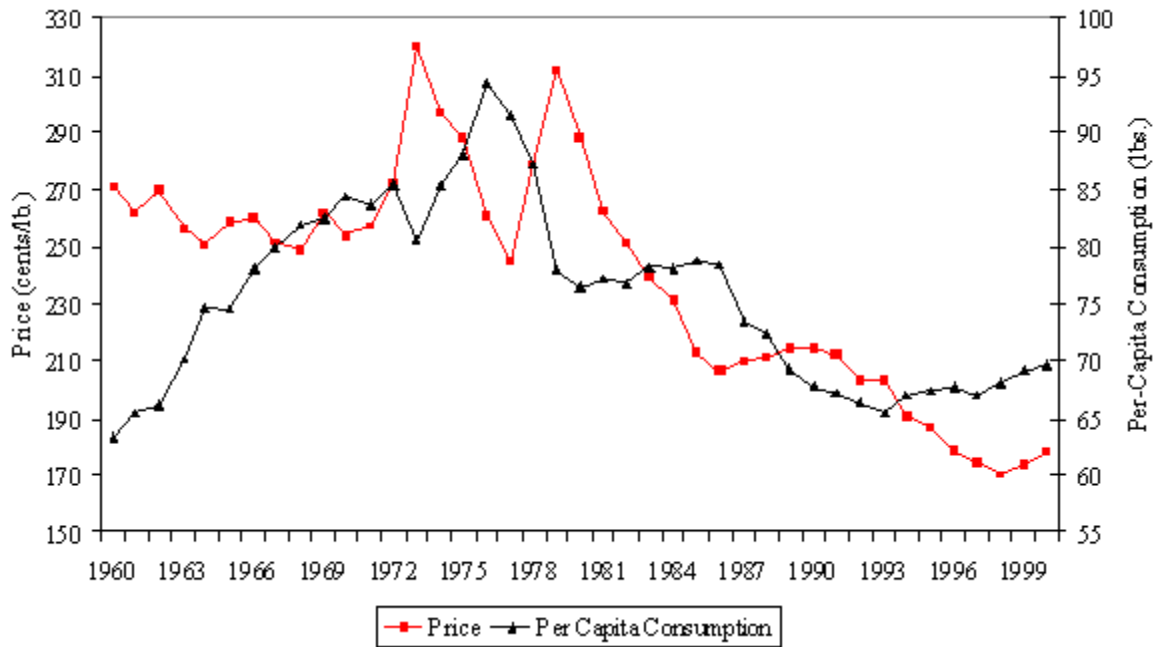


Figure 5. Per Capita Consumption and Deflated Price (CPI, 1982-84=100) of Beef, 1960-2000

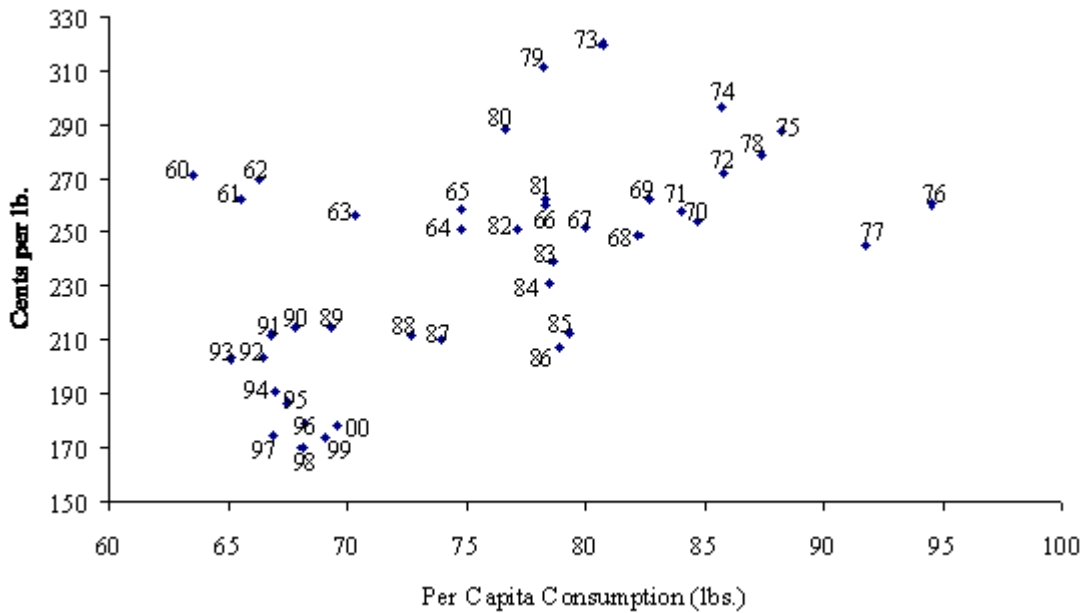


Figure 6. Per Capita Consumption and Deflated Price (CPI, 1982-84=100) for Beef, 1960-2000

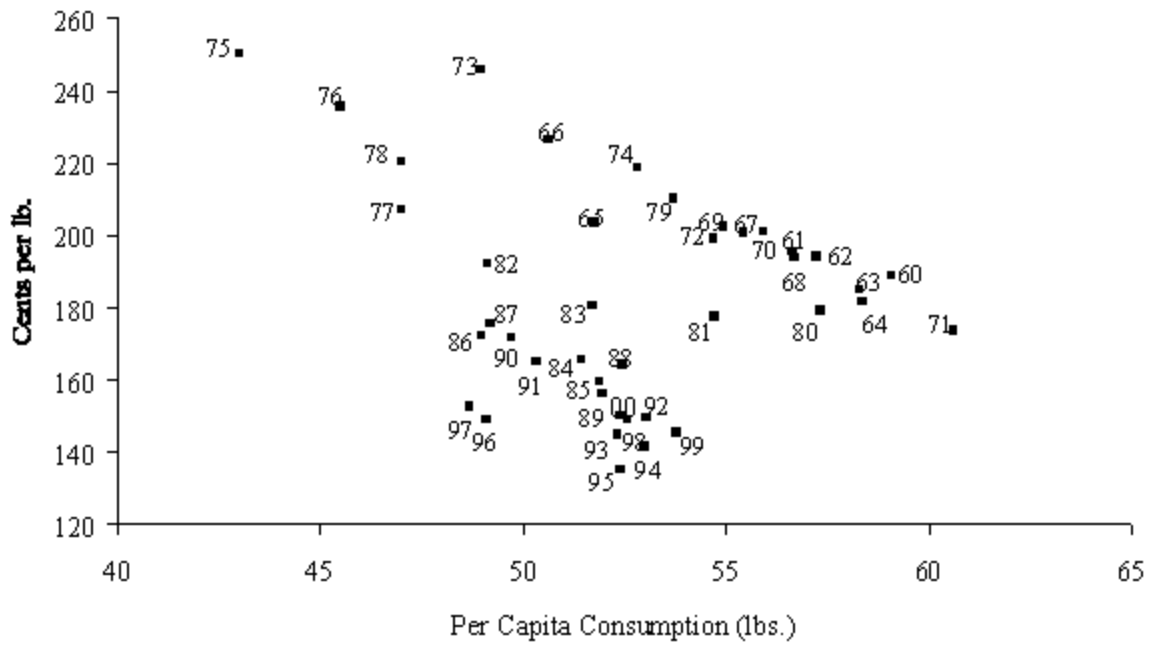


Figure 7. Per Capita Consumption and Deflated (CPI, 1982-84=100) Price for Pork, 1960-2000

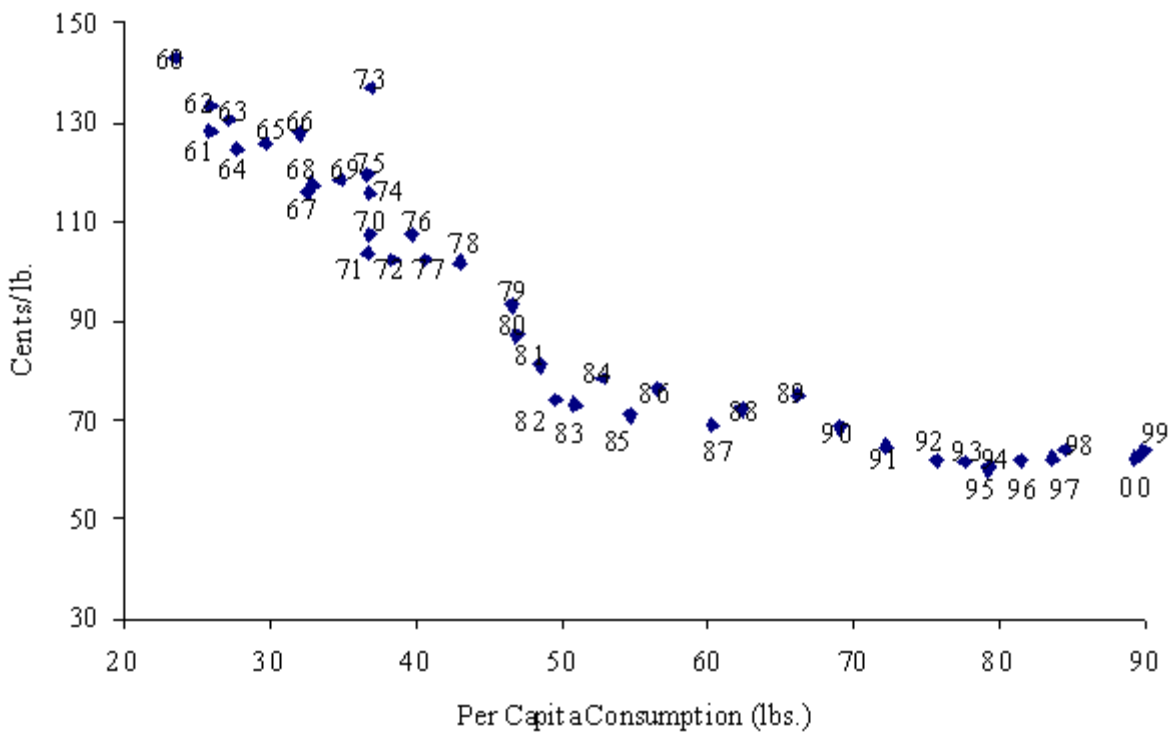


Figure 8. Per Capita Consumption and Deflated (CPI, 1982-84=100) Price for Broilers, 1960-2000

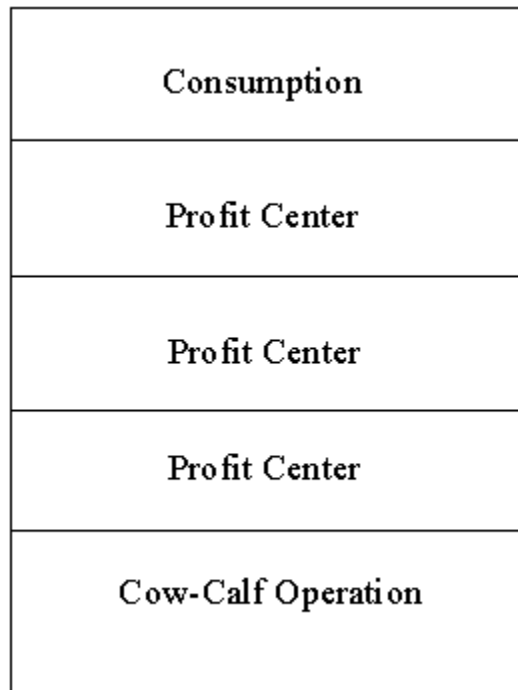


Figure 9. Demonstration of Various Profits Centers in the Beef Industry

NOTES: