

CANADIAN
INTERNATIONAL
TRADE TRIBUNAL



AN INQUIRY INTO THE COMPETITIVENESS OF THE CANADIAN CATTLE AND BEEF INDUSTRIES

November 1993

REFERENCE NO. GC-92-001

**AN INQUIRY INTO THE
COMPETITIVENESS OF THE
CANADIAN CATTLE AND BEEF
INDUSTRIES**

Canadian International Trade Tribunal

The Canadian International Trade Tribunal is an independent quasi-judicial body which reports to Parliament through the Minister of Finance. It was established on December 31, 1988, by the *Canadian International Trade Tribunal Act*. The Tribunal hears appeals from rulings by Revenue Canada on customs, excise and sales tax matters. The Tribunal makes findings on whether or not imported goods, which have been found to be dumped or subsidized, are injuring Canadian production of such goods. It also conducts import safeguard inquiries at the request of the government or domestic producers. Finally, the Tribunal acts almost as a standing commission of inquiry with powers to conduct research, hold public hearings and report on a broad range of matters relating to the economic, trade, tariff or commercial interests of Canada.

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FOREWORD

This report completes a 12-month study into the competitiveness of the Canadian cattle and beef industries in the North American and world markets. The government, acting on the request of the Canadian Cattlemen's Association, with the support of the Canadian Meat Council, directed the Canadian International Trade Tribunal to carry out this inquiry.

We immediately recognized the formidable task upon us when we began this inquiry. The cattle and beef industries in Canada, the United States and Mexico are complex and dynamic.

In Canada, the cattle and beef industries are vanguard industries. While many agricultural and primary processing sectors have not yet met the full rigours of international competition, we have found that the Canadian cattle and beef industries are well-accustomed to competing in the tariff-free Canada-United States market.

We have concluded that, for the most part, the future of the Canadian cattle and beef industries is bright. In particular, the cattle industry in Alberta has come through a period of unprecedented growth and prosperity. This industry has benefited from several competitive advantages, such as low forage and feed expenses, buoyant cattle prices in the United States which have favourably affected Canadian prices, skilled ranchers and managers, and a supportive government policy environment.

The beef-packing industry in Alberta has good prospects for long-term competitiveness. Its members have access to high-quality cattle at competitive prices, they have the newest and largest plants, and they have the expertise. What they need, however, is a greater utilization of their plants to make them truly competitive. This would happen through improved access to the large U.S. market or through further rationalization of the Canadian industry.

The cattle and beef industries in Eastern Canada, on the other hand, are facing different competitiveness pressures. After a decade of rationalization, they are coming to terms with their smaller scale. To ensure their continued viability, their focus must be on initiatives to maintain and expand the market niches and competitive advantages that they enjoy.

While we are confident in the future of the Canadian cattle and beef industries, this is not, however, a time for complacency. It is, rather, a time for the industries and governments, individually and jointly, to take the initiatives that will ensure the continued success of the industries in the years ahead. An open border between Canada and the United States and a fair trading regime are vital to these industries.

In this regard, the early termination of the National Tripartite Stabilization Program and the recent imposition by Canada of a tariff rate quota on imports of boneless beef from countries other than the United States have removed irritants to Canada-United States trade. It is our view that these initiatives should lead to reciprocal action on the part of U.S. authorities, for example, to implement the 1992 beef inspection agreement and negotiate an agreement relating to grade equivalency or reciprocal grading. We are also hopeful that the larger issue, of making meat import laws in Canada more equivalent in effect to those in the United States, can be resolved.

These actions, along with improved marketing of Canadian beef in the U.S. market, would help to enhance the competitiveness of the Canadian beef-packing industry.

The cattle and beef industries in Canada have recognized that much of their future success depends on their own efforts. They look to governments only to improve the regulatory framework within which they operate in order to ensure their continued success. Much of their potential to prosper in the North American and world markets in the coming years depends on their ability to identify and respond to opportunities and challenges as they arise.

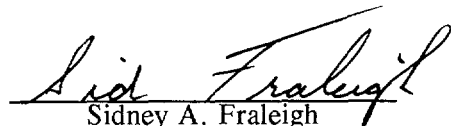
We would like to thank the dozens of producers and packers who showed us their operations, prepared written submissions and participated so actively in our public hearings. Through them, we acquired a wealth of information, including how the industries function, some of the key elements to their success, as well as some of the problems that they must overcome to function more efficiently. We also benefited greatly from very thorough submissions made by industry associations, governments and other interested parties.

We also owe a great deal of thanks to our staff for their dedication and fine work. It was a pleasure for all of us to work on this important and challenging inquiry.

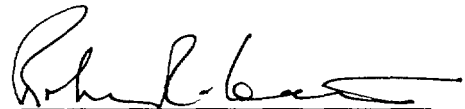
We hope that our report will stimulate discussion and prompt the industries and governments to take action that will strengthen Canada's cattle and beef industries in the coming years.



Arthur B. Trudeau
Presiding Member



Sidney A. Fraleigh
Member



Robert C. Coates, Q.C.
Member

EXECUTIVE SUMMARY

On November 19, 1992, the Governor in Council directed the Canadian International Trade Tribunal (the Tribunal) to undertake a comprehensive study of the Canadian cattle and beef industries in the North American and world markets. The guiding principle underlying this inquiry was the need for the Canadian industries to be aware of, and to be able to respond to, present and expected changes in the conditions of international trade, government policies and regulations, input costs and marketing conditions.

The terms of reference for the inquiry directed the Tribunal to: develop industry profiles for Canada, the United States and Mexico; review national and regional trends in the structure of the industries in the three countries; identify and examine the various government policies, regulatory measures and assistance programs that affect the competitiveness of the cattle and beef industries in each of the three countries; and provide an assessment of the opportunities and challenges facing the Canadian cattle and beef industries in the coming years.

An examination of the cattle and beef industries in Canada and the United States indicates that the structure of the industries is very similar in both countries. Three principal sectors were examined by the Tribunal. The cow-calf sector is that part of the industries concerned with the production of calves. The next sector comprises the feedlots where the animals are fed high-energy rations, i.e. grain and silage, to reach their slaughter weight. Finally, the packing sector is responsible for slaughtering the fed cattle, as well as veal calves, cull cows and bulls. This sector produces beef and veal carcasses, cuts and grinding beef, that are then shipped to further processors or the wholesale and retail sectors, or exported.

While the cattle cycles in both countries generally track one another, the current expansion phase, in Canada, began in 1987, while it did not start in the United States until 1989. Despite this timing difference, certain parallels are apparent in the industry trends in both Canada and the United States. In recent years, beef production and consumption have declined in both countries, while imports have increased. The cattle and beef industries in Canada and the United States have also undergone structural changes leading to greater concentration and rationalization. Cattle feeding has become increasingly concentrated in Western Canada, particularly in Alberta, and in the Great Plains in the United States. Moreover, cattle slaughtering is also concentrated in these two regions, as the packing industry has moved closer to the centres of cattle production. Further, in the feedlot and packing sectors, the trend is towards fewer, but larger, operations, as the industries realize improved economies of scale.

The cattle and beef industries in Mexico are different from those in Canada and the United States, and are structured differently in the northern and southern regions of the country. The cattle industry in the north more closely resembles the Canadian and U.S. industry structure in terms of cattle production and commercial feedlots, albeit on a much smaller scale. In the southern area, dual-purpose cattle predominate, and the feedlots are less commercial and largely grass-based. The Mexican government is pursuing policies to reform regulations pertaining to land tenure and property rights, and to relocate the beef-packing industry away from urban areas and closer to the centres of cattle production. The beef-packing industry in Mexico is also working to streamline the distribution system, with the aim of reducing the number of middlemen and making the system more efficient. Despite recent efforts to liberalize trade measures, the

Mexican government reimposed customs tariffs on cattle and beef in response to imports that have risen sharply in recent years.

Beef and veal (beef) account for just under one third of total global meat production. Despite high levels of production, only about 10 percent of beef produced enters world trade (excluding intra-EC trade). This trade is highly concentrated, and the international market for beef is very competitive. Canada is a net exporter of cattle and a net importer of beef. Overall, Canada's net trade balance in cattle and beef is positive. Although there are promising export markets for Canadian beef in the Pacific Rim, the United States is, by far, Canada's most important trading partner. Virtually all of our live cattle exports, and over 90 percent of beef exports, go to the United States. The growth in exports of both feeder and slaughter cattle to the United States in recent years reflects the strong pull from U.S. feedlots and packing plants. The volume of trade between Canada and Mexico, however, is relatively low. The United States is Mexico's largest foreign supplier of beef, the principal supplier of slaughter cattle and the crucial export market for Mexican feeder cattle. In terms of volume, the United States is a net importer of live cattle and beef, although in terms of value, it was a net exporter of beef in 1992.

Governments in North America, and elsewhere, have a long history of intervention in their agricultural sectors, with programs, policies and regulations designed to support incomes and commodity prices, limit risk and price variability, and ensure safe and adequate food supplies. The programs, policies and regulations convey differing advantages and disadvantages. Tribunal analysis suggests that U.S. producers have a relative advantage over their Canadian counterparts, particularly in the effective protection afforded by the *Meat Import Act of 1979*, compared to the protection offered by comparable Canadian legislation, and in access to grazing on public land.

Our analysis also reveals that some government measures, such as funded research, credit programs, environmental regulations and taxation policies, are widely available or applicable to the agriculture sector in the different countries and offered no real competitive advantage to one country's cattle and beef industries over those in another. However, programs in all three countries that are designed to assist grain producers generally have a negative impact on cattle producers by raising the cost of feed.

Other government measures have an impact on the Canada-United States bilateral relationship. The National Tripartite Stabilization Program in Canada was a trade irritant for the United States. Notwithstanding its limited impact on the Canadian industry, the National Tripartite Stabilization Program is being terminated two years ahead of schedule. On the other hand, the Canadian industries are disadvantaged by the lack of U.S. recognition of the equivalency of the Canadian grading system and by the failure of the United States to fully implement an agreement to eliminate border inspection.

Using a net benefit approach to measure the impact of government support to the cattle and beef industries, the Tribunal found that government intervention, as a whole, provides benefits to the cattle and beef industries in Canada and the United States, while it imposes a net cost on the cattle industry in Mexico. On balance, the magnitude of support is similar in both Canada and the United States. Direct financial assistance is not a significant competitiveness factor for the cattle and beef industries in Canada or the United States. On the other hand, regulatory intervention does appear to have a significant effect in certain areas.

On the whole, the cattle and beef industries in Canada have a bright future and are generally prepared for the rigours of international competition. The cow-calf sector, building on its competitive advantages, is strong. Moreover, feedlots in Western Canada are among the most successful in North America. This sector, particularly that which is concentrated in southern Alberta, benefits from being close to both feeder cattle and Canadian and U.S. beef-packing plants. The beef-packing sector is the least competitive of the three sectors of the Canadian industries. Its greatest competitive disadvantages compared to the United States are smaller average throughput, higher labour costs and, with regard to beef-packing plants located in Alberta, the significant distance that beef has to be transported to markets in the United States and Eastern Canada. Nevertheless, the Tribunal believes that the beef-packing sector in Alberta has good prospects for long-term competitiveness.

There are five broad sets of challenges that will continue to affect the competitiveness of the Canadian cattle and beef industries, both now and in the years to come. Clearly, one of the most important challenges is to have unimpeded access to U.S. markets for both cattle and beef. Secondly, the industries need to hold on to their market share through constant attention to maintaining and improving the quality and consistency of their product. Thirdly, cost control is critically important to keep prices competitive. Fourthly, Mexico presents a unique challenge to the Canadian industries because it is a potential market which is three times that of Canada. Finally, access to other export markets, particularly in the Pacific Rim, will provide opportunities for the Canadian industries, but these markets will be very competitive.

The government can assist the Canadian cattle and beef industries in meeting these challenges by improving the regulatory framework within which they operate. Specifically, the government should be prepared to take action where regulations, or the lack thereof, inhibit the competitive goals of the industries. In particular, the Canadian industries would benefit from meat import laws that are more equivalent in effect to those in the United States. Moreover, consumers and the industries would benefit from grade labelling regulations at the retail level. The government should also continue to negotiate with the United States to harmonize the impact of our respective laws and regulations that affect the cross-border trade in cattle and beef. This is particularly important in the case of grade equivalency and in ensuring that the United States effectively implements the 1992 agreement to eliminate border inspection in favour of destination inspection.

For their part, the Canadian cattle and beef industries have recognized that much of their future success depends on their own efforts. The industries must continue to build on their competitive advantage in animal health, genetics and feeding to ensure the production of high-quality product. Moreover, they must strive to reduce costs and improve profitability. They should make greater use of such risk management strategies as forward contracting and strategic industry alliances. The industries must also continue to stay abreast of new technologies. Further, the industries need to take the lead in working with the grocery trade to develop appropriate marketing and promotion strategies to better serve consumer needs. Similarly, in the U.S. and other foreign markets, the industries must promote the quality of Canadian beef on its own merits, not simply because it may be recognized as being equivalent to U.S. product. Finally, although the industries must be prepared to explore other potentially lucrative export markets, the primary focus of the industries' export strategy should remain squarely targeted on the United States.

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CHAPTER I

INTRODUCTION

1. Introduction and Purpose of the Inquiry

On November 19, 1992, the Governor in Council, pursuant to section 18 of the *Canadian International Trade Tribunal Act*,¹ directed the Canadian International Trade Tribunal (the Tribunal) to undertake an inquiry into the competitiveness of the Canadian cattle and beef industries in the North American and world markets.² The inquiry was referred to the Tribunal on the recommendation of the Minister of Finance, the Minister of Agriculture, and the Minister of Industry, Science and Technology and Minister for International Trade.

The preamble to the terms of reference stated that, in order for the Canadian cattle and beef industries to maintain and strengthen their competitive positions in international trade, these industries had to be aware of, and had to respond to, recent and expected changes in the conditions of international trade, government policies, input costs and marketing conditions. The preamble further indicated that the Canadian cattle and beef industries requested that the government undertake a comprehensive study into the competitiveness of their industries. Finally, the preamble noted the desirability of having available the most complete and up-to-date information on the nature of the cattle and beef industries in Canada, the United States and Mexico.

The terms of reference for the inquiry are:

- to develop a profile of the cattle and beef industries in Canada, the United States and Mexico in a global context, including trends in production, consumption and international trade;
- to review conditions and trends in the structure of the cattle and beef industries in Canada, the United States and Mexico on a national and regional basis, including marketing and distribution systems;
- to identify and examine factors that affect the competitiveness of the respective cattle and beef industries of Canada, the United States and Mexico in North American and other markets, in particular factors such as government policies, regulatory measures and subsidy and other assistance programs, including those related to transportation, the availability and cost of inputs such as land and grain, environmental and production quality standards, and access to markets; and

1. R.S.C. 1985, c. 47 (4th Supp.), as amended by the *Canada-United States Free Trade Agreement Implementation Act*, S.C. 1988, c. 65, ss 52-59.

2. The full text of Order-in-Council P.C. 1992-2378 is contained in Appendix I.

- to provide an overall assessment, based on the above, of the opportunities and challenges facing the Canadian cattle and beef industries in the coming years.

We were asked to report our findings by November 19, 1993. In conducting the inquiry, the terms of reference directed us to hold public hearings.

2. Organization of the Inquiry

This inquiry was designed to gather facts and opinions about the competitiveness of the domestic cattle and beef industries, as well as about the opportunities and challenges that they face in the North American and world markets. The inquiry was also designed to provide interested parties with maximum access to the inquiry process.³

The notice of inquiry was mailed on November 26, 1992. At that time, parties were invited to prepare preliminary submissions to identify and describe the competitiveness issues, arising from the terms of reference, that they believed should be addressed during the inquiry. The submissions which were received assisted the Tribunal staff in preparing the Draft Staff Notes on the Conduct of the Inquiry, which were distributed on January 7, 1993. The draft notes described the proposed inquiry process and research program, and identified some of the competitiveness issues faced by the industries.

Experts from industry, government and academia attended the consultative forum and preliminary hearing in Ottawa, Ontario, on January 14, 1993. They discussed and commented on the Tribunal staff's plan for the conduct of the inquiry. Following the consultative forum and preliminary hearing, the Tribunal reflected on the views of the experts, revised the inquiry process and research program and, on January 29, 1993, issued the Final Staff Notes on the Conduct of the Inquiry.

The requirement to inquire into the cattle and beef industries throughout North America posed a unique challenge for the Tribunal. In particular, it demanded a different emphasis on the inquiry tools available to the Tribunal in order to hear the views of interested and affected parties.

Thus, visits in Canada, the United States and Mexico formed an integral part of our "hearing" process and offered one of our most important sources of information for this inquiry. The itineraries were carefully planned to ensure that a broad cross section of cow-calf operations, feedlots and packing plants in the three countries were visited. As well, meetings were held with government and association officials. By this means, we gained an understanding of the products, the production processes, the industry structure and trade patterns. We also learned about the day-to-day and longer-term challenges facing these industries in the three countries.

Our meetings had different degrees of formality. They included meetings around a kitchen table, as were, for example, our meetings with the Sears and the Butters in Alberta.

3. Appendix II lists the participants and witnesses to the hearings held by the Tribunal.

At the other extreme was our meeting with the Washington Cattlemen's Association (WCA) in Ellensburg, Washington. At that meeting, the WCA provided a written brief to the Tribunal, and its officials summarized the brief and answered Tribunal questions.

To allow parties to present their views to the Tribunal in a more formal setting, regional hearings were held in Calgary, Alberta, on March 24 and 25, 1993, and in Ottawa, Ontario, on April 21 and 22, 1993. At these hearings, witnesses representing 18 parties gave evidence.

As a third way to hear the views of the industries, the Tribunal encouraged the filing of written submissions⁴ at all stages of the inquiry process, from the planning stage to the final hearing. In all, the Tribunal received over 70 submissions⁵ from the industries, industry associations, experts and government officials.

Another important building block for the inquiry was research carried out by our staff and consultants hired by the Tribunal. Contracts for an analysis of government assistance to the cattle and beef industries in the United States and Mexico, and for a profile of the Mexican cattle and beef industries were awarded to The WEFA Group. The Department of Finance and the Department of Agriculture provided reports to the Tribunal on a range of issues, including a comparison of taxation policies in Canada and the United States, and the effects of government programs and policies on competitiveness.⁶ The Tribunal staff⁷ worked on various other topics, including profiles of the Canadian and U.S. cattle and beef industries, cost and demand issues, and government assistance to the cattle and beef industries in Canada.

The results of Tribunal staff research and consultant reports are summarized in a staff report entitled Competitiveness of the Canadian Cattle and Beef Industries in the North American and World Markets, distributed in August 1993. The staff report has been updated⁸ to incorporate the comments received from interested parties with regard to the August 1993 report.⁹ The updated staff report should be consulted by readers who wish more detailed information than is contained in this final report.

The final public hearing was held in Ottawa, Ontario, on September 20, 1993. This hearing provided the opportunity for interested parties to comment on the reports prepared by consultants and the Tribunal staff, and to offer final evidence and arguments regarding the inquiry. Further to this hearing, we prepared this final report and our assessment.

4. To assist parties in filing general submissions, the Tribunal issued a Guide for Submission setting out the subjects on which the Tribunal wanted to hear the views of parties.

5. Appendix III lists the submissions received by the Tribunal.

6. A list of the reports prepared for the Tribunal by The WEFA Group, the Department of Finance and the Department of Agriculture is provided in Appendix IV.

7. Appendix V lists the Tribunal staff who worked on the inquiry.

8. Copies of the staff report and corrigendum are available from the Tribunal.

9. Canadian International Trade Tribunal, Competitiveness of the Canadian Cattle and Beef Industries in the North American and World Markets, Corrigendum to Staff Report of August 1993, September 1993.

3. Assessment Framework

We interpreted the focal point of the terms of reference to be the competitiveness of Canadian producers and packers in the North American and world markets. However, the recent evolution in trade flows, from east-west to north-south, indicates that the Canadian market and industries are increasingly composed of distinct regions. Accordingly, a portion of the assessment of the competitiveness of the Canadian industries was done on a regional basis.

To make our assessment, we used a market-oriented definition of competitiveness, namely, the ability to maintain or increase market share in domestic and export markets while earning at least normal profits. In general terms, a firm can establish a competitive advantage relative to its competitors and maintain or increase market share in one of two ways. First, it can seek to provide the product at a lower price than that of its competitors. Second, the firm can seek to distinguish its product as superior to the competing products through marketing and/or advertising, with the expectation of increasing the demand for its product.

Our focus in assessing the competitiveness of the Canadian cattle and beef industries was on issues of production costs and product demand. In this regard, we considered carefully the effects of the conditions of international trade and the structures of the industries on the basic cost and demand factors. Moreover, we paid particular notice to the effects of government programs, policies and regulations on the competitiveness of producers through the impacts of these government interventions on input costs and demand for the products. In conducting our historical and prospective assessments of the Canadian cattle and beef industries, we used a medium-term viewpoint, or a period of approximately five to twelve years.

4. Product Coverage

This inquiry covers the products of two industries: cattle and beef. These industries are economically interdependent.

The products related to the cattle industry range from frozen semen to live cattle and calves, regardless of age, sex, size, breed or purpose for which they are kept. The Tribunal focused primarily on cattle for the production of meat for human consumption. Such cattle, which are covered by Chapter 1 of the *Customs Tariff*,¹⁰ include beef cattle, as well as cull dairy and breeding cattle.

Products of the cattle and beef industries include meat, hides for the manufacture of leather, fat for the manufacture of tallow and a number of other products. Meat products include meat for human consumption which can be sold as carcasses or half-carcasses, primal, subprimal and other cuts, grinding beef, edible offal (variety meats), salted and smoked meat, and meat preparations, such as corned beef and beef stews. Our main focus was on carcasses, half-carcasses, primal and subprimal cuts of beef and veal for human consumption. These products are covered by Chapter 2 of the *Customs Tariff*.

10. R.S.C. 1985, c. 41 (3rd Supp.), as amended by S.C. 1988, c. 65.

5. Organization of the Report

The report is divided into six chapters, including this introductory chapter. Chapter II provides a profile of the cattle and beef industries in Canada, the United States and Mexico.

Chapter III highlights international developments that affect the competitiveness of the Canadian cattle and beef industries in world markets and discusses trade in cattle and beef for Canada, the United States and Mexico.

Chapter IV considers a number of basic factors that affect the competitiveness of the Canadian cattle and beef industries, including the demand for beef, the costs of production of cattle and beef, the pricing of cattle and beef, interest rates and the Canada-United States exchange rate.

Chapter V describes and assesses the impact of government programs, policies and regulations on North American cattle and beef operations.

Finally, Chapter VI summarizes the competitiveness of three industry sectors, namely, cow-calf operations, feedlot operations and packing operations. It also describes the challenges and opportunities facing each of these sectors, as well as the cattle and beef industries at large, both today and tomorrow.

CHAPTER II

INDUSTRY PROFILES

In order to properly assess the competitiveness of the Canadian cattle and beef industries, it is first necessary to develop an understanding of the structure of the industries and to place them in a North American context. This chapter provides a profile outlining the structure and evolving trends in the cattle and beef industries in Canada, the United States and Mexico. It also compares key features and developments in the industries in Canada and the United States.

1. Canadian Cattle and Beef Industries

a) Industry Structure

The cattle and beef industries in Canada and the United States are very similar in structure. Beef production in Canada starts with the production of the calf by the rancher or cow-calf producer (Figure 2.1). The principal product of the cow-calf sector is weaned calves, steers or heifers weighing approximately 250 kg.¹ Depending on breed and production conditions, calves are generally backgrounded² or sold directly to feedlot operators. Cows that are used to produce calves are culled from the herd when it is no longer feasible to maintain them for economic reasons, usually when they become less productive or when calf prices are low. These cull cows are sold to packers which produce beef cuts or boneless manufacturing beef.

Feedlots are involved in the output of finished (fed) cattle. Their input is feeder cattle and calves purchased from the cow-calf producers. At the feedlot, animals are put on a high-energy ration and increase in weight from approximately 250 kg (350-450 kg for backgrounded cattle) until they reach their slaughter weight of approximately 550 kg.

Cattle feeding in Canada utilizes high-energy rations based mainly on grain and silage. It is a major market for feed grain, such as barley, corn and wheat, and for forage produced in crop rotations. Feedlot operators in Western Canada use mainly barley and barley silage, whereas those in Eastern Canada use predominantly corn grain and silage.³ This type of production differs from that in the European Community (EC) where dual-purpose cattle⁴ are used, or from that in Oceanic and South American countries, where beef breeds are finished on grass.

The Canadian beef-packing industry has several specializations. High-grade cattle are slaughtered, and the carcasses are usually broken into halves or quarters. While some carcasses are sold to further processors and retailers, the majority is destined for boxing operations where

1. 200-day adjusted weaning weight.

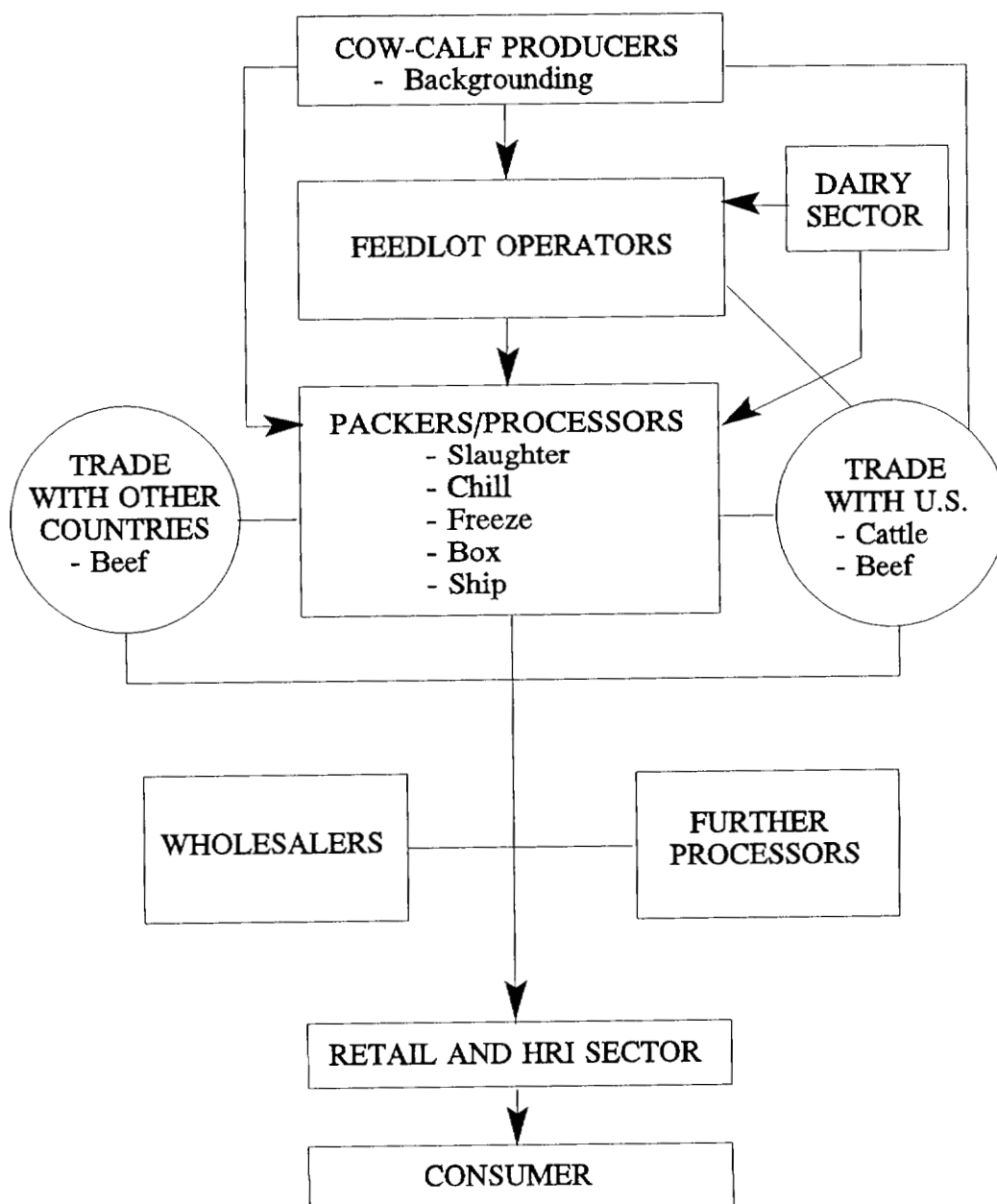
2. Backgrounding generally refers to a production stage during which a weaned calf is put in a growing/feeding program in preparation for feedlot finishing.

3. In Colorado, there seems to be a trend to feed more dry roughage, such as hay and flaked corn, than in the Corn Belt where high-moisture barley and corn silage is used.

4. Dual-purpose cattle are those cattle which are bred to produce both dairy and beef products.

Figure 2.1

BEEF FLOWCHART



Notes: Lines without arrowheads indicate two-way flow.
HRI sector=Hotel, restaurant and institutional sector.

they are broken into subprimal⁵ cuts which are vacuum-packed and sold to further processors, retailers and purveyors. The subprimal cuts are then transformed into retail cuts, manufacturing beef trimmings and by-products, such as fat and bone.

Approximately 25 percent of beef produced in Canada ultimately reaches the consumer in processed form, such as weiners, sausages and luncheon meats.⁶

Low-grade cattle (e.g. cull cows and bulls from both beef and dairy herds) are slaughtered, and the carcasses are usually deboned and processed into manufacturing beef products and cuts.

Specialization has been a characteristic of the Canadian cattle industry since the early 1960s. Prior to that time, the typical beef farm was based on combined cow-calf and finishing operations with relatively little emphasis on specialized cattle feeding. The shift to separate feedlot enterprises was driven by the increased availability of high-energy feed, the opportunity to increase margins through economies of scale and the growing demand for highly finished beef in North America. Virtually all slaughter steers and heifers in Canada are now finished in feedlots and account for about 80 percent of total Canadian beef production.

At any stage of cattle production and packing, cattle and beef may enter interprovincial and international trade. The major export destination for Canadian cattle and beef is the United States, while Canada's major suppliers are the United States, Australia and New Zealand.

b) Economic Significance

Cattle production is an important part of Canadian agriculture and an important agricultural export. The cattle herd is based on highly productive beef cattle breeds, the predominant ones being Hereford, Angus, Charolais and Simmental, which yield high-quality beef that is well-suited for the Canadian and U.S. markets.

Cash receipts⁷ from cattle and calves increased from \$3.6 billion in 1980 to \$3.9 billion in 1991 (an 8-percent increase over 1980) and to \$4.6 billion in 1992 (a 25-percent increase over 1980).

Alberta is the largest cattle-producing province, accounting for 41 percent of Canadian cattle receipts in 1992 (40 percent in 1991), up from 33 percent in 1980. Ontario is the second largest cattle-producing province, with receipts accounting for 22 percent of Canadian cattle receipts in 1992 (23 percent in 1991), down from 32 percent in 1980.

5. Subprimal cuts refer to cuts resulting from breaking primal cuts into smaller cuts. Primal cuts include the shoulder, rib, loin, hip, flank and plate.

6. Department of Industry, Science and Technology, *1990-1991 Industry Profile, Cattle Processing*, March 1993 at 2.

7. Statistics Canada, *Agriculture Economic Statistics*, Catalogue 21-603E. Total cash receipts include all sources of cash receipts from farming operations, such as crops, livestock and products, forest and maple products, provincial income stabilization, deficiency payments, dairy supplementary payments and any other supplementary payments.

The importance of cattle production in the farm economy has changed over the last decade and varies across Canadian regions. As a percentage of all cash receipts from farming, receipts from cattle and calves accounted for 23 percent in 1980, 18 percent in 1991 and 20 percent in 1992.

In 1992, cattle production accounted for 38 percent of total farm cash receipts in Alberta, 17 percent in Ontario, 19 percent in British Columbia, and 15 and 14 percent in Saskatchewan and Manitoba, respectively. As a percentage of total farm cash receipts, cattle production is less important in the Atlantic provinces and Quebec, accounting for 11 and 10 percent, respectively.

Trade with the United States in live cattle has increased the importance of the Canadian cattle industry as an export industry. In 1981, live cattle exports represented 1.5 percent of the value of all agricultural exports. By 1992, this had increased to 7 percent.⁸

In 1991, there was a total of 280,043 census farms⁹ in Canada, a 12-percent decrease since 1981. This compares to 145,747 farms¹⁰ which reported having cattle and calves in 1991, a decrease of 21 percent from 1981.

In 1992, Canada produced about 2 percent of the world's beef and veal supply. Beef and veal shipments, valued at approximately \$3.5 billion in 1989, accounted for about 40 percent of total shipments in the meat-processing sector.¹¹

c) Key Profile Statistics

(i) Supply and Disposition

- Cattle

Table 2.1 provides Canada's supply and disposition of cattle and calves since 1980. Supply and disposition figures include data for both beef and dairy cattle. Since the onset of the latest expansion phase of the cattle cycle¹² in Canada in 1987, the supply of cattle and calves in Canada has been increasing, due to both growing inventories and larger calf crops. In fact,

8. Statistics Canada, Summary of Canadian International Trade, December 1992, Catalogue 65-001 Monthly, March 1993.

9. Refers to any farm, ranch or other agricultural holding which produced at least one of the following products intended for sale: crops, livestock, poultry, animal products, greenhouse or nursery products, mushrooms, sod, honey, or maple syrup products.

10. Any farm which reported having at least one cattle or calf.

11. *Supra*, note 6. The meat-processing sector consists of red meat products, such as beef, veal, pork, lamb and horsemeat. The three major industries in the meat-processing sector include cattle processing, hog processing and further processing of meats.

12. The size of herds and the marketing of animals are determined by what is known as "the cattle cycle." Although the timing and length of cycles may vary between countries, there are similarities between cattle cycles of different countries where the supply and demand for cattle and beef are determined by market forces. Compared to other livestock cycles, such as the hog cycle which lasts approximately three years, the cattle cycle is relatively long. A cattle cycle in Canada typically lasts ten years. The cattle cycle is described in more detail later in this chapter.

from 1987 to 1991, total supply rose by 11 percent. Despite the increase in the supply of cattle and calves, slaughter levels decreased from 1987 to 1991, rising marginally in 1992. On the other hand, the volume of cattle and calves exported from Canada increased by more than 270 percent from 1987 to 1992. As a proportion of the domestic disappearance of cattle and calves, exports grew from 10 percent in 1987 to 25 percent in 1992.

Table 2.1

CANADA'S SUPPLY AND DISPOSITION OF CATTLE AND CALVES

(000 head)

Year	On Farms Jan. 1	Imports	Calf Crop	Total Supply	Slaughter		Death Loss	Exports	Domestic Disappearance
					Cattle	Calves			
1980	12,126	27	5,101	17,254	3,526	531	672	359	5,088
1981-86	11,684	76	4,918	16,678	3,645	609	611	379	5,244
1987	10,667	75	4,533	15,275	3,195	510	547	267	4,519
1988	10,756	37	4,840	15,633	3,086	491	560	511	4,648
1989	10,984	41	4,883	15,908	3,121	503	553	510	4,687
1990	11,220	14	4,858	16,092	2,892	462	566	884	4,804
1991	11,289	44	5,062	16,395	2,729	428	595	929	4,681
1992	11,713	36	5,185	16,934	2,872	421	597	1,311	5,201
1993	11,786								

Note: Domestic disappearance is the sum of slaughter cattle and calves, death loss and exports.

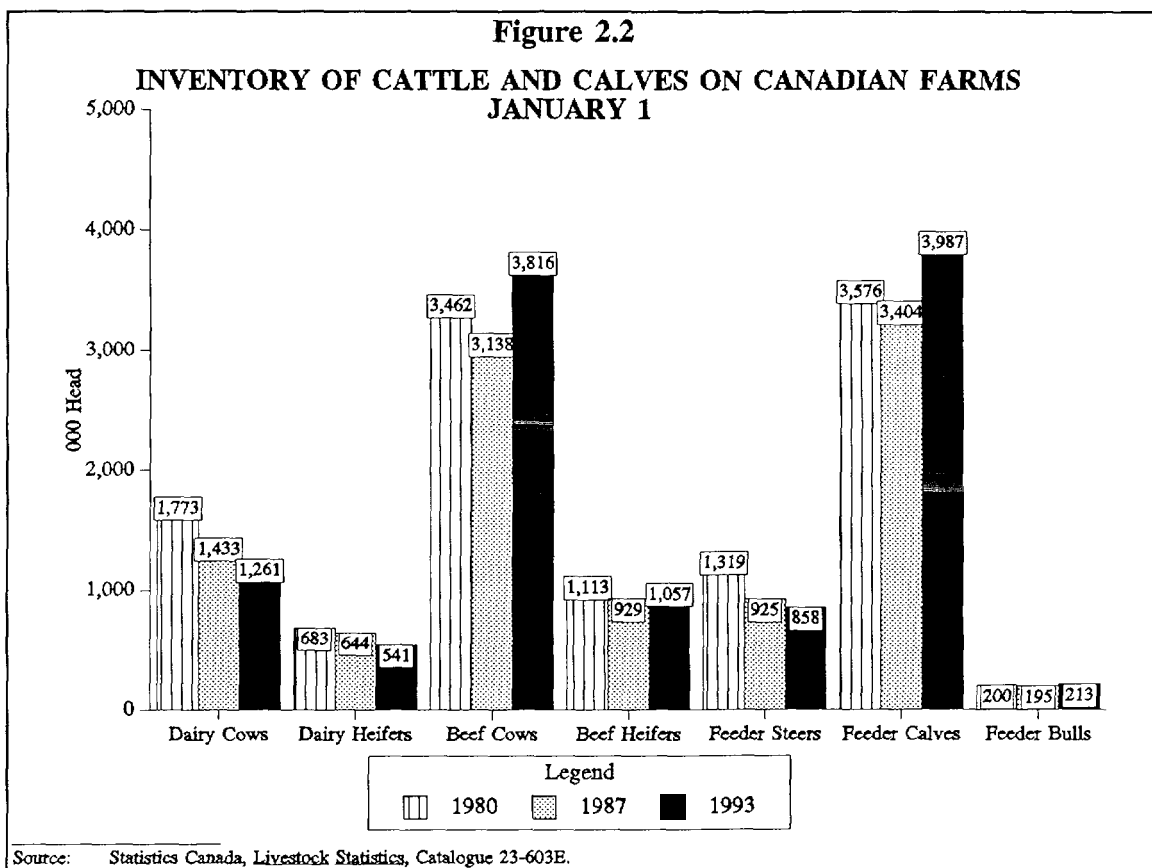
Source: Statistics Canada, *Livestock Statistics*, Catalogue 23-603E.

On January 1, 1993, there were 11.8 million head of cattle and calves on Canadian farms. This represented an increase of approximately 1.0 million head from the cyclical low in 1987, but was still lower than the 1980 level by about 0.4 million head. The herd expansion which began in 1987 is expected to continue at a moderate rate until at least 1996.¹³

The composition of the total cattle and calf inventory by type of cattle changed in the past decade (Figure 2.2).

The most significant change is in the inventory of dairy cows which has been declining since 1980 and which is currently at its lowest point. Two principal reasons explain this decline: first, the level of milk fat consumption has substantially decreased; and second, better feedstock and farm management have increased the level of production per animal. In 1980, dairy cows made up 15 percent of the total inventory of cattle and calves; by 1993, dairy cows constituted 11 percent of the total inventory.

13. Department of Agriculture, *Agri-Food Perspectives*, April 1993; and SCI Sparks Companies, Inc., *Agriculture Canada Commodity Outlook*, March 2, 1993, at 43-44.



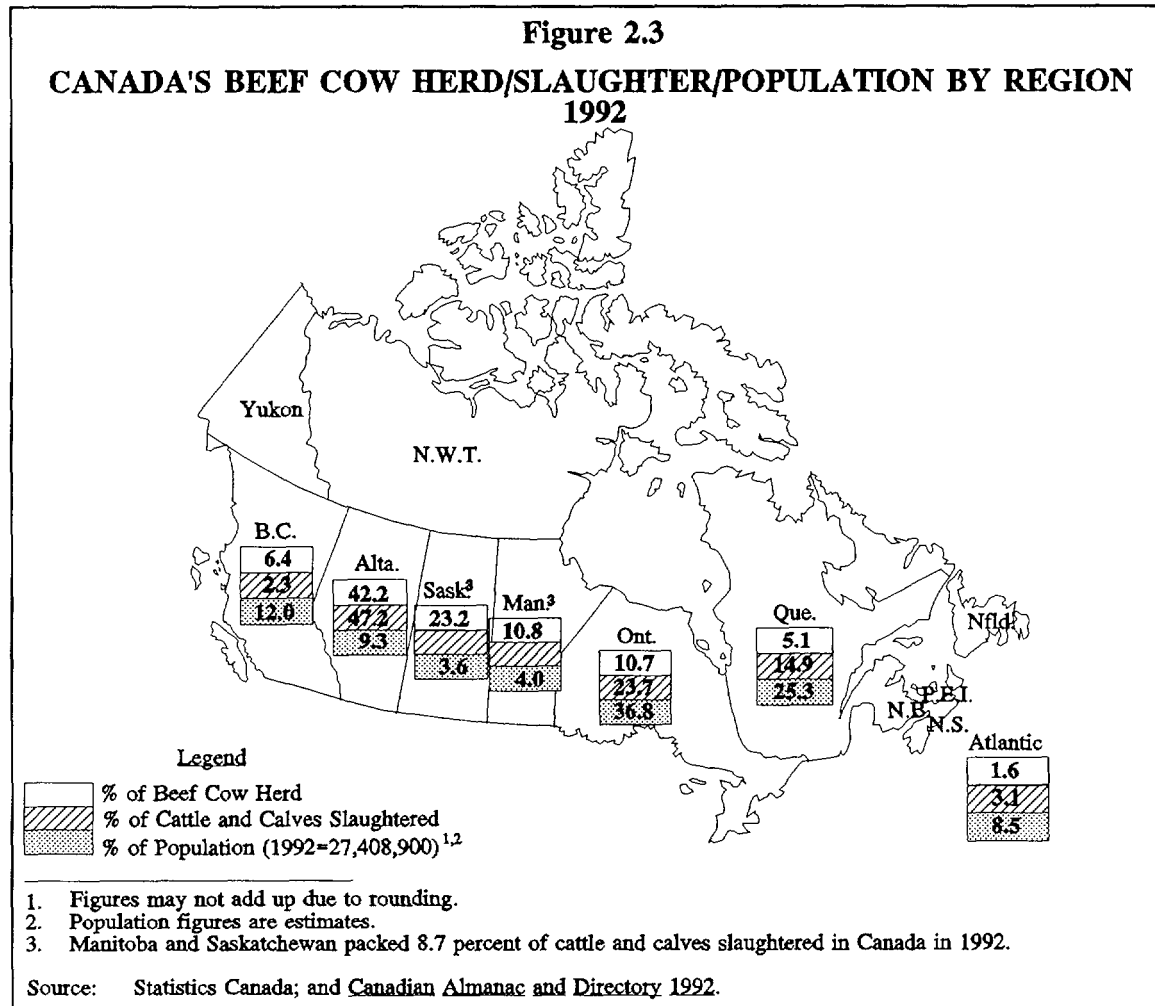
Unlike dairy cows, the inventory of beef cows rose in the past decade. The number of beef cows rose from 29 percent of the total inventory of cattle and calves in 1980 (3.5 million head) to 33 percent in 1993 (3.8 million head). The largest concentration of beef cows is found in Western Canada, especially in Alberta. In 1991, the average size of the beef cow herd in Canada was 38 head.¹⁴

Feeder calves and beef cows displayed similar growth trends. Feeder calf inventories increased from 29.5 percent of total inventory in 1980 (3.6 million head) to 34 percent in 1993 (4.0 million head).

The number of cattle and calves slaughtered in federally inspected plants decreased steadily from the mid-1980s to 1991. In 1991, total Canadian slaughter of cattle and calves was 3.2 million head (Table 2.1). This represents approximately 22 percent fewer head slaughtered than in 1980. Slaughter increased slightly in 1992. Cattle account for about 87 percent of all slaughter cattle and calves in Canada.

14. *Supra*, note 7.

In Canada, beef cattle production and slaughtering activities are concentrated in Western Canada, while the more populated eastern provinces import large quantities of beef from Western Canada and the United States. Figure 2.3 shows the regional distribution of the beef cow herd, cattle slaughtering and the Canadian population for 1992.



In 1992, Alberta had more than 42 percent of the national beef cow herd and accounted for more than 47 percent of Canada's cattle and calf slaughter, but had less than 10 percent of the national population. In comparison, Ontario and Quebec combined had approximately 16 percent of Canada's beef cow herd, slaughtered about 39 percent of Canada's cattle and calves, but had more than 62 percent of the national population.

- Beef

Table 2.2 provides Canada's supply and disposition of beef since 1980.

Table 2.2							
CANADA'S SUPPLY AND DISPOSITION OF BEEF							
(000 kg - carcass weight)							
Year	Production	Imports	Beginning Stock	Total Supply	Exports	Ending Stock	Domestic Disappearance
1980	938,790	78,203	26,952	1,043,945	65,003	27,383	951,559
1981-86	979,718	98,796	17,896	1,096,410	94,621	15,531	986,258
1987	912,966	133,589	13,192	1,059,747	88,873	11,632	959,242
1988	906,869	153,064	11,632	1,071,565	82,492	16,744	972,329
1989	908,400	158,420	16,744	1,083,564	104,027	16,419	963,118
1990	857,931	184,786	16,419	1,059,136	104,900	12,943	941,293
1991	823,681	217,372	12,943	1,053,996	105,262	15,018	933,716
1992	865,417	217,837	15,018	1,098,272	156,323	14,615	927,334

Note: Domestic disappearance equals total supply minus exports and ending stock.

Source: Statistics Canada, *Livestock and Animal Products Statistics*, Catalogue 23-203.

Between 1980 and 1991, total production decreased in Canada from 939 million kg to 824 million kg, a decline of 8 percent. In 1992, production increased to 865 million kg. From 1980 to 1992, beef production did not decline by as much as slaughter, since the average carcass weights increased. For example, between 1985 and 1992, the average carcass weights increased from 614 kg to 672 kg. During the same period, the volume of beef imported grew by 63 percent, to reach 217 million kg in 1991. Consequently, the total supply of beef remained fairly stable throughout the 1987-92 period.

From 1987 to 1992, exports increased by 67 million kg, stocks remained stable and the total domestic disappearance of beef declined moderately by 32 million kg, to reach 927 million kg in 1992.

Veal production increased during the period, the result of average carcass weights rising from 68.9 kg in 1985 to 106.1 kg in 1991.¹⁵

(ii) Cow-Calf and Feedlot Operations

Cattle operations can generally be classified either as cow-calf or feedlot operations. Cow-calf operations¹⁶ greatly outnumber feedlot operations in all Canadian regions. Between 1986 and 1991, the total number of operations which reported having some form of cow-calf operation increased by 6 percent, from 81,062 to 85,766 operations¹⁷ (Table 2.3).

Table 2.3
REGIONAL DISTRIBUTION OF COW-CALF¹ AND FEEDLOT OPERATIONS
IN CANADA

Region	Cow-Calf Operations				Feedlot Operations			
	1986	%	1991	%	1986	%	1991	%
Ontario	15,463	19	15,716	18	2,843	57	1,996	51
Saskatchewan	19,427	24	19,616	23	385	8	352	9
Alberta	24,177	30	27,349	32	1,078	22	989	25
Other	<u>21,995</u>	<u>27</u>	<u>23,085</u>	<u>27</u>	<u>659</u>	<u>13</u>	<u>568</u>	<u>15</u>
Canada	81,062	100	85,766	100	4,965	100	3,905	100

1. Does not include small operations with one to eight head of beef cattle.

Source: Department of Agriculture, Policy Branch, special tabulation of census of agriculture data, 1986 and 1991.

The greatest number of cow-calf operations is found in Alberta. Significant numbers are also found in Saskatchewan and Ontario. The provincial distribution of cow-calf operations fluctuated slightly between 1986 and 1991. In 1991, Alberta increased its 1986 share of Canada's cow-calf operations from 30 to 32 percent, while Ontario and Saskatchewan each lost 1 percent share over this period.

15. Statistics Canada, *Livestock and Animal Products Statistics*, Catalogue 23-203; and information provided by B. Rosien, Statistics Canada.

16. Cow-calf operations include those operations which perform a combination of activities such as cow-calf feeder and finisher-stocker, plus the "more specialized" cow-calf operations, but exclude small operations with one to eight head of beef cattle.

17. Department of Agriculture, Policy Branch, special tabulation of census of agriculture data, 1986 and 1991. Excludes small operations with one to eight head of beef cattle.

The cow-calf sector can be divided into those operations which are "more specialized"¹⁸ and those operations which perform a combination of activities such as cow-calf and feeder or finisher-stocker activities. Table 2.4 shows the breakdown of cow-calf operations by type.

Table 2.4				
COW-CALF OPERATIONS BY TYPE¹				
	1986		1991	
	No. of Operations	%	No. of Operations	%
More Specialized				
Cow-Calf Operations	56,486	70	68,994	80
Cow-Calf Finishers-Stockers	12,844	16	8,944	11
Cow-Calf Feeders	<u>11,732</u>	<u>14</u>	<u>7,828</u>	<u>9</u>
Total	81,062	100	85,766	100
1. Does not include small operations with one to eight head of beef cattle.				
Source: Department of Agriculture, Policy Branch, special tabulation of census of agriculture data, 1986 and 1991.				

The number of "more specialized" cow-calf operations increased by 22 percent, from 56,486 in 1986 to 68,994 in 1991. It appears that the major portion of this increase resulted from the fact that some 7,800 farmers reduced their activities in feeding, finishing and stocking cattle and calves and thus became "more specialized" cow-calf operations.

In the feedlot sector, certain significant structural changes have taken place in recent years. Between 1986 and 1991, the number of feedlot operations¹⁹ in Canada declined by 21 percent. Most of this decline took place in Ontario, as a greater proportion of cattle feeding shifted to Western Canada. In 1984, Eastern Canada fed approximately 31 percent of the nation's total, compared to Western Canada feeding 69 percent. By 1992, however, Eastern Canada's share had fallen to 24 percent of total fed cattle, with the remainder being fed in Western Canada, principally in Alberta where there is a preponderance of large-size feedlots. The average feedlot operation in Alberta contains 612 head, compared to 158 head in Ontario.

18. More specialized cow-calf operations as defined by the Department of Agriculture are operations with a number of slaughter calves equal to 30 percent of the number of beef cows.

19. Feedlot operations are either: (a) operations where all cattle and calves are kept for slaughter and number 25 head or more; or (b) where there is at least 1 beef cow and the number of slaughter cattle is at least 24 times the number of beef cows.

Various factors help explain the prominence of cattle feeding in Alberta. They include:

1. large grain production;
2. competitive grain prices;
3. adequate supply of feeder cattle;
4. efficient slaughtering plants;
5. moderate climate (in southern Alberta, temperatures below -20°C rarely prevail; consequently cattle need not expend considerable amounts of energy to keep warm, resulting in good feed conversion);
6. low precipitation rate which results in less mud, cleaner cattle and efficient feeding conditions; and
7. the combination of 5 and 6 above, resulting in minimal housing requirements for cattle.

(iii) Packing Operations

In Canada, about 90 percent of all cattle and calves are slaughtered in federally inspected plants.²⁰ Figure 2.4 shows that the number of federally inspected plants slaughtering cattle was at its highest in 1982 at 143 plants, but declined steadily thereafter. By 1992, there were 103 federally inspected plants slaughtering cattle in Canada.

The same trend applies to federally inspected plants slaughtering calves. The number of plants decreased by one third, from 120 plants in 1982 to 80 in 1992.

The major players in Canadian beef packing are: Cargill Foods, located in High River, Alberta; Lakeside Packers, located in Brooks, Alberta; Better Beef Limited, located in Guelph, Ontario; and XL Foods Ltd., located in Calgary, Alberta. These four establishments, which in 1992 accounted for approximately 53 percent of federally inspected cattle slaughter, up from 43 percent in 1991, dominate the Canadian market. This industry sector is very competitive, as these major players compete for market share in Canada and the United States.

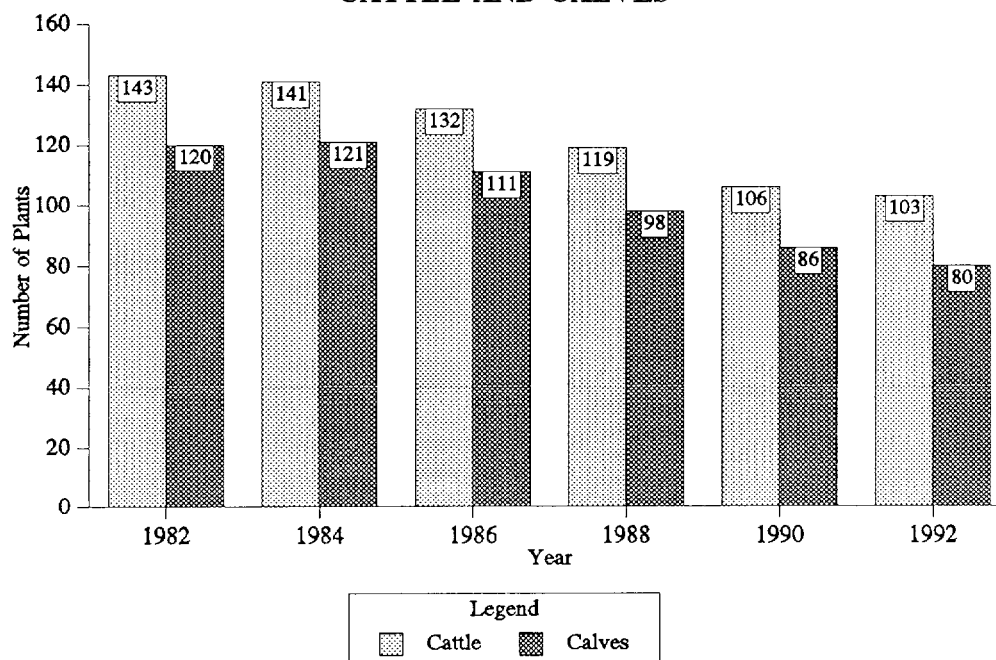
Of the federally inspected plants that slaughter cattle, the larger plants appear to be capturing market share at the expense of the smaller plants. In 1983, eight plants, each slaughtering over 140,000 head per year, accounted for 39 percent (1.3 million head) of the total commercial cattle slaughter. By 1992, there were four plants in this category: two slaughtering more than 200,000 head and two slaughtering more than 400,000 head. These four plants accounted for 53 percent (1.4 million head) of the total commercial cattle slaughter.

In 1983, there were three federally inspected plants slaughtering calves with a capacity of over 40,000 head per year. These three plants accounted for 43 percent (194,000 head) of the total calf slaughter in 1983. By 1992, there was only one plant in this category, accounting for approximately 17 percent of the total calf slaughter.

20. Approximately 89 percent of slaughter is federally inspected, 4 percent is provincially inspected and 7 percent is subject to other (or no) inspection.

Figure 2.4

CANADIAN FEDERALLY INSPECTED PLANTS SLAUGHTERING CATTLE AND CALVES



Source: Department of Agriculture, Food Production and Inspection Branch.

More and more, firms are locating efficient plants where key factors of production are most plentiful. The decision to locate in a specific area is influenced by a number of important elements, including the proximity to large feedlots, access to water and the ability to effectively manage waste water.

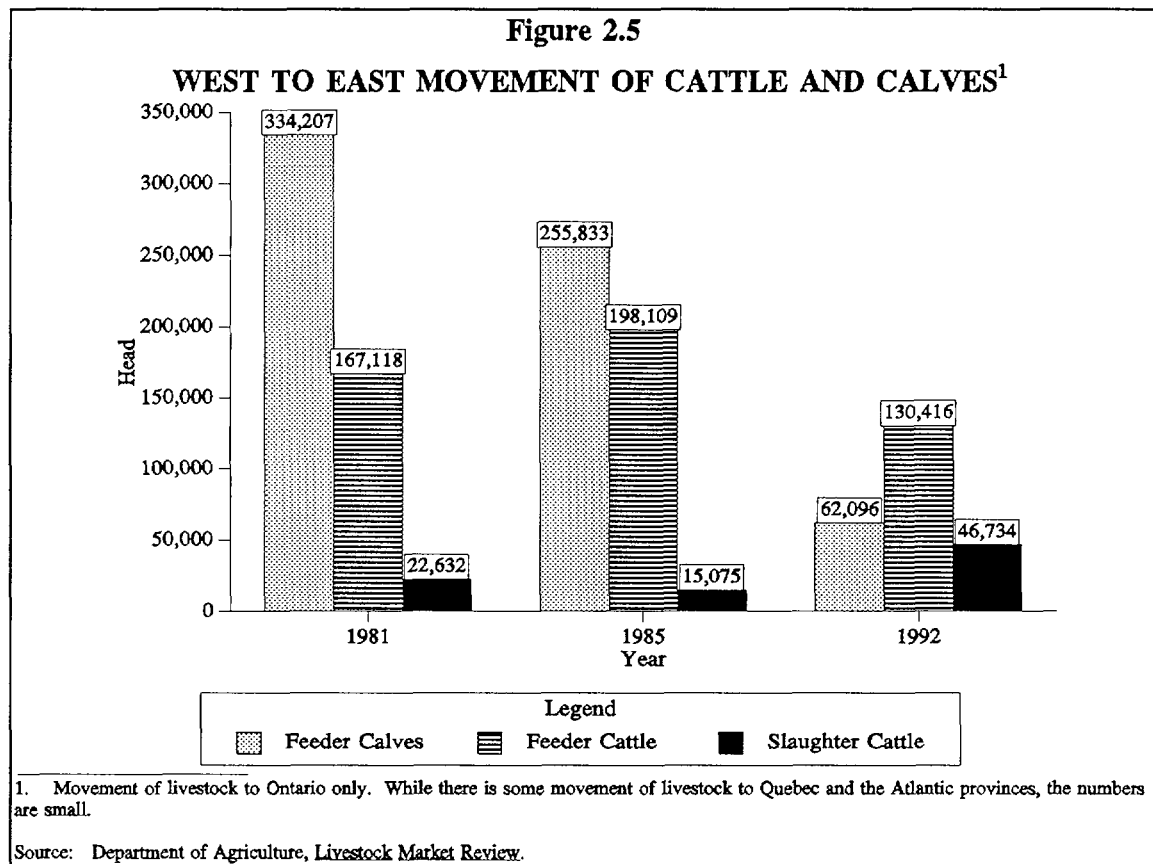
Over the years, there has been a trend in slaughter volume moving to Western Canada. Between 1980 and 1992, Alberta increased its share of total slaughter from 37 to 47 percent, while Ontario's share declined from 31 to 24 percent. Slaughter by type of animal differs on an east-west basis. Eastern Canada slaughters a greater proportion of calves, while Western Canada slaughters a greater proportion of cattle.²¹

21. The distribution of calf slaughter is a reflection of the location of the dairy industry. Dairy calves comprise the bulk of slaughter calves. The dairy industry is concentrated closer to major population centres, thus easing the difficulties inherent in the transportation and storage (i.e. spoilage) of bulk milk.

(iv) Interprovincial Trade and Transportation Issues

To balance the supply and demand for cattle, feeder and slaughter cattle and calves are traded interprovincially. Feeder cattle, and especially calves, from the surplus-producing Prairies have traditionally been shipped east, primarily to Ontario, for feedlot finishing and slaughter. However, the movement of cattle from Western Canada to Eastern Canada generally declined in the past decade.

In 1981, 334,000 feeder calves were shipped to Eastern Canada. By 1992, this volume had decreased to only 62,000 (Figure 2.5).



The decrease in shipments of feeder cattle to Eastern Canada was not as pronounced as it was for feeder calves, falling from 167,000 in 1981 to 130,000 in 1992. Against these trends, the movement of slaughter cattle to Eastern Canada, albeit limited over the years, increased from 23,000 head in 1981 to 47,000 in 1992.²²

22. This increase is largely the result of the need for additional slaughter cattle to supplement the regular supply in Ontario. It is uncertain, at this time, whether this represents a changing trend.

The decline in the movement of livestock to Ontario has reduced the activities of the beef-slaughtering industry in Ontario²³ and resulted in beef packers from Western Canada and the U.S. Midwest becoming major suppliers of beef to Eastern Canada.

A number of factors are likely to have contributed to fewer feeder cattle and calves moving from west to east. They include the increased demand for feeders in Western Canada, due in part to industry restructuring, the increased demand for feeders in the United States and the higher cost of transporting cattle as compared to beef.

- **Transportation Costs**

Transportation rates for trucking live cattle are influenced by three main factors:

1. freight moving from Ontario to Western Canada;²⁴
2. provincial regulation of equipment dimensions and load rates (weight);²⁵ and
3. seasonality of feeder cattle supply.²⁶

23. Ontario packers are located primarily in Guelph, Kitchener and Toronto. Ontario Ministry of Agriculture and Food, Ontario Beef Packer Situation Outlook, September 1988.

24. Most of the long-distance livestock haulers have developed freight contracts for products for which they can use specialized livestock equipment. The freight business going west is subject to different seasonal demands compared to livestock. Because freight becomes the "front-end haul" and livestock the "back-end haul," livestock rates are subject to more rate cutting when there is more equipment in Western Canada available to haul livestock east than there is livestock to haul. However, when the seasonal movement of livestock is at its heaviest, livestock becomes the "front-end haul."

25. Generally, Ontario and Quebec have been less restrictive on load rates and more restrictive on equipment lengths, while provinces in Western Canada have been the opposite. Recently, the Ontario government agreed to allow the same length dimensions for trucks as was agreed to by the western provinces in the late 1980s. This change should introduce the opportunity for further cost efficiencies, as transporters update their equipment to the new standards.

26. Ontario Cattlemen's Association estimates are assembled for the data input to the National Tripartite Stabilization Program. Trucking rates vary according to season to reflect changes in demand. For example, average trucking rates from Alberta to southwestern Ontario ranged between \$5.50/cwt in July and August 1992, and \$9.00/cwt in October and November 1992.

Table 2.5 shows a comparison of the shipping costs of transporting live cattle and beef.

Table 2.5		
ESTIMATED COSTS OF SHIPPING CATTLE AND BEEF FROM WESTERN CANADA TO ONTARIO		
(\$/head)		
	From Alberta	From Calgary
Fed Cattle ¹	112.50	-
Swinging Beef (carcasses) ²	-	45.50
Boxed Beef ³	-	29.91

Note: Costs as of October 1993.

1. A load of fed cattle (50,000 lbs) transported from Alberta to Ontario would have cost \$4,500 (500 cwt x \$9.00/cwt), or \$112.50 per head assuming an average live weight of 1,250 lbs per animal. As a result, approximately 40 head of live fed cattle can be transported in one shipment.
2. A load of swinging beef (55,000 lbs on a triple axle trailer) transported from Calgary to Toronto would have cost \$3,575 (550 cwt x \$6.50/cwt), or \$45.50 per head assuming a 700-lb. carcass. As a result, the equivalent of approximately 78 head of cattle can be transported in one shipment.
3. A load of boxed beef (55,000 lbs on a triple axle trailer) transported from Calgary to Toronto would have cost \$3,163 (550 cwt x \$5.75/cwt), or \$29.91 per head. Due to the fact that there is less bone, blood and waste in boxed beef than in swinging beef, only about 520 lbs per head is shipped. As a result, an equivalent of about 105 head of cattle can be transported in a boxed beef shipment.

Source: Ontario Cattlemen's Association; and the Canadian Meat Council.

Compared to the cost of transporting carcass beef and boxed beef, the uncompetitiveness of shipping fed cattle becomes very evident. In October 1993, the average cost of transporting fed cattle from Alberta to southwestern Ontario was estimated at \$112.50 per head.²⁷ This is significantly higher than the costs estimated for transporting swinging beef at \$45.50 per head and boxed beef at \$29.91 per head. In terms of cost per head, transporting boxed beef is far superior to the alternatives.

27. The Ontario Cattlemen's Association explained that, in some instances, a packer that is in a position to transport slaughter cattle has a little more negotiating strength than a producer moving feeder calves. In this regard, the average rate per head calculated for moving slaughter cattle may be somewhat less than the per-head cost of \$112.50 as estimated above. In addition, there is considerable variability in transportation rates depending on the time of year.

2. U.S. Cattle and Beef Industries

a) Economic Significance

Cattle production is an important part of U.S. agriculture. The predominant beef cattle breeds are Hereford, Angus and Shorthorn in the north and west, and Brahman in the south. Larger, leaner breeds, such as Charolais, Limousin, Simmental and Chiani, are also popular.

Cash receipts from cattle and calves increased from US\$32 billion in 1980 to US\$39 billion in 1991, a 22-percent increase.

The Great Plains²⁸ dominated the United States in cash receipts from cattle and calves throughout the 1980-91 period. In 1991, the Great Plains accounted for 49 percent of such cash receipts, up from 43 percent in 1980. The percentage shares of cash receipts from cattle and calves remained relatively constant during the 1980-91 period in the western,²⁹ southeastern³⁰ and northeastern states,³¹ whereas the north-central states³² lost some ground.

The importance of cattle production in the farm economy in the United States has remained fairly stable over time. As a percentage of all cash receipts from farming,³³ receipts from cattle and calf production remained at 23 percent in both 1980 and 1991.

In terms of the number of farms, in 1987, 1.2 million farms reported having cattle and calves, a decrease of 13 percent from 1982. This compares with a total of 2.1 million census farms in the United States in 1987, a decrease of 7 percent since 1982.

In 1992, the United States provided 22 percent of the world's beef and veal supply. International trade is important to the U.S. cattle and beef industries. In 1992, the United States became a net exporter of beef and veal, in value terms.

28. The Great Plains include Kansas, Nebraska, North Dakota, South Dakota, Oklahoma and Texas.

29. The western states include Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming.

30. The southeastern states include Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.

31. The northeastern states include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont.

32. The north-central states include Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio and Wisconsin.

33. Cash receipts from farming include cash receipts from farming operations, such as crops, livestock and products, and government payments.

b) Key Profile Statistics

(i) Supply and Disposition

- Cattle

Table 2.6 shows that the U.S. cattle inventory declined from 111 million head in 1980 to almost 101 million head in 1993. During this declining phase of the U.S. cattle inventory, imports of live cattle and calves supplemented the total available supply, thus helping to maintain beef production levels. The share of U.S. domestic disappearance provided by imports rose from 1.6 percent in 1980 to 5.4 percent in 1990. After falling slightly to 5.0 percent in 1991, imports increased again in 1992, hitting 5.7 percent of U.S. domestic disappearance. On the other hand, U.S. exports of live cattle are equal to less than 1.0 percent of domestic disappearance.

Table 2.6

U.S. SUPPLY AND DISPOSITION OF CATTLE AND CALVES

(000 head)

Year	On Farms Jan. 1	Imports	Calf Crop	Total Supply	Slaughter ¹		Death Loss	Exports	Domestic Disappearance
					Cattle	Calves			
1980	111,242	681	44,938	156,861	34,116	2,679	5,413	66	42,274
1981-86	112,186	930	42,909	156,025	36,741	3,243	5,247	84	45,315
1987	102,118	1,200	40,152	143,470	35,890	2,902	4,800	131	43,723
1988	99,622	1,332	40,588	141,542	35,324	2,565	4,657	321	42,867
1989	98,065	1,459	40,102	139,626	34,106	2,223	4,452	169	40,950
1990	98,162	2,135	39,249	139,546	33,439	1,838	4,425	120	39,822
1991	98,896	1,939	39,026	139,861	32,885	1,484	4,371	311	39,051
1992	99,559	2,253	39,335	141,147	33,059 ²	1,410 ²	4,400 ²	322	39,191
1993	100,892								

1. Commercial and non-commercial slaughter.

2. Preliminary.

Source: U.S. Department of Agriculture, Livestock and Poultry: Situation and Outlook Report, February 1993.

In 1987, imports as a percentage of domestic disappearance began a steady increase. This increase in imports of live cattle coincided with the observed increase in Canadian exports.

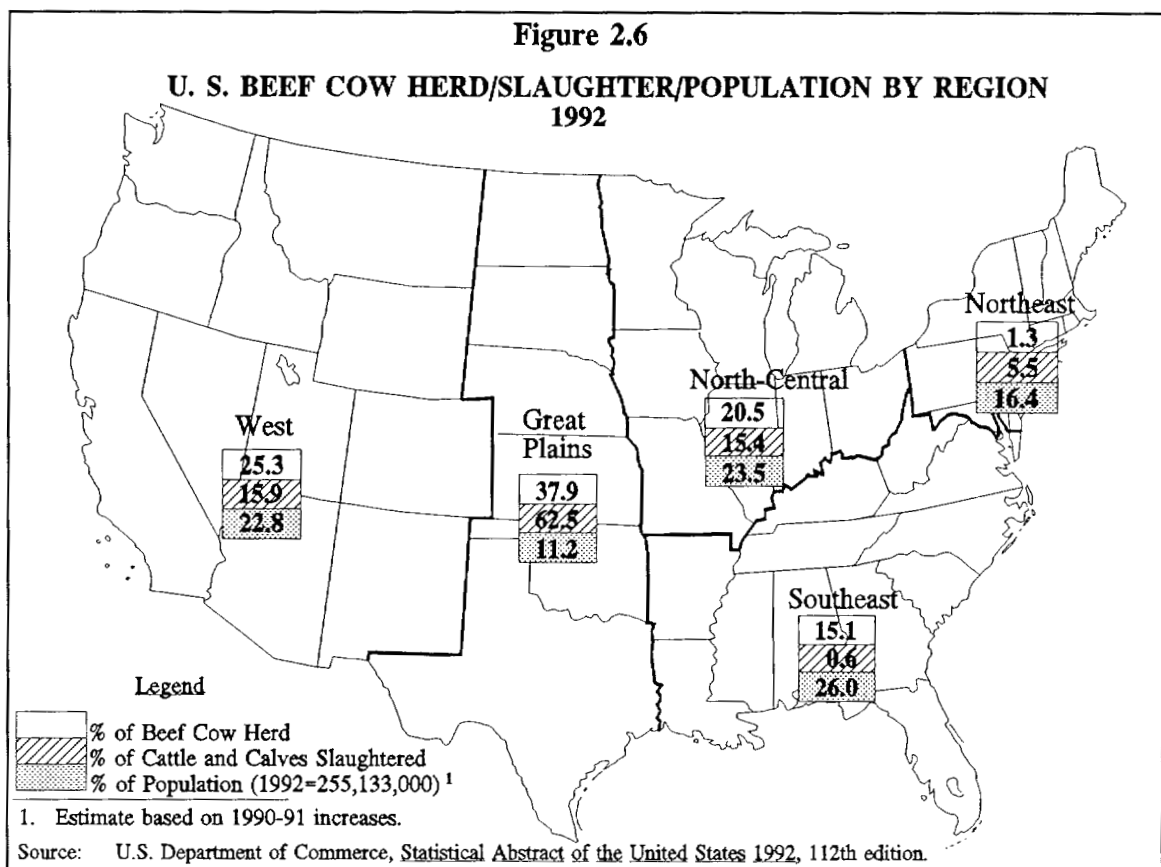
Between 1980 and 1993, the U.S. cattle and calf inventory underwent periods of contraction and expansion. The cattle cycle appeared to enter an expansion phase from 1980 to 1982, when the inventory increased to 115.4 million head. Economic and climatic problems, however, quickly put an end to the expansion phase. The U.S. cattle and calf inventory then

continued its earlier slide, declining by over 17 million head (15 percent) during this liquidation phase. The expansion phase of the most recent cattle cycle, albeit small, began in 1989.

Unlike the dairy cattle herd in Canada, which declined in percentage terms, in the United States, dairy cows have maintained a 10-percent share of a declining total inventory from 1980 to 1993. Similarly, the inventory of beef cows as a share of the total inventory remained relatively constant, 33 percent in 1980 and 34 percent in 1993.

Since 1980, the annual cattle slaughter in the United States has ranged between 32.9 and 36.7 million head. Steers and heifers comprise about 75 percent of federally inspected slaughter. On average, cull cattle from dairy and beef herds account for an additional 18 to 20 percent.

In the United States, beef cattle production and slaughtering activities are concentrated in the West, particularly in the Great Plains. Figure 2.6 shows the regional distribution of the beef cow herd, cattle slaughtering and U.S. population for 1992.



In 1992, the Great Plains and the western states had more than 63 percent of the national beef cow herd and accounted for more than 78 percent of the U.S. cattle slaughter. These regions had 34 percent of the national population.

- Beef

Table 2.7 provides the U.S. supply and disposition of beef since 1980.

Table 2.7								
U.S. SUPPLY AND DISPOSITION OF BEEF ¹								
(million kg - carcass weight)								
Year	Production ²	Imports ³	Beginning Stock ⁴	Total Supply ⁵	Exports ³	Shipments to U.S. Territories ³	Ending Stock ⁴	Domestic Disappearance
1980	9,817	936	208	10,961	78	21	196	10,666
1981-86	10,574	883	187	11,644	143	21	186	11,294
1987	10,689	1,029	187	11,905	272	25	175	11,433
1988	10,700	1,079	175	11,954	308	29	191	11,426
1989	10,472	988	191	11,651	464	28	152	11,007
1990	10,316	1,069	152	11,537	456	31	180	10,870
1991	10,395	1,091	180	11,666	539	N/A	190	10,937

1. Edible offals are not part of the carcass and, therefore, are not included.

2. Includes commercial and farm production.

3. Beginning in 1989, trade data include beef and veal.

4. Cold-storage holdings in public and private warehouses and packing plants whose food products are normally stored for 30 days or more. Excluded is stock in space maintained by wholesalers, jobbers, distributors, chain stores, locker plants containing individual lockers, meat packer branch houses, frozen-food processors whose entire inventories are turned over more than once a month and the Armed Forces.

5. Computed from unrounded data.

N/A = Not available.

Source: U.S. Department of Agriculture, Livestock and Poultry: Situation and Outlook Report, and Food Consumption, Prices and Expenditures, 1970-90.

Between 1980 and 1991, total production of beef increased in the United States by close to 6 percent, from 9,817 million kg to 10,395 million kg. However, in response to the decrease in cattle slaughter, the production of beef in the United States fell steadily from 1988 to 1990, with a marginal increase in 1991. Imports of beef remained relatively stable, therefore, the supply of beef decreased only slightly from 11,954 million kg in 1988 to 11,666 million kg in 1991. Although the volume of beef exports increased during this period, exports remained small in relative terms.

(ii) Cow-Calf and Feedlot Operations

- Cow-Calf Operations

The cow-calf operation is the most common type of cattle-raising enterprise in the United States. Since many farms have a few hectares of permanent pasture, hay or grazing area, about 40 percent of all U.S. farms had some beef cows in 1987.³⁴ In 1991, the average size of beef cow herds in the United States was 37 head.³⁵

There is a long-term, downward trend in the number of producers in the beef cow industry. Between 1986 and 1992, the number of beef cow operations in the United States declined steadily from 1.0 to 0.9 million. This 10.5-percent decline is a reflection of smaller-scale producers, perhaps faced with unacceptable levels of profitability, exiting the industry, and of the subsequent expansion by larger operators.³⁶ Besides the question of profitability and consolidation, urbanization may further explain the decline in the number of operators in some areas of the United States.

Beef cow operations are concentrated mostly in the Southeast, the Great Plains and the North-Central regions. These areas accounted for over 85 percent of the total number of beef cow operations in 1992.

Throughout the 1987-91 period, Texas, Missouri, Tennessee, Oklahoma and Kentucky consistently reported the largest numbers of beef cow operations.³⁷ Over one third of the operations were located in these five states. In 1991, Texas led with 13 percent of the total operations, followed by Missouri (7 percent), Tennessee (6 percent), Oklahoma (6 percent) and Kentucky (5 percent).

- Feedlot Operations

There are substantially fewer feedlot operations³⁸ today than in the past. In 1992, there were 46,446 feedlots in the 13 major feeding states,³⁹ down about 40 percent from 78,071 feedlots in 1980. Despite the decline in the number of feedlot operations in the past decade, the number of cattle marketed from feedlots has remained relatively constant.

34. U.S. Department of Commerce, Census of Agriculture (1987), 1990.

35. National Cattlemen's Association, Cattle and Beef Handbook - Facts, Figures and Information, Revised 1992, Economics at 3.

36. U.S. International Trade Commission, The Competitive Position of Canadian Live Cattle and Beef in U.S. Markets, July 1987 at 14.

37. Canadian International Trade Tribunal, Competitiveness of the Canadian Cattle and Beef Industries in the North American and World Markets, Staff Report, August 1993, Appendix 3.4 at 528-33.

38. The U.S. Department of Agriculture defines "feedlot operations" as those with one or more animals during the course of the year that are "on feed" (i.e. animals being fed a ration of grain, silage, hay and/or protein supplements to prepare them for slaughter).

39. The 13 most important cattle-feeding states account for close to 90 percent of the nation's fed cattle. They are Arizona, California, Colorado, Idaho, Illinois, Iowa, Kansas, Minnesota, Nebraska, Oklahoma, South Dakota, Texas and Washington.

The feedlot sector in the United States is more concentrated than the cow-calf sector. Much of the reported decline in the number of feedlots is accounted for by small, non-commercial operations, with a one-time capacity of under 1,000 head. In recent years, competition for reduced supplies of feeder cattle has directly affected the small cattle feeders, which have seen the largest number of producers exit the business.⁴⁰ Between 1980 and 1992, the number of small feedlots in the 13 major cattle-feeding states decreased by 41 percent, while the number of large feedlots, with a one-time capacity of 16,000 head or more, increased by 11 percent. From 1980 to 1992, the number of feedlots in the largest category (i.e. 32,000 head or more) increased from 67 to 82.

Large feedlots are concentrated in Texas, Nebraska, Kansas and Colorado. The 175 large feedlots (i.e. with 16,000 head or more) from these four states accounted for 46 percent of the total fed cattle marketings from the thirteen states.

(iii) Packing Operations

Commercial slaughtering includes slaughter in federally inspected and other plants, primarily state-inspected plants, while excluding livestock slaughtered on farms. Almost all of commercial slaughter, averaging 97 percent,⁴¹ takes place in federally inspected plants, as interstate trade requires federal meat inspection in the United States.

Figure 2.7 shows that the number of federally inspected plants slaughtering cattle peaked at 1,506 in 1982, then declined by 36 percent to 971 plants by 1992. A similar trend occurred in plants slaughtering calves. The number of plants peaked at 854 in 1984, then fell significantly (by 50 percent) during the remainder of the period. These trends reflect the rationalization taking place in this sector. In fact, the slaughter sector is the most concentrated of all the sectors in the cattle and beef industries.

The location of the slaughter industry is now oriented more to livestock production than to consumption centres because of the ease and lower cost, compared to livestock, of shipping boxed meat.⁴² The beef-packing industry is concentrated near the large commercial feedlots. The top four states for fed cattle marketings also account for much of the commercial cattle slaughter in federally inspected plants. In 1992, Nebraska, Kansas, Texas and Colorado accounted for 20.0, 18.4, 17.3 and 7.5 percent, respectively, of the U.S. commercial cattle slaughter. These top four states have alternated rank from year to year.

With respect to calf slaughter, New York, Wisconsin and Pennsylvania accounted for 17, 14 and 12 percent, respectively, of the U.S. calf slaughter activity.⁴³

40. U.S. Department of Agriculture, Livestock and Poultry: Situation and Outlook Report, "An Analysis of Fed Cattle Marketings by Region and Feedlot Capacity" by S. Reed, February 1989 at 39.

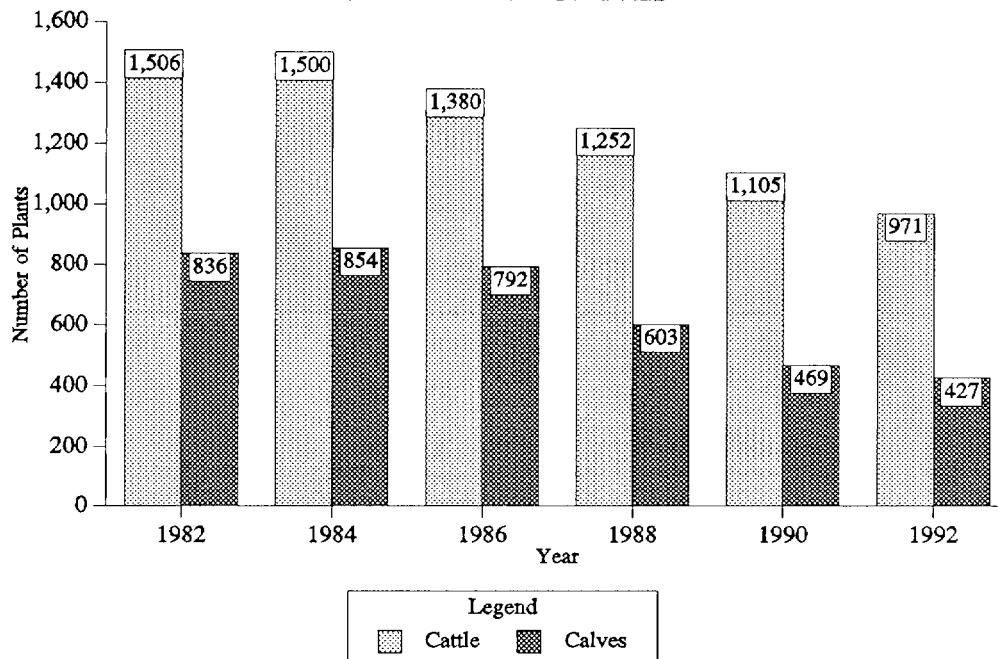
41. U.S. Department of Agriculture, Livestock Slaughter: Annual Summary.

42. U.S. Department of Agriculture, Economics of the U.S. Meat Industry (Agricultural Information Bulletin No. 545) by R.J. Crom, November 1988 at 33.

43. As in the case of Canada, calf slaughter in the United States is centred in the eastern states where the dairy industry is concentrated.

Figure 2.7

U.S. FEDERALLY INSPECTED PLANTS SLAUGHTERING CATTLE AND CALVES



Source: U.S. Department of Agriculture, *Livestock Slaughter: Annual Summary*.

Of the federally inspected plants that slaughter cattle, the large plants are capturing market share. In 1982, there were 12 large plants (500,000 head or more), accounting for 28 percent (9.4 million head) of the cattle slaughter. By 1992, there were 20 plants in this category, representing 2 percent of total plants and handling 60 percent (19.2 million head) of commercial slaughter. This trend towards concentration and scale suggests that there is an economic advantage for the very large plants.⁴⁴

Mergers and acquisitions played an important role in increasing concentration in the beef-packing sector during the 1980s. In 1992, IBP Inc. held a 25.4-percent share of the total slaughter, followed by ConAgra Red Meat Cos. with 15.9 percent, and Cargill Foods with 14.4 percent.⁴⁵

A further characteristic of the beef-packing sector is the degree of "vertical coordination." In the 1990s, the larger beef packers have gained more control over the feeding and final packaging sectors of the industry than they had in the 1980s. Moreover, beef packers are also

44. U.S. International Trade Commission, *Live Cattle and Beef: U.S. and Canadian Industry Profiles, Trade and Factors of Competition*, January 1993 at 2-5.

45. *Supra*, note 37, Appendices 3.11 and 3.12 at 553-55.

increasingly entering into forward contracts, i.e. contracts to purchase cattle at a future date, and special marketing arrangements with feeders to ensure a steady supply of fed cattle for slaughter.⁴⁶

3. Comparative Review of Canada and the United States

The following sections provide a comparative review of certain principal features of the cattle and beef industries in Canada and the United States.

a) Summary Statistics

Table 2.8 provides some key statistics of the cattle and beef industries in Canada and the United States.

Table 2.8						
SUMMARY OF KEY STATISTICS OF THE CATTLE AND BEEF INDUSTRIES IN CANADA AND THE UNITED STATES						
	Canada			United States		
	1980	1992	% Change	1980	1992	% Change
Farm Cash Receipts						
Cattle and Calves (\$)	3.6 billion	4.6 billion ¹	+27.8	37.4 billion	45.4 billion ²	+21.4
Inventories						
Cattle and Calves (000 head), as of January 1	12,126	11,713	- 3.4	111,242	99,559	-10.5
Imports						
Cattle and Calves (000 head)	27	36	+33.3	681	2,253	+230.8
Beef (million kg)	78	218	+178.6	936	1,091 ²	+16.6
Exports						
Cattle and Calves (000 head)	359	1,311	+265.2	66	322	+387.9
Beef (million kg)	65	156	+140.5	78	539 ²	+591.0
Slaughter (000 head)	4,057	3,293	-18.8	36,795	34,469 ¹	-6.3
Beef Production (000 kg)	938,790	865,417	-7.8	9,817,000	10,395,000 ²	+5.9
	Canada			United States		
	1986	1992	% Change	1986	1992	% Change
Number of Operations						
Cow-Calf	81,062	85,766	+6.0	1,013,570	907,630	-10.5
Feedlot	4,965	3,905	-21.3	48,592	46,446	-4.4
Packing Plants (cattle)	132	103	-21.9	1,380	971	-29.6
Packing Plants (calves)	111	80	-27.9	792	427	-46.1
1. Preliminary.						
2. 1991 data.						

46. U.S. General Accounting Office, Beef Industry - Packer Concentration and Cattle Prices, December 1990 at 5.

b) Cattle Cycles

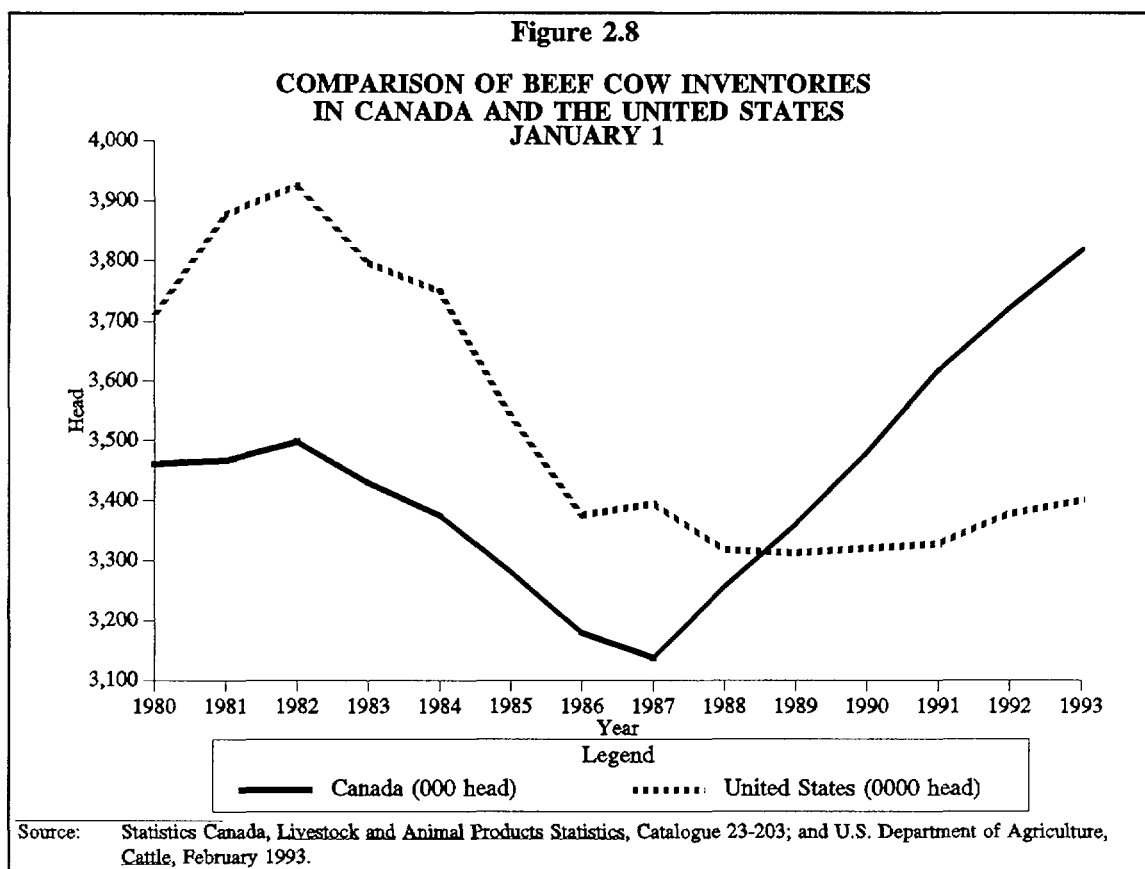
The size of beef herds and the marketing of animals are influenced by what is known as the "cattle cycle." The cattle cycle has four distinct phases (consolidation, expansion, peak and reduction) and, historically, in Canada and the United States, a cycle takes 10 years to complete.

Over the years, cattle cycles in Canada and the United States have tended to track one another quite closely. However, there has been an important divergence in the most recent cycle, which saw expansion of the herd begin in 1987 in Canada, but not until 1989 in the United States. Further, the extent of herd expansion during this latest cycle has been much less in the United States than in Canada. That is, from January 1, 1987, to January 1, 1993, the cattle herd in Canada increased by nearly 10 percent, whereas in the United States, from January 1, 1989 (when the U.S. expansion phase began) to January 1, 1993, the cattle herd expanded by only 3 percent. (The comparable four-year period in Canada shows a cattle herd increase of 7 percent.)

Different factors may explain the difference between the two countries in the timing of the onset of the expansion phase. For instance, the severe droughts in the late 1980s in the western United States resulted in increased levels of herd slaughter. On the other hand, low grain prices in Western Canada may have encouraged farmers to increase the size of their herds.

This most recent expansion phase has not been felt evenly across the different regions of Canada and the United States. For example, in Manitoba, Saskatchewan and Alberta, the total cattle and calf inventory increased significantly. On the other hand, the cattle and calf inventory in Ontario decreased as of January 1, 1993. Similarly, in the United States, the cattle herds in the Great Plains and the Southeast expanded, from January 1, 1989, to January 1, 1993, while those in the West, North-Central and Northeast regions remained relatively stable.

Figure 2.8 shows a comparison of beef cow inventories in Canada and the United States from 1980 to 1993. To facilitate the comparison, the U.S. beef cow numbers have been divided by 10. The figure shows that, between 1982 and 1987, beef cow inventories in the two countries generally followed a similar decreasing trend. However, in 1987, Canada's inventory began a significant upward swing, while the beef cow inventory in the United States levelled off and increased slightly in 1992 and 1993. On a regional basis, Alberta's share of the beef cow inventory increased from 39.9 percent in 1980 to 42.5 percent in 1993.

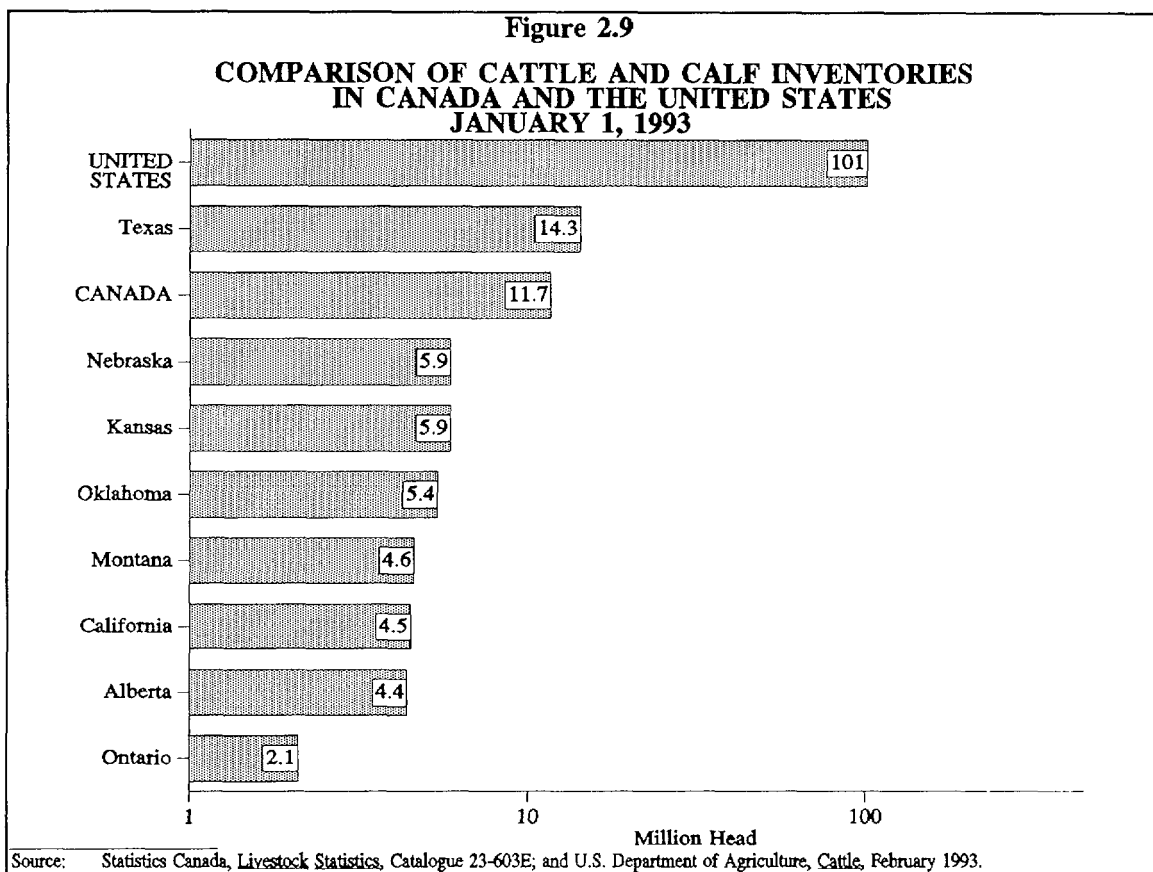


c) Magnitude of Inventories

Figure 2.9 demonstrates the relative size of the inventories of cattle and calves in Canada, Alberta and Ontario in comparison with the inventories of cattle and calves in the United States and its major producing states. Texas, alone, has more cattle and calves than all of Canada. However, Alberta's inventory of 4.4 million head is very comparable with inventories of the other top-producing U.S. states.

The total inventory of cattle and calves in the United States is approximately nine times the inventory in Canada (including both dairy and beef herds). Since 1980, the size of the dairy herd in both countries has fallen, while the total size of the beef herd in Canada has increased.

The fluctuations in the size of the cattle and calf inventory have been reflected differently in the production of beef in Canada and the United States. In Canada, the cattle and calf inventory decreased by 3 percent between 1980 and 1993, while beef production decreased by 8 percent. However, the overall supply of beef in Canada increased, due to a 178-percent increase in beef imports over the time period.



Source: Statistics Canada, *Livestock Statistics*, Catalogue 23-603E; and U.S. Department of Agriculture, *Cattle*, February 1993.

In the United States, the cattle and calf inventory decreased by 9 percent between 1980 and 1993, while beef production increased by 6 percent between 1980 and 1991.

d) Location of Feeder Cattle Production

Over the past 12 years, there has been relatively little change in the United States in the regional distribution of feeder cattle production, as measured by the inventory of beef cows. The Great Plains represented 38 percent of the beef cow herd in both 1980 and 1993. However, in more recent years, Canada has experienced an increase in concentration of feeder cattle production in Alberta.

e) Location and Rationalization in the Feeding Industry

There have been significant shifts in the location of the cattle-feeding industry in both Canada and the United States.

In Canada, the percentage of the feeder steer, calf and bull inventory held by Western Canada rose significantly from 65 percent in 1980 to 75 percent on January 1, 1993. In 1993, Alberta alone accounted for approximately 43 percent of fed cattle production, up from

34 percent in 1980. Ontario's share of the national fed cattle production decreased from 26 percent in 1980 to 17 percent in 1993.

A similar east-to-west shift in the location of the cattle-feeding industry has taken place in the United States. The cattle-feeding industry has moved from traditional feeding states in the North-Central region, in Indiana, Iowa, Illinois and Minnesota, to the Great Plains. Today, four states have come to dominate the cattle-feeding industry: Texas, Nebraska, Kansas and Colorado.⁴⁷

In Canada, the number of feedlot operations decreased by 21 percent between 1986 and 1992, while remaining relatively unchanged in the United States. However, major reductions in the number of feedlots in the United States took place during the period from 1980 to 1986.

f) Location and Rationalization in the Beef-Packing Industry

The last decade also saw a significant shift in the location and concentration of the beef-packing industry in both countries, with the important cattle-feeding regions in each country accounting for a larger proportion of the cattle slaughter.

In Canada, between 1980 and 1992, Alberta's share of the volume of cattle and calves slaughtered in federally inspected establishments rose from 37 to 47 percent. During the same period, Ontario's share of the total fell from 31 to 24 percent. Similarly, the proportion of the total cattle and calf slaughter in Manitoba and Saskatchewan also decreased.

Similar trends were seen in the United States, cattle slaughter becoming more concentrated in the Great Plains, which accounted for 56 percent of total slaughter in 1992, up from 43 percent in 1980. Conversely, the share held by the North-Central region had fallen from 22 to 15 percent by 1992.

Another important phenomenon that has been taking place in the beef-packing industry in both countries is the significant increase in the degree of concentration. Cattle slaughtering is becoming increasingly accounted for by a smaller number of large plants.

Rationalization in the beef-packing industry has progressed further in the United States than in Canada. That is, from 1986 to 1992, the total number of packing plants slaughtering cattle in the United States fell by 30 percent, compared to a decline of 23 percent in Canada.

Packing plants slaughtering calves have undergone even more severe rationalization in both Canada and the United States. Between 1986 and 1992, the number of plants slaughtering calves decreased by 28 percent in Canada and by over 46 percent in the United States.

47. Colorado is considered to be part of the West.

4. Mexican Cattle and Beef Industries⁴⁸

Mexico, a country which is approximately one fifth the size of Canada, has a population of 85 million, three quarters of whom live in urban areas. Politically, the country is a federation of 32 states which are usually grouped into six regions: North, Central, West, Gulf, South and Peninsula (Figure 2.10). For analytical purposes, the country has been divided into two areas: a northern area, which includes all states in the North, and a southern area, which includes all other states. Each area has a distinctive culture and economy, and different competitiveness issues and opportunities.

About 26 percent of the working population in Mexico is engaged in agriculture, although this sector accounts for only 9 percent of gross domestic product. An overwhelming majority of people who work the land are either small landholders, or *ejidatarios*, who work on communal farms.⁴⁹

a) Recent Developments

The recent reforms to Article 27 of the Mexican Constitution and the Agrarian Law have resulted in a new legal framework with respect to land tenure and property rights. These reforms eliminate obstacles and restrictions to private investment in agricultural and livestock activities. The new land reforms also allow cattle ranchers to increase the size of their ranches to a limit of 25 times larger than before. The Mexican government hopes that these new reforms will instill dynamism to the sector, promote economies of scale, improve efficiency, increase factor mobility and provide security for the private sector to participate in rewarding projects with a long-term development perspective.⁵⁰

The recent modifications eliminate excessive government intervention, recognize the liberty of *ejidatarios* to organize and run their operations their own way, establish a secure framework within which renewable contracts and joint venture schemes can take place, and provide security in land tenancy. The new land tenure laws in Mexico will allow the formation of corporate/cooperative ranches. This should stimulate investment and improve productivity.

In addition to certain recent political developments, Mexico has made advances with respect to its distribution system. Cattlemen's associations and unions are playing larger roles in the marketing and distribution system for cattle. Wholesale facilities have been purchased to create food terminals with the intent of eliminating intermediaries. Millions of dollars have been

48. The Mexican data are available from a variety of sources and are not always comparable or complete. This comment applies to all Mexican data in this report.

49. Article 27 of the Mexican Constitution of 1917 guaranteed the right of citizens to own land and required the government to provide land to the millions of peasants who, for four centuries earlier, had worked in perpetual indebtedness to a small group of landowners. By the late 1980s, some 100 million hectares of unused or underutilized land had been seized from private landholders and given to the landless citizens. Rather than give the peasants title to the land, however, the government established the *ejido* system of communal farms. Although the *ejidatarios* had the right to use the land, ownership of the land remained with the state.

50. Submission of the Agricultural Office of the Embassy of Mexico, Ottawa, August 9, 1993.

Figure 2.10
MEXICO'S GEOGRAPHIC REGIONS

North

Baja California
 Baja California Sur
 Chihuahua
 Coahuila
 Durango
 Nuevo León
 San Luis Potosí
 Sonora
 Zacatecas

West

Colima
 Jalisco
 Michoacán
 Nayarit
 Sinaloa

Central

Aguascalientes
 Distrito Federál
 Guanajuato
 Hidalgo
 México
 Morelos
 Puebla
 Querétaro
 Tlaxcala
 Veracruz

South

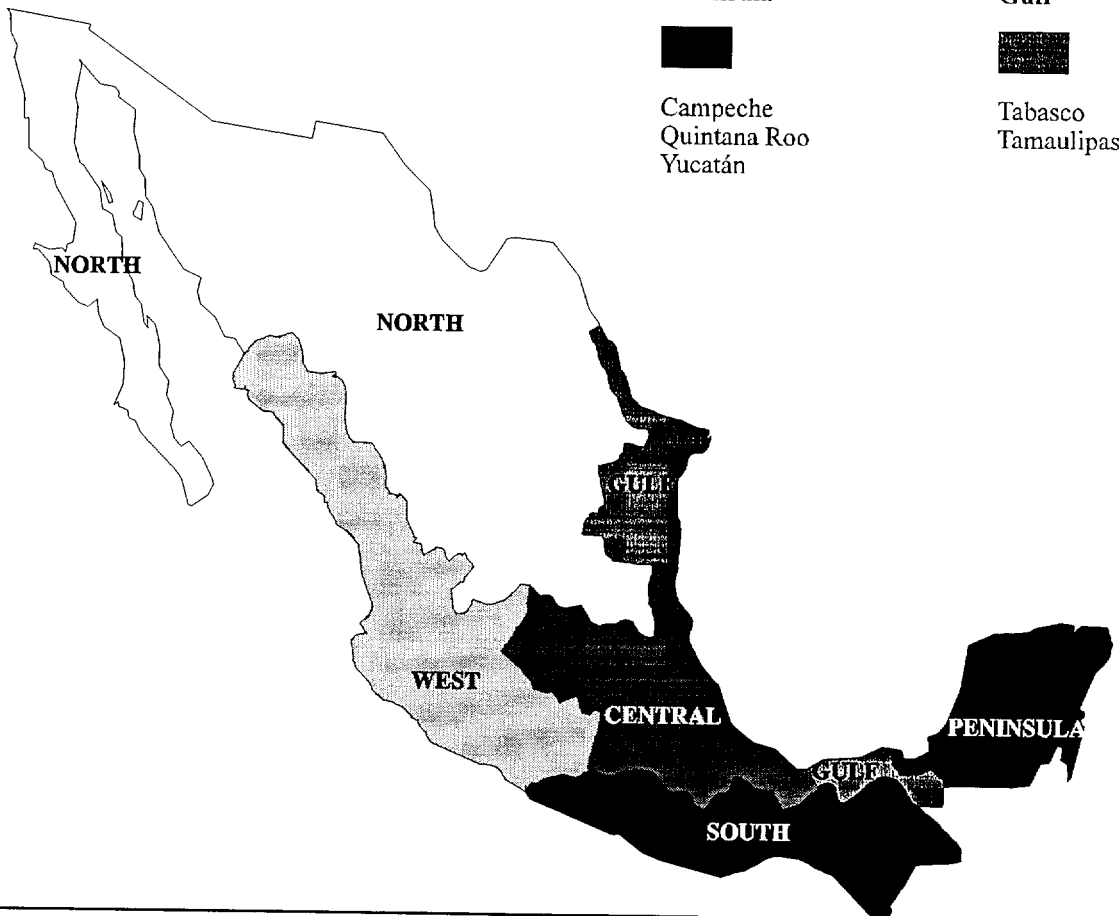
Chiapas
 Guerrero
 Oaxaca

Peninsula

Campeche
 Quintana Roo
 Yucatán

Gulf

Tabasco
 Tamaulipas



invested by the unions, allowing them to by-pass the middlemen, thereby establishing lower prices for the consumer and higher prices for the producer.⁵¹ These lower consumer prices should, in turn, help increase beef consumption in Mexico.

b) Key Profile Statistics

(i) Supply and Disposition

- Beef

Table 2.9 provides Mexico's supply and disposition of beef since 1988.

Table 2.9				
MEXICO'S SUPPLY AND DISPOSITION OF BEEF				
(million kg)				
Year	Production	Imports ¹	Exports ¹	Domestic Disappearance
1988	1,217.3	15	0	1,232.3
1989	1,162.8	40	4	1,198.8
1990	1,113.9	60	5	1,168.9
1991	1,188.7	120	4	1,304.7
1992	1,247.2	150 ²	5 ²	1,392.2

1. Estimates of imports and exports for Mexico are based on data from the Foreign Agricultural Service of the U.S. Department of Agriculture.

2. Preliminary.

Source: Canadian Embassy in Mexico, Market Study on the Mexican Market for Meat and Livestock Products; The WEFA Group; and U.S. Department of Agriculture, Dairy, Livestock and Poultry: World Livestock Situation, October 1992.

While the annual cattle slaughter in Mexico has been approximately 5.5 million head since 1988, beef production decreased from 1,217.3 million kg in 1988 to 1,188.7 million kg in 1991, before recovering to 1,247.2 million kg in 1992.

51. Canadian International Trade Tribunal, Notes from the February 23, 1993, Meeting Between the CITT Members and Staff and Ing. Cezar Gonzales Quiroga, President of the National Livestock Commission, April 21, 1993.

During the same period, imports of beef into Mexico increased continuously from 15 million kg in 1988 to an estimated 150 million kg in 1992. Based on information from the Foreign Agricultural Service of the U.S. Department of Agriculture (USDA), Mexican beef exports in 1988 were negligible. Exports remained relatively stable, averaging between 4 and 5 million kg throughout the 1989-92 period. Mainly due to the continued increase in imports, domestic disappearance increased by 13 percent, from 1,232.3 million kg in 1988 to 1,392.2 million kg in 1992. In 1992, it is estimated that imports accounted for about 11 percent of domestic beef consumption, up from 1 percent in 1988.

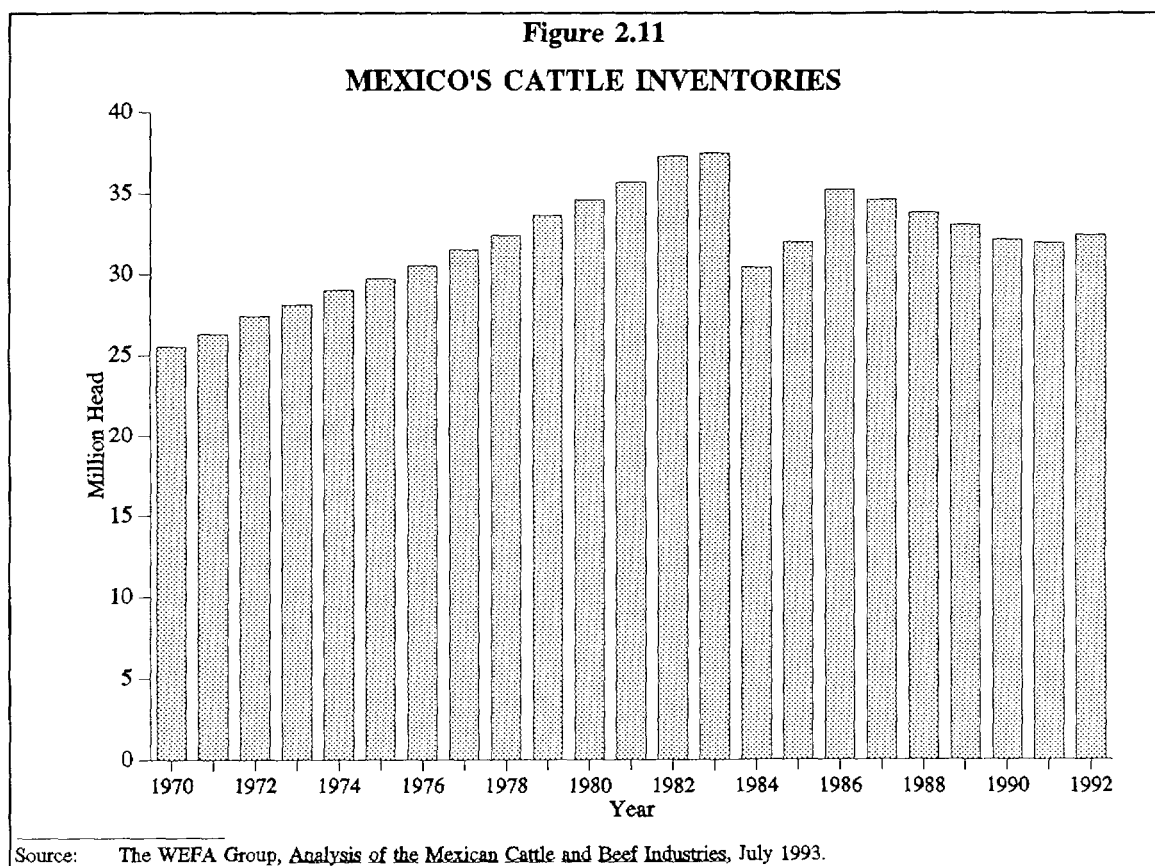
In addition to the beef production and trade shown above, Mexico has a separate and active market for variety meats. According to the U.S. Department of Commerce, in 1992, about 40 percent of the U.S. beef export volume to Mexico consisted of variety meats, including tongue, kidneys, livers and other edible organs which are generally in low demand in the United States.

Table 2.10 shows that Mexico's regional distribution of beef production was relatively stable between 1988 and 1991. The North has historically accounted for the largest share of production. In 1991, it provided 28.0 percent of Mexico's total beef production, the Central region was a close second with 25.8 percent, followed by the West with 21.6 percent, up from 19.8 percent in 1988, and the South with 10.9 percent, down from 12.4 percent in 1988.

Table 2.10										
MEXICO'S BEEF PRODUCTION BY REGION										
(000 kg)										
Region	1988	%	1989	%	1990	%	1991	%	1992	%
North	348,256	28.6	338,725	29.1	344,346	30.9	333,192	28.0	359,566	28.8
Central	321,249	26.4	317,797	27.3	244,009	21.9	306,861	25.8	334,516	26.8
West	241,613	19.8	225,702	19.4	243,378	21.8	257,198	21.6	259,247	20.8
Gulf	103,513	8.5	103,766	8.9	111,067	10.0	112,459	9.5	106,422	8.5
South	151,478	12.4	131,674	11.3	127,954	11.5	130,136	10.9	140,059	11.2
Peninsula	<u>51,177</u>	<u>4.2</u>	<u>45,116</u>	<u>3.9</u>	<u>43,165</u>	<u>3.9</u>	<u>48,841</u>	<u>4.1</u>	<u>47,385</u>	<u>3.8</u>
Total	1,217,286	100.0	1,162,780	100.0	1,113,919	100.0	1,188,687	100.0	1,247,195	100.0
Note: Figures may not add up due to rounding.										
Source: The WEFA Group, <u>Analysis of the Mexican Cattle and Beef Industries</u> , July 1993; and further information provided by The WEFA Group on October 1, 1993.										

(ii) Inventory

It is estimated that the number of cattle in Mexico is 32 million head (Figure 2.11), or 3 percent of the world's cattle population, ranking Mexico seventh largest in the world among beef-producing nations.



In Mexico, the cattle inventory increased annually throughout the 1970s. This contrasts with other major beef-producing countries, such as the United States, Australia and Argentina, whose inventories peaked in the mid-1970s.⁵²

Various factors explain the changes to the cattle inventory. For example, growing export markets for cattle (and, to a lesser extent, for beef) stimulated inventory growth in northern Mexico. On the other hand, inventories in the southern states were increased among subsistence producers to provide for families. In the early 1980s, oil prices began a swift decline, and the ensuing recession severely affected the Mexican economy. Mexican cattle producers were hit with a domestic decline in consumer purchasing power, and inventories decreased significantly.

52. The WEFA Group, *Analysis of the Mexican Cattle and Beef Industries*, July 1993.

Droughts in 1982, 1983 and the first part of 1984 severely limited forage supplies for cattle and resulted in further cattle inventory liquidation. Inventories were replenished rapidly in the next two years, but were on a downward trend until 1991, recovering slightly in 1992.

Since 1986, the beef cattle inventory in Mexico has been declining. Factors responsible for the decline include the government's price control policy for beef and feed grain, limits on the size of landholdings for cattle producers, and droughts in 1989 and 1990. The beef cattle inventory rose in 1992.

(iii) Cow-Calf and Feedlot Operations

- Cow-Calf Operations

Mexican cow-calf operations differ in the northern and the southern areas. In the northern area, cow-calf herds are primarily beef breeds that depend heavily on the export market to support feeder cattle sales. According to the U.S. Embassy in Mexico City, approximately 90 percent of Mexican feeder steer exports originate in the northern area.

The southern area, on the other hand, has a humid, tropical climate with impressive forage capacities to support cattle year-round. However, this area suffers from inadequate infrastructure, frequent flooding, tropical pests and livestock diseases, as well as long distances from some of the larger consumption centres in the North. In the southern area, the herd is composed of dual-purpose breeds of native cattle for the production of both milk and beef. Because of the growing specialization in the Mexican dairy industry (confined dairy farms located primarily in the North and Central regions produce 55 percent of Mexico's milk), the traditional dual-purpose cattlemen will probably find it increasingly difficult to compete in the future and will likely be forced to choose between beef and dairy production.

- Feedlot Operations

Mexican feedlot operations are scattered across the country and vary in size, from very small operations to those with over 17,000 head. The large commercial feedlots are generally concentrated in the North. These feedlots are North American in style (grain-based), and they produce meat which is similar to that produced in Texas and which is consumed locally.

The northern feedlots are, on average, much larger than the feedlots in the southern area. Table 2.11 shows that the average capacity of northern feedlot operations is over 1,000 head. In the southern area, excluding the Peninsula, the average feedlot⁵³ capacity ranges from 124 head in the West to 485 head in the Gulf. In comparison, the Peninsula has fewer, but much larger, feedlots with over 2,100 head per feedlot on average. Capacity utilization rates for feedlots range from 34 to 59 percent.

53. These feedlots are large grazing pastures where regular, additional feed supplements are provided. These operations are owned individually or as cooperatives.

Table 2.11
CAPACITY AND UTILIZATION OF MEXICO'S FEEDLOTS
1991

Region	Feedlots (number)	Capacity (head)	Average Capacity per Feedlot (head)	Utilization (head)	Utilization (percent)
North	802	818,530	1,021	277,690	33.9
Central	2,454	328,150	134	112,143	34.2
West	2,517	311,660	124	117,272	37.6
Gulf	73	35,400	485	19,290	54.5
South	105	18,040	172	10,681	59.2
Peninsula	<u>47</u>	<u>101,090</u>	<u>2,151</u>	<u>40,331</u>	<u>39.9</u>
Total	5,998	1,612,870	269	577,407	35.8

Source: Tribunal staff estimates based on The WEFA Group, Analysis of the Mexican Cattle and Beef Industries, July 1993. Revised to include the state of Campeche.

The Mexican Cattlemen's Association defines a feedlot as a production system whereby agricultural products other than grass are fed to cattle. This broad definition encompasses southern systems where cattle on pastures may receive sporadic supplements of dried field corn, sugar cane or rice shells, as well as northern systems where cattle are fed nothing but prepared agricultural products other than grass. The intensity of the feeding is reflected in the time necessary for cattle to be ready for slaughter, which is at least twice as long on the southern pastures as it is in the northern production system.

In the southern area, cattle-feeding practices allow cattle to graze on pastures for 18 to 24 months until they reach approximately 250 kg. At this point, they are fed a ration of feed grain, hay and supplements for 3 to 4 months. In total, 28 months would have elapsed between calving and slaughtering. The northern feedlots try to adhere more to Canadian and U.S. methods, i.e. cattle backgrounded to 248 kg are placed in feedlots for several months to gain approximately 1.6 kg per day to the final weight of 500-550 kg. Typical slaughter weights in southern Mexico, according to the Director General of Statistics at the Secretariat of Agriculture and Water Resources (SARH), are about 360 kg, versus 550 kg in Canada and the United States.

(iv) Packing Operations

Three types of slaughter plants operate in Mexico: municipal slaughterhouses, the plants of federal inspection type (TIF) slaughterhouses, where the meat is federally inspected, and private non-TIF slaughterhouses that slaughter primarily hogs. Since the mid-1980s, municipal slaughterhouses have accounted for approximately 83 percent of cattle slaughtered and TIF plants for about 13 percent.⁵⁴ The remaining cattle were slaughtered in private operations or on farms.

Current government policy aims at moving the packing industry away from the urban centres and closer to the cattle-producing areas. The most obvious reason behind this shift is cost reduction, in terms of shipping or transportation expenses. However, another significant reason behind the government closure of urban slaughter facilities is the problem of overloading city sewage systems and a desire to get rid of old inefficient facilities. The government objective is to improve and modernize the beef marketing system, and to control heavy pollution in urban areas.

All slaughter and meat-packing plants built in Mexico today are required to be TIF plants. Eight new TIF plants have been constructed since 1991, and essentially all TIF plants, old and new, are vertically integrated to the retail level. The capacity utilization of the TIF plants remains at no more than 40 percent.⁵⁵

5. Conclusion

The foregoing examination of the cattle and beef industries in Canada and the United States indicates that the structures of the industries are very similar. In contrast, certain major structural differences exist in Mexico when compared to the structures of the industries in Canada and the United States.

In Canada and the United States, the cattle and beef industries have a significant impact on the economy and play a major role in the agriculture of both countries. In Canada, cash receipts from the sale of cattle and calves equalled \$4.6 billion in 1992, or 20 percent of all farm cash receipts. Cash receipts from the sale of cattle and calves in the United States amounted to \$47.0 billion in 1991, or 23 percent of all farm cash receipts.

Alberta is the largest cattle-producing province in Canada, while the Great Plains is the largest cattle-producing area in the United States. Over the years, there has been an east-to-west shift in the feeding and packing sectors. Together with this shift in location, the industries in both countries underwent considerable rationalization which resulted in fewer and larger-scale operations.

54. Meat Marketing in Mexico-Working Paper by R. Bierlen and D. Hayes, January 1991 at 8.

55. The WEFA Group, letter addressed to the Canadian International Trade Tribunal, April 27, 1993.

The most recent expansion phase of the cattle cycle in Canada began approximately two years earlier than the expansion phase in the United States. In the early 1980s, total inventory in the United States was approximately 10 times the inventory in Canada. By 1993, however, the U.S. inventory was about 9 times the inventory in Canada.

Changes in the size of the cattle and calf inventory have been reflected differently in the production levels of beef in Canada and the United States. In Canada, the inventory decreased by 3 percent between 1980 and 1993, while beef production decreased by 8 percent. However, the overall supply of beef in Canada increased due to the increase in beef imports over the period. In the United States, the cattle and calf inventory decreased by 9 percent between 1980 and 1993, while beef production increased by 6 percent between 1980 and 1991.

As noted, the cattle and beef industries in Mexico are quite different from those in Canada and the United States. Even within Mexico, two distinct areas exist, as the cattle industry is structured differently in the north and the south. The northern area produces beef breeds primarily for export to the United States. Here, the feedlots are generally larger, more commercial and grain-based. In the southern area, dual-purpose cattle predominate, and the feedlots are less commercial and largely grass-based.

Currently, over 80 percent of slaughter takes place in municipal plants located in urban areas. However, the Mexican government's policy is to relocate the packing sector closer to cattle production and to bring slaughter and beef inspection under federal control, similar to the situation in Canada and the United States.

Historically, the systems of land holding and meat distribution in Mexico have inhibited the development of the domestic cattle and beef industries. However, recent reforms in these areas will enable Mexican producers to improve productivity and become more efficient producers of cattle and beef.

CHAPTER III

TRADE IN CATTLE AND BEEF

International trade is an important factor in the competitiveness of the cattle and beef industries in Canada. This chapter puts the Canadian industries into perspective by examining the patterns of international trade in cattle and beef. The chapter first looks at international markets, including trends in world meat production and trade, and identifies Canada's most promising export markets and competitors outside of North America. This is followed by a focus on North America, with an examination of the trade patterns in Canada, the United States and Mexico.

1. International Markets and Trade

a) World Meat Production

During the last decade, world meat production increased by about one third, to 164 billion kg (Figure 3.1). Pork is the largest component of world meat production, with output in 1993 forecast at 69 billion kg, accounting for 41 to 42 percent of total meat production in 1983-93. With forecast production of 48 billion kg in 1993, beef ranks second in world meat output. Between 1983 and 1993, although beef and veal production was stable, their share of global meat production declined from 36 to 29 percent. Poultry output has made great strides in the past 10 years. With production forecast in 1993 at 41 billion kg, poultry now represents close to one quarter of world meat production, compared to one fifth in 1983. Lamb and goat meat production is the smallest component of world meat production, with output in 1993 forecast at 6 billion kg. The trends in global meat production suggest that pork and poultry are the commodities that are experiencing strong growth.

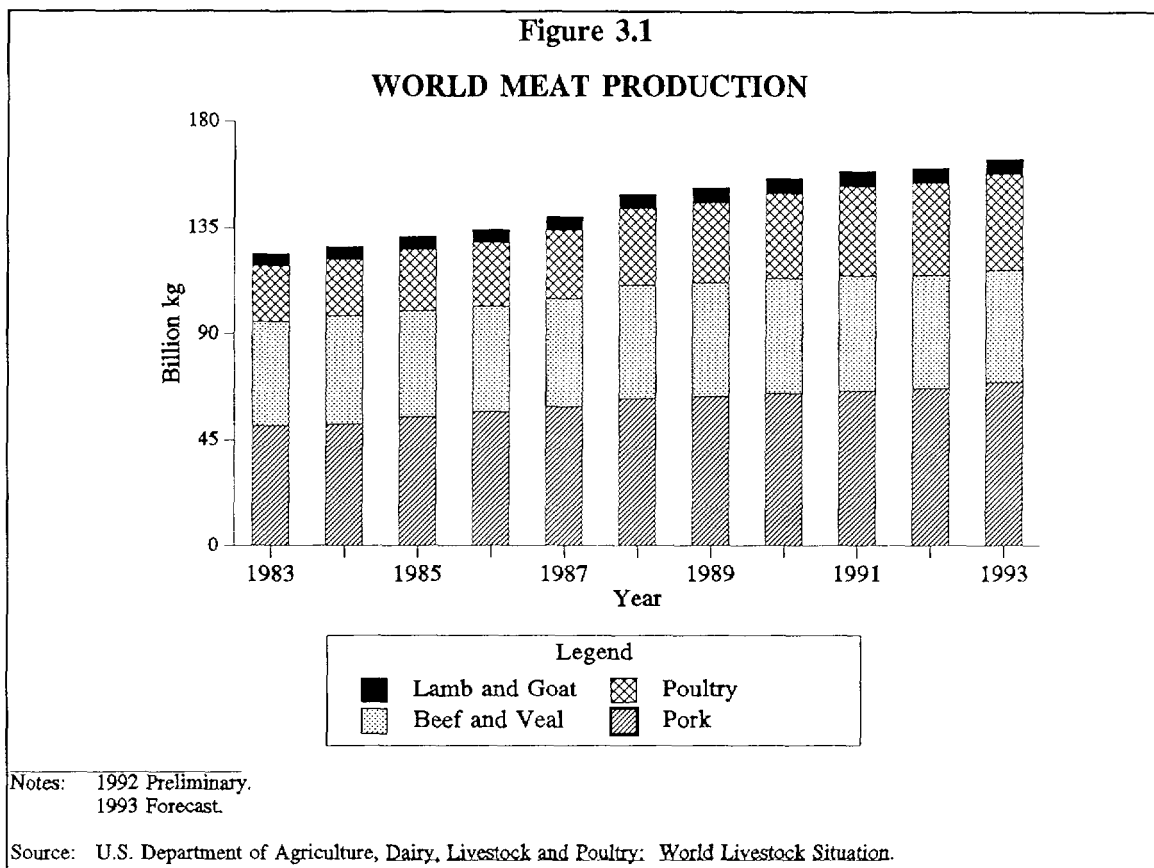


Figure 3.2 shows the world's leading beef and veal producers, exporters and importers for 1992.

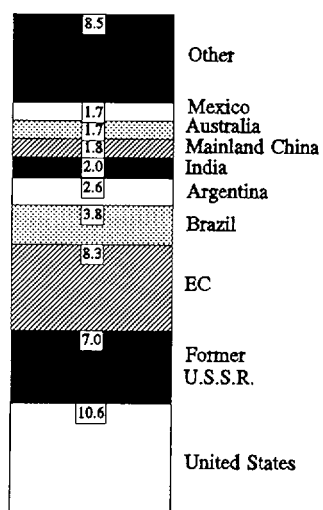
Total world bovine¹ meat production amounted to 48 billion kg in 1992, down from 49 billion kg in 1990. Decreases in production by the former U.S.S.R., amounting to 1.4 billion kg between 1990 and 1992, accounted for the bulk of the world decrease. The geographic concentration of beef and veal production is striking. Beef and veal production is concentrated in nine countries (or blocks): the United States, the former U.S.S.R., the EC, Brazil, Argentina, India, China, Australia and Mexico. In 1992, these producers accounted for almost 82 percent of total world production, up from 77 percent in 1988. The United States is the world's largest beef producer, accounting for about 22 percent of production in 1992. The EC is second at 17 percent, the former U.S.S.R. is third at 14 percent, Brazil is fourth at 8 percent, and Argentina is fifth at 5 percent. Between 1988 and 1992, the most significant change in the ranking of producers occurred when declining production in the former U.S.S.R., in 1991, resulted in the EC moving into second place. Canada accounts for less than 2 percent of world production.

1. Trade data use the classification "bovine," which includes beef and veal, and buffalo/bison meat. All references to beef and veal trade used in this chapter are based on this classification and are, therefore, not strictly limited to meat produced from cattle.

Figure 3.2

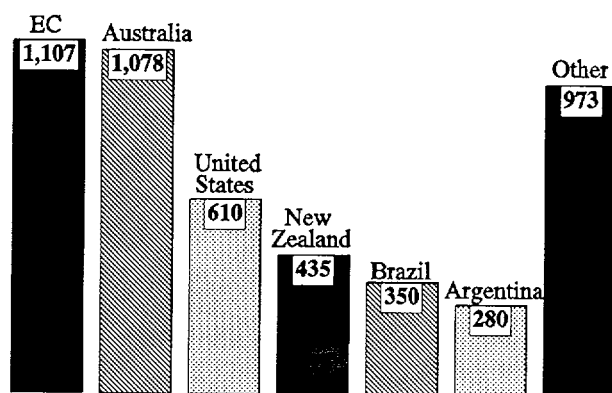
WORLD BEEF AND VEAL SITUATION 1992¹

LEADING PRODUCERS (billion kg)



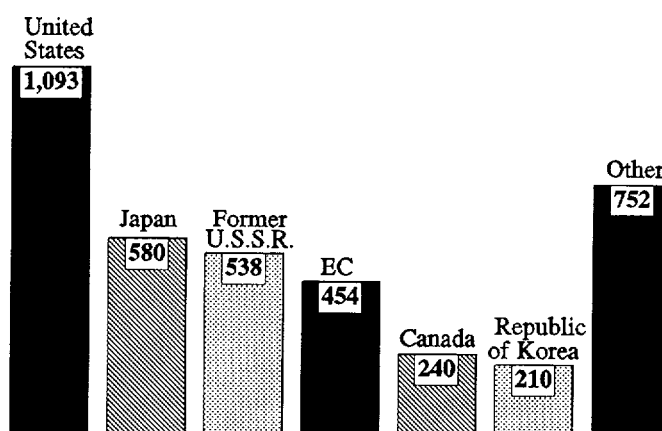
Total=48.0

LEADING EXPORTERS (million kg)



Total=4,833

LEADING IMPORTERS (million kg)



Total = 3,867

1. Preliminary.

Notes: Trade totals exclude intra-EC trade.

Due to different collection methods, total imports are not equal to total exports.

Source: U.S. Department of Agriculture, Dairy, Livestock and Poultry: World Livestock Situation, October 1992.

b) World Meat Trade

Only a small share of world beef and veal production, approximately 10 percent (excluding intra-EC trade), enters world trade.² Moreover, the exportable surplus of production is largely concentrated in a few countries. Six countries account for over 80 percent of exports.³ Similarly, 80 percent of imports are received by six countries.⁴ The EC and the United States are both leading exporters and importers.

A fundamental characteristic of the international beef and veal trade is the division of the market for fresh, chilled or frozen bovine meat into two groups of countries with limited contact with each other. The market is divided according to the presence of foot-and-mouth-disease (FMD).⁵ In order to prevent the spread of the disease, trade in fresh, chilled or frozen bovine meat is only conducted between countries belonging to the same category.^{6,7} FMD-free countries prohibit beef imports from FMD-endemic countries, unless the meat has been cooked at a temperature that will destroy the virus and is sealed in air-tight, sterile containers to prevent recontamination.

An added constraint in the international beef and veal market is the application of various health and/or other regulatory barriers in some countries. The most notable example is the EC hormone ban that prohibits the import of beef produced through the use of growth hormones. This regulation effectively closes access to the EC market to those producing countries, such as Canada and the United States, where hormones are used.

International trade in beef and veal increased between 1988 and 1992. World imports increased steadily, from 3.0 billion kg to over 3.9 billion kg. The former U.S.S.R., Japan and the Republic of Korea accounted for much of this increase. The United States is, by far, the world's largest importer of beef and veal, accounting for 20 percent in 1992. Japan is the second largest importer, accounting for 10 percent, followed closely by the former U.S.S.R., accounting for over 9 percent. Canada is the fifth largest importer, accounting for 4 percent of world beef and veal imports. Since 1988, these rankings have remained relatively stable. However, the former U.S.S.R. moved from fourth to third position as imports increased, while the EC moved from second to fourth. On the other hand, the Republic of Korea's imports have grown

2. U.S. Department of Agriculture, Dairy, Livestock and Poultry : World Livestock Situation.

3. The EC, Australia, the United States, New Zealand, Brazil and Argentina.

4. The United States, Japan, the former U.S.S.R., the EC, Canada and the Republic of Korea.

5. The FMD-free areas include the United States, Canada, Japan, the Republic of Korea, Taiwan, Australia and New Zealand. The FMD-endemic areas comprise the EC, Eastern Europe, the former U.S.S.R., the Middle East, North Africa, Argentina, Brazil and Uruguay. However, among the EC member states, Ireland and Denmark are recognized as being entirely free of FMD, and the United Kingdom is frequently qualified as such. UNCTAD, Studies in the Processing, Marketing and Distribution of Commodities: The Marketing of Bovine Meat and Products: Areas of International Cooperation, 1989 at 43-44.

6. No internationally recognized definition of FMD-free status exists. Importing countries, therefore, differ in the criteria used to define FMD status. Generally speaking, however, before a country can be recognized as FMD-free, it must have ceased vaccinating for one year, as well as have had no outbreaks of FMD for one year.

7. An FMD-free country, however, may export to an FMD-endemic country.

950 percent since 1988, thus making the Republic of Korea the sixth largest importer of beef and veal.

Between 1988 and 1992, the ranking of the principal exporters remained stable from year to year. The EC is the largest exporter, accounting for 17.0 percent in 1992, followed closely by Australia, accounting for over 16.0 percent. The United States accounted for 13.0 percent of world exports, while New Zealand accounted for 9.0 percent. Canada accounted for 3.5 percent of world exports in 1992.

Data from the Organization for Economic Cooperation and Development (OECD) indicate that, by 1996, beef and veal production in OECD countries is projected to exceed the 1990 levels by 9.6 percent. On the other hand, beef and veal consumption is expected to grow at a slower pace of 8.4 percent. This means that OECD countries will need to increase their export efforts in the medium term. However, with the lower levels of consumption, there is likely to be extensive competition for these export markets.

c) Most Promising Export Markets

Canadian beef and veal are exported to the United States and, in small volumes, to many other countries. During 1992, Canada exported beef and veal products to over 40 countries. These included countries that were FMD-endemic, such as the former U.S.S.R. and members of the EC.

Other than the United States, Canada's major export markets include Japan, the Republic of Korea and Taiwan. Japan, the world's leading net beef and veal importer, and the Republic of Korea, now the world's sixth leading beef and veal importing nation, have committed to gradual reductions in restrictions on access to their markets. Taiwan is an attractive market because of its large population and relative wealth. The United States, Australia and New Zealand have been aggressively pursuing these markets. Canada is also trying to establish a greater presence in these markets, aided by its recent recognition as a supplier of high-quality grain-fed beef. As a result of changes in its grading system, Canada has succeeded in gaining equivalency with the favourably accepted U.S.-graded product in the Republic of Korea and Taiwan.

Table 3.1 lists those countries that are Canada's most promising export markets and the major suppliers of beef and veal.

<p>Table 3.1</p> <p>GLOBAL BEEF AND VEAL TRADE IN KEY ASIAN MARKETS</p> <p>Net Product Weight</p> <p>(million kg)</p>		
Importing Country	Exporting Country	1992 Trade Volume
Japan	Australia	215.2
	United States	185.2
	New Zealand	8.4
	Canada	0.1
Republic of Korea	Australia	97.9
	United States	53.8
	New Zealand	14.8
	Canada	0.1
Taiwan ¹	Australia	32.7
	New Zealand	8.3
	United States	3.8
	Canada	0.1
<p>1. Figures quoted are for 1991.</p> <p>Source: JETRO, Japan External Trade Organization; Canadian Beef Export Federation, <u>Opportunities and Constraints for Canadian Beef in Taiwan</u>, 1992; and Embassy of the Republic of Korea, Ottawa.</p>		

Notwithstanding the potential to expand beef and veal export sales, Canadian exports of beef and veal to countries other than the United States would require significant increases in volume to have any positive effect on Canada's beef industry.⁸ It is clear from Table 3.1 that Canada is a very small supplier to these key Asian markets and faces significant competition from the United States, Australia and New Zealand.

8. Department of Agriculture, The Impact of Canadian and U.S. Government Policies on the Canadian Cattle and Beef Sectors, July 1993.

(i) Japan

During the past decade, the cattle inventory in Japan increased. More recently, the Japanese cattle industry underwent structural changes in the wake of lower wholesale carcass prices, particularly for Holstein steers, and greater competition from imported beef and veal, primarily from the United States and Australia.

While the cattle inventory increased by almost 5 percent from 1990 to 1992 (Table 3.2), the number of herds declined rapidly, reflecting a trend towards fewer and larger herds. The number of dairy herds (60 percent of slaughtered cattle are Holstein steers, and cull cows and heifers) fell by 13 percent from 1990 to 1992. Similarly, the number of beef herds, largely of the premium Wagyu breed cattle, dropped by 9 percent. In 1993, the dairy/beef sector is expected to become more concentrated, with dairy cow inventories declining as small-scale producers are forced out of business.

Table 3.2**JAPAN
Selected Statistics**

	1982	1990	1991	1992¹	1993²
Cattle Inventory ³	4,485	4,760	4,863	4,980	5,034
Beef and Veal ⁴					
Production	481	549	574	600	615
Consumption	655	1,075	1,123	1,225	1,260
Imports	174	537	504	580	645

1. Preliminary.

2. Forecast.

3. Thousand head at January 1.

4. Million kg, carcass weight equivalent.

Source: U.S. Department of Agriculture, *Dairy, Livestock and Poultry: World Livestock Situation*.

Beef and veal production, consumption and imports all increased during the past decade. Domestic beef and veal production is expected to increase 2.5 percent from 1992 to 1993, as the Wagyu beef cattle inventory grows and as the slaughter in both the beef and dairy sectors increases slightly.

In 1993, Japan's total beef and veal consumption is forecast at 1.3 billion kg, an increase of 17 percent over 1990, with more than half of the domestic consumption supplied by imports, primarily from the United States and Australia. While per-capita beef and veal consumption has

increased considerably since 1985, from 4.4 to 6.1 kg in 1990, it still trails, considerably, the consumption of other animal protein sources.

Japan eliminated its import quotas for beef and veal in April 1991, thus improving access to the market. For the most part, chilled product is perceived more favourably than frozen product in the Japanese market because of its tenderness advantage. However, chilled beef and veal have a shorter shelf life than frozen product. In 1991, following liberalization and the replacement of quotas by higher tariffs that apply to the landed cost of beef and veal, air freighting chilled beef and veal became less competitive. As shipping from Vancouver requires 11 days, this will make the extension of the shelf life of product a major technical issue for Canadian exporters.⁹

(ii) Republic of Korea

As shown in Table 3.3, the Korean cattle herd has expanded yearly since 1990. It is projected to expand by 10 percent in 1993, to 2.5 million head, despite a dramatic increase in beef and veal imports. Nearly 22 percent of the Korean herd is composed of dairy animals.

In the last 10 years, beef and veal production, consumption and imports increased sharply. Korean beef and veal production, although expanding, cannot supply domestic needs.

Table 3.3					
REPUBLIC OF KOREA					
Selected Statistics					
	1982	1990	1991	1992¹	1993²
Cattle Inventory ³	1,506	2,051	2,126	2,269	2,496
Beef and Veal ⁴					
Production	83	131	136	145	165
Consumption	148	244	312	370	410
Imports	73	117	176	210	250
<hr/>					
1. Preliminary.					
2. Forecast.					
3. Thousand head at January 1.					
4. Million kg, carcass weight equivalent.					
<hr/>					
Source: U.S. Department of Agriculture, <u>Dairy, Livestock and Poultry: World Livestock Situation</u> .					

9. Canadian Beef Export Federation, Opportunities and Constraints for Canadian Beef Exports to Japan, 1991 at 11, 17-18, 24 and 31; and U.S. Department of Agriculture, The World Beef Market - Government Intervention and Multilateral Policy Reform, 1990 at 46.

Beef and veal consumption in 1993 is forecast at 410 million kg, an increase of 68 percent over 1990. About 61 percent of this demand will be provided by imports, primarily from Australia and the United States.

As Korean consumers have become more affluent, they have increased their consumption of livestock products. Of the meat products, beef and veal have shown the greatest yearly percentage increase. However, per-capita consumption of beef and veal still trails pork consumption by more than half. Per-capita beef and veal consumption increased from 2.9 kg in 1985 to 4.1 kg in 1990.

Imports are limited by quota and controlled by the Livestock Products Marketing Organization (LPMO), which is designated as the sole authorized importer and distributor of beef and veal in the Republic of Korea. The LPMO decides, by tender offerings, the quantity, quality and type of beef cuts to be imported. Virtually all tenders have been for frozen beef and veal.

Following a successful GATT challenge in 1989, the Republic of Korea agreed to place beef and veal on the list for complete import liberalization by 1997. Beef and veal imports in 1990-92 were well above the minimum quota levels negotiated between the Korean government and major trading partners. The quota for 1993 is 99 million kg, up from 66 million kg in 1992. It will be raised further to 106 million kg in 1994 and to 113 million kg in 1995. Actual imports have exceeded the minimum import quota level in recent years, as demand for foreign beef and veal increased and Korean authorities attempted to reduce upward pressure on beef and veal prices.¹⁰ Overall imports in 1993 are forecast at 250 million kg, an increase of 114 percent over the 1990 figures.

The Republic of Korea has two completely different beef import markets. There is a premium hotel and restaurant market dominated by the United States, and a lower-price retail market, predominantly supplied by Australia, with frozen, bone-in and lean beef that is primarily grass-fed.¹¹ Australia is the largest supplier to the Korean market. Virtually all of the import market is for frozen beef and veal. On a market share basis, however, between 1989 and 1992, Australia's share of frozen beef and veal imports decreased from 74 to 59 percent, while the United States' share almost doubled to 32 percent.¹²

An important development for Canadian sales to the Republic of Korea is the recent acceptance by the LPMO of the Canada "AAA" and "AA" grades for the high-quality beef definition used in Korean bid invitations.¹³

10. U.S. International Trade Commission, *International Economic Review*, August 1993 at 11.

11. Department of Agriculture, *Republic of Korea: Agri-Food Export Market Assessment*, April 1992 at 9; and Cattle Council of Australia, *Yearbook 1992* at 52.

12. *Supra*, Chapter II, note 37, Appendix 5.3 at 576.

13. Information provided by the Canadian Embassy in the Republic of Korea to the Canadian Beef Export Federation, February 2, 1993.

(iii) Taiwan

The cattle inventory in Taiwan increased between 1982 and 1992. More recently, it varied from a high of 165,000 head in 1990 to a low of 153,000 head in 1992 (Table 3.4).

Table 3.4					
TAIWAN					
Selected Statistics					
	1982	1990	1991	1992 ¹	1993 ²
Cattle Inventory ³	128	165	154	153	156
Beef and Veal ⁴					
Production	6	5	5	5	5
Consumption	30	51	59	57	59
Imports	24	46	54	52	54
1. Preliminary. 2. Forecast. 3. Thousand head at January 1. 4. Million kg, carcass weight equivalent.					
Source: U.S. Department of Agriculture, <i>Dairy, Livestock and Poultry: World Livestock Situation</i> .					

Several factors have limited the potential for the domestic cattle industry to supply the increasing demand for beef and veal, including increasing environmental concerns related to intensive livestock operations in Taiwan.

Domestic production remained stable throughout the decade and, in 1993, is forecast to satisfy about 8 percent of demand. Domestic consumption of beef and veal in 1993 is forecast at 59 million kg, an increase of almost 16 percent over 1990. In the past decade, imports more than doubled, projected to hit 54 million kg in 1993. Australia and New Zealand are the principal suppliers. Per-capita consumption of all types of meat increased between 1986 and 1990, with chicken enjoying the greatest gain. Per-capita consumption of beef and veal increased marginally from 1.9 kg in 1986 to 2.1 kg in 1990, ranking fourth after pork, chicken and duck, respectively.

The market has developed a two-tiered structure comprised of high- and low-quality beef. Taiwanese consumers differentiate between high- and low-quality beef by the country of origin, which is generally indicated on menus in restaurants and on packages of beef sold in retail outlets. No other modifier such as "grain-fed" or "grass-fed" is included.

Until very recently, Taiwan operated a discriminatory tariff regime on beef and veal, under which U.S. "Prime" and "Choice" beef was automatically considered to be of "special

quality" and accorded a lower tariff. The tariff effectively excluded non-U.S. beef from the high-quality market.¹⁴ In early 1993, however, Taiwanese authorities recognized Canada "AAA" beef as qualifying for entry as "special quality" and for the preferential tariff.¹⁵ With the same access to the market as U.S. beef, Canada "AAA" beef should be competitive in the high-quality market.¹⁶

d) Canada's Main Competitors in Export Markets

Apart from the United States, Canada faces competition in world export markets for beef and veal from a number of countries. Table 3.5 shows the principal non-North American beef and veal exporters.

Table 3.5					
PRINCIPAL BEEF AND VEAL EXPORTERS					
Selected Countries					
(million kg)					
	1982	1990	1991	1992 ¹	1993 ²
FMD-Free Countries					
Australia	942	1,064	1,080	1,078	1,062
New Zealand	366	359	430	435	470
Ireland ³	N/A	N/A	195	200	250
Denmark ³	N/A	N/A	40	57	60
Nicaragua	N/A	N/A	16	17	18
FMD-Endemic Countries					
EC ⁴	489	1,060	1,009	850	724
Argentina	522	451	390	280	260
Brazil	398	230	290	350	350

1. Preliminary.
2. Forecast.
3. Excluding intra-EC trade.
4. From 1991, statistics exclude Denmark and Ireland.

N/A = Not available.

Source: U.S. Department of Agriculture, *Dairy, Livestock and Poultry: World Livestock Situation*.

14. Department of Agriculture, *Taiwan: Agri-Food Export Market Assessment*, October 1992 at 14.

15. Information provided by the Department of External Affairs and International Trade, March 3, 1993.

16. *Supra*, note 14.

(i) Australia

The Australian cattle inventory stands at just under 25 million head. Australia is a leading producer of grass-fed beef. However, there is a growing feedlot industry in Australia geared to producing grain-fed beef similar to the North American industry. In 1993, the industry plans to expand its feedlot capacity by 18 percent, to 530,000 head.

In 1992, Australia was the world's second largest exporter of beef and veal. Exports increased somewhat between 1982 and 1992, but are projected to decrease by 1.5 percent in 1993, to 1,062 million kg (Table 3.5). Exports represent about 62 percent of total Australian production.

The United States is Australia's largest beef market, accounting for 45 percent of exports and valued at \$1.06 billion in 1992. Japan and the Republic of Korea now represent another 38 percent of Australian beef and veal exports. The next most important markets are those of Canada and Taiwan. These five countries account for 95 percent of Australia's beef and veal exports.¹⁷

One of the reasons for the success of Australian beef and veal exports lies in their achieving a shelf life of more than 60-100 days for chilled beef and veal, compared to 30-40 days for North American product.¹⁸ Moreover, proximity to the growing export markets in the Pacific Rim offers the Australian beef industry an important competitive advantage in accessing FMD-free markets. Further, as the feedlot industry expands, Australia will become a larger competitor in the high-quality beef markets in Japan, the Republic of Korea and Taiwan that are currently served by the United States and Canada.

(ii) New Zealand

The New Zealand cattle inventory is just over 8 million head. Similar to Australia, New Zealand cattle are primarily grass-fed. In most cases, cattle graze on pasture year-round. New Zealand does not have a significant feedlot industry because of its high grain costs.

Over the past decade, while consumption decreased, both production and exports showed an increasing trend. In 1993, exports are forecast at 470 million kg, up 8 percent. Nearly 80 percent of New Zealand's beef and veal production is exported. This proportion is increasing as domestic utilization declines and total production increases.

Between 1989 and 1992, the United States accounted for over 70 percent of beef and veal exports. Beef shipments to the United States are primarily for the production of ground beef for the hamburger trade. In 1991, other than shipments to the United States, New Zealand exported 21 million kg of beef and veal to Canada, 15 million kg to the Republic of Korea, 8 million kg to Taiwan and 7 million kg to Japan.

17. Dick Austen, Chairman, Australian Meat and Live-stock Corporation, "Beef Export Policy and Marketing," speech given at OUTLOOK 93, Canberra, February 2-4, 1993.

18. Canadian Beef Export Federation, Opportunities and Constraints for Canadian Beef Exports to Japan, 1991 at 13.

The most significant development in New Zealand's export beef and veal markets over the last decade was the increasing importance of the Republic of Korea, which ranks third in importance after the United States and Canada. New Zealand exporters have benefited from the improved access arrangements to which the Korean government has agreed. Moreover, New Zealand shares the advantage of proximity that Australia has in shipping fresh/chilled beef and veal into the promising markets of the Pacific Rim.

(iii) European Community

The EC was the world's second largest beef and veal producer and the leading exporter in 1992. Through the Common Agricultural Policy (CAP), the EC has provided price support to its cattle and beef industries. Prices have traditionally been maintained, in part, through the use of intervention buying¹⁹ and export subsidies to facilitate the sale of surplus products abroad. However, the program of CAP reform to which the EC agreed in 1992 includes, *inter alia*, a decline in intervention prices designed to encourage a reduction in production.

Most countries of the EC are not certified FMD-free. Exports of beef and veal are primarily destined for other countries in Europe, particularly the former U.S.S.R. Of the 12 member states, only Denmark and Ireland are widely recognized as FMD-free and, as such, have the potential to compete in other FMD-free markets. Beef and veal exports to non-EC countries from Ireland and Denmark in 1993 are forecast to reach 250 million kg and 60 million kg, respectively.

In February 1985, the EC undertook, under the Andriessen Assurance, not to sell subsidized beef and veal to major Pacific Rim markets traditionally supplied by Australian exports. If the EC put an end to the Andriessen Assurance and started selling subsidized beef and veal to Japan, Australia's markets would suffer, along with those of the United States, New Zealand and Canada.²⁰ Since 1989, increasing EC beef and veal stocks have led to pressure from producers to gain access to new markets, particularly the north Asian markets. In November 1990, however, the EC reaffirmed that it will respect the undertaking. As Asian markets are also very important to the United States, maintenance of the Andriessen Assurance was part of the EC-U.S. Blair House deal.²¹

(iv) Argentina

Argentina was the fifth largest producer of beef and veal in the world in 1992, with a cattle inventory of just under 57 million head. As with Australia and New Zealand, Argentina produces grass-fed beef. Currently, Argentina falls within the group of countries where FMD is endemic. However, a program to control FMD is showing positive results and, consequently, Argentina may be close to becoming recognized as FMD-free.

19. The EC buys up surplus production and places it in storage.

20. Cattle Council of Australia, *Yearbook 1992* at 10.

21. Information received from Mr. Des Pearson, First Secretary, Australian High Commission in Ottawa, via the Department of External Affairs and International Trade.

Exports are forecast at 260 million kg in 1993, down 33 percent since 1991. This decline is due mainly to an overvalued currency.²² As a result, some export-oriented plants have had to shut down. Other factors, such as relatively high livestock prices, high production costs (electricity, labour, etc.), high taxes and weak international prices, have negatively affected the export industry.

The export of fresh or chilled beef and veal is limited. Because of FMD, certain countries only admit beef which is thermo-processed or frozen and boneless. It is estimated that thermo-processed beef represented almost 50 percent of all Argentine exports in 1990. The EC and the United States are Argentina's major markets, followed by Israel. However, should Argentina be successful in obtaining recognition as being FMD-free in some or all of its production areas, it could compete with the Oceanic countries in supplying frozen manufacturing beef to the U.S. market.

(v) Brazil

In 1992, Brazil was the world's fourth largest beef and veal producer, with a cattle inventory of about 130 million head, and the fifth largest exporter. Like Argentina, Brazil's grass-fed herd is subject to FMD, thus limiting the export markets available for fresh/chilled or frozen beef and veal. The EC is a primary export market for Brazil.

Brazilian exports dropped in 1990 to 230 million kg, largely the result of overvaluation of the currency, which affected price competitiveness, and of the loss of the U.S. export market for thermo-processed beef.²³ Export prospects have since improved, with exports forecast to reach 350 million kg in 1993.

(vi) Nicaragua

Nicaragua is an FMD-free country with a growing cattle inventory that is now at about 1.7 million head.

From 16 million kg in 1991, exports of Nicaraguan beef and veal are forecast to increase by 1 million kg yearly and reach 18 million kg by 1993. The country was prohibited from exporting beef and veal to the United States in 1986, after it was delisted for not guaranteeing the safety of U.S. meat inspectors.²⁴ At that time, Nicaragua became a significant supplier of beef and veal to Canada. The U.S. market for Nicaraguan beef and veal reopened in August 1992.

Nicaragua continues to diversify its export markets for beef and veal and has been successful in the United States, Mexico, Central America and the EC.²⁵

22. *Supra*, note 2, November 1991 at 19.

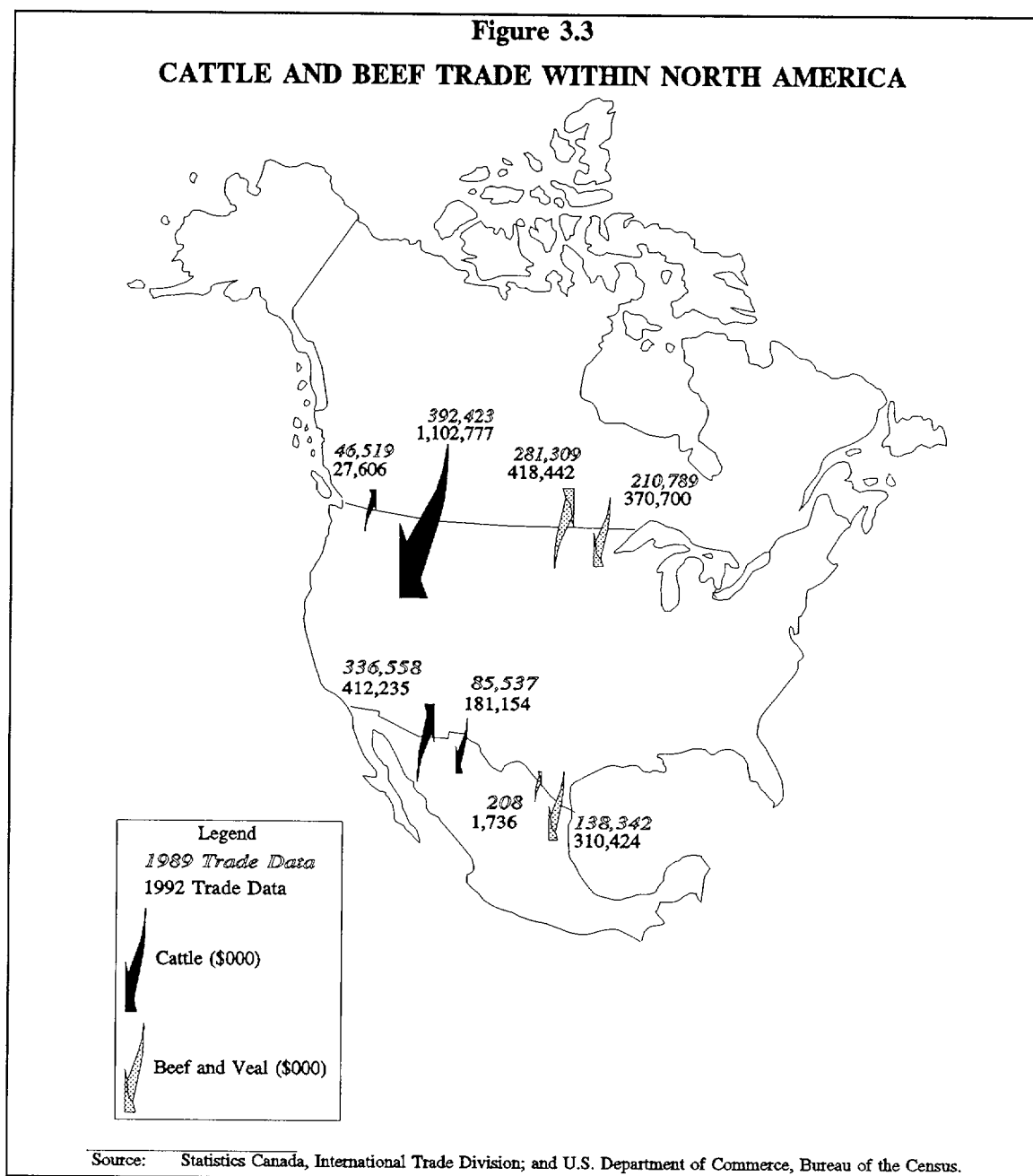
23. *Ibid.* at 20. Sanitary problems within the Brazilian beef industry are thought to be the cause of the loss of the U.S. market. See GATT, The International Markets for Meat 1992/93, February 1993 at 35.

24. U.S. Department of Agriculture, Livestock and Poultry: Situation and Outlook Report, August 1992.

25. Information provided by the Canadian Embassy in Costa Rica to the Department of External Affairs and International Trade, March 29, 1993.

2. Canadian Trade

Trade is very important to the Canadian cattle and beef industries. The Canadian cattle and beef market is a key part of the larger North American market. Figure 3.3 shows selected trade flows, in Canadian dollars, of cattle and beef between Canada, the United States and Mexico for 1989 and 1992.



Between 1989 and 1992, the value²⁶ of the North American live cattle trade increased in all directions except for cattle exported to Canada from the United States. Similarly, trade in beef and veal increased for all parties. Canada shows a notable increase in the value of live cattle exports to the United States, from \$392 million in 1989 to over \$1.1 billion in 1992, a 180-percent increase. In addition, Canada increased its value of exports of beef and veal to the United States by 76 percent, from \$211 million in 1989 to over \$370 million in 1992.

The value of U.S. trade in beef and veal to Canada increased by about 49 percent, increasing to over \$418 million in 1992. At the same time, U.S. exports of beef and veal to Mexico increased by 124 percent, exceeding \$310 million in 1992.

The value of Mexican trade in live cattle with the United States increased by 22 percent, increasing from over \$336 million in 1989 to more than \$412 million in 1992. The volume and value of Mexican trade with Canada have been relatively small to date and, therefore, have not been reflected in Figure 3.3.

a) Canadian Cattle Trade

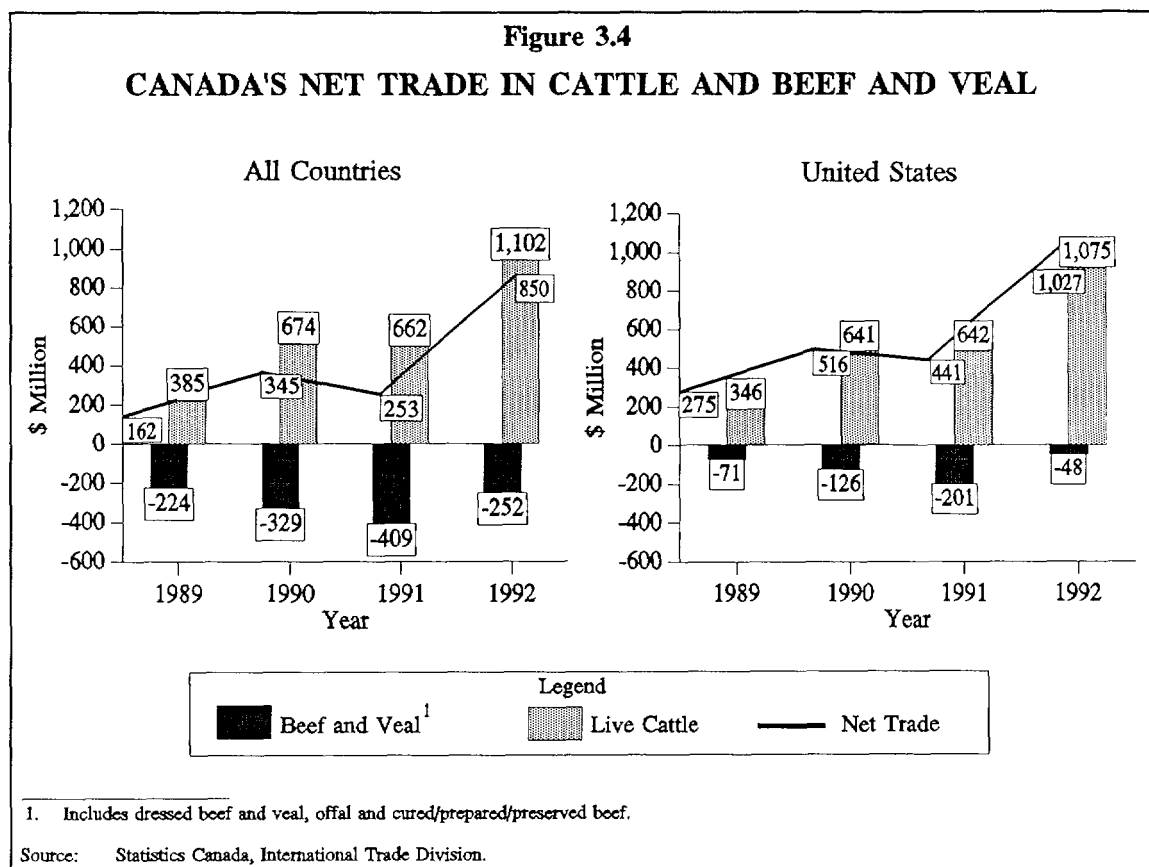
(i) Net Trade

In recent years, Canada has run a surplus in its trade of live cattle, and a deficit in its beef and veal trade, with all countries including the United States. Overall, Canada's net trade²⁷ balance for cattle and beef has been positive. Total net trade for all countries reached an all-time high of \$850 million in 1992, up from \$162 million in 1989. Total net trade with the United States increased significantly between 1989 and 1992, from \$275 million to \$1.027 billion. The following sections provide details of Canada's trade in live cattle, and beef and veal.

Figure 3.4 provides, in summary form, Canada's net trade in cattle and beef and veal since 1989 for all countries and, separately, for the United States.

26. The following conversion rates were used to convert U.S. dollars to Canadian dollars: for 1989, 1.183874, and for 1992, 1.208311.

27. Net trade is equal to exports minus imports.



(ii) Cattle Imports

Canada does not import significant volumes of live cattle. Despite fluctuations in some years, imports of live beef cattle and calves from the United States generally declined during the last decade.

Table 3.6 shows imports of various types of live beef cattle and calves. Until 1990, Canada's imports of live beef cattle and calves consisted primarily of fed steers and heifers. Since 1990, however, the relative importance of the various types of beef cattle and calves has changed, as imports of feeder cattle and calves have increased, and imports of fed steers and heifers have decreased measurably. In 1992, Canada imported 34,000 head of live beef cattle and calves from the United States, 19,000 of which consisted of feeder cattle and calves, with the remainder consisting of slaughter cattle and calves.

On a regional basis, there has been a shift in the patterns for feeder cattle and calf imports. Until 1985, Ontario was the only province importing significant volumes of feeder cattle and calves, accounting for 98 percent of all such imports. These imports decreased considerably, however, such that, by 1992, only 10 percent of all feeder cattle and calves

imported into Canada were destined for Ontario. British Columbia accounted for 90 percent of Canada's imports of feeder cattle and calves in 1992.

Table 3.6

**CANADIAN LIVE BEEF CATTLE AND CALF IMPORTS FROM
THE UNITED STATES**

(head)

	Fed Steers and Heifers	Cows and Bulls	Veal Calves	Feeder Cattle and Calves	Total
1981	152,291	707	18,076	0	171,074
1982-86	50,181	1,228	11,889	7,205	70,503
1987	57,871	2,562	9,955	13,836	84,224
1988	27,130	3,166	4,970	8,055	43,321
1989	37,434	589	1,496	5,933	45,452
1990	9,469	963	891	3,057	14,380
1991	24,671	2,255	1,166	11,668	39,760
1992	8,557	4,836	1,088	19,312	33,793

Source: Department of Agriculture, Livestock Market Review.

With regards to imports of slaughter cattle and calves since 1981, Ontario has been the largest importer. In 1992, it imported almost 9,000 head of slaughter cattle and calves, or 60 percent of the national total.

(iii) Cattle Exports

As geography would dictate, the United States is the major export market for live cattle and calves. Canadian exports of cattle and calves have increased sharply in recent years, growing from 0.4 million head in 1988 to 1.0 million head in 1992. In the past three years, over 98 percent of Canadian exports of live cattle and calves went to the United States. Exports of live cattle to other countries are limited to pure-bred and dairy cattle, primarily for breeding purposes.

More cattle and calves are exported to the United States, as fewer cattle and calves are shipped from the western provinces to Ontario. The increase was especially pronounced following the temporary trough in exports in the mid-1980s. The highest volume of live cattle and calf exports was recorded in 1992. That year, exports were 37 percent higher than they were the previous year. While exports of all types of live cattle and calves increased during the 1981-92 period, slaughter steers and heifers experienced the largest growth, followed by feeder cattle, and slaughter cows and bulls.

Exports of slaughter cattle and calves grew from approximately 157,000 head in 1981 to 732,000 head in 1992. Steers and heifers contributed the most to this export growth, increasing from 15,000 head in 1981 to 460,000 head in 1992. In addition, exports of slaughter cows and bulls increased significantly, from 80,000 to 264,000 head, throughout the last decade.

Table 3.7 shows the live cattle and calf exports to the United States.

Table 3.7								
CANADIAN LIVE CATTLE AND CALF EXPORTS TO THE UNITED STATES								
(head)								
	Feeder			Slaughter				Total Exports
	Cattle	Calves	Total	Steers & Heifers	Cows & Bulls	Veal Calves	Total	
1981	27,791	16,964	44,755	15,171	77,990	63,382	156,543	201,298
1982-86	39,894	4,761	44,655	62,345	105,864	38,337	206,546	251,201
1987	1,481	2,942	4,423	109,374	70,499	13,926	193,799	198,222
1988	21,636	5,166	26,802	226,860	147,834	24,360	399,054	425,856
1989	52,423	8,027	60,450	202,149	183,761	31,456	417,366	477,816
1990	181,957	19,512	201,469	252,379	207,088	20,115	479,582	681,051
1991	225,005	41,304	266,309	251,938	220,972	7,070	479,980	746,289
1992	253,396	39,162	292,558	460,084	264,199	7,300	731,583	1,024,141

Source: Department of Agriculture, Livestock Market Review.

Exports of feeder cattle and calves have grown since the mid-1980s. In 1992, feeder cattle and calves accounted for approximately one quarter of Canada's live cattle and calf exports and were approximately six times greater than they were in 1981.

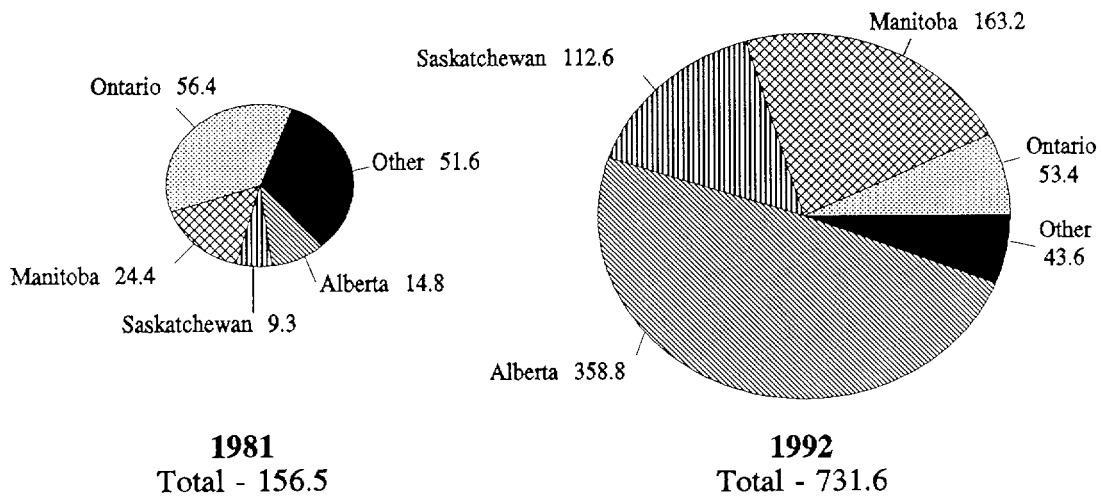
Figure 3.5 shows the volume of slaughter and feeder cattle and calf exports by selected region. Alberta is the largest exporter of slaughter cattle and calves, accounting for approximately one half of all Canadian exports in 1992. Other provinces exporting significant numbers of slaughter cattle and calves include Saskatchewan, Manitoba and Ontario. Exports of slaughter calves originate primarily in Ontario, Quebec and British Columbia.

Increased export volumes of slaughter cattle are in response to the strong demand by U.S. packers for finished cattle.

Figure 3.5

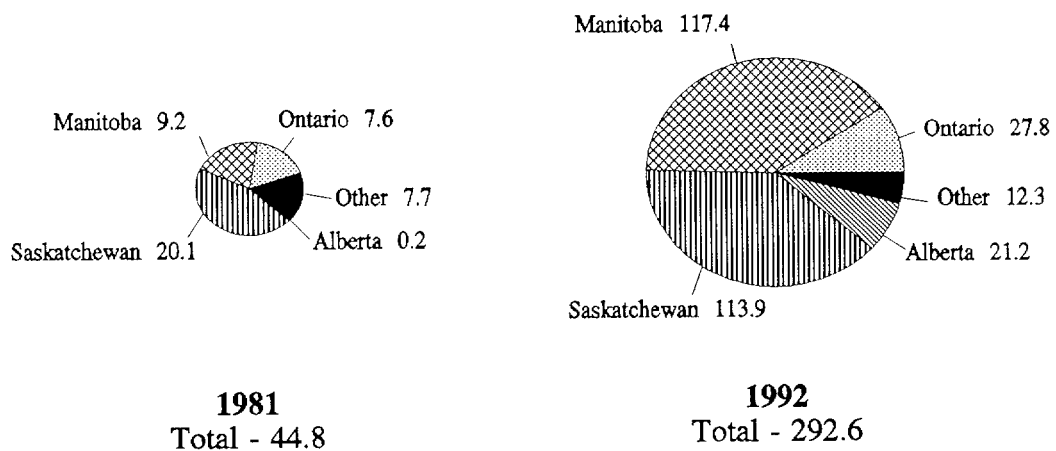
SLAUGHTER CATTLE AND CALF EXPORTS BY SELECTED REGION

(000 head)



FEEDER CATTLE AND CALF EXPORTS BY SELECTED REGION

(000 head)



Source: Department of Agriculture, Livestock Market Review.

In 1992, Manitoba and Saskatchewan recorded significant exports of feeder cattle and calves. Since 1990, however, Manitoba has been the largest exporter of feeder cattle and calves, followed by Saskatchewan and, to a much lesser extent, Alberta.

Since 1989, the relative importance of the three primary destinations of Canadian live cattle to the United States has shifted. In 1989, 49 percent of Canada's exports of live cattle to the United States were destined for the West, while 19 and 16 percent were destined for the North-Central and Great Plains regions, respectively. By 1992, the proportion of Canadian exports of live cattle destined for the West had declined to 41 percent, while those destined for the North-Central and Great Plains regions had risen to 28 and 23 percent, respectively.

In earlier years, relatively high grain prices in Canada contributed to the export of feeder cattle. More recently, some U.S. feedlot operators have become increasingly dependent on Canadian cattle to keep operating at economical capacity.

b) Canadian Beef and Veal Trade

(i) Beef and Veal Imports

Table 3.8 shows the volume and unit value of beef and veal imported into Canada since 1988.

Table 3.8										
CANADIAN BEEF AND VEAL IMPORTS ¹										
Major Sources										
(volume ² and unit value)										
	United States		Australia		New Zealand		Other		Total ³	
	million		million		million		million		million	
	kg	\$/kg	kg	\$/kg	kg	\$/kg	kg	\$/kg	kg	\$/kg
1988	47.6	4.56	37.5	2.98	27.0	3.23	14.1	2.59	126.2	3.59
1989	60.6	4.64	22.3	3.19	24.0	3.28	24.6	2.56	131.5	3.76
1990	80.2	4.44	33.5	3.01	23.8	3.27	21.0	2.71	158.5	3.73
1991	101.4	4.25	38.6	2.85	24.6	3.29	14.8	3.06	179.4	3.72
1992	95.1	4.40	51.2	2.75	20.2	3.38	10.7	2.69	177.3	3.70

1. Includes heading and subheading Nos. 02.01, 02.02, 0206.10, 0206.21, 0206.22, 0206.29, 0210.20 and 1602.50.

2. Product weight.

3. Figures may not add up due to rounding.

Source: Statistics Canada, International Trade Division.

Between 1988 and 1991, Canada's imports of beef and veal increased each year. Imports increased by 42 percent, from some 126 million kg in 1988 to approximately 179 million kg by 1991. In 1992, however, imports of beef and veal into Canada decreased slightly to 177 million kg.

Canada's largest supplier of beef and veal is the United States, followed by Australia and New Zealand. In 1992, Canada imported approximately 95 million kg of beef and veal from the United States, representing more than half of all beef and veal imported. The share of Canada's imports of beef and veal held by the United States increased yearly between 1988 and 1991, but declined slightly in 1992.

Australia accounts for 29 percent of beef and veal imports. In 1992, Canada imported approximately 51 million kg of Australian beef and veal. The share held by Australia has increased every year since 1990. New Zealand, however, is accounting for a decreasing proportion of imports. In 1988, 21 percent of Canada's imports of beef and veal originated in this country. By 1992, approximately 20 million kg of product came from New Zealand, representing 11 percent of all Canadian imports.

Imports of beef and veal from Nicaragua increased in 1989 and 1990, accounting for 15 and 11 percent, respectively, of Canada's imports. Imports increased as product from Nicaragua was banned from the U.S. market. The United States has since reopened its borders to imports from Nicaragua. Consequently, shipments to Canada from this country have since abated.

Imports of beef and veal from the United States carry the highest unit value, followed by those from New Zealand and Australia. In 1992, the unit values of U.S., New Zealand and Australian imports stood at \$4.40, \$3.38 and \$2.75/kg, respectively. The variances in prices reflect the various qualities, i.e. grain-fed versus grass-fed, and the form in which the product is shipped, i.e. fresh, chilled or frozen.

On a regional basis, Ontario is the largest importer of beef and veal. Approximately one third to one half of all Canadian imports of beef and veal were destined for this province between 1988 and 1992. Until 1990, the Atlantic region was the second largest importer of beef and veal, accounting for approximately one quarter to one third of imports. Its share has since been eroded. Quebec has been importing greater volumes of beef and veal, accounting for 26 percent of national beef and veal imports in 1992. British Columbia's share of imports remained stable between 1988 and 1992, accounting for approximately 14 percent of the Canadian total. Minimal volumes of beef and veal imports are destined for the Prairies.

- No-Roll Imports

Imports of "no-roll" have become a sensitive subject for the Canadian cattle and beef industries. No-roll is the identifier for beef produced in the United States which has been inspected, but not graded. Graded beef carcasses are given the USDA grade marking by running a roller stamp on the carcass, thus no-roll is used for ungraded beef from that country. The Canadian industries have complained that this ungraded beef can be of wide-ranging quality, resulting in poorer cuts appearing at the retail counter alongside higher-quality Canadian cuts

selling for the same price. Currently, Canada does not require retailers to identify the grade of beef at the retail counter. The push by the Canadian cattle and beef industries for mandatory labelling of beef as graded or ungraded at the retail counter is an effort to address the problem of quality identification by the consumer.

The no-roll beef market is relatively large in Canada, estimated by Kerr and Yeung²⁸ to constitute between 40 and 75 percent of beef cuts and between 10 and 15 percent of carcasses imported from the United States. Kerr and Yeung estimated that imports of no-roll beef by Ontario ranged from 6.5 million kg in 1988 to 15.5 million kg in 1992. Imports by Quebec increased from 4.2 million kg in 1988 to 10.1 million kg in 1992. Kerr and Yeung concluded that probably in excess of 80 percent of no-roll beef imports are destined for the retail trade. According to some industry sources, imports of no-roll beef may have peaked, however, as some retailers are now substituting U.S.-graded beef for no-roll imports.

(ii) Beef and Veal Exports

Table 3.9 shows the volume and unit value of beef and veal exported from Canada since 1988 by major destination.

Table 3.9										
CANADIAN BEEF AND VEAL EXPORTS ¹										
Major Destinations										
(volume ² and unit value)										
	United States		Japan		Mexico		Other		Total ³	
	million kg	\$/kg	million kg	\$/kg	million kg	\$/kg	million kg	\$/kg	million kg	\$/kg
1988	70.3	2.32	3.8	5.03	2.3	1.50	7.1	2.10	83.5	2.40
1989	82.2	2.56	6.6	4.82	2.7	1.44	8.4	2.83	100.0	2.71
1990	85.0	2.71	4.2	4.45	1.4	1.48	3.7	3.15	94.3	2.79
1991	86.9	2.65	4.4	4.15	0.5	1.82	2.7	3.24	94.5	2.74
1992	134.2	2.76	4.6	4.65	1.1	1.58	4.3	2.44	144.2	2.80

1. Includes heading and subheading Nos. 02.01, 02.02, 0206.10, 0206.21, 0206.22, 0206.29, 0210.20 and 1602.50.

2. Product weight.

3. Figures may not add up due to rounding.

Source: Statistics Canada, International Trade Division.

28. The Impact of Imported U.S. No-Roll Beef on the Canadian Market by W. Kerr and M. Yeung, 1992.

Between 1988 and 1992, Canada's exports of beef and veal were on an upward trend. Exports increased by 73 percent, from approximately 84 million kg in 1988 to over 144 million kg in 1992.

Canada's prime export market for beef and veal is the United States. In 1992, the United States represented 93 percent of all exports of beef and veal, followed by Japan at 3.2 percent and Mexico at under 1 percent. The past four years highlight that Canadian packers have concentrated their export activity on the United States: the share of beef and veal exports has increased since 1989 and grew by 54 percent between 1991 and 1992, going from 87 million kg to over 134 million kg.

Exports to Japan have remained very stable since 1990, in the range of 4.5 million kg. Likewise, exports to Mexico have not shown any notable increases since 1988.

Exports of beef and veal to Japan carry the highest unit value, \$4.65/kg in 1992, followed by those to the United States (\$2.76/kg). The unit values to Japan are, on average, 70 percent higher than those to the United States. This reflects the high-end product that is exported to Japan.

In 1980, Quebec accounted for 42 percent of Canada's beef and veal exports to the United States, Ontario for 40 percent, while Alberta's share of exports was only 3 percent. In 1992, the position of the main provinces exporting beef and veal to the United States reversed. In 1992, Alberta accounted for 38 percent of Canada's exports of beef and veal to the United States, Ontario for 29 percent, and Quebec for 13 percent. This reflects the decrease in the size of the dairy herd in Eastern Canada and the increase in the size of the beef herd in Western Canada. Ontario and Quebec's exports are destined primarily for New York and Pennsylvania, while California is a prime destination for Alberta's exports.

3. U.S. Trade

a) U.S. Cattle Trade

The United States is a net importer of cattle, experiencing a US\$1.1 billion deficit in its live cattle and calf trade in 1992. Table 3.10 shows U.S. imports and exports of live cattle.

Table 3.10
U.S. LIVE CATTLE AND CALF TRADE
(000 head)

Country	1989	%	1990	%	1991	%	1992	%
Imports¹								
Mexico	873.6	59.9	1,261.2	59.1	1,034.7	53.3	982.0	43.5
Canada	584.7	40.1	873.8	40.9	904.7	46.6	1,273.2	56.5
Other	<u>1.1</u>	<u>0.1</u>	<u>0.0</u>	<u>0.0</u>	<u>0.1</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Total ²	1,459.4	100.0	2,135.0	100.0	1,939.5	100.0	2,255.3	100.0
Exports¹								
Mexico	125.0	73.6	64.2	53.5	210.1	67.6	251.9	78.2
Canada	24.0	14.1	34.6	28.9	88.2	28.4	56.6	17.6
Other	<u>21.0</u>	<u>12.3</u>	<u>21.1</u>	<u>17.6</u>	<u>12.7</u>	<u>4.1</u>	<u>13.7</u>	<u>4.3</u>
Total ²	170.0	100.0	120.0	100.0	311.1	100.0	322.3	100.0

1. U.S. import and export figures do not correspond to Canadian import and export figures reported earlier in this chapter. Canada determines the volume of live cattle by the actual head count. The United States applies a standard formula based on value to create an estimate of the number of head traded.

2. Figures may not add up due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census.

Total U.S. imports increased from 1.5 million head in 1989 to 2.1 million head in 1990. Record numbers of cattle, representing a 46-percent increase, were imported in 1990, mainly because of relatively higher prices in the United States.²⁹ Following a 9-percent decrease in 1991, imports increased by 16 percent in 1992, reaching a high of 2.3 million head.

29. *Supra*, note 2, May 1991 at 25.

U.S. exports of live cattle and calves declined by 29 percent, from 170,000 head in 1989 to 120,000 head in 1990, then increased by 159 percent to 322,000 head in 1992. Mexico is the largest U.S. export market, accounting for about 78 percent of all U.S. exports by quantity and 77 percent by value in 1992.

b) U.S. Beef and Veal Trade

Table 3.11 shows that imports of beef and veal products from all countries increased by 14.0 percent from 1989 to 1992. The United States imported 639 million kg in 1989, increasing to 729 million kg in 1992. On the other hand, U.S. exports of beef and veal to all markets declined by 10.2 percent, from 379 million kg in 1989 to 341 million kg in 1990. Exports grew steadily thereafter to 437 million kg in 1992, an increase of 28.4 percent.

Based on the volume of trade, the United States has been a net importer of beef and veal since 1989. However, in dollar terms, the United States became a net exporter of beef and veal between 1991 and 1992.

The three largest suppliers of beef and veal to the United States are Australia, New Zealand and Canada. During the 1989-92 period, Australia was the primary supplier of beef and veal to the United States, accounting for, on average, half of all U.S. beef and veal imports. Imports from New Zealand accounted for one third, on average, and Canada ranged between 11 and 17 percent. The United States has negotiated voluntary restraint agreements (VRAs) with Australia and New Zealand to keep beef import levels within the specified limits prescribed by the *Meat Import Act of 1979*³⁰ (the USMIA).

U.S. exports of beef and veal have experienced strong growth since 1990. Japan, while still the largest U.S. export market, accounting for close to half (47.2 percent) of total exports in 1992, is no longer the overwhelming destination for U.S. product. Japan's decreasing market share of U.S. exports is the direct result of growing export trade with Canada (18.2 percent in 1992, up from 8.3 percent in 1989), Mexico (15.5 percent, up from 7.8 percent) and the Republic of Korea (12.6 percent, up from 5.7 percent).

30. Pub. L. No. 96-177, 93 Stat. 1291, 19 U.S.C. 1202.

Table 3.11

U.S. BEEF AND VEAL TRADE¹

	1989	1990	1991	1992
Imports				
Volume (million kg)				
Australia	273.0	361.7	349.8	337.5
New Zealand	219.5	192.6	211.9	212.8
Canada	87.1	80.2	80.7	126.1
Mexico	0.1	1.2	0.6	0.3
Other	<u>59.4</u>	<u>63.6</u>	<u>67.1</u>	<u>52.3</u>
Total	639.1	699.3	710.1	729.0
Value (US\$ million)				
Australia	628.4	840.8	809.7	738.0
New Zealand	513.1	478.5	528.8	504.3
Canada	185.0	186.1	186.8	286.5
Mexico	0.2	3.2	1.9	1.4
Other	<u>142.2</u>	<u>160.0</u>	<u>167.4</u>	<u>134.3</u>
Total	1,468.9	1,668.6	1,694.6	1,664.5
Exports				
Volume (million kg)				
Japan	270.2	192.0	175.0	206.6
Canada	31.7	64.9	86.7	79.4
Mexico	29.6	28.1	63.7	68.0
Caribbean ²	4.3	4.7	4.5	2.2
Republic of Korea	21.5	32.9	48.9	55.0
Other	<u>22.0</u>	<u>17.9</u>	<u>18.2</u>	<u>26.2</u>
Total	379.3	340.5	397.0	437.4
Value (US\$ million)				
Japan	1,002.0	951.7	879.7	1,113.8
Canada	120.4	286.7	367.6	331.2
Mexico	76.2	79.9	183.9	208.1
Caribbean ²	18.3	21.8	20.9	11.9
Republic of Korea	78.8	116.7	176.8	211.6
Other	<u>96.8</u>	<u>90.4</u>	<u>96.0</u>	<u>124.0</u>
Total	1,392.5	1,547.2	1,724.9	2,000.6

1. Data apply only to fresh, chilled or frozen beef and veal in heading Nos. 02.01 and 02.02. Direct comparisons with other tables in this report are not possible.

2. Member countries of the Caribbean Community (CARICOM).

Source: U.S. Department of Commerce, Bureau of the Census.

4. Mexican Trade

a) Mexican Cattle Trade

The U.S. market is of primary importance to the Mexican cattle industry and, thus, the industry is vigorously promoting Mexican cattle north of the border. However, the Mexican government has a long history of regulating its cattle and beef trade. Throughout most of the 1980s, exports of feeder cattle were controlled by a combination of export quotas (which effectively set a ceiling on exports) and export permits. This policy allowed the government to keep track of the number of feeder cattle leaving the country.

The policy of requiring foreign buyers to purchase permits limited the growth in feeder cattle exports in the mid-1980s and, between 1986 and 1992, exports were in the range of 0.9 to 1.2 million head. This can be explained by the fact that demand for feeder cattle in the United States began to increase sharply in the fall of 1986, as available supplies of domestic feeder cattle were limited because of U.S. herd liquidation. During the same period, Mexican beef prices were controlled by the government's policy that was aimed at making meat more affordable, particularly to low-income consumers. As U.S. cattle prices improved in an absolute sense, and in relation to Mexican cattle prices, Mexican cattle producers sold increasing numbers of feeder cattle to U.S. feedlots at the higher prices.

In 1987, the government set out a plan that would liberalize trade in feeder cattle over a five-year period. Table 3.12 shows that the existing export quota was replaced in 1988 by a declining export tariff, culminating in the removal of all tariffs in the fall of 1992.

Table 3.12

MEXICAN TARIFF RATES ON FEEDER CATTLE EXPORTS

Month and Year	Quota or Tariff	Minimum Tariff
Sept. 1987 - Aug. 1988	1.23 million head	
Sept. 1988 - Aug. 1989	20 percent	\$60 per head
Sept. 1989 - Aug. 1990	10 percent	\$30 per head
Sept. 1990 - Aug. 1991	5 percent	\$15 per head
Sept. 1991 - Aug. 1992	2 percent	\$ 5 per head
Sept. 1992	Tariff Removed	

Source: The WEFA Group, *Analysis of the Mexican Cattle and Beef Industries*, July 1993.

Under normal circumstances, feeder cattle exports to the United States could have been expected to increase over this period. However, there were particular circumstances that

prevented this expected pattern from occurring. Although feeder cattle prices in the United States increased by 20 percent between 1987 and 1991, making the U.S. feeder cattle market attractive to Mexican cattlemen, a drought in Mexico in 1989 and 1990 reduced pasture feed supplies, causing liquidation of both heifer calves and breeding stock. After 1990, exports dropped as producers retained more heifers for herd rebuilding.

Future exports of feeder steers³¹ could be affected by health considerations. The United States is expected to be declared free of bovine tuberculosis in 1994.³² Currently, there is no system for declaring individual Mexican states as being free of disease; therefore, the entire country must be certified as a whole. This makes certification more difficult and puts the Mexican livestock industry at a severe disadvantage. Steer exporters in northern Mexico will suffer the most, as they will have to adhere to additional health requirements that will drive up costs and lower profits. In addition to providing documentation of a test for bovine tuberculosis, the animals will likely have to be quarantined.

Campaigns against bovine tuberculosis have been successful in states such as Baja California, Baja California Sur, Sonora and Chihuahua. This is partly the result of having relatively modern livestock sectors and favourable geographic conditions. While currently concentrating on the eradication of bovine tuberculosis in the northern states, which account for about 90 percent of Mexico's steer exports, the Mexican government is also pressuring the USDA to recognize the concept of disease-free regions in Mexico.

The United States provides almost all of Mexico's imports of live cattle. As the U.S. export data in Table 3.10 show, shipments of live cattle and calves from the United States fell from 125,000 head in 1989 to 64,000 head in 1990, and then increased over 290 percent to reach 252,000 head by 1992. Most of these cattle imports are slaughter animals.³³ Prior to November 1992, there were no import tariffs on cattle, except for a 10-percent tariff on breeding cattle which was removed in 1989. In November 1992, Mexico imposed a 15-percent tariff on cattle imports.

b) Mexican Beef and Veal Trade

Throughout most of the 1980s, Mexico's tariff on beef and veal imports was designed to protect domestic producers from foreign supplies of competitively priced beef and veal. However, these measures resulted in reduced beef supplies. When increasing exports of feeder steers to the United States reduced the available supply of cattle for domestic beef production, the government maintained the import tariff on beef and veal and established a quota (ceiling) on exports of feeder steers.

31. Only Mexican steers are exported because, for animal health reasons, the United States will not allow heifers to be sent from Mexico. Canadian International Trade Tribunal, Notes from the February 18, 1993, Tour of the Facilities of VISA, Monterrey, Nuevo Leon, Mexico, Given to Tribunal Members and Staff, April 21, 1993.

32. The WEFA Group, Analysis of the Mexican Cattle and Beef Industries, July 1993 at 5.3.

33. *Supra*, note 2, October 1992 at 41.

The 10-percent import tariff on beef and veal that had been in effect through 1988 was removed in 1989. Once the tariff was removed, beef and veal imports began increasing in large volumes. As Table 3.13 indicates, Mexican beef and veal imports increased by 900 percent between 1988 and 1992, from 15 million kg to 150 million kg. The United States is the principal supplier, accounting for about 45-50 percent of Mexican imports.

Table 3.13					
MEXICAN BEEF AND VEAL TRADE¹					
(million kg)					
	1988	1989	1990	1991	1992²
Imports	15	40	60	120	150
Exports	0	4	5	4	5

1. Data apply only to fresh, chilled or frozen beef.
2. Preliminary.

Source: U.S. Department of Agriculture, Dairy, Livestock and Poultry: World Livestock Situation, October 1992.

The dramatic rise in beef and veal imports caused domestic producers to claim that imports were eroding domestic livestock prices and to lobby the government for protective action. Faced with this increase in imports, the Mexican government imposed tariffs on imports of fresh beef and veal at 20 percent, frozen beef and veal at 25 percent and cattle at 15 percent in November 1992. If the *North American Free Trade Agreement*³⁴ (NAFTA) is approved by legislative bodies in all three countries, the Mexican import tariffs for Canada and the United States will be removed according to the provisions of the agreement.

Mexican exports, while non-existent in 1988, have remained stable at 4-5 million kg per year since 1989.

5. Conclusion

The international markets for beef and veal are very competitive, and the competition is increasing, particularly from the United States, Australia and New Zealand. Japan, the Republic of Korea and Taiwan appear to be the most promising offshore export markets for Canada's beef

34. As signed at Ottawa, Mexico and Washington on December 17, 1992.

and veal, as these countries are liberalizing their markets and experiencing strong growth in consumption.

Trade in cattle and beef and veal between Canada, the United States and Mexico has increased steadily in recent years and is becoming more important to Canada's agriculture. Canada has traditionally run a trade surplus in live cattle and a deficit in beef and veal. The net balance, however, is positive. In 1992, the total net trade for all countries was \$850 million, an all-time high.

Canada's net trade balance in cattle and beef and veal with the United States exceeded \$1 billion in 1992. Canadian live cattle and beef and veal exports to the United States increased to a high of \$1.1 billion and \$370 million, respectively. The U.S. live cattle and beef and veal exports to Canada reached \$28 million and \$418 million, respectively, in 1992. The United States is the major supplier of beef and veal to Canada, followed by Australia and New Zealand.

The volume of cattle and beef and veal trade between Canada and Mexico is relatively low. The United States is Mexico's largest supplier of beef and veal and is the crucial export market for Mexican feeder cattle, as well as slaughter cattle.

CHAPTER IV

DEMAND, PRODUCTION COSTS, PRICES AND MACROECONOMIC FACTORS

There are many factors, short- and long-term, national and international, market- and government-defined, that affect the competitiveness of the Canadian cattle and beef industries. This chapter considers one such group of influences, namely, the basic factors, or the "givens," that determine the overall market environment in which the Canadian cattle and beef industries operate:

- the demand for beef;
- the costs of production of cattle and beef;
- the pricing of cattle and beef; and
- the interest rates and the Canada-United States exchange rate.

1. Demand for Beef

This section first gives a historical overview of total and per-capita beef and veal consumption and consumer expenditures on beef in Canada, the United States and Mexico. Second, an analysis is presented of the principal factors that affect the demand for beef, including prices, incomes, product characteristics, demographics and consumer preferences. Finally, there is a discussion of the impact on the demand for beef of certain developments in the way beef is marketed and distributed.

a) Historical Overview of the Demand for Beef in Canada, the United States and Mexico

(i) Total and Per-Capita Consumption of Beef and Veal

Table 4.1 gives the total and per-capita consumption of beef and veal in Canada, the United States and Mexico for selected years.

Table 4.1

**TOTAL AND PER-CAPITA CONSUMPTION OF BEEF AND VEAL
CANADA, THE UNITED STATES AND MEXICO
1980-92**

(carcass weight equivalent)

Year	Canada		United States		Mexico ^{1,2}	
	Total	Per Capita	Total	Per Capita	Total	Per Capita
1980	986	40.9	10,855	47.7	-	-
1981-84	1,025	41.5	11,324	48.6	-	-
1985-87	1,021	40.2	11,816	49.1	-	-
1988	1,008	38.9	11,611	47.4	1,232	16
1989	1,002	38.2	11,170	45.1	1,199	15
1990	984	36.9	11,016	44.1	1,169	14
1991	975	36.0	11,076	43.9	1,305	16
1992	972	35.4	11,040 ³	43.5	1,392	17

Notes: Total consumption data are in million kg.
Per-capita consumption data are in kg.

1. Data for Mexico do not include veal.

2. Per-capita figures for Mexico are estimates calculated by Tribunal staff using estimated consumption data (see Table 2.9 of this report) and population figures as provided by The WEFA Group. (See Canadian International Trade Tribunal, Competitiveness of the Canadian Cattle and Beef Industries in the North American and World Markets, Staff Report, August 1993, Table 4.1 at 96.)

3. Preliminary estimate.

Source: For Canada: Statistics Canada, Livestock Statistics, Catalogue 23-603E, March 1993, and Tribunal calculations; for the United States: U.S. Department of Agriculture, Livestock and Poultry: Situation and Outlook Report, February releases, and Tribunal calculations; and for Mexico: Canadian Embassy in Mexico, Market Study on the Mexican Market for Meat and Livestock Products, Tribunal calculations, The WEFA Group and U.S. Department of Agriculture, Dairy, Livestock and Poultry: World Livestock Situation, October 1992.

In Canada, total consumption of beef and veal reached a peak in the 1981-84 period and declined steadily thereafter. The downward trend in total Canadian consumption of beef and veal reflects a decline in per-capita consumption, which, from 1980 to 1992, fell by 13 percent, from

40.9 to 35.4 kg.¹ This decrease in per-capita consumption continued a trend that began in the preceding decade, when per-capita consumption fell by one quarter from 1976 to 1980.

In the United States, total consumption of beef and veal continued to rise until 1985-87, declined for the next three years, rose marginally in 1991 and then declined again in 1992.² From 1980 to 1992, the per-capita consumption of beef and veal in the United States fell by less than it did in Canada, decreasing by 9 percent, from 47.7 to 43.5 kg.

Despite the overall decline in consumption of beef and veal in both Canada and the United States, the consumption of ground beef has risen at the expense of other types of beef. In fact, ground beef now accounts for approximately 35 and 42 percent, respectively, of the beef consumed in Canada and the United States.³

In comparison with the trends seen for beef and veal during the 1980s, the per-capita consumption of poultry increased substantially in Canada and the United States.⁴

In Mexico, total consumption of beef declined moderately in 1989 and 1990 from its level in 1988, then rose by 12 percent in 1991 and by a further 7 percent in 1992.⁵ Per-capita consumption of beef in Mexico varied between 14 and 17 kg from 1988 to 1992.⁶ Because of the loss of buying power, Mexican meat consumption is approximately the same as it was 20 years ago.⁷

In Mexico, more expensive grain-fed beef, which is primarily imported from the United States, is purchased by upper-income consumers and the tourist industry. Middle- and lower-income Mexicans are likely to buy the much leaner "Spanish cuts," coming from grass-fed cattle. Those at the bottom of the economic ladder consume mostly offal.⁸

(ii) Expenditures on Beef

In Canada, consumer expenditures on beef have mirrored the changing trends in consumption patterns. That is, expenditures on beef as a proportion of expenditures on all meat fell from 39 percent in 1982 to 34 percent in 1990.⁹

1. Statistics Canada, Livestock Statistics, Catalogue 23-603E, 1993; and Tribunal calculations.

2. *Supra*, Chapter III, note 24, February releases; and Tribunal calculations.

3. For Canada: *supra*, Chapter II, note 6 at 4; and for the United States: Cattle•Fax, An Economic Analysis of Low-Fat Ground Beef, September 1991 at 12.

4. *Supra*, notes 1 and 2.

5. Canadian Embassy in Mexico, Market Study on the Mexican Market for Meat and Livestock Products; Tribunal calculations; The WEFA Group; and U.S. Department of Agriculture, Dairy, Livestock and Poultry: World Livestock Situation.

6. *Ibid.*

7. *Supra*, Chapter II, note 51.

8. Canadian Embassy in Mexico, Market Study on the Mexican Market for Meat and Livestock Products at 16-17.

9. Statistics Canada, Family Food Expenditure in Canada: 17 Metropolitan Areas 1990, Catalogue 62-554, 1992.

During the same period, expenditures on all meat as a proportion of food expenditures declined, while an increasing proportion of the food dollar was spent on fruits and vegetables.¹⁰ Similarly, expenditures on all food items as a percentage of disposable income continued to fall.¹¹

Trends in consumer expenditures on beef, all meat and food in general were similar in the United States.¹²

b) Selected Factors Affecting Consumer Demand for Beef

There is a range of factors that influence consumer demand for beef, including prices, income levels, product characteristics, demographics and consumer preferences.

(i) Prices

The retail price of beef is one factor affecting the demand for beef. A 1993 study conducted for the Manitoba Red Meats Forum Inc. (Manitoba Forum) looked at over 20 studies on consumer meat demand undertaken since the 1970s.¹³ The studies, which primarily considered Canada and the United States, used a variety of estimation techniques and covered different time periods. On average, the report found that, for every 10-percent increase or decrease in the price of beef, assuming nothing else changes, the demand for beef falls or rises by approximately 6.5 percent.¹⁴

The report also found that the demand for beef is somewhat more sensitive to changes in its own price than is the demand for chicken. On the other hand, based on the studies consulted, the demand for pork is marginally more sensitive to changes in its own price than is the demand for beef.¹⁵

To the extent that consumers view other meats as substitutable for beef, then the prices of those other products will also affect the demand for beef. For example, all other things being equal, when the prices of poultry and pork decrease, so too should the demand for beef, and vice versa.¹⁶

(ii) Income Levels

Real consumer income levels also affect the demand for beef. The 1993 study for the Manitoba Forum found that, on average, assuming nothing else changes, for every 10-percent increase or decrease in real consumer incomes, the demand for beef rises or falls by

10. *Ibid.*

11. Department of Agriculture, Consumer Food Trends for the 1990s, 1990 at 10.

12. Competitive Issues in the Beef Sector: Can Beef Compete in the 1990s? by D. Johnson *et al.*, October 1989 at 8.

13. North American Meat Demand prepared by J. Eales for the Manitoba Red Meats Forum Inc., February 14, 1993.

14. This is defined as the "own-price elasticity of demand." The demand for beef is own-price inelastic. *Ibid.* at i.

15. The own-price elasticities of demand for both chicken and pork are inelastic. *Supra*, note 13 at i.

16. This is the notion of "cross-price elasticity of demand," which measures the percentage change in demand for one product resulting from a 1-percent increase in the price of a second product, all other prices being held constant.

approximately 6.7 percent.¹⁷ Changes in consumer income levels lead to somewhat lesser changes in the demand for chicken and pork.¹⁸

(iii) Product Characteristics

One of the most important factors negatively affecting the demand for beef is the perception of consumers that beef is of inconsistent quality. A major survey conducted in 1992 by the Beef Information Centre (BIC), the marketing and promotion arm of the Canadian Cattlemen's Association (CCA), found that approximately one in three respondents was not completely satisfied with the consistency of quality in the beef on the market.¹⁹

While retailers have long advertised beef, e.g. "Canada A grades," a small number, including Costco in Western Canada, now advertise and sell only "AAA" grade beef,²⁰ which provides additional information to consumers on product quality. Some retailers have also begun to provide consumers with nutritional information on meat products, and recipes and information on meat cuts.²¹

(iv) Demographics and Consumer Preferences

Several demographic factors have an impact on the demand for beef. In some cases, the evidence in the literature is relatively clear. For example, it appears that older consumers purchase less beef, regardless of the price of beef or their level of income.²²

Current consumer preferences with regard to meat do not favour beef. The 1992 BIC survey found that beef is seen as a "traditional family meal and is not considered to be as suitable for meals on the run, or for snack-type meals."²³ Health and nutrition issues were important to three quarters of those surveyed, with consumers who had positive attitudes towards beef's healthfulness consuming significantly more beef than those who expressed concerns about its nutritional qualities.²⁴ Consumers are unwilling to buy beef if they perceive it as being too fat.²⁵ In addition, consumers have expressed dissatisfaction with current beef packaging, particularly if it is not freezer-ready or leakproof.²⁶ Finally, concerns over the environment and

17. This is defined as the "income elasticity of demand." The demand for beef is income inelastic. *Supra*, note 13 at i.

18. The demand for chicken and pork is income inelastic. *Supra*, note 13 at i.

19. Beef Information Centre, *So What's Your Beef?*, February 1993 at 6.

20. Canadian International Trade Tribunal, *Notes from the March 26, 1993, Meeting Between XL Beef and Tribunal Members and Staff*, August 6, 1993.

21. Canadian Council of Grocery Distributors, *1992 State of the Industry Report: A CCGD/FMI Comparative Study of the Food Industry in Canada and the United States*, November 1992 at 11.

22. *Supra*, note 13 at 67.

23. *Supra*, note 19 at 2.

24. *Supra*, note 19 at 3.

25. National Cattlemen's Association, *Executive Summary, National Beef Quality Audit*, 1992 at 15.

26. Ontario Ministry of Agriculture and Food, *Beef Quality - The Canadian Consumer's Perspective: A Summary of the Research on Beef Quality Conducted by Actionable Market Research for the Ontario Ministry of Agriculture and Food*, October 1987 at 5.

animal rights have likely negatively affected some consumers' perceptions of all red meat, including beef.²⁷

In comparison with beef, the nature of poultry as a consumer product has changed considerably in recent years. That is, in the 1960s, the majority of chicken was sold as whole birds, but 20 years later, parts represented the most common form in which chicken was sold.²⁸ Further, there are more value-added products that rely on poultry.

c) Future Demand for Beef in Canada, the United States and Mexico

Projections for future consumption of beef in Canada and the United States tend to show relatively stable levels of demand. That is, there are no factors currently at work in the market which would indicate that there will be significant future increases in the consumption of beef. On the contrary, the indicators suggest the opposite trend:

- the population is aging;
- overall population growth is slowing; and
- neither real disposable incomes nor prices of competing meats are expected to rise significantly.

The outlook is somewhat more promising in Mexico, where consumption of beef is forecast to increase by 5 percent in 1993.²⁹ Over the longer term, as incomes increase in Mexico, so should the consumption of beef.

d) Developments in the Marketing and Distribution of Beef

Certain developments in the marketing and distribution of beef are important to better understand the demand for beef.

(i) Boxed Beef

Boxed beef³⁰ first appeared during the mid-1960s in the United States. Prior to this period, beef was largely distributed in carcass form, as either sides or quarters. By the late 1980s, boxed beef accounted for 80 percent of the beef distributed to retail outlets in the United States.³¹ Some industry analysts expect carcass beef to all but disappear in the United States during the 1990s.³²

In Canada, boxed beef is not as predominant and, according to one witness at the Ottawa public hearing for this inquiry, only 60 to 70 percent of beef is currently distributed in boxed

27. Canadian Council of Grocery Distributors, Trends in Canada: Survey on Consumer Shopping 1991 at 35.

28. *Supra*, note 13 at 56.

29. U.S. Department of Agriculture, Dairy, Livestock and Poultry: World Livestock Situation, April 1993 at 5.

30. Boxed beef refers to carcasses broken down into primal or subprimal cuts and vacuum-packed in leakproof plastic bags which are placed in boxes.

31. Livestock and Meat Marketing by J.H. McCoy and M.C. Sarhan, 1988 at 323.

32. *Supra*, note 12 at 68.

form.³³ In Quebec, where there is still a preference for beef in carcass form, an even smaller percentage of beef is distributed in boxed form.³⁴

Boxed beef offers several advantages to wholesalers and retailers, in that it is easier to handle, reduces transportation costs and waste, lowers retailers' in-store labour costs and results in less spoilage and shrinkage. In 1991, retail meat departments in Canada produced 87 pounds of meat per labour hour, while those in the United States produced 125 pounds per labour hour, with "[a] major part of this difference result[ing] from the much higher proportion of beef received in subprimal form in the U.S. and from the fact that in Canada, one store in eight still receives swinging beef carcasses."³⁵

(ii) No-Roll

Chapter III of this report discusses the increase in the volume of imports of no-roll beef into Canada from the United States in recent years. Because current labelling regulations do not require ungraded beef from any source to be identified as such at the retail level, Canadian consumers cannot absolutely determine the quality of the beef that they purchase until they consume it. To the extent that ungraded beef, including no-roll from the United States, is of lower quality, it contributes to consumers' negative perceptions of the quality of beef.

(iii) The HRI Sector

In recent years, there has been a shift away from food consumption at home. In 1981, food expenditures at home accounted for 73 percent of total expenditures on food, while in 1990, the percentage fell to 69 percent.³⁶

Growth in the hotel, restaurant and institutional (HRI) sector is expected to continue in future years, particularly in the take-out and home-delivery segments.³⁷ Beef's share of the HRI sector is strongest in the fast-food segment, primarily in the form of hamburger sales, and weakest in the table service segment.³⁸ Beef appears to be at a competitive disadvantage compared to other products in this latter segment because it is viewed as a "heavier" meal item.

The claim is sometimes made that beef packers in Canada are unable to provide sufficient volumes of "middle cuts"³⁹ to the HRI sector, in part because they focus on meeting the needs of retailers who can generally make use of a wider range of cuts.⁴⁰ In its submission of March 1993, the Canadian Meat Council (CMC) states that "there is a constant concern about

33. Testimony of Mr. Larry Campbell, Canadian Meat Council, transcript, April 21, 1993, at 333.

34. Department of Agriculture, Competitiveness of the Beef Industry in Canada and Beef Imports, Working Paper 8/91, May 1991 at 2-5.

35. *Supra*, note 21.

36. Result for 1981 from the Department of Agriculture, Handbook of Food Expenditures, Prices and Consumption; and result for 1990 from data supplied directly by the Department of Agriculture.

37. Canadian Restaurant and Foodservices Association, 1993 Foodservice Facts, 1993.

38. *Ibid.*

39. Middle cuts are premium cuts coming from ribs, short loins and sirloins.

40. *Supra*, note 12 at 3-2. Retailers in Quebec have marketed large volumes of one particular middle cut, namely, the "French Roast." This cut was imported in large volumes from the United States.

maximizing returns for the total carcass as between sales of all the cuts to retailers vs only the middle cuts to foodservice and difficult disposition of the balance of the cuts.⁴¹" Although beef packers in the United States are also concerned about utilizing the whole beef carcass, the larger size of the market makes it easier to dispose of the remaining cuts.⁴²

(iv) Food Wholesaling and Retailing Industries

In Canada, the food wholesaling industry is highly concentrated in ownership and integrated closely with the food retailing industry. Although U.S. food wholesaling has become more concentrated in recent years, it remains less concentrated than the industry in Canada and less integrated with the food retailing industry.⁴³

Similarly, ownership in the food retailing industry is more concentrated in Canada than in the United States. In Canada, there are proportionally more grocery stores than there are in the United States, with the average size of grocery stores being smaller. In the United States, warehouse-type stores and large discounters (e.g. Price Club) play a more important role in the food retailing industry.⁴⁴

In Canada, fresh meat and poultry account for nearly 18 percent of average grocery store sales.⁴⁵ Beef is the single largest selling item, accounting for almost one third of retail meat sales.

2. Production Costs, Scale and Integration in Cattle and Beef Industries in Canada, the United States and Mexico

Costs of production are an important element in assessing the competitiveness of the Canadian cattle and beef industries.

The limitations of comparing unit costs of production across jurisdictions cannot be too strongly emphasized. Not only do methods of data collection differ but so do the definitions of the various cost items. There are often significant differences in production methods, e.g. type of rations fed or number of shifts in a beef-packing plant. Therefore, any conclusions about relative cost competitiveness must be tempered by a recognition of the often significant differences in data sources.

The following four sections will consider costs of production in the cow-calf, feedlot and beef-packing sectors. As described in Chapter II of this report, Mexican cattle production methods are not generally the same as those in Canada and the United States. Therefore, costs of production for the cattle industry in Mexico will be analyzed in a single section.

41. Submission of the Canadian Meat Council, March 9, 1993, at 3.

42. Canadian International Trade Tribunal, Notes from the March 22, 1993, Meeting Between Lakeside Farm Industries Ltd. and Tribunal Members and Staff, August 3, 1993.

43. Ernst & Young, Responding to Cross Border Shopping: A Study of the Competitiveness of Distribution Channels in Canada, March 1992 at 16-10, 16-11 and 16-40.

44. *Ibid.* at 16-6 and 16-7.

45. Ontario Ministry of Agriculture and Food, PDR Notes, September 9, 1992, at 6.

a) Cow-Calf Operations: Canada and the United States

This section gives an overview of production costs in the cow-calf sector in Canada and the United States. As well, the issue of economies of scale in cow-calf production is examined.

(i) Production Costs

The Tribunal staff analyzed costs of production from a wide variety of sources in Canada and the United States, encountering significant problems in interpreting the data.⁴⁶ In any case, the manner in which the CCA describes cow-calf farming, in its September 1993 submission, better captures the nature of production costs in this sector than would a direct comparison of costs in different regions:

[The] majority of beef cows are kept on mixed farm operations on which they are not the most important source of income. Their role is to make use of rough land, crop by-products and other unusable feed supplies and to provide some income stability, especially to grain operations [in Canada].... In this situation, calculated production costs are often high but usually include costs of otherwise unused land, labor and feed.⁴⁷

The type of feed and pasture used in cow-calf farming varies in different regions in Canada and the United States. For example, corn is a common source of silage in Eastern Canada and the eastern United States, while range grazing is more important in the western regions of both countries. This suggests that cow-calf farming can be competitive using a range of forages. The key to competitiveness is that forage be widely available, at a competitive cost. In turn, climate and topography are the major factors that determine the type and cost of the available forage.

In assessing the relative competitiveness of various regions in cow-calf production, it is important to note that proximity to cattle-feeding and beef-packing industries may help to offset higher production costs. In other words, there is a certain synergy created by having the cow-calf, feedlot and beef-packing sectors in close proximity to one another.

46. For example, costs were most often presented in terms of "dollars/cow," calculated by summing all the costs associated with producing a crop of calves from a given herd and then dividing these costs by the number of cows in that herd. To the extent that weaning percentages vary from region to region, cost comparisons would not be on the basis of "apples to apples." Another problem was that, in some regions, farms being surveyed as "cow-calf farms" were also likely engaged in backgrounding or other forms of cattle feeding. Further, the methods used to value farm-grown feed and pasture costs, two of the most significant elements of cost, varied greatly from region to region. Finally, data were not available from all sources for the same period of time.

47. Comments of the Canadian Cattlemen's Association on the staff report, September 3, 1993, at 3.

(ii) Economies of Scale in Cow-Calf Operations

Data from Alberta for 1990 indicate that, compared to a herd size of less than 55 cows, herds of 55-110 cows had variable costs that were 17 percent lower, while costs for herds with 111 cows or more were a further 24 percent lower.⁴⁸ Although larger herds did have lower unit feed costs, their greatest proportional advantage was in equipment repairs and fuel, oil and utilities.

Results for 1990-91 for cow-calf operations in the United States also suggest that there are economies of scale in cow-calf operations.⁴⁹ In this instance, cow-calf operations with herd sizes of more than 1,000 cows had the lowest unit cost for feed, interest and machinery repairs. However, unit labour costs increased for herd sizes of more than 100 cows.

In 1991, the average size of beef cow herds was nearly identical in Canada and the United States, at approximately 38 and 37 cows, respectively.⁵⁰ However, in the United States in 1992, some 47 percent of the total inventory of beef cows were in herds of more than 100 cows, while in Canada, data for 1986 suggest that the percentage of cows in larger-sized herds was somewhat smaller.⁵¹

b) Feedlots: Canada and the United States

This section compares the costs of production and cash receipts for feedlot operations in Eastern and Western Canada to those in the Great Plains and the Corn Belt in the United States. As well, the economies of scale in feedlot operations are considered.

(i) Comparison of Feedlot Costs

The major costs of cattle feeding are the feeder cattle themselves, the feed and other variable costs, such as labour, interest, medicine and veterinary services, and transportation. Other than the feeder cattle, feed is the largest component of cost. Together, the cost of feed and other variable costs represent the "cost of gain," that is, the cost of putting weight on feeder cattle in order to be able to sell them as fed cattle.

The difference between the cost paid by a feedlot for its feeder cattle and the price that it receives for fed cattle is the size of the "cattle price spread," or margin available to support the cost of gain and to generate a positive "net margin," i.e. a profit. A negative net margin will result when the cost of gain is greater than the cattle price spread.

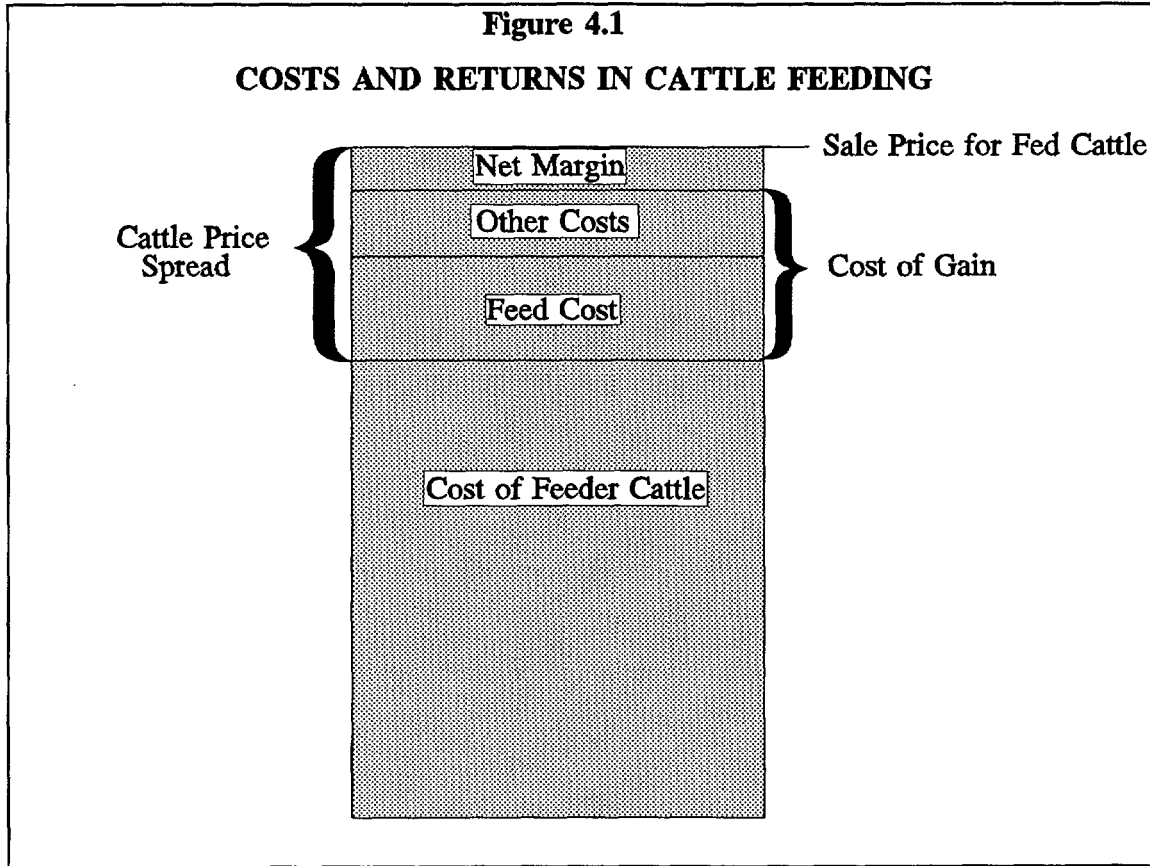
48. Alberta Ministry of Agriculture, Production Economics Branch, 1990 Costs and Returns Summary: Cow-Calf Operations, September 1991.

49. Unpublished data provided by the U.S. Department of Agriculture, January 1993.

50. For Canada, Statistics Canada, Agriculture Economic Statistics, Catalogue 21-603E; and for the United States, *supra*, Chapter II, note 35 at 5.

51. For Canada, SCI Sparks Companies, Inc., British Columbia Beef Industry Review, April 1992; and for the United States, U.S. Department of Agriculture, Cattle, February 1993.

Figure 4.1 illustrates these cost and return concepts.



To analyze the costs of production for Canadian and U.S. feedlots, the Tribunal relied on estimates developed by Canfax⁵² and the Economic Research Service of the USDA,⁵³ respectively. In both instances, estimates are developed using a complex set of formulae and assumptions.⁵⁴ From the available data, the following measures were derived:⁵⁵

52. Canfax develops monthly estimates for feeding six classes of cattle, namely, heifer calves, steer calves, yearling heifers, yearling steers, short-keep heifers and short-keep steers, for "typical" commercial feedlots in Western Canada, i.e. Alberta, and in Eastern Canada, i.e. Ontario. Estimates for short-keep heifers are not developed for Eastern Canada.

53. The Economic Research Service of the U.S. Department of Agriculture develops monthly estimates for feeding a single class of steers in "typical" feedlots in the Great Plains and the Corn Belt.

54. *Supra*, Chapter II, note 37, Appendices 9.11 and 9.12 give the assumptions for the databases developed by Canfax and the Economic Research Service of the U.S. Department of Agriculture, respectively.

55. The cattle-feeding industry uses a number of different measures, with different names, to assess costs and profitability. The four measures presented in this report illustrate different aspects of costs and returns in feedlots in Canada and the United States.

1. "feed cost/cwt of gain"⁵⁶ = feed cost divided by the cwt of gain;
2. "cost/cwt of gain" = feed cost and all other costs, excluding the cost of the feeder cattle, divided by the cwt of gain;
3. "cattle price spread/cwt of gain" = sale price of the fed cattle, less the cost of the feeder cattle, divided by the cwt of gain; and
4. "net margin/cwt of gain" = sale price of the fed cattle less total costs (i.e feeder cattle, feed and all other costs) divided by the cwt of gain.

Figures 4.2 to 4.5 illustrate these four measures for feedlots in Western Canada, Eastern Canada, the Great Plains and the Corn Belt from 1981 to 1992.⁵⁷ The data are in Canadian dollars. For the sake of clarity of presentation, an average is given for Canadian feedlots which represents an equal (one third) weighting of steer calves, yearling steers and short-keep steers.

As shown in Figure 4.2, compared to the other three regions examined, feedlots in Western Canada enjoy a competitive advantage in terms of feed cost/cwt of gain. The feed cost/cwt of gain is second lowest in Eastern Canada and highest in the Great Plains. As Figure 4.3 illustrates, feedlots in Western Canada retain their advantage when cost/cwt of gain is considered. This suggests that the advantages enjoyed by feedlots in Western Canada apply equally to feed and non-feed costs. The cost/cwt of gain is quite similar in the other three regions.

Figure 4.4 shows that the cattle price spread/cwt of gain is generally smaller for feedlots in Western Canada, compared to feedlots in the other three regions examined. In other words, the spread between the cost of feeder cattle and the price for fed cattle is smallest in Western Canada. As shown in Figure 4.5, feedlots in Western Canada also have the largest net margin/cwt of gain. In Eastern Canada, the Great Plains and the Corn Belt, Figure 4.5 shows that the net margin/cwt of gain was more likely to be negative than positive during the period examined.

The positive net margins in Western Canada are the result of the cost of gain being small relative to the cattle price spread. In other words, although the cattle price spread is larger in the other three regions examined, the cost of gain is proportionately higher. Those regions of North America, where conditions are such that they allow comparatively low costs of gain, have a competitive advantage in cattle feeding. Feedlots that face a smaller spread between the prices at which they buy and sell cattle and remain profitable must be efficient operators. The advantages that they possess with regard to costs of gain enable them to operate profitably, notwithstanding lower prices for fed cattle and higher costs for feeder cattle.

56. Dividing by the cwt of gain is a means of standardizing results over a range of feeding situations.

57. The Corn Belt series was discontinued in 1990, while the Canfax series for Eastern Canada was discontinued in November 1992.

Figure 4.2

FEED COST/CWT OF GAIN

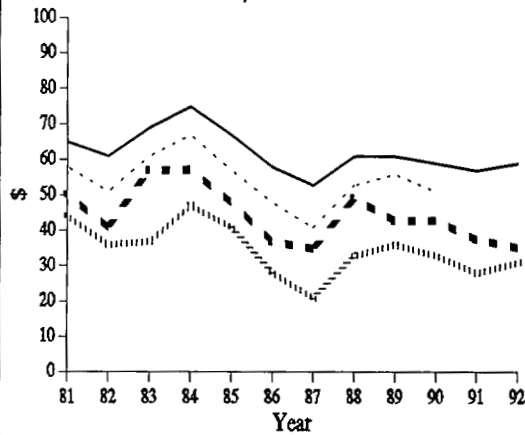


Figure 4.3

COST/CWT OF GAIN

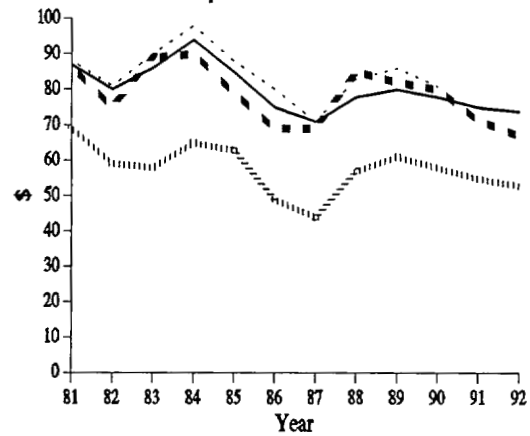


Figure 4.4

CATTLE PRICE SPREAD/CWT OF GAIN

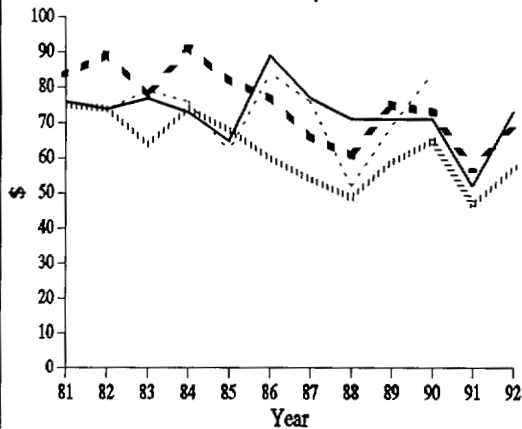
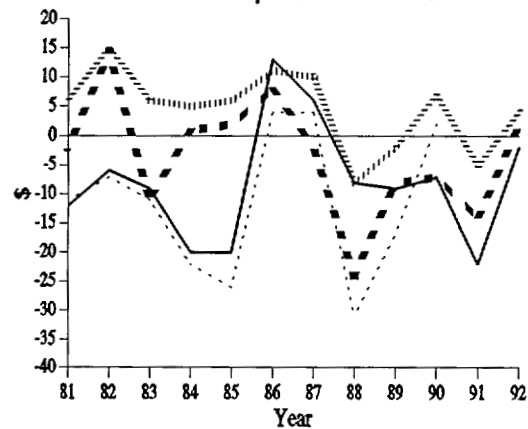


Figure 4.5

NET MARGIN/CWT OF GAIN



Legend

..... Western Canada
 - - - - - Eastern Canada

———— U.S. Great Plains
 U.S. Corn Belt

Note: U.S. Corn Belt series discontinued after 1990.

Source: Canfax; and Economic Research Service of the U.S. Department of Agriculture.

Despite the demonstrated efficiency of cattle feeding in Alberta, in recent years, exports of feeder cattle to the United States from Manitoba and Saskatchewan have increased significantly. In part, this phenomenon appears to reflect the buying power of the very large feedlots in the U.S. Midwest. As one feedlot operator in Alberta stated: "[F]eeder cattle are being exported to the United States because U.S. feedlot operators have investments in their operations and have to keep them busy even if they may earn a smaller [unit] return.⁵⁸" Thus, the increase in feeder cattle exports represents a "pull" in response to conditions in the United States.

Analogous to the situation for cow-calf operations, assessing the relative competitiveness of feedlots in a given area must take into account their proximity to both sources of feeder cattle and beef-packing plants. For example, the cattle-feeding industry in Eastern Canada may remain viable, even though it faces higher costs, because it serves as a critical source of fed cattle for beef-packing operations in the province. If the beef-packing industry in Ontario were to disappear, the future of the provincial feedlot industry would be uncertain.

Another important set of factors that need to be considered when looking at the competitiveness of cattle feeding in a particular area are the management skills of feedlot operators, the availability of capital and a supportive policy environment. In this regard, Alberta would seem to have all the necessary components to support a thriving cattle-feeding industry.

(ii) Economies of Scale in Feedlots

According to the literature, it appears that larger feedlots enjoy both lower unit feed costs and non-feed costs.⁵⁹ While studies in the United States have reached different conclusions about the size of feedlots necessary to obtain full economies of scale, one-time capacities ranging from 10,000 to 30,000 head have been identified.⁶⁰ If the lower bound of this range were applicable, then larger Canadian feedlots would obtain the same economies of scale as their U.S. counterparts.

Larger feedlot operations have the opportunity to become more skilled in purchasing and selling cattle, thus improving their net margins. In fact, Krause suggests that "[w]hen the size of a cattle feedlot is large enough so that most internal technical economies of size are realized, the degree of success of a feedlot is determined by buying and selling success."⁶¹

Further, larger operations may be able to obtain feeder cattle at a lower cost because they can purchase in larger volumes. Similarly, compared to smaller operators, a large feedlot is more likely to have cattle ready for slaughter throughout the year and, therefore, may be able to command a premium price from beef packers that have to maintain their throughput. Small

58. Canadian International Trade Tribunal, Notes from the Meeting Between Thiessen Farms Ltd. and Tribunal Members and Staff, July 27, 1993, at 2.

59. U.S. Department of Agriculture, Cattle Feeding, 1962-89. Location and Feedlot Size, Agricultural Economic Report Number 642, April 1991 at 28.

60. *Ibid.*

61. *Supra*, note 59 at 31.

feedlots that "turn" cattle only once a year are obviously at a disadvantage compared to larger operations that utilize their facilities on a continuous basis. In the area of management of operations, larger feedlots may be more likely to take advantage of various risk management tools, such as forward contracting.⁶²

However, as long ago as 1970, Gustafson and Van Arsdall concluded that "[d]isposal of manure looms as a virtually undisputed diseconomy for the larger feedlots."⁶³ During a visit of Members and Tribunal staff with the Colorado Cattle Feeders' Association in June 1993, the statement was made that, instead of farmers paying feedlots for manure, feedlot operators now have to pay farmers to apply the manure to their land.⁶⁴

c) Cattle Production in Mexico

In assessing costs in the cattle industry in Mexico, it is important to recall that there are two very different, regional production systems. That is, in the northern area, cattle are raised as feeders, with the steers being largely exported to the U.S. market. The cattle that do enter Mexican feedlots are fed a grain sorghum ration. On the other hand, in the southern area, there are more dairy beef herds. These cattle consume grass from the time they are weaned until they are slaughtered.

A broad comparison of the cost of producing cattle in northern and southern Mexico is provided in Table 4.2.

Table 4.2		
MEXICO'S COST OF PRODUCTION OF CATTLE		
1991		
(\$)		
	Northern Mexico	Southern Mexico
Feed Cost/cwt of Gain	43	16
Total Cost/cwt of Gain	82	89
Source: The WEFA Group, <u>Analysis of the Mexican Cattle and Beef Industries, Final Report</u> , April 1993.		

62. U.S. Department of Agriculture, Cattle Feeding in the United States, Agricultural Economic Report No. 186, October 1970 at 63-64.

63. *Ibid.* at 64.

64. Canadian International Trade Tribunal, Notes from the June 18, 1993, Meeting Between the Colorado Cattle Feeders' Association (CCFA) in Denver, CO and Tribunal Members and Staff, August 19, 1993, at 3.

The results for southern Mexico, where there is a very low feed cost/cwt of gain in relation to the total cost/cwt of gain, reflect the fact that cattle in this region are grass-fed for periods of up to 28 months.

The lack of feed at competitive world prices continues to be a significant disadvantage for the Mexican cattle-feeding industry. Land values in Mexico are generally lower than those in Canada or the United States. However, this advantage is offset by the lower productivity of the pasture and rangeland. Recent land reforms, which allow cattle ranchers to increase the size of their ranch to a limit of 25 times larger than previously, may promote economies of scale and improve efficiency.

d) Beef-Packing Industries: Canada, the United States and Mexico

The focus of this section is on assessing the costs of production in the beef-packing industries in Canada and the United States. A brief discussion is also presented on the beef-packing industry in Mexico.

It is difficult to analyze costs of production in this sector because governments do not routinely publish statistics on beef packing, and individual companies are extremely reluctant to divulge information on costs and returns.

(i) Comparison of Costs of Production in the Beef-Packing Industries in Canada and the United States

Table 4.3 summarizes estimates of cattle slaughter⁶⁵ and fabrication⁶⁶ costs in Canada and the United States from two recent reports.

65. Slaughter costs are all labour, material and overhead costs incurred from the arrival of the cattle at a beef-packing plant to the shipping of carcass beef.

66. Fabrication costs consist of all labour, material and overhead costs involved in breaking carcasses and boxing beef.

Table 4.3

**SELECTED ESTIMATES OF CATTLE SLAUGHTER AND FABRICATION COSTS
CANADA AND THE UNITED STATES**

(\$/head)

	Slaughter Costs	Fabrication Costs
Department of Agriculture - 1991		
Canada	35-40	55-60
United States	31-35 ¹	48-53 ¹
Ontario Beef Packer Report - 1988		
Canada	50 in Ontario 36-40 in Alberta	60-80 in Ontario 60 in Alberta
United States	24-27	49

1. Converted using 1991 exchange rate of CAN\$1.00 = US\$0.88.

Source: Ontario Ministry of Agriculture and Food, Ontario Beef Packer Situation Outlook, September 1988; and Department of Agriculture, Competitiveness of the Beef Industry in Canada and Beef Imports, Working Paper 8/91, May 1991.

In a 1991 Department of Agriculture report, estimated slaughter costs are given as being \$0-9/head higher in Canada than in the United States, with fabrication costs being approximately \$2-12/head higher in Canada.⁶⁷

The estimates of slaughter and fabrication costs for Canadian beef-packing plants presented in the 1991 Department of Agriculture report are similar to those given in the 1988 Ontario report⁶⁸ for packing operations in Alberta. However, estimates of both slaughter and fabrication costs are reported to be higher in Ontario than in Alberta. The estimates given of fabrication costs in the United States are also similar in the two reports, while the estimates of slaughter costs differ somewhat.

67. Cost estimates given in this report are based on "unpublished information supplied by [the] beef industry." *Supra*, note 34, Table 2.7.

68. Cost estimates were derived by "extrapolating individual packer information on employment, wages, and operating rates." See Ontario Ministry of Agriculture and Food, Ontario Beef Packer Situation Outlook, September 1988 at 39.

(ii) Factors Affecting Costs in the Beef-Packing Industry

There are several factors that affect costs in the beef-packing industry and that contribute to the differences in slaughter and fabrication costs between Canada and the United States.

- Intensity of Facility Use and Scale of Operations

The annual volume of cattle slaughtered by a beef-packing plant depends on both the speed of the kill line and how intensely the facilities are used, i.e. the number of days worked per week and the number of shifts per day.

Discussions with Canadian industry representatives suggest that the majority of Canadian plants do not routinely run two shifts per day or work more than five days per week.⁶⁹ In comparison, more large beef-packing operations in the United States run two shifts per day.

There are only two plants in Canada, namely, Cargill Foods and Lakeside Packers, whose annual throughput is in the range of 400,000-500,000 head. The next largest beef-packing operations, XL Foods Ltd. and Better Beef Limited, process volumes in the range of 150,000-250,000 head.⁷⁰

In contrast, in the United States in 1991, there were 17 plants with an annual volume of more than 500,000 head, with 7 of these having volumes of more than 1,000,000 head.⁷¹ An additional 35 plants slaughtered between 150,000 and 499,999 head per year.

In order for even one of Canada's two largest-beef packing plants to operate a full second shift and to increase its annual throughput to approximately 1,000,000 head, it would have to purchase virtually all of the 460,000 fed steers and heifers that were exported to the United States in 1992.

A computer model developed by two U.S. researchers in 1991 to simulate costs for beef-packing plants can be used to estimate the impacts of differences in line speed and intensity of operation between Canadian and U.S. beef-packing plants.⁷² Table 4.4 compares costs for a "large" U.S. beef-packing plant to those for "large" Canadian plants.

69. Lakeside Packers began processing cattle on a modified seven-day schedule in May 1993.

70. SCI Sparks Companies, Inc., British Columbia Beef Industry Review, April 1992 at 79.

71. U.S. Department of Agriculture, Livestock Slaughter 1991 Summary, March 1992 at 60.

72. U.S. Department of Agriculture, Beefpacking and Processing Plants Computer-Assisted Cost Analysis by L.A. Duewer and K.E. Nelson, April 1991.

Table 4.4

COMPARISON OF ESTIMATED COSTS FOR
LARGE CANADIAN AND U.S. PLANTS¹(\$/head)²

A Typical "Large" U.S. Plant	Typical "Large" Canadian Plants	
	Plant A	Plant B
- 2 shifts per day		- 1 shift per day
- 5 days per week		- 5 days per week
- 300 head per hour	- 300 head per hour	- 210 head per hour
- 100-percent capacity	- 100-percent capacity	- 100-percent capacity
- annual volume of 1,125,000 head	- annual volume of 562,500 head	- annual volume of 393,700 head
- costs are \$76 per head	- costs are \$86 per head	- costs are \$91 per head

1. Results are published only for plants with specified characteristics. The examples in this table were chosen to represent typical large Canadian and U.S. operations.

2. Results converted to Canadian dollars using an exchange rate of CAN\$1.00 = US\$0.81. The data in the Duewer and Nelson study were collected in 1988.

Source: U.S. Department of Agriculture, Beefpacking and Processing Plants Computer-Assisted Cost Analysis by L.A. Duewer and K.E. Nelson, April 1991.

The results show that large Canadian beef-packing plants are at a \$10-\$15/head disadvantage compared to a large plant in the United States in terms of combined slaughter and fabrication costs.⁷³

The harvesting of by-products is becoming an increasingly important component of the beef-packing industry.⁷⁴ Larger plants have the volumes necessary to justify the expense of

73. If the estimates for slaughter and fabrication costs from the 1991 Department of Agriculture study given in Table 4.3 of this report are added together, the range for Canada is \$90-\$100 per head, while the range for the United States is \$79-\$88 per head.

74. *Supra*, Chapter II, note 37 at 438. In 1991, for a steer with a live weight of 568 kg, the average value of by-products was US\$92.62, with the hide contributing US\$54.37 and the other by-products contributing US\$38.25. Discussions with Canadian industry representatives confirmed that similar, or higher values, apply in this country.

harvesting a wider array of by-products. Therefore, the smaller average size of Canadian plants again places them at a competitive disadvantage.

- **Labour Costs**

In 1991, a telephone survey of Canadian beef packers was conducted by the Manitoba Transport Institute to determine average labour costs.⁷⁵ By way of comparison, the study also gives estimates of labour costs in the U.S. meat-packing industry. Table 4.5 gives selected results from the study.

Table 4.5			
LABOUR COSTS AND FRINGE BENEFITS IN THE BEEF-PACKING INDUSTRY			
SELECTED PROVINCES¹ AND STATES²			
1991			
(\$/hr.)			
Canada		United States	
Ontario	20.15	California	13.67
Saskatchewan	16.24	Washington, Oregon	15.11
Alberta	13.32	Midwest	11.74
		Upper Plains	11.57
<hr/>			
1. Results for British Columbia and Manitoba are not presented here because the study described the beef-packing industry in these provinces as being "very small relative to Canadian production."			
2. Results for the United States are for the meat-packing industry. Only selected averages were published. The 1991 conversion rate used was CAN\$1.00 = US\$0.87.			
Source: <u>Competitiveness in Livestock Slaughtering and Meat Processing</u> prepared by C.E. Ward and M.D. Faminow for the Manitoba Red Meats Forum Inc., June 1992.			

At \$13.32/hr., the labour cost in beef packing was significantly lower in Alberta than in either Saskatchewan or Ontario, which had the highest average labour cost for beef packing in Canada. In the nearby states of Washington and Oregon, the average labour cost in the

75. Competitiveness in Livestock Slaughtering and Meat Processing prepared by C.E. Ward and M.D. Faminow for the Manitoba Red Meats Forum Inc., June 1992.

meat-packing industry was \$15.11/hr. In comparison, in the Midwest⁷⁶ and Upper Plains⁷⁷ regions of the United States, labour costs were \$11.74/hr. and \$11.57/hr., respectively.

Labour costs represent approximately one half of slaughter-fabrication costs. Therefore, even relatively small differences in labour costs can represent significant differences in overall costs in the beef-packing industry.

- **Boxed Beef vs. Carcass Beef**

Boxing beef, rather than selling carcasses, gives beef-packing plants an opportunity to add additional value to the manufacturing process.⁷⁸

As noted earlier in this chapter, the vast majority of beef produced in the United States is boxed beef. However, in Canada, only Cargill Foods and Better Beef Limited, among the larger beef packers, both slaughter cattle and box beef under the same roof. A third company, XL Foods Ltd., boxes beef at a separate facility in the same city.⁷⁹ On the other hand, Lakeside Packers "sells carcass beef. There is a niche for this type of beef in the United States, since the U.S. industry processes boxed beef."⁸⁰

- **Vertical Integration**

The advantage of vertical integration to beef packers is that it reduces the risk of not having a steady supply of fed cattle to process. On the other hand, increased integration may mean additional financing costs for beef packers.

To date, there has been relatively little direct integration among the various sectors of the Canadian cattle and beef industries, and that which has occurred has taken the form of beef packers owning feedlots. In particular, Lakeside Packers, one of the two largest beef packers, owns a feedlot that supplies a large percentage of its supply of fed cattle.⁸¹ Another large beef packer in Western Canada, XL Foods Ltd., also owns a feedlot to supply a portion of its fed cattle.⁸²

Linked to the notion of vertical integration is that of "forward contracting," whereby beef packers agree to purchase fed cattle from feedlots at some point in the future at a given price.

76. Illinois, Iowa, Nebraska, North Dakota, South Dakota, Minnesota, Wisconsin and Missouri.

77. Colorado, Kansas, Oklahoma and Texas.

78. The results of the Duewer and Nelson model show that, based on costs and prices as they were in the United States in 1988, plants of any size that only slaughter cattle did not generate positive returns.

79. *Supra*, note 70 at 87.

80. Canadian International Trade Tribunal, Notes from the March 22, 1993, Meeting Between Lakeside Farm Industries Ltd. and Tribunal Members and Staff, August 3, 1993, at 5. Lucerne Foods Ltd. in Calgary boxes some beef for Lakeside Packers, *supra*, note 70 at 188.

81. Canadian International Trade Tribunal, Notes from the March 22, 1993, Meeting Between Lakeside Farm Industries Ltd. and Tribunal Members and Staff, August 3, 1993, at 3.

82. Canadian International Trade Tribunal, Notes from the March 26, 1993, Meeting Between XL Beef and Tribunal Members and Staff, August 6, 1993, at 1.

Often the beef packer specifies the characteristics of the fed cattle and will not purchase them otherwise. Currently, forward contracting appears to account for approximately 20 percent of fed cattle sales in both Western and Eastern Canada.⁸³

The trend towards integration started earlier in the United States.⁸⁴ In 1989, the 15 firms which accounted for 84 percent of U.S. commercial steer and heifer slaughter reported that 19 percent of their supplies of fed cattle were obtained through captive supplies, i.e. packer feeding, forward contracting or purchasing/marketing agreements.⁸⁵

A 1989 survey of 3,700 feedlots in the 13 major⁸⁶ cattle-feeding states found that forward contracting accounted for some 13 percent of their cattle marketings.⁸⁷ The survey also found that nearly two thirds of such forward contracting was carried out in Texas and Kansas. Further, large feedlots marketing more than 20,000 head per year accounted for 84 percent of the forward contracting.

In the United States, vertical integration in the form of companies being involved in grain operations, as well as in feedlot and packing industries, is more common.

(iii) Beef-Packing Industry in Mexico

In Mexico, the average size of beef-packing plants is much smaller than in either Canada or the United States. For example, the average capacity of 11 TIF plants opened in recent years along the coast of the Gulf of Mexico is 300 cattle per day.⁸⁸

Labour costs in the Mexican beef-packing industry are lower than those in Canada and the United States. For example, at one beef-packing facility in Mexico visited by Tribunal members and staff, labour costs were less than \$1.50/hr.⁸⁹

In Mexico, particularly in southern Mexico, cattle tend to be purchased over a large area and transported to distant beef-packing plants located near large centres of consumption. Significant death and weight loss occur during transportation. The government policy of establishing beef-packing plants closer to cattle production areas is now well under way and is expected to reduce transportation costs, lower death loss and cut down on the use of middlemen.

83. Based on information provided by the Ontario Cattlemen's Association, Canfax, KenAgra Management Services Ltd. and La Fédération des producteurs de bovins du Québec.

84. At the September hearing, Dennis Laycraft of the Canadian Cattlemen's Association stated that forward contracting "has gone on for at least five or six years" in the United States. Transcript, September 20, 1993, at 532.

85. Research Institute on Livestock Pricing, Structural Change in Livestock: Causes, Implications, Alternatives, "Structural Change: Implications for Competition and Pricing in the Feeder-Packer Subsector" by C.E. Ward, February 1990 at 75.

86. Arizona, California, Colorado, Idaho, Illinois, Iowa, Kansas, Minnesota, Nebraska, Oklahoma, South Dakota, Texas and Washington.

87. *Supra*, note 85 at 75.

88. *Supra*, Chapter II, note 51 at 2.

89. *Supra*, Chapter III, note 31 at 3.

3. Prices for Cattle and Beef in Canada and the United States

Having analyzed costs of production in the cattle and beef industries in Canada and the United States, this chapter now turns to a discussion of prices for cattle and beef in the two markets.

a) Cattle Prices in Canada and the United States

(i) Historical Trends

Figure 4.6 shows prices for feeder steers, slaughter steers and slaughter cows in both Eastern and Western Canada, as well as in the United States.⁹⁰ The prices for the United States are presented in Canadian dollars.

Following a slight decrease in the early 1980s, feeder steer prices in both Eastern and Western Canada and the United States increased until the 1987-88 period. Since then, prices in the three regions have fluctuated from year to year, but, in 1992, were lower than they had been at their respective peaks of four to five years previously. In 1992, feeder steer prices at Oklahoma City, Edmonton and Ontario were \$103.40, \$101.60 and \$97.44/cwt, respectively.

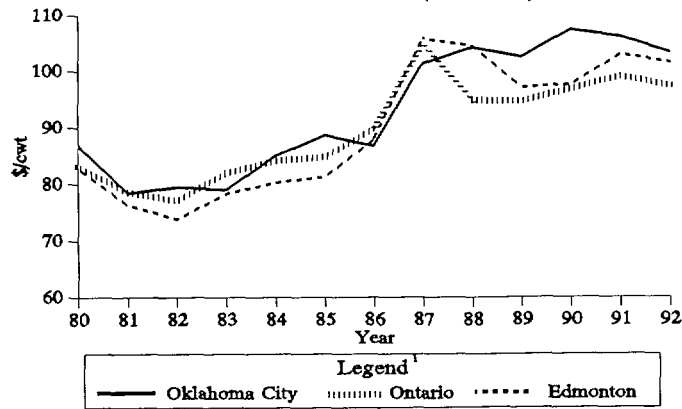
Throughout the early part of the 1980s, feeder steer prices varied little among the three markets examined. However, since 1987, feeder steer prices in Western Canada have been higher than those in Eastern Canada. Since 1989, feeder steer prices in the United States have remained consistently higher than those in either Western or Eastern Canada, with the largest differential being recorded in 1990.

Despite fluctuations in some years, slaughter steer prices in Eastern Canada, Western Canada and the United States generally increased between 1980 and 1990. Following a significant decrease in 1991, slaughter steer prices rose in 1992 to \$91.06, \$87.72 and \$81.84/cwt at Nebraska, Ontario and Alberta, respectively. Throughout the 13 years examined, fed cattle prices in Western Canada were the lowest among the three regions, while those in Eastern Canada and the United States were generally similar.

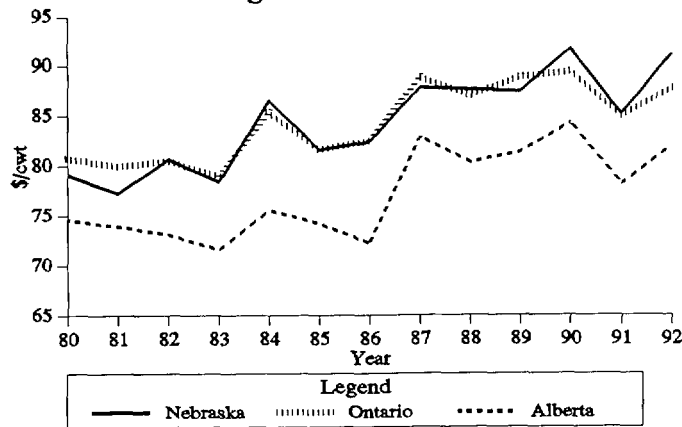
Slaughter cow prices in Canada and the United States decreased in the early 1980s, then increased in 1987, and fluctuated from year to year thereafter. In 1992, slaughter cow prices were highest at Toronto, at \$55.73/cwt, followed by Sioux Falls and Edmonton, at \$54.18 and \$48.39/cwt respectively. Slaughter cow prices in the Sioux Falls and Toronto markets track each other relatively closely, while prices in the Edmonton market have been lower.

90. *Supra*, Chapter II, note 37. Detailed information on cattle prices for Canada and the United States is available in Appendix 2.6 at 483.

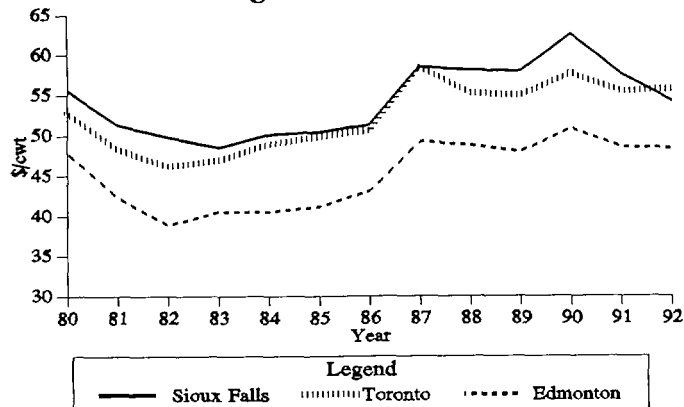
Figure 4.6
CATTLE PRICES - CANADA AND THE UNITED STATES
Feeder Steer Prices (6-7 cwt)



Slaughter Steer Prices



Slaughter Cow Prices



1. Toronto prices are taken to be Ontario prices for 1980-87.

Source: Department of Agriculture; Ontario Cattlemen's Association; Canfax; and U.S. Department of Agriculture.

(ii) Factors Affecting Cattle Prices

There are a number of broad demand and supply considerations that need to be taken into account when looking at the factors that affect cattle prices in Canada and the United States. First, demand for cattle is what is termed as a derived demand, in that it depends on the demand for beef. The fact of virtually unimpeded trade in cattle between the United States and Canada means that the U.S. market, which is 10 times larger than the Canadian market, dominates prices in Canada. On the supply side, the phase of the cattle cycle is an important consideration influencing cattle and beef prices generally. Finally, the prices at which cattle actually trade will depend on local supply and demand conditions, as well as on the quality and condition of the cattle.

More particularly, the price of feeder cattle depends on the supply of feeder cattle, the costs of feeding cattle and the prices of fed cattle. As described previously in this chapter, feedlots are a margin-based industry, in which profits depend on being able to sell fed cattle for more than the cost of the feeder cattle and the costs of feeding. This means that the price/cwt that a feedlot is willing to pay for feeder cattle is based on the difference between what the prices/cwt for fed cattle are expected to be in the future, when the animal is actually sold, and the average costs of gain/cwt. Therefore, prices for feeder cattle are strongly influenced by future price expectations rather than by current prices.

Cow-calf producers tend to be price-takers. There is a relatively large number of producers, each of whom sells only a small number of feeder cattle and who, individually, do not directly influence prices.

The generally higher feeder cattle prices in the United States since the mid-1980s reflect a number of circumstances. There has been intense demand for feeder cattle by large feedlots in the United States seeking to meet the demand for fed cattle from large beef-packing plants. The increased demand has been fuelled by a feeder cattle deficit in the United States resulting, in part, from a lag in the cattle cycle and a delay in herd expansion.

The reasons for feeder cattle prices in Eastern Canada, a region deficit in the production of feeder cattle, being lower than those in Western Canada, a region with a large surplus of production, likely also relate to the intense demand, particularly from the northwest United States, for feeder cattle from Western Canada. In addition, the market premium for feeder cattle from Western Canada may reflect factors such as a perceived higher quality and greater uniformity of cattle and the fact that the larger cow-calf operations in Western Canada permit feeder cattle to be sold in larger lot sizes than in Eastern Canada. The large lot sizes are important to larger feedlot operators who prefer to fill pens with cattle from a common source.

The primary determinants of fed cattle prices are the demand for fed cattle, the costs of slaughtering cattle and the supply of fed cattle. The nature of the pricing relationship is that "[i]n producing areas, such as Western Canada and the U.S. Midwest, the price bid for cattle is set by the cost of moving surplus product ... into the nearest available deficit market.... With

respect to actual prices paid for Canadian cattle going to the U.S. or to Canadian packers, the relationship varies according to the relative demand in the two markets.⁹¹"

Given that Alberta has historically been a region with a surplus of fed cattle, it is not surprising that prices in this region are lower than those in either Eastern Canada or the Great Plains. That is, the lower fed cattle prices in Alberta reflect the costs of transporting beef to main population centres in Canada and the United States.

The demand and supply conditions for boneless manufacturing beef are a key factor in influencing the price of slaughter cows. Slaughter cow prices are lower in Alberta than in Eastern Canada because the former region is in a large surplus position, due to the large volume of cows being culled from the beef herd. In addition, in Eastern Canada, demand from large cow-boning operations in nearby states may be bidding up prices.

b) Wholesale and Retail Beef Prices in Canada and the United States

(i) Wholesale Beef Prices

Figure 4.7 shows domestic Canadian and U.S. prices and Australian/New Zealand import prices for boneless manufacturing beef.⁹²

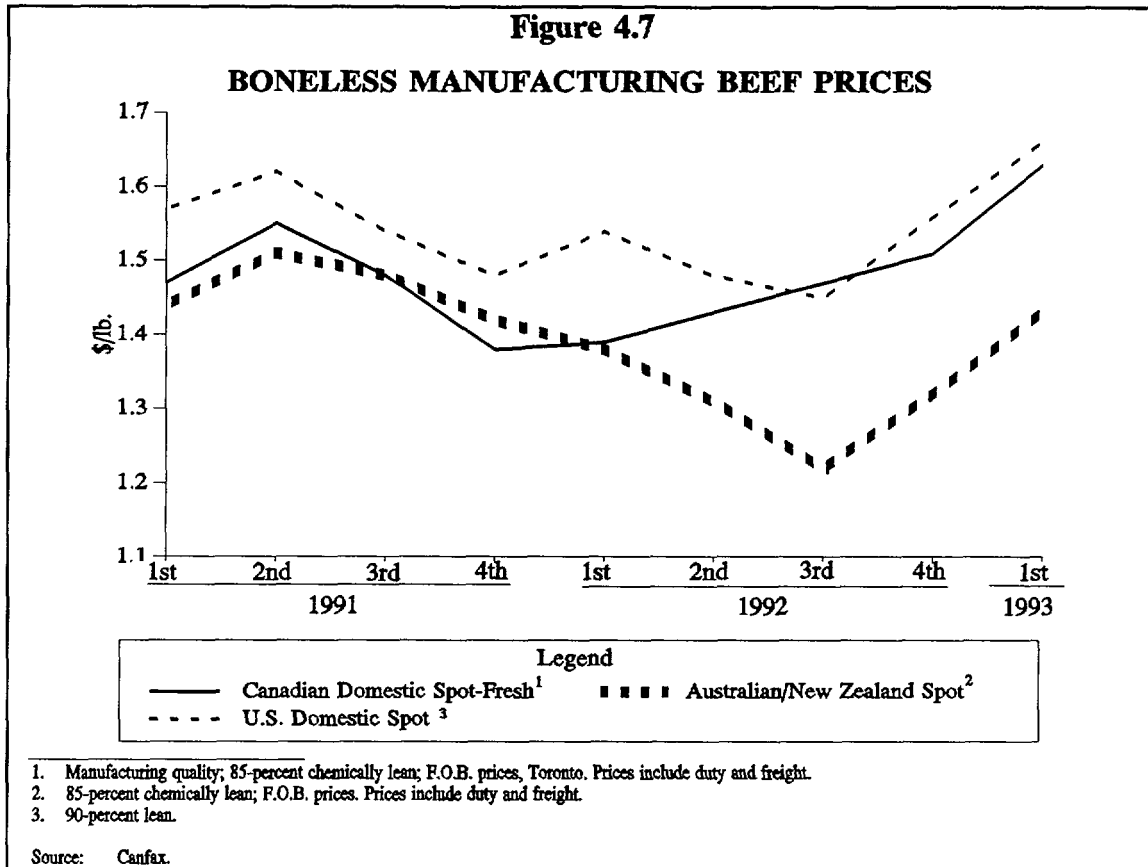
The Canadian domestic spot price⁹³ and the Australian/New Zealand spot price tracked one another closely during 1991 and the first quarter of 1992. The spread between the two prices began to widen in the second quarter of 1992 and, in the first quarter of 1993, was \$0.20/lb. Figure 4.7 also shows that the U.S. domestic price of boneless manufacturing beef was generally greater than the corresponding price in Canada.

The price of boneless manufacturing beef is determined by the demand and supply conditions in the market. In particular, the volume of imported boneless manufacturing beef entering Canada and the price of that beef affect domestic prices.

91. Canadian Cattlemen's Association, Post-Hearing Brief to the U.S. International Trade Commission, August 1992 at 3.

92. See Canadian International Trade Tribunal, An Inquiry Into the Importation of Boneless Beef, Originating in Countries Other than the United States of America, Reference No. GC-93-001, May 28, 1993, Appendix 6 at 34-36.

93. Prices for Canada and the United States are of fresh boneless manufacturing beef, while those for Australia/New Zealand are of frozen boneless manufacturing beef.



In considering wholesale prices of high-quality beef, the Tribunal looked at the following two data sources: for Canada, the actual wholesale prices of carcass beef in the Montréal and Calgary markets, as published by Canfax;⁹⁴ and for the United States, a "carcass equivalent price," as published in the USDA *Market News*.⁹⁵

A cursory comparison of the two series suggests that prices in Montréal are higher than those in the United States.⁹⁶ The fact that a price differential appears to exist despite the open trade in beef between the two countries reflects a number of circumstances.

First, it is noted that the U.S. prices are not actual market prices of carcasses, but are an index built up from the prices of both live cattle and boxed beef cutout values. In the United States, wholesale carcass prices are no longer routinely published or used by the industry because the vast majority of beef is traded in boxed form. In Canada, on the other hand, there is no routinely used source of price information on boxed beef cuts.

94. Discussions with Canfax staff. The Montréal price appears to be the most frequently used wholesale carcass beef price in the industry.

95. Data as supplied by Canfax.

96. The data covered the period from 1991 to July 1993.

In addition, at least a portion of the apparent spread reflects the fact that prices in Canada are based on a "fat-out" carcass, i.e. with the hanging tender and internal fats removed prior to weighing, while in the United States, the carcass equivalent price is based on a "fat-in" carcass.

For the foregoing reasons, detailed analyses of the two price series are difficult and should be done so only with caution.

(iii) Retail Beef Prices

In Canada, the average retail price of beef⁹⁷ rose rapidly during the late 1970s, increasing by 60 percent between 1976 and 1979.⁹⁸ By 1983, the average real price had fallen by 30 percent, and, thereafter, real prices fluctuated from year to year. In 1992, the average real retail price of beef was \$8.18/kg.

The retail price of competing meats has generally remained lower than that of beef. The retail price of pork has been, on average, approximately one quarter to one third less than that of beef, while the retail prices of chicken and turkey have been approximately one half less than the retail price of beef.⁹⁹ Since the mid-1970s, the real price of chicken has been relatively stable, while that of turkey has exhibited a gradual downward trend. Similar trends in the retail prices of beef and other meat were seen in the United States.¹⁰⁰

When Tribunal members and staff visited a supermarket in Mexico City in February 1993, the price of selected cuts of high-quality beef imported from the United States was \$16.41/kg, while the price of comparable cuts of beef of domestic origin was \$9.06/kg.^{101,102} The retail prices of low-quality beef are fixed by the government, while those of high-quality marbled beef are not controlled.

4. Macroeconomic Variables

Early in this inquiry, concerns were expressed by both the cattle and beef industries about the relatively high level of Canadian interest rates and the Canada-United States exchange rate. In this regard, it is noted that prime lending rates in Canada and the United States fell in 1992 and in the first six months of 1993. Similarly, after the Canadian dollar depreciated by 5 percent in 1992, the Canada-United States exchange rate was close to the average of what it had been during the 1980-92 period. In 1993, the Canadian dollar continued to depreciate.

This section provides a historical overview of the trends in the interest rates and the Canada-United States exchange rate, as well as a general description of the nature of the impact

97. The retail price represents a weighted average of the prices of the different types of beef sold in grocery stores, in major Canadian cities, as adjusted for inflation, with 1990 as the base year.

98. Alberta Ministry of Agriculture, Market Analysis Branch, Canadian Meat Demand 1960-1990, An Analytical Spreadsheet, December 1991 at 9. Tribunal calculations for 1991 and 1992.

99. *Ibid.*

100. *Supra*, note 12.

101. Canadian International Trade Tribunal, Field Trip Report, Aurrera Supermarket, Mexico, February 22, 1993.

102. A report by the U.S. Department of Agriculture suggests that retail prices of low-quality beef in Mexico in January 1993 were approximately \$8-\$9/kg. *Supra*, note 29.

of interest rates and the Canada-United States exchange rate on the competitiveness of the Canadian cattle and beef industries.

a) Interest Rates

(i) Historical Trends

Nominal interest rates, as measured by the prime lending rate, have been volatile in both Canada and the United States since the early 1980s.¹⁰³ In Canada, the nominal interest rate reached a peak of 19 percent in 1981, then declined to 10 percent in 1987, increased again to 14 percent by 1990, fell to 10 percent in 1991 and, finally, to just under 8 percent in 1992. In the first six months of 1993, the rate continued to fall and, in June 1993, was 6 percent. The situation was similar in the United States, with the nominal interest rate ranging from a high of nearly 19 percent in 1981 to a low of 6 percent in 1992 and in the first six months of 1993.

From 1980 to 1992, the spread in nominal interest rates between Canada and the United States averaged 1.20 percentage points in favour of the United States.¹⁰⁴ However, in the first six years of the 1980s, the average spread was only 0.25 percentage points, while, from 1986 to 1992, the spread averaged more than 2.00 percentage points. In the first six months of 1993, the spread narrowed to 0.20 percentage points.

From 1980 to 1992, the average real¹⁰⁵ interest rate in Canada was 6 percent, ranging from a low of 4 percent in 1980 to a high of 9 percent in 1990. In the United States, the real interest rate also averaged close to 6 percent during this period. The first six months of 1993 saw average real interest rates of approximately 4 to 5 percent in Canada and 3 percent in the United States.

On average, from 1980 to 1992, the spread in real interest rates between Canada and the United States was only 0.5 percentage points in favour of the United States. However, the spread was less in the early 1980s than in more recent years. In 1990, the spread in real interest rates stood at 4.6 percentage points. During the first six months of 1993, the spread was close to 1.5 percentage points.

(ii) Effect of Interest Rates on Competitiveness

When interest rates in Canada are higher than those in the United States, the relative cost competitiveness of the Canadian cattle and beef industries is adversely affected. For example, in 1990, when the spread in nominal interest rates between Canada and the United States was

103. *Supra*, Chapter II, note 37, Appendix 11.1 at 616.

104. From 1974 to 1991, the correlation coefficient between prime lending rates in Canada and the United States is 0.93.

105. A real interest rate is defined here as the difference between the nominal interest rate and the rate of inflation, as measured by the annual rate of change in the consumer price index.

4 percentage points, the average Canadian cattle producer faced an extra cost burden of approximately \$2,300 per year¹⁰⁶ on a debt of \$58,000 per farm.¹⁰⁷

The impact of an unfavourable spread in interest rates on the cattle-feeding industry in Canada was referred to in a submission by Lakeside Packers: "[the] interest rate policy has cost Canadian cattle feeders considerably in the last 6 years and may well have been a factor in the increases in feeder cattle flows out of this country in recent years."¹⁰⁸

The beef-packing industry also faces a relative cost disadvantage when interest rates are higher in Canada than in the United States. In 1992, the average debt load of establishments in the Canadian meat and meat products industry was estimated to be \$1.17 million per establishment.¹⁰⁹

With a spread in nominal interest rates of 4 percentage points between Canada and the United States, the average Canadian meat packer faced nearly \$47,000 per year in extra costs, compared to a similarly sized U.S. firm.

b) Canada-United States Exchange Rate

(i) Historical Trends

From 1980 to 1986, the value of the Canadian dollar depreciated by 16 percent, falling from US\$0.86 to US\$0.72. The next five years saw a reversal of this trend, as the value of the Canadian dollar appreciated to reach US\$0.87 in 1991. In 1992, the Canadian dollar began to depreciate again, with the average value of the Canadian dollar in that year being US\$0.83. During the first six months of 1993, the average exchange rate was US\$0.79. From 1980 to 1992, the Canada-United States exchange rate averaged US\$0.81.

(ii) Effects of the Canada-United States Exchange Rate on Competitiveness

In addition to being a function of currency supply and demand at a given point in time, an exchange rate measures the relative strengths of two national economies. Fluctuations in exchange rates are a fact of business in an open economy; they pose an additional challenge to industries working in an integrated North American market.

Fluctuations in the Canada-United States exchange rate have a number of impacts, partially offsetting, on the Canadian cattle and beef industries.

Within the integrated North American market, the price of Canadian cattle being sold to the United States is determined by prices in the much larger U.S. market. When the

106. Because interest costs are tax deductible in both Canada and the United States, the effective impact of a spread in interest rates will be somewhat less. The impact on producers of having access to credit at less-than-market rates was not considered in this analysis.

107. *Supra*, Chapter II, note 37, Table 11.1 at 368.

108. Submission of Lakeside Packers, March 1993 at 2.

109. *Supra*, Chapter II, note 37, footnote 7 at 370.

Canada-United States exchange rate fluctuates, adjustments take place in the returns being received by Canadian cattle producers and beef packers, and in the trade flows of cattle and beef between the two countries.¹¹⁰ During a visit by Tribunal members and staff, one feedlot operator in Alberta stated that the "[f]luctuation in the value of the Canadian dollar ... is the single greatest influence on how many Canadian cattle are sold to U.S. plants."¹¹¹

When the Canada-United States exchange rate appreciates, Canadian cattle producers selling to the U.S. market receive lower returns in terms of Canadian dollars. All other things being equal, this makes the prevailing cattle prices in the Canadian market relatively more attractive than those in the U.S. market, and more cattle are retained for feeding and slaughter in Canada. Eventually, the increased supply of cattle results in lower prices for cattle in Canada, which restores an equilibrium between Canadian and U.S. cattle prices.

Cattle feeders, in addition to perhaps paying less for feeder cattle, may benefit from lower prices for feed grain, to the extent that an appreciation in the Canadian dollar leads to decreased exports of feed grain and an increase in domestic supplies.

The lower prices for fed cattle, a benefit for beef packers, may be offset by lower prices for beef because the higher Canadian dollar makes imports of beef from the United States relatively cheaper.

Essentially, the opposite set of impacts occurs in the Canadian cattle and beef industries when the Canada-United States exchange rate depreciates. In this case, Canadian producers that sell cattle in the U.S. market receive higher returns in terms of Canadian dollars. Since prevailing prices in the U.S. market are relatively more attractive than those in the Canadian market, more cattle are exported to the United States, which reduces the supply of cattle available for feeding and slaughter in Canada. All other things being equal, the lower supply leads to higher prices for cattle in the Canadian market and, over time, a new equilibrium is achieved.

Feedlot operators (and backgrounders) may also face higher prices for feed grain when the Canadian dollar depreciates. Beef packers are likely to pay more for live cattle when the Canadian dollar depreciates. On the other hand, the price of beef in the domestic market may also increase in response to the higher price of beef imported from the United States.

As part of the research undertaken for this inquiry, Tribunal staff requested that the Department of Agriculture simulate the impacts of changes in Canadian interest rates and the Canada-United States exchange rate on the conditions of competition facing the Canadian cattle and beef industries.¹¹² One scenario simulates the effects of a high Canadian dollar, combined

110. From the perspective of a U.S. purchaser of Canadian cattle, fluctuations in the Canada-United States exchange rate have less of an effect on what it costs to import cattle because the price is relatively fixed in terms of U.S. dollars.

111. Canadian International Trade Tribunal, Notes from the March 22, 1993, Meeting Between South Slope Feeders and Tribunal Members and Staff, August 23, 1993, at 3.

112. Department of Agriculture, The Impact of Canadian and U.S. Government Policies on the Canadian Cattle and Beef Sectors, July 1993; Quantitative Assessment of the Impact of Removing the National Tripartite Stabilization (NTS) Programs for Cattle, August 1993; The Impact of Changing the Method of Payment Under the Western Grain Transportation Act (WGTA) on the Canadian Cattle Industry, August 1993; and Impact of Increased Offshore Imports of Boneless Beef on the Canadian Cattle and Beef Market, August 1993.

with high Canadian interest rates.¹¹³ The results are that the competitive position of the Canadian cattle and beef industries would be weakened, largely as a result of the price decreases of cattle and beef brought about by the high exchange rate, but also as a result of higher costs of production due to higher interest rates.¹¹⁴ Net trade in beef and cattle with the United States would decrease under this scenario.

If the assumptions of the scenario had been the opposite, namely, the current situation of falling interest rates and the Canada-United States exchange rate, the results of the simulation would also have been approximately the opposite, i.e. the competitive position of the Canadian cattle and beef industries would have improved.

5. Conclusion

This chapter has considered four key sets of factors that define the business environment in which the Canadian cattle and beef industries operate: the demand for beef; production costs of cattle and beef; the pricing of cattle and beef; and interest rates and the Canada-United States exchange rate. It is important that the Canadian cattle and beef industries be able to meet the challenges posed by these basic market factors.

The demand for beef in Canada and the United States has declined in recent years and is unlikely to increase in the near future. One factor negatively affecting the demand for beef is the perception of consumers that beef is of inconsistent quality. The absence of beef labelling at the retail level does not assist consumers in buying consistent quality product and contributes to their negative perceptions of beef. Cost control is of critical importance to the cattle and beef industries, since the retail price of beef is already higher than that of competing meats.

The key to competitiveness in the cow-calf sector is the availability of competitively priced forage, which several regions in Canada have in abundance. In the feedlot sector, Western Canada has a cost advantage over Eastern Canada and the Great Plains and the Corn Belt regions of the United States. The Canadian beef-packing sector is the least competitive of the three sectors in the cattle and beef industries. One of the key factors contributing to higher slaughter costs in Canada is the less intensive utilization of Canadian beef-packing plants. The Canadian beef-packing industry is also at a disadvantage because of higher average labour costs.

The present environment of low interest rates in Canada and a low Canadian dollar is a positive influence on the competitiveness of the Canadian cattle and beef industries. However, interest rates and the Canada-United States exchange rate will continue to vary in the future, and the Canadian cattle and beef industries must be prepared to deal with less favourable conditions when they arise.

113. The scenario assumes that the Canadian dollar gradually appreciates by 5.1 percent over the baseline from the first quarter of 1993 to the fourth quarter of 1995 and remains 5.1 percent higher than the baseline thereafter. Interest rates are assumed to gradually increase, by 100 basis points, between the fourth quarter of 1993 and the third quarter of 1994, and to remain 100 basis points higher than the baseline thereafter.

114. *Supra*, Chapter II, note 37, Appendix 11.4 at 619.

CHAPTER V

GOVERNMENT PROGRAMS, POLICIES AND REGULATIONS

The agricultural sector in North America has a long history of government intervention. The cattle and beef industries in North America are not an exception. Canada, the United States and Mexico all have farm programs and policies designed to support farm incomes and prices, to reduce price variability and production risk, and to assure a safe and adequate food supply for their populations. This chapter describes the programs, policies and regulations that affect the North American cattle and beef industries, and examines the impact of these government interventions on the competitiveness of these industries.

The Tribunal reviewed government programs, policies and regulations at the federal, sub-federal and local levels. In this regard, the Tribunal selected six provinces in Canada,¹ twelve states in the United States² and six states in Mexico³ for detailed study at the sub-federal level. The provinces and states were chosen on the basis of their cattle and beef production, including cow-calf operations, cattle feeding and beef packing.

The main criterion used by the Tribunal in selecting from the range of programs, policies and regulations that have an impact on the cattle and beef industries was the quantifiable net benefit⁴ of the program, policy or regulation. In this regard, programs, policies and regulations that were found to provide a net benefit greater than or equal to 0.2 percent of the adjusted value of production for the cattle-producing industry⁵ or the beef-packing industry⁶ were considered.⁷

While the threshold level of 0.2 percent of adjusted cash receipts was the main criterion used in selecting government programs, policies and regulations to be examined, the benefits of certain programs, policies and regulations were not quantifiable. However, they were considered to be important factors in the cattle and beef industries and are described in this chapter. These programs, policies and regulations relate to labelling, health and environmental matters.

1. The six provinces selected were British Columbia, Alberta, Saskatchewan, Manitoba, Ontario and Quebec, which, in total, accounted for 98.4 percent of cattle production and 97.5 percent of beef packing in Canada during 1991.

2. The twelve states selected were California, Colorado, Florida, Iowa, Kansas, Minnesota, Montana, Nebraska, Oklahoma, South Dakota, Texas and Washington. Together, these states accounted for 65 percent of cattle production and 76 percent of beef packing in the United States during 1991.

3. The six Mexican states selected were Chiapas, Chihuahua, Nuevo León, Sonora, Tabasco and Veracruz. These states represented 38 percent of cattle production and 39 percent of beef packing in Mexico during 1991.

4. The "net benefit" is a measure of the level of support provided by a particular program, based primarily on the level of government expenditures made on that program. This measure is explained more fully in section 2 of this chapter.

5. For the cattle-producing industry, the adjusted value of production is the value of industry output, less the value of dairy animals, plus direct financial transfers.

6. For the beef-packing industry, the adjusted value of production is the value of output of the first level of beef packing. This value is based on the value of beef cattle production, plus cull cows from the dairy herd, less cattle exports, grossed up by the value added to livestock at the first level of the beef-packing industry. Provincial figures are based on the respective provincial shares in national slaughtering.

7. In Canada, if a federal government program met the Tribunal's threshold in any of the six provinces examined, it was included at the federal level for all provinces.

This chapter presents a description of the relevant programs, policies and regulations, and their impact on the cattle and beef industries. This is followed by a brief discussion of the net benefits calculated for those government programs, policies and regulations.

1. Government Programs, Policies and Regulations

The North American cattle and beef industries are affected by a variety of government programs, policies and regulations at both the federal and sub-federal levels. A discussion of the more significant programs and policies affecting the industries in the three countries is presented in the following subsections. We first examine programs, policies and regulations that are comparable across more than one of the three North American countries, followed by programs specific to each individual country.

a) Programs, Policies and Regulations Comparable Across More Than One Country

There are a number of programs, policies and regulations that are comparable, although not identical, across more than one of the three North American countries. This subsection describes and analyzes the impact of 10 such programs, policies or regulations on the cattle or beef industry. These interventions include inspection and grading programs, the meat import acts, tariff policies, feed grain programs, credit programs, public land grazing programs, irrigation programs, taxation policies, research programs and other government regulations.

(i) Inspection and Grading

- Inspection

Federal inspection programs in Canada and the United States ensure that domestic and imported products are marketable and safe for human consumption by eliminating or controlling plant and animal diseases, and by ensuring compliance with food safety and quality standards. The Food Production and Inspection Branch of the Department of Agriculture performs these functions under the *Meat Inspection Act*⁸ and the accompanying regulations. In the United States, similar functions are carried out for beef by the Food Safety and Inspection Service of the USDA under the *Federal Meat Inspection Act*,⁹ while the Animal and Plant Health Inspection Service of the USDA is responsible for the inspection of live cattle.

Both countries maintain inspection regimes that include veterinarians and research scientists, laboratories and quarantine facilities. Domestic cattle herds are inspected, as are live cattle imports, to protect the domestic herd from disease. Slaughter plants are inspected for health and sanitary measures, and carcasses are inspected for human safety. Moreover, inspectors are sent abroad to inspect foreign slaughter plants. Those plants deemed to meet the

8. R.S.C. 1985, c. 25 (1st Supp.), as amended by S.C. 1988, c. 65, s. 141.

9. Pub. L. No. 90-201, 81 Stat. 584, 19 U.S.C.S. 1306 (1967).

health and safety standards of Canada or the United States are certified to export product to the country whose health standards have been met. Inspectors in both countries conduct border inspections of meat shipments.

Under the *Canada-United States Free Trade Agreement*¹⁰ (the FTA), Canada and the United States agreed to work towards greater harmonization of their respective inspection regimes, including their internal review systems, laboratory procedures, and inspection and certification of third-country suppliers.¹¹ Moreover, the FTA addresses the issue of border inspections by providing that there should be no more inspection at the importing country's border than exists on shipments between neighbouring states or provinces in that country.

In 1990, the USDA proposed an "open border" experiment that would allow meat to move between the two countries without border inspections. The experiment was cancelled, however, after U.S. inspectors, during spot checks, rejected some shipments from Canada. Although these incidents were localized, the resulting negative publicity forced the cancellation of the experiment.

In the wake of the failed open-border experiment, the USDA undertook an investigation of the U.S. and Canadian inspection systems. In its report published in 1992,¹² the USDA found that the Canadian inspection system was at least equivalent to the U.S. system. Thus, the similarities between the two inspection systems are officially recognized. According to the CCA, "it is not a science problem; it's a political problem."¹³

In July 1992, Canada and the United States entered into an agreement, under the FTA, to move towards destination inspection rather than border inspection. Under this process, exporters can elect to have their shipments inspected at the border or at an approved destination. The agreement called for destination inspection to be fully implemented by April 1993. However, the implementation of this agreement is not uniform. According to the CMC, Canada implemented this agreement, while the United States did not.¹⁴ Consequently, Canadian exports still face delays at the U.S. border.¹⁵

Border inspections can be a significant impediment for Canadian exports to the United States. Moreover, the potential for protectionist influence is a very real concern. Testifying before the Tribunal, the CCA asserted that the open-border trial was shelved by political backlash.¹⁶ Moreover, periodic health concerns, such as the outbreak of "E. coli" in early 1993 in the northwestern states, are likely to produce political pressure for more stringent

10. *Canada Treaty Series*, 1989, No. 3 (C.T.S.), signed on January 2, 1988.

11. I. Bernier, *Free Trade Agreement Between Canada and the United States - Annotated*, Issue No. 2 (Cowansville: Yvon Blais, 1993), Annex 708.1, Schedule 10, "Meat, Poultry and Egg Inspection" at 188.

12. U.S. Department of Agriculture, *Equivalency Study of the United States and Canadian Meat and Poultry Inspection Systems, Summary Report*, March 1992.

13. Testimony of Mr. David Andrews, Canadian Cattlemen's Association, transcript, March 24, 1993, at 48.

14. Testimony of Mr. Larry Campbell, Canadian Meat Council, transcript, September 20, 1993, at 640.

15. Testimony of Mr. Robert Weaver, Canadian Meat Council, transcript, April 21-22, 1993, at 286.

16. *Supra*, note 13 at 46.

plant and border inspections.¹⁷ The industries are seeking clear rules that will minimize the opportunity for different or subjective interpretations of existing regulations. Negotiations are ongoing between the Department of Agriculture and the USDA, and there is a close liaison between the CMC and the American Meat Institute. Without progress on this issue, Canadian exporters believe that they will not have assured access to the U.S. market.

In Mexico, inspection services for animals and meat are administered by the SARH. Mexico is working closely with the United States with respect to animal inspection for live cattle trade and claims that its animal health inspection system is very similar to the U.S. system.¹⁸

The inspection system for Mexican slaughter/packing plants, however, is not comprehensive. All plants producing beef for export are subject to inspection by the SARH. Other "municipal" plants, which produce for the domestic market, are only subject to health and sanitation inspection, not meat inspection. With the possible implementation of NAFTA, the Canadian industry has expressed concern over the need for improvement in the Mexican inspection system to meet Canadian and U.S. standards.¹⁹ Mexico is in the process of seeking Canadian certification for export to Canada.

The Mexican government operates a number of animal health programs intended to control and eradicate animal pests and diseases. Funding for these programs, which originates from the SARH, has increased in recent years in an effort to maintain and improve competitiveness. Total funding for animal health programs is budgeted to increase by 18 percent in 1993.

- Grading

The grading of beef carcasses by federal inspectors provides a standard reference point for retailers and consumers as to the quality characteristics of the product. The changes to the Canadian grading system in 1972 had a fundamental impact on the industry, encouraging the trend towards leaner product. At the same time, these changes resulted in divergence between the Canadian and U.S. systems. While Canada promoted the production of leaner meat, the fat content of meat (marbling) remained the primary measure of quality in the United States. This divergence put Canadian producers at a disadvantage, in that U.S. producers were able to sell their discounted (lean) beef in Canada as a premium product, whereas Canadian lean beef was sold at a discount in the U.S. market.

17. *Supra*, note 13 at 47.

18. Canadian International Trade Tribunal, Notes from the February 23, 1993, Meeting Between the CITT Members and Staff and Dr. Hector Campos Lopez, Direccion General de Salud Animal, Secretaris de Agricultura y Recursos Hidraulicos, April 21, 1993.

19. Submission of the Canadian Meat Council, March 9, 1993, at 5.

The grading system was revised again in 1992²⁰ to address the changes taking place in the marketplace and to bring the system closer in step with the U.S. system, with the goal of improving market access. Marbling was added as a criterion for high-quality "A" grades of beef. Under the new system, Canada Grade "A" (trace marbling) is very lean product that does not have a high-quality equivalent in the United States; Canada Grade "AA" (slight marbling) is comparable to USDA "Select;" and Canada Grade "AAA" (small and greater marbling) is comparable to USDA "Choice."²¹ While some differences remain between the two grading systems, the Department of Agriculture has informally established equivalence in the beef grades.

The Canadian industries, however, are faced with the problem that U.S. authorities have not provided formal grade equivalency to Canadian grades. As a result, Canadian beef exports continue to be discounted and generally compete with U.S. no-roll (ungraded) product. Moreover, U.S. regulations allow for the grading of imported ungraded carcasses with USDA grades, but not of imported beef in other forms. Shipments of beef carcasses are often sent ungraded so as to receive a USDA grade. Similarly, many Canadian producers ship cattle to the United States for slaughter, where they are then able to receive a USDA grade of "Select" or "Choice," thus commanding premium prices.²² Consequently, there is a market incentive to export raw materials rather than the value-added products made from those raw materials.

The Canadian industries are pursuing two objectives with U.S. officials in the medium and long term, namely, grade equivalency and reciprocal grading.²³ Industry witnesses repeatedly told the Tribunal of the need for grade equivalency to convince U.S. buyers and consumers that the quality of Canadian beef is comparable to their expectations.

Grade equivalency would involve the formal recognition by the governments of both Canada and the United States that Canadian and U.S. beef grades are equivalent. For example, it would mean that the governments would recognize that Canada Grade "AAA" is equivalent to USDA "Choice." Under such an agreement, Canada Grade "AAA" beef could be exported to the United States and sold as, or equivalent to, "Choice" beef.²⁴ In this way, U.S. consumers could be confident that they are getting the same quality.

The recognition of equivalency, however, may require further research before U.S. officials are prepared to accept an agreement.²⁵ Therefore, in the shorter term, the Canadian industries are seeking a "reciprocal grading" agreement with the United States. Such an agreement would enable plants in one country to have meat graders from the other country present in their plants, grading to the other country's standards. Under such a system, a

20. The *Livestock Carcass Grading Regulations*, SOR/92-541, September 17, 1992, *Canada Gazette* Part II, Vol. 126, No. 21 at 3821, are established under the 1988 *Canada Agricultural Products Act*, R.S.C. 1985, c. 20 (4th Supp.).

21. The highest-quality U.S. grade, USDA "Prime," has abundant marbling and has no equivalent in Canada.

22. Testimony of Mr. Dennis Laycraft, Canadian Cattlemen's Association, transcript, March 24, 1993, at 38.

23. Testimony of Mr. Dennis Laycraft, Canadian Cattlemen's Association, transcript, September 20, 1993, at 615.

24. *Ibid.* at 621.

25. *Supra*, note 23 at 615-16.

Canadian beef-packing plant could have a USDA meat grader grading the Canadian carcasses in Canada before they are cut for boxing and exported to the United States. Thus, Canadian beef could be processed in Canada and still be sold in the United States showing USDA grades.²⁶

In support of this goal, the CMC, in conjunction with the CCA, and representatives of the Department of Agriculture have met with their U.S. counterparts on a formal level. While the interest shown by the U.S. groups was disappointing, discussions will continue on this issue.²⁷ Moreover, the Canadian parties have submitted a discussion paper to their U.S. counterparts detailing their proposals for grade equivalency and reciprocal grading.²⁸

The CMC regards the equivalency issue as a shared responsibility between government and industry. Industry has told us that there is a marketing aspect to this issue, as well as the regulatory aspect. In other words, the industry feels that the regulatory approach is important, but that it is not a sufficient means of achieving the recognition of the equivalence of Canadian high-quality beef. The CCA also expressed the need for the industry to convince the retail trade in the United States to accept Canadian grades as equivalent to USDA grades.²⁹

Market acceptance of grade equivalence is not only important for access to the U.S. market but is also important for access to third-country markets that have recognized U.S. grading standards for high-quality meat. For instance, Mexican grading standards were revised in 1991 to more closely resemble the U.S. grading standards. Currently, these standards are applied to exported beef only.

Canadian product also faces competition from U.S. product in other export markets. As the CMC stated in its written submission to the Tribunal, "the dominance of the U.S. Choice and Prime grade in the Japanese and other Asian markets has made it extremely difficult to sell Canadian beef without an official 'equivalency rating'.³⁰" Nevertheless, the industry has achieved some success in these markets on the strength of the Canadian product, as evidenced by the acceptance of the Canada "AA" and "AAA" beef grades by the Republic of Korea and the acceptance of the Canada "AAA" beef grade by Taiwan as qualifying for the top-quality categories in those countries.

(ii) Meat Import Acts

Both Canada and the United States have legislation in place that may be used to restrict the importation of meat products, including beef. The legislation in both countries specifies formulas to be used or considered when setting the volume of certain meats (primarily beef) that may be allowed to enter the respective country. These formulas both have counter-cyclical elements that tend to increase allowable imports when domestic cow beef production is lower and to decrease the allowable amount when domestic cow beef production is higher. The FTA

26. *Supra*, note 23 at 615-20.

27. Submission of the Canadian Meat Council, September 1993 at 2.

28. *Supra*, note 23 at 614-15.

29. *Supra*, note 22 at 43.

30. *Supra*, note 19 at 4.

prohibits Canada or the United States from imposing quantitative import restrictions on meat imports originating in the other party. However, there is an exception to this general prohibition. Either party may impose quantitative import restrictions where: (1) one party has imposed quantitative import restrictions on imports of meat from third countries; (2) the other party has not imposed equivalent restrictions; and (3) imports from the party which has not imposed restrictions are increasing and are frustrating the other party's restrictions on imports from third countries.

In Canada, the *Meat Import Act*³¹ (the MIA) allows the imposition of import quotas at the discretion of the Minister of Agriculture, with the concurrence of the Secretary of State for External Affairs. The MIA, which was proclaimed in force in 1982, was used only once, in 1985, in response to a rapid increase in the level of imports of boneless beef from the EC.

While Canada has not imposed restrictions under the MIA since 1985, it recently imposed a tariff rate quota on imports of boneless beef from sources other than the United States, which limits the amount of boneless beef allowed to be imported at the normal most-favoured-nation (MFN) tariff of \$0.0441/kg, to an annual amount of 72 million kg. For the period from May 1 to December 31, 1993, the tariff rate quota amount was set at 48 million kg³² of boneless beef³³ from countries other than the United States. Imports in excess of that amount are subject to an additional *ad valorem* surtax of 25 percent, pursuant to an order made under paragraph 60(1)(b) of the *Customs Tariff*. The tariff rate quota and surtax were imposed by the Canadian government following a safeguard inquiry conducted by the Tribunal which found a threat of future serious injury to the Canadian cattle and beef industries from increased imports of boneless beef from sources other than the United States.³⁴ The Canadian government consulted with interested parties regarding appropriate measures for the 1994 and 1995 calendar years.

The USMIA restricts the quantity of meat articles that can be imported into the United States. The USMIA specifies a formula to calculate the "adjusted base quantity" of certain meat articles that may be imported under that act. A "trigger level" is then set at the adjusted base quantity, plus 10 percent. If the estimated imports are expected to exceed the adjusted base quantity of imports by 10 percent (i.e. reach the trigger level), quotas will automatically be invoked at the lower, adjusted base quantity level. Therefore, it is in the interest of exporting countries not to exceed this trigger level. The major suppliers of beef to the United States, such as Australia, New Zealand and Canada (prior to the FTA), have usually entered into VRAs during years when imports seemed destined to reach the trigger level.

31. R.S.C. 1985, c. M-3, as amended by S.C. 1988, c. 65, s. 140.

32. This amount equals the annual amount of 72 million kg prorated for the remaining eight months of the year.

33. Beef classified under tariff item No. 0201.30.00 or 0202.30.00 of Schedule I to the *Customs Tariff*.

34. *Supra*, Chapter IV, note 92.

While the USMIA was used once, in 1976, to impose global import quotas, the automatic triggering features of the law and the VRAs negotiated as a result of this triggering mechanism, pursuant to section 204 of the *Agricultural Act of 1956*,³⁵ effectively restrict imports without the formal imposition of import quotas. The United States negotiated VRAs with Australia and New Zealand in 1987, 1988, 1991, 1992 and 1993.

The WEFA Group, in conjunction with the Food and Agricultural Policy Research Institute (FAPRI) of the Department of Agricultural Economics, University of Missouri-Columbia, estimated the impact on U.S. cattle and beef production of eliminating the provisions of the USMIA in the United States starting in 1976.³⁶ The scenario assumed that, in the absence of the USMIA, imports of beef would increase over actual historical levels starting at 5 percent in 1976, increasing to 30 percent by 1984 and continuing at 30 percent over actual levels through 1991.

Table 5.1 presents the difference and percent change between the average actual results during the most recent four-year period (1988 to 1991) and the average of the simulation exercise results³⁷ for that period.

Table 5.1		
ABSENCE OF THE USMIA		
Simulation of Average Impacts, 1988-91		
	Difference	Percent Change
Beef Production (million kg)	(283.00)	(2.7)
Cattle and Calf Inventory (million head)	(4.40)	(4.5)
Beef Cow Inventory (million head)	(1.80)	(5.3)
Cattle Slaughter (million head)	(0.90)	(2.6)
Fed Steer Prices (US\$/cwt)	0.16	0.2
Feeder Steer Prices (US\$/cwt)	(0.52)	(0.6)
Utility Cow Prices (US\$/cwt)	(0.44)	(0.9)
Source: The WEFA Group, <u>Analysis of U.S. Government Assistance to the Cattle and Beef Industries: Addendum Report, U.S. Meat Import Act Import Supply Control - Net Benefits Determination: Beef Import Scenario with Elimination of Import Supply Control Barriers</u> , August 1993.		

35. 7 U.S.C. 1854.

36. The WEFA Group, Analysis of U.S. Government Assistance to the Cattle and Beef Industries: Addendum Report, U.S. Meat Import Act Import Supply Control - Net Benefits Determination: Beef Import Scenario with Elimination of Import Supply Control Barriers, August 1993.

37. Economic models provide a simplification of reality and, therefore, the results should be interpreted as indicative of general trends only.

The simulation analysis indicated that, under the assumptions made and the parameters of the model, in the absence of the USMIA, the domestic production of beef in the United States would have been lower than the levels actually produced by an average of 283 million kg during the four-year period. The cattle and calf inventory and the beef cow inventory would be somewhat lower during the four-year period than what they actually were with the benefit of the USMIA. Cattle slaughter would decline by an average of 0.9 million head. Prices for fed steers would be slightly higher during the period, while prices for feeder steers and for cows would, on average, be slightly less during the 1988-91 period. It should be noted that these results indicate the long-term equilibrium impacts of eliminating that act in 1976.

From this simulation analysis, The WEFA Group estimated the net benefits to the U.S. cattle and beef industries. For the most recent four-year period, from 1988 to 1991 inclusive, the USMIA provided an average estimated benefit to the U.S. cattle industry of 2.4 percent of the adjusted value of cattle production. The benefit to the beef-packing industry was, on average, 0.2 percent of the adjusted value of beef packing during the four-year period.

The analysis indicates that the USMIA is one of the more significant government interventions affecting the U.S. cattle and beef industries. Even without the imposition of import quotas, the USMIA benefits these industries indirectly via VRAs and exporters' knowledge that import controls will be implemented if exports appear destined to exceed the specified level.

(iii) Tariff Policies

The customs tariff has traditionally been one of the main trade policy instruments used by Canada, the United States and Mexico. Within the multilateral trade framework, trade with most countries is conducted on an MFN basis. However, since 1989, trade between Canada and the United States has been subject to declining tariff rates under the FTA. The tariff rates for cattle and beef trade between the two countries are now zero.

Canada, the United States and Mexico do not carry on any substantive trade in live cattle with countries outside of North America. Consequently, the only tariffs which affect the North American cattle industries are the tariffs on live cattle trade between the United States and Mexico. These tariffs would be eliminated under the proposed NAFTA. These tariffs are unlikely to have a significant impact on the competitive position of the Canadian industry in the U.S. market, given that Canadian cattle and Mexican cattle compete in different regions of the United States. Canadian cattle are exported to the northern regions of the United States, while Mexican cattle are predominantly exported to the southern regions.

Import tariffs on beef are more relevant than import tariffs on cattle, in that a large percentage of beef imports into both Canada and the United States originate in countries outside of North America.

In Canada, the MFN rate of duty for imports of beef from countries other than the United States is \$0.0441/kg. In addition to this duty, a countervailing duty was imposed in 1986 on boneless manufacturing beef originating in the EC. This countervailing duty was imposed

following a complaint by the CCA and an inquiry by the Canadian Import Tribunal,³⁸ a predecessor organization of the Tribunal. The original injury finding was continued by the Tribunal³⁹ on July 22, 1991.

Imports of beef into the United States from countries other than Canada are subject to a tariff of US\$0.044/kg. Fancy beef and veal cuts valued at over US\$0.660/kg are subject to a tariff of 4 percent *ad valorem*. Imports of live cattle from Mexico, which represent slightly over 25 percent of the total value of cattle imports into the United States, are subject to a tariff of US\$0.022/kg.

Imports of fresh and frozen beef into Mexico are subject to an *ad valorem* tariff of 20 and 25 percent, respectively. Beef tariffs between Mexico and Canada and the United States would be eliminated under the proposed NAFTA. With these tariffs eliminated, the Canadian beef industry sees opportunities for increased exports to the United States, as that country's beef industry develops markets in Mexico for its beef.⁴⁰

(iv) Feed Grain Programs

Canada, the United States and Mexico all have agricultural programs that support the grain sector of the agricultural community. These programs invariably affect the livestock sector through the cost of feed grain.

In Canada, Parliament passed the *Western Grain Transportation Act*⁴¹ (the WGTA) in 1983, which replaced the fixed statutory freight rates (i.e. the Crow Benefit) on western grain being shipped to Canadian ports.

Grain transportation costs are shared between the federal government and the grain producers based on a formula. The government payment is made directly to the railroads that transport the grain. The ratio of government-to-producer cost-sharing changes according to annually adjusted rail rates set by the National Transportation Agency. The rate structure of the WGTA is distance-based, designed to allow equal rates for equal distance.

During the 1992-93 fiscal year, government assistance to grain producers through this program (the Crow Benefit) was calculated at a rate of \$20.14 per tonne (equal to 62.7 percent of total grain transportation costs of approximately \$1.1 billion in 1992-93), with producers paying \$11.98 per tonne (or the remaining 37.3 percent) to cover the shipment of each tonne for

38. Canadian Import Tribunal, *Boneless Manufacturing Beef Originating in or Exported from the European Economic Community in Respect of Which Subsidies Have Been Paid Directly or Indirectly by the European Economic Community and/or the Government of a Member State*, Inquiry No. CIT-2-86, July 25, 1986.

39. Canadian International Trade Tribunal, *Boneless Manufacturing Beef Originating in or Exported from the European Economic Community in Respect of Which Subsidies Have Been Paid Directly or Indirectly by the European Economic Community and/or the Government of a Member State*, Review No. RR-90-006, July 22, 1991.

40. Submission of the Canadian Meat Council, September 1993 at 3.

41. R.S.C. 1985, c. W-8.

an average movement of about 1,500 km. The total government pay-out through the application of the 1992-93 rate scale is estimated to be \$695.6 million and contributed to the costs of moving approximately 34.59 million tonnes of grain.

The CCA, among other organizations and individuals, has argued that the WGTA, through the Crow Benefit, has the effect of raising the price of grain to cattle producers and, therefore, raising the cost of cattle production in the western provinces.⁴² The Alberta government stated that "The Crow Benefit, currently administered through the *Western Grain Transportation Act*, has had a particular influence on the cattle and beef industries by distorting feed grain prices to the disadvantage of western regions which have proven competitive strengths in livestock and meat production."⁴³

The provinces of Alberta, Saskatchewan and Manitoba have, or had, provincially funded programs in place that offset, to some extent, the impacts of the WGTA.⁴⁴ However, the benefit paid under the Alberta and Saskatchewan programs has been reduced substantially in the past couple of years, and the Manitoba program was terminated in July 1991. It has been argued that the offset programs do not completely negate the increase in feed costs caused by the WGTA and, also, that the offset programs are a burden on already constrained provincial resources. As stated by the Alberta Ministry of Agriculture, Food and Rural Development, "[c]learly, the use of offset programs does not go all the way in achieving market oriented adjustments."⁴⁵ The submission also stated that "[t]he WGTA had, and still has, the effect of inflating local grain prices ... and causing an unnecessary drain on provincial fiscal resources devoted to offset programs."⁴⁶

There has been much debate recently over the WGTA itself and, more specifically, over the method of payment under the WGTA. The proposed change would see the payment made directly to the grain producers rather than to the railroads that transport the grain.

In its submission to the Tribunal, Prairie Pools Inc. stated that "[i]n fact, evidence suggests that the impact of a change in the [method of payment] would be relatively small" and went on to cite several studies that estimated the impacts of a change in the method of payment.⁴⁷ Lakeside Packers, on the other hand, submitted that "[a] priori logic suggests that a grain export subsidy such as the *Western Grain Transportation Act* should result in domestic feed grain prices which are higher than would otherwise be the case."⁴⁸

42. Canadian Cattlemen's Association, Pre-Hearing Brief to the U.S. International Trade Commission, August 28, 1992, at 24.

43. Submission of the Government of Alberta, March 1993 at 5.

44. The "Alberta Crow Benefit Offset Program" in Alberta, the "Feed Grain Adjustment Program" in Saskatchewan and the "Livestock Development Program" in Manitoba.

45. Submission of the Alberta Ministry of Agriculture, Food and Rural Development, September 17, 1993, at 2.

46. *Ibid.*

47. Submission of Prairie Pools Inc., March 1993 at 5.

48. Submission of Lakeside Packers, March 18, 1993, at 2.

On June 4, 1993, the government released draft reform legislation which proposed a framework for the phasing-in, over four years, of a shift in the payment of the WGTA benefit from the railroads to the grain producers. This draft bill is part of a proposed comprehensive reform program for the western grain transportation system. The government also announced the establishment of a producer payment panel which would draw industry input into the development of options for delivering the WGTA benefit to grain producers. The panel's report will be presented to the federal government on November 30, 1993. A change in the method of paying the benefit under the WGTA would alleviate the need for offset programs in the Prairies.

In 1992, the Department of Agriculture conducted an analysis of the impact of changing the method of payment of the transportation subsidy under the WGTA and of eliminating the Alberta Crow Benefit Offset Program (ACBOP).⁴⁹ This analysis indicated that the effects of the WGTA on the Canadian cattle industry were, for the most part, regional in nature. The analysis assumed that, under a scenario where the payment was paid directly to the grain producers rather than to the railroads, the price of barley would decline by 14, 15 and 9 percent in Alberta, Saskatchewan and Manitoba, respectively.

Under this scenario (basically in the absence of the existing WGTA and the ACBOP⁵⁰), the cattle herd in Western Canada would be slightly larger, and beef production would be higher. At the same time, the cattle herd would decline marginally in Eastern Canada, and fewer feeder cattle and calves would be shipped from Western to Eastern Canada. However, beef production would increase slightly in Eastern Canada, as more slaughter cattle would be purchased in Western Canada and shipped east. Net trade in cattle and beef between Western Canada and the United States would increase minimally, while net trade in cattle between Eastern Canada and the United States would decline, and net trade in beef would increase.

49. Department of Agriculture, The Impact of Changing the Method of Payment Under the Western Grain Transportation Act (WGTA) on the Canadian Cattle Industry, August 1993.

50. The food and agriculture regional model does not account for the offset programs in Saskatchewan and Manitoba; therefore, no adjustment was made for these programs.

Table 5.2 presents the results of the simulation exercise.

Table 5.2		
ABSENCE OF THE WGTA AND THE ACBOP		
Simulation of Eastern and Western Canada Average Impacts, 1986-91		
	Difference	Percent Change
Western Canada		
Inventory of Beef Cattle (000 head)	14.37	0.30
Beef Production (million kg)	4.06	0.75
Net Trade with the United States		
Slaughter Cattle (000 head)	2.61	0.89
Beef (million kg)	0.04	0.13
Shipments West to East		
Feeder Calves (000 head)	(3.74)	(3.24)
Feeder Cattle (000 head)	(5.80)	(4.23)
Slaughter Cattle (000 head)	1.42	3.00
Eastern Canada		
Inventory of Beef Cattle (000 head)	(0.63)	(0.04)
Beef Production (million kg)	0.41	0.11
Net Trade with the United States		
Slaughter Cattle (000 head)	(2.10)	(11.27)
Beef (million kg)	4.12	135.58
Source: Department of Agriculture, <u>The Impact of Changing the Method of Payment Under the Western Grain Transportation Act (WGTA) on the Canadian Cattle Industry</u> , August 1993.		

The main function of the Feed Grains Program in the United States is to provide assistance and support to U.S. feed grain producers. Target prices are set by Congress for each of the crops covered by the Feed Grains Program. When market prices fall below target prices during a given period of the year, if the producers participate in the Acreage Reduction Program,⁵¹ they can receive deficiency payments from the federal government. Deficiency payments are also dependent upon the Commodity Credit Corporation (CCC) loan rate, which is the price at which the CCC will buy the crop from a farmer who has used it as collateral for

51. The Acreage Reduction Program provides incentives to farmers to idle some part of their acreage in feed grain.

credit from the CCC.⁵² Its loan rate effectively provides a price floor for feed grain. Another related program, the "0/92," allows farmers to idle all or part of their base acres and still be eligible for 92 percent of the estimated deficiency payment.

When looking at the impact of these programs on the cattle industry, a parallel can be drawn between the Feed Grains Program and the Export Enhancement Program.⁵³ Both programs try to improve the market returns to grain producers. The CCA pointed out that the Export Enhancement Program and elements of the Feed Grains Program "put upward pressures on domestic prices" of feed grain in United States,⁵⁴ thereby imposing additional costs on the U.S. cattle industry. However, as the CCA also stated, the Feed Grains Program can also result in feed grain prices being lower than they otherwise would be, if CCC grain stocks can be drawn upon when grain production drops and the market price goes up because of unusual conditions.⁵⁵

Using an economic simulation exercise to estimate the impact of the Feed Grains Program on the cattle sector, The WEFA Group arrived at similar conclusions. The analysis by The WEFA Group showed that, during the drought years of 1988 and 1989, feed grain prices would have been higher in the absence of the Feed Grains Program, which means that the program provided positive benefits to the cattle sector. During 1990 and 1991, however, the same analysis indicated that the Feed Grains Program resulted in higher feed prices, thereby increasing the cost to the cattle industry. Thus, these programs have a stabilizing effect on the prices of feed grain in the United States, keeping them relatively lower during periods of shortages and somewhat higher during periods of plentiful supply.

In Mexico, under the Balanced Feed Subsidy, imports of low-quality corn and grain sorghum from the United States, used primarily for livestock feeding, are purchased on the open market by the National Popular Subsistence Company, which then sells the feed grain at below-market prices to private feed mills. While this program provides a subsidy to livestock production, the policy of restricting imports and supporting the domestic prices of feed grain outweighs the feed grain subsidy, resulting in a net tax on the livestock sector.⁵⁶

Border controls assist the Mexican government policy of supporting producer prices for basic commodities, including feed grain for livestock. The Mexican government has used a guaranteed minimum price policy to support farm prices since the 1950s. The government guarantees the purchase of corn and dry bean production at fixed minimum prices. In 1989, the government eliminated guaranteed prices for all commodities, except corn and dry beans. For grain sorghum, Mexico's leading feed grain for livestock feeding, the guaranteed price was

52. More specifically, "The size of the deficiency payment is based on the difference between the target price and the market price in the first five months of the marketing year or the [Commodity Credit Corporation] loan rate, using the one that is higher, i.e. minimizes the deficiency payment." The WEFA Group, Analysis of U.S. Government Assistance to the Cattle and Beef Industries, July 1993 at 3.7.

53. According to The WEFA Group, grain products have captured, so far, "virtually all promotional funding." *Ibid.* at 3.24.

54. *Supra*, note 42 at 23.

55. *Ibid.*

56. The WEFA Group, Analysis of the Mexican Cattle and Beef Industries, July 1993 at 6.1.

replaced by an "agreement" price, which is set by a compromise among the government, producers and distributors. Grain sorghum prices in Mexico continue to be higher than those in the United States, largely because of the continued high support of corn prices.

The Mexican government is pursuing an income support policy for growers of primary commodities as part of its agricultural reforms. The policy is designed to promote the production of adequate domestic supplies of basic commodities and to ease the transition to market pricing.⁵⁷ The Tribunal learned from industry officials in Mexico that the local geography inhibits grain production and that Mexico will require 10-15 years to become competitive in grain production.⁵⁸ Consequently, this policy has, and will continue to have, a significant impact on the cost of cattle feeding.

(v) Credit Programs

The Canadian government provides financing to the agricultural sector through a variety of programs under the *Farm Credit Act*,⁵⁹ the *Farm Improvement and Marketing Cooperatives Loans Act*⁶⁰ and the *Farm Syndicates Credit Act*.^{61,62} Most programs under these acts are administered by the Farm Credit Corporation, a federal crown corporation. These programs provide short- or long-term loans to eligible farmers, or guarantee loans made by commercial lending establishments to eligible farmers for farm uses.

Under the *Farm Debt Review Act*,⁶³ Farm Debt Review boards are established in the provinces to help insolvent farmers deal with their creditors. The Farm Debt Review Fund allows the Farm Credit Corporation to offer debt concessions, such as arrears or interest forgiveness, or payment restructuring, to its clients in financial difficulty.

The U.S. government, through the Farmers' Home Administration, offers loans to farmers at lower-than-market rates. The Farmers' Home Administration is generally a lender of last resort for farmers who cannot obtain credit from commercial lenders. The interest rate charged by the agency is based on the government's cost of borrowing. Other credit programs available to U.S. cattle producers include the Farm Credit System, production credits and state credit programs.

In Mexico, the National Rural Credit Bank provides agricultural credit to producers at interest rates below the market rate for normal business loans.

57. *Ibid.* at 1.8.

58. Canadian International Trade Tribunal, Notes from the February 22, 1993, Meeting Between the CITT Members and Staff and Luis Munozcano Alvarez, National Agricultural Council, April 22, 1993.

59. R.S.C. 1985, c. F-2.

60. R.S.C. 1985, c. 25 (3rd Supp.).

61. R.S.C. 1985, c. F-5.

62. In April 1993, the *Farm Credit Corporation Act*, S.C. 1993, c. 14, Canada Gazette Part III, Vol. 16, No. 1 at 179, replaced the *Farm Credit Act* and the *Farm Syndicates Credit Act*. The new act provides the Farm Credit Corporation with improved flexibility in offering credit programs to different types of agricultural enterprises.

63. R.S.C. 1985, c. 25 (2nd Supp.).

The Fiscal Transfer Subsidies, governed by the National Popular Subsistence Company, are intended to assist in the modernization of beef packing in Mexico and to improve the competitiveness of the industry. Beef packers receive support which is intended to provide investment in new and used equipment, whether imported or purchased domestically.

The net benefits calculated for credit programs available to cattlemen in the United States were more substantial than those calculated for either Canadian or Mexican credit programs, both in actual dollar amounts and as percentages of the adjusted value of cattle production.

(vi) Grazing on Public Land

Grazing on public land is widely practised in the western regions of both the United States and Canada. The objectives for such grazing programs are broadly similar in both countries. Public policy recognizes the need to manage the public rangeland resource in a manner that promotes conservation, while applying the concept of multiple use for the land (e.g. resource extraction, wildlife conservation, recreation, etc.). Moreover, the grazing programs provide a measure of economic stability for ranchers and western rural economies. This policy recognizes that access to public grazing land is often necessary to round out production for an individual rancher or to allow some operations to be economically viable. Some observers point to the low fees charged for public grazing land, relative to private leasing rates, as a significant benefit to western cattlemen in both countries.⁶⁴

Grazing on public (Crown) land in Canada is confined to Alberta, Saskatchewan, Manitoba and British Columbia. Crown land is controlled by the federal or provincial government. The land is generally of marginal agricultural quality, unable to support other types of agricultural production. There are approximately 16.0 million hectares of Crown land devoted to grazing, with 6.2 million animal unit months (AUM),⁶⁵ which, during 1992, helped support, for part of the year, 1.1 million head of cattle. About 14.8 million hectares (94 percent) are owned and controlled by the four provinces. The remaining fall under the federal grazing program administered by the Prairie Farm Rehabilitation Administration.

Crown grazing programs in Canada differ between the jurisdictions.⁶⁶ The Prairie Farm Rehabilitation Administration program is service-based and operates much like a commercial leasing operation with a comparable fee structure. Provincial grazing programs are primarily geared to providing individual ranchers with additional, undeveloped land without the provision of any services. Each province provides a variety of dispositions⁶⁷ with differing lengths of tenure. The majority of dispositions, however, are long-term leases. Ranchers pay annual fees

64. *The Georgia Cattleman*, "The Great Grazing Fee Debate: Grazing Giveaway Costs Taxpayers Millions" by G. Darden, July 1991 at 12-13. Similarly, in their submissions to the Tribunal, some producers in Eastern Canada noted that their counterparts in Western Canada received a benefit from Crown grazing fees.

65. An animal unit month is the amount of forage necessary to sustain one cow and calf, one horse, or five sheep for one month.

66. *Supra*, Chapter II, note 37, Annex 1.

67. A grazing disposition is a contractual arrangement conferring a right or privilege to graze livestock on specified tracts of publicly owned land.

for the use of Crown land, ranging from \$1.18/AUM in northern Alberta to \$4.79/AUM in Saskatchewan. In addition to these fees, ranchers are required, in most cases, to pay property taxes on the land leased from the Crown. Generally speaking, these taxes may as much as double the cost/AUM paid by the ranchers. Moreover, leaseholders bear the full cost of capital range improvements to the land (e.g. fencing and water development). There is a perception among Canadian ranchers that they pay more for Crown grazing rights than do their U.S. counterparts.⁶⁸

Grazing on public rangeland in the United States is primarily concentrated in the 16 western states.⁶⁹ There are nearly 125 million hectares of public rangeland used for grazing, most of which is of marginal quality, unsuitable for other agricultural use. Unlike Canada, the vast majority of this rangeland, 87 percent, is owned by the federal government. The Bureau of Land Management (BLM) of the U.S. Department of the Interior (USDI) controls about 68 million hectares. The Forest Service (FS) of the USDA administers approximately 40 million hectares. In 1991, federal rangeland in the United States provided nearly 19 million AUMs and helped support 3.8 million head of cattle.⁷⁰

The annual grazing fees⁷¹ are determined by a formula prescribed in the *Public Rangelands Improvement Act of 1978*⁷² (the PRIA). In 1986, these fees were US\$1.35 (CAN\$1.88)/AUM, rising to US\$1.97 (CAN\$2.26)/AUM in 1991 and falling to US\$1.86 (CAN\$2.37)/AUM in 1993. For the most part, these federal fees are considerably lower than fees charged by state governments.

The BLM and FS rangeland programs do not operate on a cost-recovery basis. In 1990, the latest year for which figures are available, total revenues from grazing fees amounted to US\$27 million, compared to expenses of US\$74 million,⁷³ for a deficit of US\$47 million. The total program expenses amounted to US\$3.24/AUM for the FS and US\$3.21/AUM for the BLM. However, these figures include expenses that are incurred regardless of grazing. The expenses directly attributable to the grazing programs were US\$2.40 and US\$2.18/AUM, respectively.⁷⁴

Grazing fees have been a particularly contentious issue in the United States with the debate revolving around relating public fees to private market values. Several economic studies have been conducted over the years on grazing fees, including studying alternative formulas and the subsequent impact on ranchers. Most recently, the USDA and the USDI, at the direction of

68. Canadian International Trade Tribunal, *Notes from the March 25, 1993, Meeting Between Larry and Avril Sears of the Flying E Ranch and Tribunal Members and Staff*, July 28, 1993.

69. Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington and Wyoming.

70. *Supra*, Chapter II, note 35, Environment/Grazing at 5.

71. Grazing fees on the national grasslands under the control of the Forest Service are set by the Secretary of Agriculture.

72. Pub. L. No. 95-514, 16 U.S.C.S. 1332, 1333.

73. *Supra*, Chapter II, note 44 at 4-6.

74. *Ibid.*

Congress, tabled a report on grazing fees, including a market value appraisal of public rangeland.⁷⁵ That report determined that the market rental value at January 1, 1992, for mature cattle on public land was from US\$4.68 to US\$10.26/AUM over six different pricing areas (e.g. regions possessing similar qualities of geography, water and vegetation). This compared to private rates of US\$5.50 to US\$12.00/AUM.⁷⁶

It is this disparity between public and private lease rates that is at the heart of the U.S. debate. Conservationists and ranchers in other regions of the United States point to the low fees as evidence that the government is subsidizing western ranchers.⁷⁷ Moreover, critics claim that these fees lead to overgrazing and the destruction of rangeland. The industry counters these claims by asserting its role in managing and improving rangeland. Producers further argue that the fees reflect fair market value, given that the marginal land is less productive. Similarly, they point to higher operating costs incurred for the use of public land. Because the public has access to federal land, producers face additional problems, such as gates being left open, damage to forage, vandalism, and lost or injured livestock. On the other hand, with most private leases, the producer has everything provided and secures exclusive access to the property. The industry points to these differences in support of its argument that a straight comparison between public and private fees is not valid. On the contrary, by including the various "non-fee" costs, the total cost to the permittee is comparable to, if not greater than, private rental rates.

The Clinton Administration has pledged to raise federal grazing fees in the United States. Following a series of consultations with the industry and other interested parties during the spring of 1993, the BLM, with the cooperation of the FS, published a new rangeland management proposal.⁷⁸ The BLM and the FS also published proposed regulatory changes in the Federal Register, on August 13, 1993, with a 30-day period for public comment. In addition to changes in the administration of the grazing programs,⁷⁹ the proposal includes a new grazing fee structure that would see federal grazing fees more than double within three years. A substantial increase would bring federal fees closer in line with those charged by the state governments.

One of the guiding principles in revising the grazing fee formula is the need for those fees to approximate market value.⁸⁰ The proposed fee formula presented in "Rangeland Reform '94," and subsequently published in the Federal Register, however, is one of several fee options under consideration. The BLM, with the cooperation of the FS, will prepare an Environmental Impact Statement of the grazing reform proposal, in which all the grazing fee

75. U.S. Department of Agriculture and U.S. Department of the Interior, Grazing Fee Review and Evaluation Update of the 1986 Final Report, April 30, 1992.

76. *Ibid.* at 16.

77. *Supra*, note 64.

78. U.S. Department of the Interior and Bureau of Land Management, Rangeland Reform '94, A Proposal to Improve Management of Rangeland Ecosystems and the Administration of Livestock Grazing on Public Lands, August 1993.

79. Part of the thrust of this reform initiative is to harmonize the administrative and regulatory policies of the Forest Service and the Bureau of Land Management in managing their respective grazing programs.

80. Federal Register, Part V, U.S. Department of Agriculture, Forest Service, 36 CFR Part 222, Range Management; Grazing and Livestock Use and Grazing Fees; Proposed Rule, Vol. 58, No. 155, August 13, 1993, at 43204; and Federal Register, Part VI, Department of the Interior, Bureau of Land Management, 43 CFR Parts 4, 1780, and 4100, Grazing Administration Regulations; Proposed Rule, Vol. 58, No. 155, August 13, 1993, at 43218.

options will be assessed.⁸¹ After this process, the Secretary of the Interior and the Secretary of Agriculture will make a final decision on the federal grazing fee. The intent is to initiate the grazing reforms as soon as possible and to implement the new grazing fees no later than the 1995 billing year.⁸²

Table 5.3 presents a comparison of charges connected with grazing on public land in Canada and the United States.

81. Federal Register, Part VII, Department of the Interior, Bureau of Land Management, Grazing Administration, Rangeland Management; Notice, Vol. 58, No. 155, August 13, 1993, at 43235.

82. *Supra*, note 78 at 6. The federal grazing billing year runs from March to February. As part of the general intent to harmonize the grazing programs of the two agencies, the new grazing fee structure will apply to all federal land (i.e. Forest Service fees on the national grasslands will no longer be set independently).

Table 5.3

**COMPARISON OF COSTS FOR GRAZING ON PUBLIC LAND
IN CANADA AND THE UNITED STATES**

1993

Jurisdiction	Grazing Fee (\$/AUM)	Municipal Taxes	Range Improvement
Canada			
Prairie Farm Rehabilitation Administration	9.00 ¹	Included in fee	Included in fee
Alberta			
Area A (south)	2.37	Extra to fee ³	Extra to fee
Area B (central)	1.97	Extra to fee ³	Extra to fee
Area C (north)	1.18	Extra to fee ³	Extra to fee
Saskatchewan	4.79	Extra to fee ³	Extra to fee
Manitoba	1.25	Extra to fee ³	Extra to fee
British Columbia ²	1.82	No property taxes	Extra to fee
United States⁴			
BLM/FS (PRIA)	2.37	Included in fee	50% of fee goes to range improvement
FS (national grasslands)	2.61	Included in fee	50% of fee goes to range improvement

1. Estimate based on fees charged per head, per day by the Prairie Farm Rehabilitation Administration.

2. Permits and licences only. Some grazing dispositions are in the form of long-term leases on which ranchers do pay property taxes and the full cost of range improvement.

3. Property taxes are generally equal to, or greater than, the provincial grazing fee.

4. For the purposes of comparison, the 1993 grazing fees on state land are: \$6.04 in Colorado; \$6.35 in Idaho; \$5.31 in Montana; and \$4.21 in New Mexico. These figures were obtained from the B.C. Ministry of Forests, based on an internal study of grazing programs in neighbouring jurisdictions.

Source: Tribunal research.

Provincial fees, with the exception of those in Saskatchewan, are generally lower than U.S. federal fees. Fees charged under the PRIA are comparable to the fee in the southern region of Alberta (Area A). However, unlike their U.S. counterparts whose fees include property tax considerations, most Canadian ranchers must also pay property taxes on their Crown dispositions.⁸³ Furthermore, 50 percent of all grazing fees in the United States go to the Range Betterment Fund for use in improving services on the land.⁸⁴ In other words, U.S. permittees benefit from some range improvements provided by the government as part of the grazing fees paid. This contrasts with the situation in Canada, whereby lessees or permittees are responsible, for the most part, for the costs of all such services on Crown dispositions, over and above their grazing fees.⁸⁵ When property taxes and range improvement costs are considered, most Canadian ranchers are currently paying much more for grazing rights on public land than are U.S. ranchers. Consequently, U.S. ranchers receive a greater benefit from the privilege of using public rangeland than do their Canadian counterparts.

The Tribunal's analysis found that, at the industry level, the U.S. federal grazing program met the net benefits threshold, whereas the Canadian programs did not. Using the grazing fee study prepared jointly by the FS and the BLM as the basis of its analysis, The WEFA Group estimated the benefits to the U.S. cattle industry attributable to grazing fees by comparing the fees charged under the PRIA to market value rates, as determined by the study conducted jointly by the USDA and the USDI.⁸⁶ During the 1991 fiscal year, the total benefit attributed to public grazing on federal land was US\$61.5 million, or approximately 0.22 percent of the national adjusted value of cattle production in the United States.

At the Tribunal's request, the Department of Agriculture analyzed the impacts of raising grazing fees on U.S. public rangeland to a level that more closely represents market value.⁸⁷

83. The general exception to this rule is British Columbia, where most grazing dispositions are in the form of permits or licences that do not include an obligation to pay property taxes.

84. The industry claims, however, that these funds are often misspent, that is, used in areas other than on capital improvements to the rangeland. Western Livestock Reporter, No. 47, "Administrative Costs of Grazing Fees" by H.S. Thomas, June 16, 1993.

85. Some provinces do have incentive programs to encourage lessees or permittees to undertake capital improvements to their dispositions. Under the Provincial Range Improvement Program in Alberta, lessees who make improvements to their dispositions (e.g. build a water dug-out) receive a credit of 50 percent of their cost to their annual rent. Also, for every \$1,000 spent on improvements, the lease can be extended by one year, up to 20 years. In Saskatchewan, lessees can enter into a Range Improvement Agreement with the province, detailing grazing management measures, and thereby receive a rent reduction. Alternatively, in consideration of development costs incurred to improve the tenure, lessees may receive a freeze in rental rate increases for 5-7 years. Under the Crown Land Improvement Program in Manitoba, lessees may depreciate capital investment in land improvement through a 13-year freeze in rental rate increases. Under the Crown Rangeland Management Program, farmers are eligible for financial assistance to cover 25 percent of actual costs to implement certain projects outlined in a Farm Forage Plan (developed between the farmer and the province). The Crown Rangeland Management Program, which has a \$2,500 limit per lessee, expires on March 31, 1994.

86. *Supra*, note 52 at 3.15

87. Department of Agriculture, The Impact of Canadian and U.S. Government Policies on the Canadian Cattle and Beef Sectors, July 1993.

The analysis assumes a reduction of 500,000 head in the cattle inventory in the first year of the simulation compared to the baseline, and 1,000,000 head in each subsequent year.⁸⁸

Table 5.4 shows how an increase in U.S. grazing fees would impact on cattle prices, production, consumption and trade in the United States and Canada. These figures are based on an increase in fees beginning in 1988.

Table 5.4				
INCREASED GRAZING FEES IN THE UNITED STATES				
Simulation of U.S. and Canadian Average Impacts, 1988-97				
	Changes Compared to Baseline			
	1988-92		1993-97	
	Difference	% Change	Difference	% Change
Impact on the United States				
Cattle Producer Price (US\$/cwt)	4.72	1.63	3.79	1.28
Beef and Veal Production (million kg) ¹	(109.74)	(1.03)	(137.30)	(1.19)
Beef and Veal Consumption (million kg)	(71.20)	(0.62)	(61.78)	(0.50)
Beef and Veal Exports (million kg) ²	(4.44)	(0.78)	(8.15)	(1.50)
Beef and Veal Imports (million kg) ²	34.10	2.41	67.36	5.01
Impact on Canada				
Cattle Producer Price (CAN\$/cwt)	5.21	1.62	4.32	1.19
Beef and Veal Production (million kg) ¹	(0.79)	(0.09)	8.60	0.72
Beef and Veal Consumption (million kg)	(2.30)	(0.24)	(2.13)	(0.21)
Beef and Veal Net Trade (million kg) ²	1.50	0.53	10.77	6.44
<p>1. Production is indigenous, i.e. live animal trade balance is included.</p> <p>2. Trade includes live animal in carcass weight equivalent.</p>				
<p>Source: Department of Agriculture, <u>The Impact of Canadian and U.S. Government Policies on the Canadian Cattle and Beef Sectors</u>, July 1993.</p>				

88. As discussed above, the appraised market value of grazing mature cattle on public rangeland, as of January 1, 1992, ranged from US\$4.68 to US\$10.26/AUM. An increase in grazing fees to the low end of the range is expected to have a modest impact on the volume of cattle grazing on public rangeland. An increase in grazing fees at the high end of the range is expected to almost completely eliminate grazing on public rangeland. A decrease of 0.5 to 1.0 million head in the cattle inventory is reflective of an increase in grazing fees that lies somewhere between the extremes.

Initially, in the United States, an increase in grazing fees would lead to an increase in the rate of cow culling. During the initial five-year period (1988-92), cattle prices would increase by about 1.6 percent, and beef and veal production would decline by approximately 1.0 percent. During the 1993-97 period, cattle prices would remain higher, and beef and veal production would remain lower than the baseline case. Beef consumption would decline slightly during both five-year periods. However, imports of beef would increase by approximately 2.5 percent, on average, in the first five years, and by approximately 5.0 percent in the second period.

Canadian cattle prices would increase in response to increased U.S. prices, and, with higher prices, more beef and veal would eventually be produced in Canada. Canadian beef and veal consumption would decline marginally over the long run. The most significant change in Canada, however, would occur in net beef trade, which would decline in 1988 as the United States culls its herd, but then increase in each year thereafter, so that the average annual change for the 1988-92 period would be about 0.5 percent. Between 1993 and 1997, Canada's net beef trade would increase, on average, by over 6.0 percent.

Thus, the level of benefits calculated from grazing programs in Canada and the United States, as well as the economic analysis carried out by the Department of Agriculture, indicates that the fees charged for grazing on public land in the United States confer an advantage to the U.S. cattle industry. However, the grazing fee proposals being discussed in the United States, if implemented, would nullify this advantage and bring the charges for grazing on public land in the United States and Canada more in line with each other.

(vii) Irrigation Programs

In Canada, the provinces of Alberta, Saskatchewan and Manitoba have programs designed to assist livestock producers with the costs of irrigation. The net benefits calculated for these programs did not meet the Tribunal's threshold level of 0.2 percent of the adjusted value of cattle production. Therefore, while these programs exist, they do not confer a significant benefit to cattle producers in any of the three provinces.

The CCA has identified irrigation subsidies in the western states as providing a significant benefit to U.S. cattle producers.⁸⁹ The Bureau of Reclamation (BUREC) of the USDI administers irrigation projects in 17 western states. The purpose of these projects is to convert desert and other non-agriculturally suited land into highly productive farming areas. Capital investment provided through BUREC to build reservoirs and other irrigation structures has been a key infrastructural tool to expand settlement and sustain economic growth in the west. Most irrigation projects administered by BUREC focus on water management and preservation to ensure that water quality integrity and quantities are controlled to help ensure the sustainability of the resource.

BUREC has provided non-reimbursable funds for the development of water resources in the western U.S. states. It provides irrigation water for crops grown on about 3 percent of the nation's total harvested cropland. In the western states, the total area in irrigation rotation

89. *Supra*, Chapter II, note 44 at 4-7. In its submission to the U.S. International Trade Commission, the Canadian Cattlemen's Association estimated that the benefit to the U.S. cattle industry from irrigation was approximately \$360 million annually. *Supra*, note 42 at 26.

in 1990 was 4.1 million hectares, or 22 percent of the total irrigated acreage of 18.8 million hectares in this region. Forage was produced on 1.4 million hectares, or 35 percent of BUREC irrigated land in 1990. While data on the actual irrigated land supporting cattle do not exist,⁹⁰ it is thought that the beef and dairy cattle industries are the primary users of this irrigated forage.

Irrigation subsidies in the United States are controversial, particularly given the diminishing supplies of available water. The Tribunal noted, while travelling through the United States, that certain areas were highly dependent on irrigation. Nevertheless, the benefit of government-supplied water to the cattle industry is very difficult to quantify. The USDA, however, has acknowledged that livestock production in the western states would be reduced if, in the absence of BUREC incentives, the price of irrigation water were higher.⁹¹

Benefits to the cattle industry of projects sponsored by BUREC in the 17 western states were estimated to be equivalent to approximately US\$147 million in 1991, or 0.5 percent of the value of national cattle production in the United States.⁹²

(viii) Taxation Policies

Taxation policy is one factor which influences the competitiveness of any industry. In order to assess the extent to which taxation policies affect competitiveness, personal income tax provisions relating to cattle farmers and income tax provisions for the beef-packing industry in Canada and the United States were reviewed by the Department of Finance.⁹³ The comparison focused on the main federal tax provisions and considered special features in representative provinces (Alberta and Ontario) and states (Nebraska and Texas).

- Personal Income Tax

More than 95 percent of "specialized" cattle farmers⁹⁴ in Canada are unincorporated. They are responsible for more than three quarters of gross cattle farm revenue. Hence, the relative structures of the Canadian and U.S. personal income tax systems are important to the understanding of the competitive position of the Canadian industry in North America.

90. *Supra*, note 52 at 3.31.

91. *Supra*, Chapter II, note 44 at 4-7.

92. The benefits were calculated in five regional areas that encompass all or parts of certain states. Therefore, it was impossible to allocate the benefits at the state level for the Tribunal's sample of cattle-producing states. For the purposes of comparative analysis, the Tribunal staff has allocated an amount to each state in its sample that is included in the Bureau of Reclamation's area of authority. The allocated amount per state is based on the national average benefit from irrigation projects sponsored by the Bureau of Reclamation, which equals 0.5 percent in fiscal year 1991.

93. In order to get a better understanding of this issue, the Tribunal asked the Department of Finance to compare and contrast, in a descriptive manner, taxation provisions available to cattle farmers and beef packers in Canada and in the United States. *Supra*, Chapter II, note 37, Chapter IX, Part B.

94. Defined by the Department of Finance as those farmers with at least 90 percent of their sales derived from cattle production.

Despite their fundamental similarity, there are numerous specific differences between the Canadian and U.S. personal income tax systems, for individuals in general and for cattle farmers in particular. In some situations, depending on income level and deductions claimed, one system would be more favourable to a given cattle farmer, while in other cases, the opposite would be true. It is, therefore, not possible to make any universally applicable statement about the comparative impact on cattle farmers of the tax systems of the two countries.

However, an analysis by the Department of Finance disclosed that, on average, the only farms reporting a positive net farm taxable income appear to be those with high levels of farm revenue. Taxation provisions targeted to farmers, such as cash accounting and flexible inventory valuation, greatly reduce farmers' net income for tax purposes compared to their accounting net income.⁹⁵

Canadian cattle farms with total farm revenue between \$100,000 and \$250,000 reported taxable income of between \$1,000 and \$4,500. Similar data for cattle farms in the United States were not available. Although the comparison is not identical, the data for all U.S. farm types also show a similarly low level of taxable income.

Thus, it appears that cattle farmers on both sides of the border have relatively low taxable incomes and, consequently, pay little in income tax. On this basis, we considered income tax not to be an important issue in terms of the comparative competitiveness of the Canadian and U.S. industries.

- Corporate Income Tax Provisions Relating to Beef Packing

Most beef-packing operations are incorporated. In both Canada and the United States, the starting point for computing the tax liability of a corporation is its gross income minus the expenditures necessary to earn that income. Gross income is determined according to accepted accounting practices.⁹⁶ This requires using accrual rather than cash accounting in determining income of beef packers.

The combined statutory federal and provincial/state income tax rates for incorporated beef packers in Alberta, Ontario, Nebraska and Texas are shown in Table 5.5.

95. Department of Finance, Description of Specific Tax Provisions Available to Cattle Farmers and Beef Processors in Canada and the United States, July 1993.

96. Accounting practices for taxation (e.g. depreciation, inventory and non-capital loss carry-overs) in Canada are somewhat different from those of the United States. *Ibid.*

Table 5.5

**CANADIAN AND U.S. COMBINED STATUTORY INCOME TAX RATES
FOR BEEF PACKERS**

(**%**)

	<u>Federal</u>		<u>Provincial/State</u>		<u>Combined</u>	
	Small	Large	Small	Large	Small	Large
Canada						
Ontario	12.8	22.8	10.0	14.5	22.8	37.3
Alberta	12.8	22.8	6.0	15.5	18.8	38.3
United States						
Texas	28.4	34.0	N/A	N/A	28.4	34.0
Nebraska	28.4	34.0	7.1	9.0	33.5	39.9

Note: The combined rates for income tax in Nebraska do not equal the sum of the federal and state income tax rates because state income taxes are deductible for federal income tax purposes.

N/A = Not applicable; no state taxes are levied in Texas.

Source: Department of Finance.

These statutory rates take into account any provincial abatement, the deductibility of state taxes and relevant surtaxes or surcharges. The small business rate is the average rate applying to income eligible for the small business deduction in Canada, i.e. \$200,000. The tax rate applicable to the income earned by large corporations is the top rate on profits derived from manufacturing and processing activities.

The estimated tax rates for small corporations are substantially lower in Canada than those in the United States, while those of the large corporations are comparable in the two countries. As the trend in beef packing is toward larger-scale operations, the majority of beef production in both countries is carried out by large corporations. Thus, on balance, the difference in corporate taxation appears to be an insignificant factor in the competitiveness of the beef-packing industries in the two countries.

(ix) Research Programs

Research related to cattle production and beef packing in Canada includes pure and applied research, as well as experimental production. The Research Branch of the Department of Agriculture carries out scientific studies aimed at increasing the market potential of agri-food

products through plant and animal-related research. Through grants to non-government organizations, the federal government also supports research and education efforts in a variety of areas, such as genetics, animal health and meat-processing methods.

The USDA's Agricultural Research Service performs research and develops demonstration-type programs related to production, utilization, marketing, market research, distribution, home economics, nutrition and consumer use. In addition, the USDA performs agricultural research through its Economic Research Service and in conjunction with state level institutions through the Cooperative State Research Service.

In relation to the size of their respective industries, the Canadian government spends proportionately more on cattle and beef research than does the U.S. government.

(x) Other Government Regulations

- Labelling

Prior to the changes in the Canadian grading regulations in 1992, inequity existed between domestic and imported product insofar as there was a mandatory requirement for all domestic beef destined for movement between the provinces to be graded. Imported beef, however, which did not have to be graded, could move freely across provincial borders. The changes removed the mandatory grading requirement for all domestic beef. Instead, this product must now be labelled either by its grade or as "ungraded." Similarly, imported product falls under the same requirement, thus putting it on equal footing with domestic product.

However, these labelling requirements apply only to the wholesale level. The cattle and beef industries are concerned that, often, consumers are not aware that they are purchasing ungraded product (at graded beef prices) and that "imported, ungraded beef entering the retail or foodservice trade may lack consistency of quality."⁹⁷ Consequently, consumers may conclude that quality standards have deteriorated. In order to meet their long-term objectives for quality, the industries are calling for the introduction of regulations requiring prominent and consistent labelling at the retail and foodservice levels. Ontario, in association with the Ontario Cattlemen's Association, undertook to draft a discussion paper on beef grade labelling applicable to the retail and foodservice trades. The paper, issued in July 1992, presented a proposal that would require that grade and country of origin be on the label of packages of all beef sold in retail and foodservice establishments. The Ontario Ministry of Agriculture and Food consulted a number of organizations and found strong support to implement a beef grade labelling proposal provided that:

- it is national;
- Cryovac bags be grade labelled for boxed beef movement;⁹⁸

97. Submission of the Ontario Cattlemen's Association, April 13, 1993, at 5.

98. The Canadian Meat Council testified that it did not support the proposal that all Cryovac bags be labelled with the grade. It argued that labelling the shipping carton containing the bags would be sufficient and that labelling the bags would be costly to the industry, as large inventories of bags with different grade labels would be required in each plant. Testimony of Mr. Robert Weaver, Canadian Meat Council, transcript, September 20, 1993, at 593.

- "A," "AA," and "AAA" designations can apply individually or in grade combination;
- definitions for processing be standardized; and
- there be a provision for grade equivalency between trading partners.⁹⁹

In July 1993, the provincial ministers responsible for agriculture asked the federal Minister of Agriculture and Agri-Food to consider the establishment of a national grade labelling system. All parties recognize the potential for a new interprovincial trade barrier if some provinces introduced detailed labelling regulations and others did not.¹⁰⁰ The Department of Agriculture and Agri-Food is currently considering whether the federal government has the authority to develop and enforce such regulations on a national level.¹⁰¹

There is some concern in the retail industry that such a regulation could impose onerous costs. Many retailers do not distinguish between the various "A" grades of beef and do not price them differently.¹⁰² This is primarily because of insufficient supply of specific grades and/or the prohibitive cost, particularly in some large distribution operations, of attempting to separate meat by grade.^{103,104} The Canadian Meat Importers Committee of the Canadian Importers Association Inc., in its submission to the Tribunal, also identified added costs in voicing its objection to the labelling proposal.¹⁰⁵ Moreover, the Canadian Meat Importers Committee argued that this measure would disproportionately affect imports, which make up the bulk of ungraded meat and would thus constitute a non-tariff barrier.¹⁰⁶

Some industry representatives also suggested that labelling a product as ungraded may give consumers the impression that the product is uninspected or inferior.¹⁰⁷

In promoting the 1992 changes in the grading system, the CCA acknowledged the importance of the consumer.¹⁰⁸ More specifically, the CCA argued that the new system would recognize consumer concerns respecting eating satisfaction associated with quality product. With consumer demand for particular levels of quality such as "AAA," the grading system would enable retailers to provide their customers with the specific quality of beef that they seek. If consumers preferred the qualities of "AAA" beef, they could always knowingly buy it, rather than get "A" grade beef and risk being unsatisfied. Conversely, consumers could also choose to purchase lower-priced, ungraded beef. Either way, retail labelling would offer consumers a choice and certainty.

99. Submission of the Ontario Ministry of Agriculture and Food, September 2, 1993.

100. Submission of the Deputy Minister of Agriculture for the province of Manitoba, September 1993.

101. *Supra*, note 99.

102. Testimony of Mr. Joseph Gariup, National Grocers Co. Ltd., transcript, April 21-22, 1993, at 462 and 465-66.

103. *Ibid.* at 462 and 466.

104. In discussing the proposal, the Ontario Cattlemen's Association told the Tribunal that it envisages that the regulation will only require labels to differentiate between graded and ungraded product, without distinction between the "A" grades.

105. Submission of the Canadian Meat Importers Committee, December 1992 at 2.

106. *Ibid.* at 3.

107. *Supra*, note 102 at 490; and *supra*, note 105 at 3.

108. Canadian Cattlemen's Association, Changes to Canada's Grading System by D. Laycraft, 1993.

(xi) Health and Safety**- Organic Wash**

The Health Protection Branch of the Department of Health assesses the use of organic acid washes on an individual basis and provides advice to the Department of Agriculture on this issue. Final authorization for the use of organic acid washes on meat carcasses sold in Canada must be obtained from the Department of Agriculture.

The use of organic acid washes on chilled carcasses is believed to reduce bacteria counts, thereby extending the shelf life of meat and allowing for fresh beef to be shipped safely to distant export markets, such as Japan. However, doubts persist in the scientific community about the efficacy of such washes.

Canadian health authorities are generally cautious in granting permission for the use of organic acid carcass washes. A plant wishing to use them must send in a request and provide blueprints for equipment changes, as well as details of a quality assurance program which includes such items as the pressure of the water to be used in washes, the proposed concentration of the acid and the level of residual acid on carcasses. In 1988, the CMC unsuccessfully applied to have carcass washes approved for routine use. Since then, the use of acetic acid has been approved under certain conditions, and the Health Protection Branch is prepared to consider requests for the specified uses of this or other organic acid washes upon receipt of detailed information describing the process in each case.

The inability of the Canadian industry to use organic washes puts it at a competitive disadvantage vis-à-vis the U.S. and Australian industries, where such washes have been authorized and routinely used for years. This disadvantage not only extends to distant third markets but also to trade between Canada and the United States. On the one hand, U.S. packers can use the washes on meat being exported to Canada, as there are no restrictions on the importation of such meat. On the other hand, Canadian beef exports run the risk of possible rejection by U.S. inspectors who are applying domestic standards for bacteria counts.¹⁰⁹ The CMC told the Tribunal that discussions between the industry and the Department of Agriculture are ongoing and that they see the likelihood of a positive outcome.¹¹⁰

- Bluetongue

Canada maintains an international competitive advantage with its cattle herd, insofar as Canada is free of bluetongue disease. Live cattle imports are generally subject to two tests, 60 days apart. In 1988, the testing and certification procedures for live cattle imports from the United States were revised. Under the new system, individual states are classified according to the incidence of bluetongue (low, medium, high), and the test requirements correspond to the level of risk. Consequently, cattle from areas that are classified as low-risk are subject to only one test. For areas at medium risk, the time of year (i.e. lower versus higher incidence) will

109. Testimony of Mr. Robert Weaver, Canadian Meat Council, transcript, April 21-22, 1993, at 355-56.

110. *Ibid.* at 354.

determine whether one or two tests are required, while high-risk areas require two tests that are 30-90 days apart, and the herd must be kept in isolation during the test period. Cattle must then enter Canada within 30 days of passing the required test(s).

In its submission to the Tribunal,¹¹¹ the Washington Cattlemen's Association (WCA) contends that Canadian bluetongue testing requirements are a trade barrier.¹¹² The WCA submits that some U.S. veterinarians question the validity of the tests.¹¹³ Moreover, it questions the validity of the Canadian procedures which test for the presence of bluetongue antibodies rather than the presence of the virus itself, now that the technology exists to test for the virus. The WCA points to a lack of support for these procedures from the Canadian industry¹¹⁴ as further evidence of the lack of efficacy of the Canadian requirements.

- **Environment**

Generally speaking, non-point source pollution has been more difficult to control than point source pollution, in both Canada and the United States. The Environmental Protection Agency in the United States claims that agricultural run-off is responsible for over 50 percent of all surface water pollution in the United States, with livestock waste accounting for approximately 33 percent.¹¹⁵ Both Canada and the United States have passed laws and provided incentives to encourage environmentally sustainable agricultural practices.

In Canada, cattle and beef-packing operations are subject to such general environmental legislation as the *Fisheries Act*¹¹⁶ and the *Environmental Protection Act*.¹¹⁷ In addition, the provinces have legislation, regulations and guidelines pertaining to intensive livestock operations and manure disposal. However, the general practice in some provinces is to rely on voluntary compliance measures. For instance, neither Ontario nor Alberta requires feedlots to obtain discharge permits for run-off. Ontario works through voluntary certificates of compliance which farmers may request to evaluate their farming practices and the siting of operations. The certificate of compliance is based on the Agricultural Code of Practice. Alberta is considering a proposal for a similar code. In British Columbia, on the other hand, under the *Waste Management Act*,¹¹⁸ a waste management permit is required. However, producers who conform to the Code of Agricultural Practice for Waste Management are exempt from holding a permit.

111. Submission of the Washington Cattlemen's Association, June 15, 1993, at 2.

112. The United States does not have bluetongue tests for Canadian cattle imports.

113. *Supra*, note 111.

114. In 1992, the British Columbia Cattlemen's Association sponsored a resolution calling on the Canadian Cattlemen's Association to encourage the elimination of bluetongue testing requirements for U.S. cattle. *Supra*, note 111, Appendix A.

115. National Cattlemen's Association, *Fact Sheet: Clean Water Act*, March 1993.

116. R.S.C. 1985, c. F-14.

117. R.S.C. 1985, c. 16 (4th Supp.).

118. S.B.C. 1982, c. 41.

In the United States, environmental regulations¹¹⁹ also directly impact on expansion in the feedlot sector. Feedlots of 1,000 head or more must meet federal standards and obtain a National Pollutant Discharge Elimination System permit. Moreover, in some states, such as Colorado, feedlot operators are restricted in the amount of manure that can be disposed of on their own land.¹²⁰ On the other hand, the existence and enforcement of waste management and other environmental regulations varies from state to state. There is the perception in some regions that regulations are not as strict in some states, such as Texas.¹²¹

Environmental issues also present challenges for the beef-packing industry. The disposal of waste water and solid waste is becoming more difficult and expensive on both sides of the Canadian-U.S. border. Newer plants, such as Cargill Foods' plant in High River, have been built to meet high environmental standards,¹²² and other plants have had to upgrade their waste disposal systems to meet increasingly stringent standards. Working in conjunction with Ducks Unlimited Canada, and municipal and provincial governments, Cargill Foods has created a waterfowl wetland project, with its treated waste water, on a formerly dried-up lake bed.¹²³

On balance, however, environmental regulations do not appear to be causing a competitive disadvantage for the Canadian or U.S. industries.¹²⁴ In terms of competitiveness, recent government studies¹²⁵ have shown that pollution abatement costs are relatively low for industry as a whole, between 1.0 and 1.5 percent of value added in both Canada and the United States.

b) Programs, Policies and Regulations Specific to Canada

(i) National Tripartite Stabilization Program

The National Tripartite Stabilization Program (NTSP) for cattle was established in 1985 as a market risk protection program for Canadian cattle producers. The program was established by federal-provincial agreements. All provinces, with the exception of Quebec and Newfoundland, currently participate in the program. The program was scheduled to expire on December 31, 1995. However, the federal Minister of Agriculture and Agri-Food and his

119. The U.S. government provides the environmental guidelines that are administered by the states. Local governments also exercise considerable jurisdiction in applying environmental regulations. Canadian International Trade Tribunal, Notes from the June 18, 1993, Meeting Between the Colorado Cattle Feeders' Association (CCFA) in Denver, CO, and Tribunal Members and Staff, August 19, 1993, at 3.

120. *Ibid.* at 4.

121. Canadian International Trade Tribunal, Notes from the June 15, 1993, Meeting Between the Washington Cattlemen's Association, in Ellensburg, WA, Tribunal Members and Staff and Consulate Staff, August 13, 1993, at 4.

122. Canadian International Trade Tribunal, Notes from the March 23, 1993, Meeting Between Cargill Foods and Tribunal Members and Staff, July 27, 1993, at 2.

123. *Ibid.*

124. Environmental concerns were not raised as a major issue for discussion in the submissions received by the Tribunal nor in the regional hearings.

125. Government of Canada, North American Free Trade Agreement, Canadian Environmental Review, October 1992 at 64; and Office of the U.S. Trade Representative, Review of U.S.-Mexico Environmental Issues, February 1992 at 170.

provincial counterparts,¹²⁶ on September 17, 1993, announced that cattle plans under the NTSP will be terminated by December 31, 1993. Canadian cattlemen, through the CCA and its member organizations, had been calling for the termination of the NTSP for cattle due to its limited impact on the industry and its potential as a trade irritant with the United States.

The NTSP was a voluntary insurance-type program, funded through premiums paid equally by the federal government, participating provincial governments and participating producers. The program was designed to ensure that the premiums provided an actuarially sound fund so that, over time, premiums would equal total pay-outs to producers. The agreement was intended to ensure that producers in all provinces received the same per-unit support, that there was, over time, reasonable equity in support to be provided among substitutable agricultural commodities and that the program operated in such a manner that it limited losses, but did not stimulate production. This national program was initiated with the intention of replacing the existing provincial income stabilization programs.

There were three different stabilization plans in place under the NTSP for cattle: one for feeder calves (cow-calf operations), one for feeder cattle (backgrounders) and one for slaughter cattle (feedlots).

There were no pay-outs to producers under the feeder calf program. At the end of 1992, producer contributions totalled \$29.4 million. Up to the end of 1992, pay-outs to feeder cattle producers equalled \$15.2 million, while producer contributions to the plan equalled \$9.3 million. For the same period, pay-outs to slaughter cattle producers equalled \$307 million, while producer contributions to that plan totalled \$98 million.

The WCA submitted that the NTSP was a trade-distorting program in that "when the [Canadian] cow/calf producer is guaranteed a margin, the cow/calf producer will expand production."¹²⁷ In its submission to the Tribunal, the WCA stated that, because the NTSP reduced risk, it could have resulted in increased cattle production. It also submitted that the NTSP and resulting increases in net exports to the United States could have impacted negatively on cattle prices, specifically cattle prices in the Pacific Northwest.¹²⁸

The CCA argued that the NTSP was not intended to affect the production or price of cattle, and that all the available evidence suggested that it had not.¹²⁹ Cattlemen in Alberta argued that Canadian cattle are necessary to ensure the viable operation of the two major beef-packing plants in the state of Washington. Further, the Tribunal was told that the IBP, Inc. plant in Pasco, Washington, purchases the vast majority of its cattle using a pricing formula

126. The termination of the National Tripartite Stabilization Program was announced jointly by the federal Minister of Agriculture and Agri-Food and the ministers responsible for agriculture in the provinces of British Columbia, Alberta, Manitoba, Ontario, New Brunswick, Nova Scotia and Prince Edward Island.

127. Post-hearing brief of the Washington Cattlemen's Association to the U.S. International Trade Commission, September 18, 1992, at 6.

128. Submission of the Washington Cattlemen's Association, June 15, 1993, at 3.

129. Post-hearing submission of the Canadian Cattlemen's Association to the U.S. International Trade Commission, September 21, 1992, at 5, submitted to the Tribunal as a component of the March 1993 submission of the Canadian Cattlemen's Association.

which provides Washington area feedlots with a price based on a U.S. national average price. Therefore, the price paid for cattle from the state of Washington is unaffected by the purchase price of Canadian cattle.¹³⁰

In 1992, the Department of Agriculture applied the food and agriculture regional model to assess the impact of the NTSP plans for cattle by simulating the performance of the industry in the absence of the plans.¹³¹

The results of the analysis showed small changes (much less than 1 percent) in Canadian cattle supply as a result of the NTSP for cattle. The modest impacts observed in Western Canada resulted from the interplay of two offsetting effects: removal of the "benefit" to slaughter cattle, causing a decline in feeder calf prices, and removal of the "disbenefit" to feeder cattle/calves, causing an increase in the cow herd and the number of calves born.

Had the NTSP not been in place between 1986 and 1991, net exports of feeder cattle and calves from Western Canada to the United States would have increased by 5.00 percent (about 4,000 head annually) due to the relatively lower Canadian-to-U.S. price. Conversely, exports of slaughter cattle would have decreased by 0.01 percent (about 300 head annually).

The impact of the removal of the NTSP on Canadian and U.S. slaughter cattle and on U.S. feeder calf prices was negligible.

(ii) Significant Programs Offered by Provincial Governments

In the six Canadian provinces examined by the Tribunal staff, a total of approximately 40 individual provincial government programs and policies were found to provide an estimated amount of support equal to or greater than 0.2 percent of the provincial adjusted value of production of the relevant product.

Approximately half of the provincial programs identified were types of programs and policies common to both Canada and the United States at the federal level: inspection, farm credit, research and extension. Many of the remaining provincial programs and policies identified were targeted to the livestock or cattle sector. The provincial programs in Alberta, Saskatchewan and Manitoba, designed to help offset the impacts of the WGTA on livestock producers, are included in this portion of the provincial programs. Other notable provincial programs targeted to the livestock or cattle sector are the Farm Income Stabilization Program and the Program for the Consolidation of Feeder Cattle Farms in Quebec, the Red Meat Plan in Ontario, and the Farm Income Insurance Program in British Columbia.

Quebec is not a signatory of the NTSP agreement, but runs its own independent program, the Farm Income Stabilization Program. This program provides broader coverage and more generous benefits than those provided under the NTSP. The Program for the Consolidation of Feeder Cattle Farms in Quebec, introduced in April 1991, is intended to increase the

130. Canadian International Trade Tribunal, Notes from the June 14, 1993, Meeting Between IBP, Inc. (Iowa Beef Packers) in Pasco, Washington, Tribunal Members and Staff and Consulate Staff, August 13, 1993, at 2.

131. Department of Agriculture, Quantitative Assessment of the Impact of Removing the NTS Programs for Cattle, September 1992.

competitiveness of larger feedlots registered with the Farm Income Stabilization Program in Quebec. An industry profile, submitted to the Tribunal by the Quebec government, concluded that the high level of government support had not solved the problems of the cattle sector in becoming more competitive.¹³² Furthermore, data on marketings by province indicate that Quebec has not escaped the general trend observed since the mid-1980s towards a redistribution of cattle production from Eastern Canada to Western Canada (particularly to Alberta).¹³³

Although British Columbia is a signatory of the NTSP agreement, it supplements the national stabilization plan with a provincial plan, the Farm Income Insurance Program. This program effectively "tops up" the stabilization payments made under the NTSP. As with the NTSP and the Farm Income Stabilization Program in Quebec, the Farm Income Insurance Program is voluntary. But as observed in Quebec, this more generous program has not reversed the general trend towards a redistribution of cattle feeding from the rest of Canada to Alberta.

The measured net benefits of the Red Meat Plan in Ontario are relatively small, but it is notable for encouraging the gathering of information by the producers. Industry representatives suggest that this will result in better monitoring of livestock production, better farm management practices and greater operating efficiencies.¹³⁴

During the early part of the Tribunal's examination period, "off-farm" capital grants were made available to certain beef packers in Alberta. These grants met the Tribunal's threshold level of 0.2 percent of the adjusted value of beef production in Alberta during the 1989-90 period. However, the benefits associated with this type of assistance declined steadily during the examination period and were well below the threshold level during the 1991-92 fiscal year.

c) Programs, Policies and Regulations Specific to the United States

(i) Demand-Enhancing Programs

There are several programs which enhance the demand for, and consequently the production of, beef in the United States. These programs, for the most part, are administered by the USDA. The most significant of these programs are market promotion programs and food and nutrition programs.

- Market Promotion Programs

There is a range of market promotion programs available to, and utilized by, the U.S. cattle and beef industries. These programs fall under four broad categories: the Agricultural Marketing Service, the Foreign Agricultural Service, the Office of International Cooperation and Development, and the Office of Transportation.

132. Government of Quebec, Ministry of Agriculture, Fisheries and Food, État de situation de l'industrie de la viande bovine by L. Demers, December 1992 at 9. Report included in the submission of the Government of Quebec to the Tribunal on December 22, 1992.

133. *Supra*, Chapter II, note 37, at 481.

134. Based on discussions between Tribunal staff and Mr. Jim Magee, owner of a cow-calf operation and a feedlot, as well as Executive Director of the Ontario Cattlemen's Association, and Mr. Ralph Macartney of the Ontario Ministry of Agriculture and Food in Guelph, Ontario.

The Agricultural Marketing Service offers a variety of services which include: the Market News Service; inspection, grading and standardization to promote nationally uniform standards of quality for agricultural products; the Market Protection and Promotion program, including programs under the *Food Security Act of 1985*¹³⁵ and the *Capper-Volstead Act*;¹³⁶ the Wholesale Market Development Program; and commodity purchases for various domestic food and nutrition programs. These agricultural marketing programs are designed to improve the competitiveness of the production and distribution of various agricultural products, including beef.

The Foreign Agricultural Service of the USDA provides support to U.S. agricultural products abroad. The Foreign Agricultural Service works with U.S. agricultural trade groups and maintains contact with foreign governments and trading groups through a network of counsellors, attachés and trade officers at 75 overseas posts to assist in the development of overseas markets for U.S. agricultural products. The Foreign Agricultural Service also collects, analyzes and disseminates trade and economic forecast data for significant U.S. export markets and directs the formulation of U.S. agricultural trade policies and programs.

Foreign market development is conducted principally through two programs, the Market Promotion Program and the Cooperators Program. Under both of these programs, the U.S. government provides direct funding to national trade organizations responsible for promoting agricultural industries. These organizations must submit plans detailing the proposed utilization of the federal funds. The U.S. Meat Export Federation is the prime beneficiary of these funds for the red meat industries, including the cattle and beef industries. During fiscal year 1992, the U.S. Meat Export Federation spent approximately US\$23.3 million to promote red meat products. Approximately 56 percent, or US\$13.1 million, was obtained from the USDA, with the balance of the funding coming from private sources, such as the National Beef Check-off Program.¹³⁷ Federal funds for the 1993 fiscal year are projected to decline to approximately US\$10.4 million.¹³⁸ The Export Credit Programs available through the Foreign Agricultural Service have only been used to a limited extent by the beef industry. The Export Enhancement Program is available to cattle and beef producers, but has not been used recently by the beef industry. During the mid- to late-1980s, the Export Enhancement Program was used in conjunction with the Dairy Termination Program to export dairy cattle.¹³⁹

In terms of the measured net benefits, the Market Promotion Program provides a significant amount of assistance to the U.S. cattle industry and, to a lesser extent, to the U.S. beef industry. However, personnel with the Foreign Agricultural Service suggest that any export promotion of beef by the U.S. government or industry also benefits the Canadian industry

135. Pub. L. No. 99-198, 7 U.S.C.S. 1281.

136. See *Cooperative Marketing Associations Act*, 42 Stat. 388, 7 U.S.C.S. 291, 292 (1922).

137. The National Beef Check-off Program collects one dollar for every head sold in the United States (and an equivalent amount for imported beef sold in the United States) to be used for market promotion.

138. U.S. Meat Export Federation, "USMEF Apprehensive About Future of MPP Funding," News Release, January 7, 1993.

139. *Supra*, Chapter II, note 44 at 4-5.

as the only other major supplier of grain-fed beef in the world.¹⁴⁰ This view was supported, to some extent, by representatives of the CCA which stated that some of the work done by the U.S. government in opening and developing markets has benefited the Canadian industry.¹⁴¹

- Food and Nutrition Programs

The Food and Nutrition Service offers a variety of permanent food assistance programs for the poor and disadvantaged. Food is distributed through the various programs by means of commodity donations, cash grants and food stamps. Food is obtained for these programs by federal procurement through the USDA and through price support programs, such as the dairy price supports. While the main objective of these programs is to provide food to the poor and disadvantaged, the programs are also important mechanisms for removing excess agricultural products from the market, thereby supporting prices for agricultural commodities.

Programs operated under the Food and Nutrition Service include: the Food Donation Program; the School Meal Programs; the Special Supplemental Food Program for Women, Infants and Children; the Child and Adult Care Food Program; the Summer Food Service Program for Children; Temporary Emergency Food Assistance; the Nutrition Program for the Elderly; and the Food Commodities for Soup Kitchens Program. Approximately 80 percent of the beef purchased through domestic food assistance programs is distributed under the School Meal Programs. During fiscal year 1989, the total cost of these food assistance programs was approximately US\$6.1 billion, of which the School Meal Programs accounted for approximately 59 percent of the cost. Direct expenditures on beef for these programs amounted to US\$23.2 million, US\$14.5 million and US\$38.6 million in fiscal years 1989, 1990 and 1991, respectively.

Expenditures on food and nutrition programs accounted for 8 percent of the total measured net benefit during the 1988-89 and 1989-90 fiscal years, and for 10 percent during the 1990-91 fiscal year. As such, they represent a major benefit to the U.S. cattle and beef industries.

However, demand-enhancing programs in the United States such as these may also benefit the Canadian cattle and beef industries. The Department of Agriculture conducted an analysis of the impacts of various demand-enhancing programs available in the United States, including the food assistance programs. The analysis assumes that the elimination of the food assistance programs will result in a 0.7-percent decline in U.S. beef prices in every year, based on a study by Martinez and Dixit.¹⁴² Table 5.6 presents a summary of the impacts on the Canadian and U.S. cattle and beef industries of the elimination of the U.S. food assistance programs.

140. Canadian International Trade Tribunal, Notes from the February 4, 1993, Meeting Between the USDA Foreign Agricultural Service and Tribunal Members and Staff, February 16, 1993, at 3.

141. Testimony of Mr. Jim Graham, Canadian Cattlemen's Association, transcript, March 24, 1993, at 54.

142. U.S. Department of Agriculture, Domestic Food Assistance Programs: Measuring Benefits to Producers, June 1992, quoted in Department of Agriculture, The Impact of Canadian and U.S. Government Policies on the Canadian Cattle and Beef Sectors, July 1993.

Table 5.6

U.S. FOOD ASSISTANCE PROGRAMS
Simulation of U.S. and Canadian
Average Impacts, 1988-92

	Percent Change	
	United States	Canada
Cattle Producer Price	(1.89)	(1.83)
Beef and Veal Production	(0.47)	(0.16)
Beef and Veal Consumption	(0.74)	(0.09)

Source: Department of Agriculture, The Impact of Canadian and U.S. Government Policies on the Canadian Cattle and Beef Sectors, July 1993.

In the absence of the U.S. food assistance programs, the analysis reveals that cattle prices would decrease in both the United States and Canada by close to 2 percent. Beef and veal production and consumption in the United States and Canada would decrease, but more so in the United States.

(ii) Emergency Relief Programs

The U.S. government provides emergency relief to cattle producers under several programs, such as the *Disaster Assistance Act of 1988*,¹⁴³ the Livestock Feed program, and the Emergency Feed Program.

These programs can provide significant benefits to U.S. cattle producers, in times of natural disaster, through subsidized feed replacement. For example, the *Disaster Assistance Act of 1988* was established in response to that year's severe drought. During fiscal year 1989, the program administrators paid US\$3.4 billion to crop producers and US\$526 million to livestock producers. The payments to the livestock sector declined to US\$153 million and US\$102 million for fiscal years 1990 and 1991, respectively.

These programs have a stabilizing effect on the feed costs of cattle producers. In times of crop shortages, these programs provide feed grain at lower costs than would otherwise be available to cattle producers.

(iii) Significant Programs Offered by State Governments

Support at the state or sub-federal level in the United States, as measured by the net benefits, accounts for a relatively small share of total support to the cattle and beef industries. This share is less than one fifth of the total net benefit on a national basis and varies among the

143. Pub. L. No. 100-387, 102 Stat. 924, 7 U.S.C.S. 1421 note.

12 states examined. The benefit to the cattle industry ranges from less than 0.5 percent of the adjusted value of production to slightly more than 2.0 percent.

Each of the 12 states selected for the Tribunal's sample was examined closely to identify relevant state programs which could benefit the cattle or beef industry. In selecting the relevant programs, the Tribunal's *de minimus* threshold of 0.2 percent of the adjusted value of production of the relevant product was used. The Tribunal found that state programs and policies are generally in the form of lower property tax assessments and grants to state colleges involved in basic research, information dissemination and general academic programs. Property tax abatements or rebates result in agricultural land, in most cases, being taxed at rates that are lower than those applicable to other commercial land. For instance, The WEFA Group report indicated that, in Colorado, it is estimated that a farmer or rancher pays approximately 20 to 30 percent of the taxes of a commercial property owner. In many other states, agricultural land is assessed on a value-for-agricultural-production basis.¹⁴⁴ Other programs found to be significant include programs under the Agricultural Marketing Services in California and under the Brands Enforcement Division in Montana.

Few programs were found to be specific to cattle or beef production. Those identified were primarily inspection and disease control programs, such as the Inspection Control Program in Montana. Other state programs and policies targeted specifically to the cattle or beef sector, such as the livestock marketing services provided by the Department of Agriculture in Texas and the Market Development Program in the state of Washington, did not meet the *de minimus* threshold established by the Tribunal.

The Tribunal's research revealed very little direct assistance to the beef-packing sector in the United States. The two examples discovered during the examination period did not meet the Tribunal's threshold level of 0.2 percent of the adjusted value of beef production in the relevant state.

(iv) Local Ordinances

A concern of the Canadian industries is the existence of local ordinances in some jurisdictions in the United States (e.g. King County in the state of Washington) that stipulate that only beef bearing a USDA grade may be bought and sold in the local market.¹⁴⁵ Such local regulations effectively shut out Canadian product from these markets.

In other jurisdictions, such as Dade County, Florida, and Dallas, Texas, advertising requirements inhibit the access of imported meat. These ordinances require that wherever meat is advertised for sale, if the price is shown, the USDA grade of the meat must also be clearly indicated. These ordinances also require that meat that is pre-packaged for retail sale must be clearly labelled with the USDA grade. Alternatively, if the meat has not been graded by the USDA, the label and/or advertisement must clearly indicate so. The Dallas ordinance requires that such meat be labelled "Ungraded," while the Dade County ordinance requires such

144. *Supra*, note 52.

145. No-roll beef is excluded from the market. See Board of Health of King County, Rules and Regulations No. VI, Rules and Regulations Relating to Meat; Establishing a Meat Code; Setting Licensing Requirements; Setting Sanitation Standards; Prohibiting Certain Conduct, ss 63 and 69.

meat to be labelled "Not USDA Graded." The Dade County ordinance also states that imported meat, which has not been graded by the USDA, must be labelled "Not USDA Graded - Imported."

Industry witnesses told the Tribunal that government assistance was required to help resolve these non-tariff barriers.¹⁴⁶

d) Programs, Policies and Regulations Specific to Mexico

In Mexico, most government programs, policies and regulations which affect the cattle and beef industries are provided through programs administered by the SARH and its agencies: the National Popular Subsistence Company and the National Rural Credit Bank. Mexican government programs administered by these departments and agencies relating to tariffs, health inspection, credit programs and feed grain policies have already been discussed in the section of this chapter describing comparable programs.

There were no state programs that conferred a benefit large enough to meet the Tribunal's threshold level of 0.2 percent of the adjusted value of production for cattle or beef. The federal support is largely in the form of animal health programs, border controls and credit subsidies, most of the last two types of programs having been targeted to crop producers. There were no other significant government programs, policies or regulations affecting the cattle and beef industries in Mexico.

2. Net Benefits of Programs, Policies and Regulations

Section 1 of this chapter has provided a description of programs, policies and regulations that had a significant effect on the cattle and beef industries, and assessed the impact of these government interventions on the industries. Where the information was available, impacts were measured through economic analyses. In other cases, the Tribunal commented on the relative magnitude of government expenditures on particular programs, policies or regulations, or gave a qualitative assessment of their impact. In this section, an explanation of the net benefit calculations will be presented, followed by a summary of the net benefits calculated for programs, policies and regulations identified by Tribunal staff and consultants as meeting the threshold level of 0.2 percent of the adjusted value of production of cattle or beef.

a) Measurement of Government Support

A number of instruments have been used to measure the level of support afforded various agricultural commodities through government intervention programs and policies.¹⁴⁷ The producer subsidy equivalent (PSE) concept has been used extensively by the OECD and the

146. Testimony of Mr. Al Rogerson, Lakeside Farm Industries Ltd., transcript, March 25, 1993, at 255.

147. For a more detailed description of the development and use of measures of support, see Department of Agriculture, PSE for Beef in Canada: An Examination of Methods, August 1993.

USDA to measure support to various agricultural industries. "The PSE is an indicator of the value of the transfers from domestic consumers and taxpayers to producers resulting from a given set of agricultural policies, at a point in time."¹⁴⁸

The Department of Agriculture, in conjunction with the various provincial departments of agriculture and industry representatives, has developed a methodology, similar to the producer subsidy equivalent, for measuring the relative level of government support (net benefits) for various agricultural commodities among provinces. The net benefit concept was created by the Committee of Experts that was set up to monitor the level of government support to the red meat industries, at the farm level, pursuant to the February 1989 Agreement on the National Tripartite Price Stabilization Program for Feeder Calves, Feeder Cattle and Slaughter Cattle. The net benefits calculated for "all commodities" are designed to compare the relative level of support between different commodities, both within and between different provinces. For the purpose of this study, Tribunal staff and consultants broadly adopted the methodology developed by the Committee of Experts for its "all commodities" net benefit calculations.

For the most part, in other studies, calculations of measures of support, including the net benefit calculations, have been confined to the producer level of the industry. Some work, such as the report prepared for the Tribunal by Deloitte & Touche for the horticulture reference,¹⁴⁹ has been done to measure the impact of government programs and policies on the processing sector of agricultural industries. In this study, Tribunal staff and consultants calculated the net benefits of government programs, policies and regulations to the first level of beef packing.¹⁵⁰

Tables 1, 2 and 3 in Appendix VI identify and briefly describe those federal programs and policies that were determined to confer a net benefit greater than 0.2 percent of the adjusted value of production on the relevant product in Canada, the United States and Mexico, respectively. Tables 4¹⁵¹ and 5 in Appendix VI identify those provincial and state programs included in the net benefit calculations for Canada and the United States, respectively. Some programs described in the first half of this chapter did not lend themselves to quantitative measurement in a cross-country comparison and are not included in the following analysis of net benefits. Such programs include income and property taxation policies, and environmental and health policies.

For the most part, net benefits are calculated based on government expenditures for a particular program, although, in certain cases, economic analysis was used to estimate the net benefits of relevant programs. An economic analysis was used to measure the benefits of the USMIA and feed grain policies in the United States, the countervailing duties on imports of

148. Estimation of Agricultural Assistance Using Producer and Consumer Subsidy Equivalents: Theory and Practice by C. Cahill and W. Legg, OECD Economic Studies, No. 13, Winter. Quoted in *Ibid.* at 1.

149. Deloitte & Touche, Financial Assistance Provided to the Fruit and Vegetable Industries in Canada and the United States, May 1991.

150. The first level of beef packing is defined as primary processing or the processes of slaughter through to boxing the beef.

151. *Supra*, Chapter II, note 37, Tables 10.3, 10.5, 10.7, 10.9, 10.11 and 10.13 summarily describe provincial and state programs.

boneless manufacturing beef and grain corn in Canada and border controls for feed grain in Mexico. A description of the net benefit measurements for the individual programs is included in the staff report.¹⁵²

b) Net Benefit Summary

Table 5.7 presents a summary of the magnitude of the benefits available to the Canadian, U.S. and Mexican cattle and beef industries for fiscal years 1990-91 and 1991-92. The program information is classified by benefits available under programs affecting revenue, programs affecting costs, or other programs and policies.

Table 5.7						
COMPARISON OF NET BENEFITS BY TYPE OF INTERVENTION						
Percentage of Adjusted Value of Production						
	1990-91¹			1991-92		
	Canada	United	Mexico	Canada	United	Mexico
	%	States	%	%	States	%
Programs Affecting Revenue						
Cattle	3.55	5.45	(3.00)	3.30	5.42	(2.30)
Beef	0.31	0.49	0.00	0.20	0.49	0.00
Programs Affecting Costs						
Cattle	1.06	1.40	(0.24)	1.59	0.70	(0.18)
Beef	0.04	0.00	0.17	0.04	0.00	0.48
Other Programs						
Cattle	3.50	2.23	0.32	3.43	2.31	0.41
Beef	<u>0.81</u>	<u>0.16</u>	<u>0.00</u>	<u>0.86</u>	<u>0.17</u>	<u>0.00</u>
Total²						
Cattle	8.11	9.08	(2.93)	8.32	8.43	(2.08)
Beef	1.15	0.65	0.17	1.11	0.66	0.48

1. The time periods compared are Canadian, U.S. and Mexican fiscal years. The Canadian fiscal year runs from April to March, while the U.S. and Mexican fiscal years run from October to September.

2. Figures may not add up due to rounding.

In Canada and the United States, overall, government programs, policies and regulations provide benefits to the cattle industry. In Mexico, government programs and policies that provide a benefit to the cattle industry are outweighed by programs, policies and regulations that impose

152. *Supra*, Chapter II, note 37, Appendices 10.1, 10.2, 10.3, 10.4 and 10.5.

costs on that industry. Based on the net benefits calculated, the magnitude of government support to the cattle industries in Canada and the United States is very similar.

When fiscal year 1991-92 is compared to fiscal year 1990-91, the magnitude of support to the cattle industry declined in the United States and increased slightly in Canada, and in Mexico, the amount of "disbenefit" decreased. Government intervention in Canada and the United States is most likely to fall into the "Programs Affecting Revenue"¹⁵³ or "Other Programs" category, while in Mexico, the more significant programs are revenue-limiting.

The beef-packing industries in all three countries receive a benefit from government programs and policies. The benefits to the beef-packing industries in Canada and the United States are much smaller than the benefits received by the cattle industries in those countries.

Table 5.8 presents the level of support available to the cattle industries at the federal and sub-federal levels for the sample of Canadian provinces, U.S. states and Mexican states examined by Tribunal staff and consultants.

153. The plans for cattle under the National Tripartite Stabilization Program, which terminate on December 31, 1993, provided a significant portion of the benefits listed under the "Programs Affecting Revenue" category.

Table 5.8

COMPARISON OF NET BENEFITS TO THE CATTLE INDUSTRIES
Percentage of the Adjusted Value of Production

	1990-91 ¹			1991-92 ¹		
	Federal %	Sub-Federal %	Total %	Federal %	Sub-Federal %	Total %
Canada						
British Columbia	4.35	4.58	8.94	3.97	4.41	8.38
Alberta	1.67	6.66	8.33	2.26	5.69	7.95
Saskatchewan	1.60	4.66	6.27	2.52	3.34	5.86
Manitoba	0.81	2.72	3.53	2.45	2.16	4.60
Ontario	2.90	3.43	6.33	3.71	3.69	7.40
Quebec	<u>1.70</u>	<u>21.74</u>	<u>23.44</u>	<u>2.29</u>	<u>23.34</u>	<u>25.63</u>
Weighted Average	2.00	6.11	8.11	2.73	5.59	8.32
United States						
California	8.21	2.00	10.20	7.50	2.24	9.74
Colorado	8.25	0.69	8.94	7.55	0.59	8.15
Florida	7.44	2.80	10.24	6.77	2.55	9.33
Iowa	7.44	0.39	7.83	6.77	0.43	7.20
Kansas	7.98	0.85	8.83	7.30	0.86	8.16
Minnesota	7.44	0.85	8.29	6.77	0.91	7.68
Montana	8.96	1.16	10.11	8.22	1.38	9.61
Nebraska	7.98	0.60	8.58	7.30	0.61	7.91
Oklahoma	7.98	0.57	8.55	7.30	0.52	7.82
South Dakota	7.98	0.53	8.51	7.29	0.55	7.84
Texas	7.98	1.94	9.92	7.30	1.99	9.28
Washington	<u>7.97</u>	<u>1.25</u>	<u>9.22</u>	<u>7.29</u>	<u>1.08</u>	<u>8.37</u>
Weighted Average	7.98	1.10	9.08	7.30	1.14	8.43
Mexico						
Weighted Average	(2.93)	0.00	(2.93)	(2.08)	0.00	(2.08)

Note: Figures may not add up due to rounding.

1. The time periods compared are Canadian, U.S. and Mexican fiscal years. The Canadian fiscal year runs from April to March, while the U.S. and Mexican fiscal years run from October to September.

A distinct feature of support to the cattle industry in Canada is the relative importance of provincial governments in the total support provided. For instance, during the 1991-92 fiscal year, for which the measured net benefits for total government support to the cattle industry were almost the same in Canada and in the United States, provincial programs and policies accounted for approximately 67 percent of total support in Canada. During the comparable time period, state programs and policies in the United States accounted for less than 15 percent of the total support calculated for that country.¹⁵⁴ In Mexico, all programs and policies affecting the cattle industry are provided by the federal government.

Comparing fiscal year 1991-92 to fiscal year 1990-91, provincial support to the cattle industry in Canada declined in four of the six provinces sampled. In the United States, state support to the cattle industry declined in four of the twelve states sampled. The support available to the cattle industry in Canada, from both the federal and provincial governments, varied widely, from a low of \$4.60 per \$100 of production value in Manitoba in fiscal year 1991-92 to \$25.63 in Quebec. Quebec is not, however, a major player in the Canadian beef cattle industry. In the United States, the amount of federal and state support to the cattle industry revealed a narrower range of variation, from \$7.20 per \$100 of production value in Iowa in fiscal year 1991-92 to \$9.74 in California.

The Tribunal's research uncovered several examples of assistance provided to the beef-packing sectors in both Canada and the United States. Plants in Nebraska, Texas and Alberta received assistance through grants, incentives or tax abatements. However, in most cases, the financial benefits of these support programs were not sufficient to meet the Tribunal's threshold level of 0.2 percent of the adjusted cash receipts for beef packers. While "off-farm" capital grants in Alberta slightly exceeded the Tribunal's threshold level during the 1989-90 fiscal year, this type of support was well below the threshold level by the 1991-92 fiscal year. Furthermore, the evidence indicated that, during the review period, this type of government assistance to the beef-packing industries in North America has been isolated and has declined over time.

3. Conclusion

The foregoing analyses reveal that Canada and the United States provide a similar level of assistance to their respective cattle and beef industries. The policies of the Mexican government, however, have a negative impact on the cattle industry and a positive impact on the beef industry in that country.

Overall, it appears that direct financial assistance to the cattle and beef industries in Canada and the United States is not a significant factor affecting the competitiveness of these industries. However, government intervention in the industries through regulations and policies pertaining to meat import restrictions, border inspection, grading, labelling and health regulations is a significant factor affecting the competitiveness of the industries. That is, government intervention of a regulatory nature has more of an impact on the competitiveness of the cattle and beef industries in North America than does financial assistance.

154. *Supra*, Chapter II, note 37 at 364.

CHAPTER VI

CONCLUSION

This final chapter first summarizes the current competitiveness of the Canadian cattle and beef industries. The chapter then looks ahead to the challenges and opportunities that the Canadian cattle and beef industries will face in the coming years. Finally, the roles of government and industry in meeting these future challenges and opportunities are discussed.

1. Competitiveness Assessment of the Canadian Cattle and Beef Industries

One of the major tasks set by the terms of reference for this inquiry is to provide an overall assessment of the competitiveness of the Canadian cattle and beef industries, in both a North American and a global context. The sections that follow summarize the competitive strengths and weaknesses of the cow-calf, feedlot and beef-packing sectors in Canada. Although each sector is assessed separately, the Canadian cattle and beef industries are economically integrated, so that the competitiveness of one sector is strongly affected by, and in turn impacts on, the competitiveness of the other two sectors.

a) Cow-Calf Sector

The most important determinants of competitiveness in cow-calf farming are abundant supplies of feed at competitive costs, appropriate climate, a sound healthy herd with the genetic make-up for superior performance and, perhaps most importantly, producers who can effectively manage a cow herd. Canada fares well with regard to each of these factors.

For the most part, beef cows are kept as part of mixed farm operations and represent an efficient means of utilizing land and other feed inputs which have no other economic use. In Western Canada, competitive cow-calf farming is founded on a large, inexpensive grazing base that utilizes land unsuitable for grain production or other more intensive agricultural activities. Cow-calf farming in Eastern Canada is cost-effective because of these same factors, as well as the capability of producing high-yielding roughage crops and a supply of crop residue from high-value cash crops.

Throughout most of Canada, winters are moderate enough to allow efficient maintenance of the cow herd with minimal housing costs. Similarly, in the summer, the weather does not reach the extremes seen in the southern regions of the United States or in Mexico. As well, the relatively dry climate lessens the risk of disease.

Finally, the national beef herd is composed of breeds with the genetic make-up that is capable of producing healthy cattle with the end product characteristics desired by the marketplace.

Over the past decade or so, the regional distribution of the beef cow herd in Canada has changed to give Alberta a higher percentage of the national herd. Alberta had 42 percent of the

national inventory of beef cows and heifers in 1993 versus 38 percent in 1980.¹ On the other hand, Ontario's share of the national beef cow and heifer inventory fell from 15 percent in 1980 to 13 percent in 1993.

The average size of beef cow herds appears to be the same in Canada and the United States. However, the United States seems to have proportionately more cows in herds of more than 100 cows. Although economies of scale are present in cow-calf farming, the fact that a portion of Canadian herds are smaller than those in the United States does not represent a significant competitive disadvantage. Given that cow-calf farming is mostly carried out in conjunction with other farm activities, there is little reason to anticipate significant rationalization in this sector in either Canada or the United States.

The strength of the Canadian cow-calf sector can be seen in the fact that, from 1987 to 1993, 92 percent of the increase in the combined beef cow inventory in both countries occurred in Canada. Furthermore, exports of feeder cattle and calves rose steadily from 1987 onwards, to 60,000 head in 1989 and 293,000 head in 1992.

The inherent strengths of the cow-calf sector in Canada make it very competitive.

b) Feedlot Sector

Competitiveness in feeding cattle is dependent on a handful of critical factors, namely, abundant and close supplies of high-quality feeder cattle and competitively priced, high-energy rations, as well as proximity to large markets for fed cattle.

Feedlots are a margin-based industry in which profitability depends on being able to sell fed cattle for more than the sum of the initial cost of the feeder cattle and the costs associated with finishing, including feed, interest, transportation, labour and other overhead.

Feedlots in Western Canada have an advantage over those in Eastern Canada, as well as over those in the Great Plains and the Corn Belt regions of the United States, both in terms of feed costs and total costs of putting weight gain on feeder cattle. The reasons for this advantage are partly climatic, i.e. the Prairies are well suited to growing high-energy crops, such as barley, and are warm and dry enough to maintain cattle in outdoor pens throughout the year, and partly geographic, in that feedlots in Western Canada, particularly those in southern Alberta, are close to both feeder cattle and to Canadian and U.S. beef-packing plants. Feedlot operations in Western Canada experience the smallest spread between the price that they receive for fed cattle and the cost that they pay for feeder cattle, and yet exhibit the largest profits.

Cattle feeding can still be competitive in a particular region, even if the costs of weight gain are relatively high, if there is a nearby beef-packing industry which relies on it for fed cattle supplies. Such is the case for the feedlot industry in Ontario, which serves as a critical source

1. Statistics Canada, Livestock and Animal Products Statistics, Catalogue 23-203.

of supply for that province's beef-packing industry, which, in turn, relies on close proximity to large beef markets to be competitive.

Substantial economies of scale exist for feedlot operations, at least for one-time capacities of 10,000 to 30,000 head. Large feedlots have lower unit costs for feed and other inputs, and appear to be more effective buyers and sellers of cattle. There has been a widespread rationalization in the feedlot sector in both Canada and the United States in recent years, with the overall number of feedlots decreasing, and a smaller number of operations accounting for a larger share of marketings of fed cattle.

From 1987 to 1992, exports of slaughter steers and heifers from Canada to the United States increased more than fourfold, from 109,000 to 460,000 head.

On balance, the feedlot industry in Western Canada is probably among the most competitive in North America.

c) Beef-Packing Sector

One of the most important factors affecting competitiveness in the beef-packing industry is proximity to a steady supply of healthy, consistently sized, competitively priced fed cattle. Equally important is that beef-packing plants be able to realize the substantial economies that result from high-capacity utilization and large throughput.

The beef-packing industry in Alberta, and to a much lesser extent in Ontario, fulfils the first of these two criteria. However, the annual volume of cattle processed at Canadian beef-packing plants is, on average, less than that processed at U.S. plants. Large Canadian beef-packing plants do not appear to operate as intensively as large U.S. plants, where second shifts and six-day weeks are the norm for large operations. In Canada, only Cargill Foods and Lakeside Packers have annual volumes in the range of 400,000 to 500,000 head. In contrast, in 1991, there were 17 plants in the United States with annual volumes of more than 500,000 head, with 7 of these processing more than 1,000,000 head per year.

Labour costs put Canadian beef-packing plants at a disadvantage compared to their U.S. counterparts; however, the evidence suggests that the gap is much narrower for facilities in Alberta than in other regions of Canada.

Boxing beef represents an opportunity to add value to the beef-packing process. On average, it appears that relatively fewer beef-packing plants in Canada box beef than do plants in the United States. However, some Canadian firms, notably Lakeside Packers, have found a niche in supplying carcass beef to specific markets.

The United States has relatively more exclusive high-speed steer and heifer kill lines and exclusive cow kill lines, which are subject to fewer slowdowns for health and sanitary clean-ups, and require fewer changes in production methods than the mixed kill lines that are more prevalent in Canadian plants.

Overall, the beef-packing industry in Alberta has good prospects for long-term competitiveness. The province has the necessary resources, skills, investment capacity and determination to succeed.

On the other hand, Ontario, while still accounting for almost 25 percent of total Canadian beef production, is facing strong competitive pressures. The province's beef-packing plants pay among the highest labour rates in North America. With continuing improvements in the shelf life of beef and methods of transportation, both fresh and frozen beef products are likely to be shipped in increasing volumes to Ontario from Western Canada and the United States. The proximity of Ontario's beef packers to a large pool of Canadian and U.S. consumers partially offsets the disadvantages that they face with regard to costs and scale of operations. The beef-packing industry in Ontario also benefits from having a well-developed, processed meat industry in the province.

Other provinces may be able to have efficient beef packers that serve "niche" or local markets. However, it is unlikely that beef-packing will expand in those areas of Canada.

Over the past decade, although Canada increased its share of the combined Canada-United States cattle and calf supply, its share of the combined cattle and calf slaughter decreased. In 1980, Canada accounted for 9.9 percent of the combined supply of cattle and calves in Canada and the United States, as well as 9.9 percent of the combined cattle and calf slaughter. However, by 1992, Canada's share of the cattle and calf supply had increased to 10.7 percent, while its share of combined cattle and calf slaughter had fallen to 8.7 percent.

In sum, the Canadian beef-packing sector is the least competitive of the three sectors that we examined. Its greatest competitive disadvantages compared to the U.S. sector are smaller average throughput, higher labour costs and, with regard to beef-packing plants in Alberta, the significant distance that beef has to be transported to markets in the United States and Eastern Canada.

2. Future Challenges and Opportunities

Having assessed how competitive the Canadian cattle and beef industries are today, we need to look ahead to determine what must be done to ensure that the industries prosper in the changing market environment of the future. The evidence that we heard during the inquiry suggests that there are a number of critical opportunities and challenges facing the Canadian cattle and beef industries. Some issues may be of more concern to one sector than to another, for example, genetics may be of more immediate concern to cow-calf farmers, while grading may be a more direct concern to beef packers. However, the economic interdependence of the cattle and beef industries means that all sectors are eventually affected by what is going on in the industries as a whole.

We believe that the wide range of specific issues and concerns facing the Canadian cattle and beef industries can best be discussed in terms of five broad sets of challenges and opportunities: (a) access to the U.S. market; (b) beef quality and consistency; (c) cost, profitability and industry alliances; (d) the Mexican market; and (e) markets in the rest of the world.

a) Access to the U.S. Market

One of the more important challenges facing the Canadian industries is to ensure that there is unimpeded access to the U.S. market for cattle and beef. An integrated market for cattle and beef in North America has existed for several decades, predating both the FTA and the proposed NAFTA. The issue of access to the U.S. market is not one of tariffs, which have recently fallen to zero for both live cattle and beef products. Rather, the issue of access concerns actual and perceived regulatory non-tariff barriers on both sides of the border.

(i) Meat Import Acts

There are some very important differences in the provisions and application of the MIA and the USMIA. The simulation analysis conducted by The WEFA Group and FAPRI shows that the USMIA is one of the more significant government programs available to the cattle and beef industries in the United States.

The main distinguishing feature between the two meat import laws is the triggering mechanism under the USMIA. As a result of this difference, the certainty of restrictions on the quantity of meat imports is greater for the United States than it is for Canada. Under the USMIA, restrictions on the quantity of meat imports permitted to enter the United States must be imposed when the quantity of imports is expected to exceed a specified trigger level. Consequently, major beef-exporting countries are willing to negotiate VRAs to avoid triggering the imposition of import quotas under the USMIA. However, in Canada, the decision of whether to impose restrictions on meat imports is left to the discretion of the government of the day.

Without comparable restrictions on beef imports into Canada, the U.S. industry could claim that beef from third countries is entering the United States through Canada and frustrating VRAs that are negotiated with those third countries. This alleged frustration can threaten the Canadian industry's access to the important U.S. market, as was the case during the first six months of 1993. The imposition by Canada, in June 1993, of tariff rate quotas on imports of boneless beef from countries other than the United States addressed the situation in the short term. In the longer term, the Canadian cattle and beef industries would benefit from meat import laws that are more equivalent in effect to those in the United States.

(ii) Inspection

Under the FTA, Canada and the United States agreed to work towards greater harmonization of their meat inspection regimes, including their internal review systems, laboratory procedures, and inspection and certification of third-country suppliers. Except for a brief experiment initiated and cancelled by the USDA in 1990, which allowed meat to move between the two countries without border inspection, there has been little progress on fulfilling the goal of harmonizing inspection regimes.

In 1992, Canada and the United States entered into an agreement to move towards destination rather than border inspection. At the final public hearing for this inquiry,

a representative of the CMC noted that Canada had implemented destination inspection by the target date of April 1993, whereas, effectively, the United States had not.

Uncertainty of access and the cost of unnecessary inspections and delays present a significant competitive challenge to Canadian beef exporters. We strongly believe that the federal government should diligently pursue with the United States the effective implementation of the 1992 agreement regarding destination inspection and the broader objective of fully harmonizing our respective meat inspection regimes.

(iii) Grade Equivalency

Differences in beef grading between Canada and the United States also pose a challenge to the Canadian industries. Currently, Canadian beef tends to be discounted in the U.S. market, while the United States can readily access the Canadian retail market with its no-roll beef in direct competition with Canadian graded product.

The benefits to the Canadian cattle and beef industries of having an agreement on grade equivalency or reciprocal grading are obvious. That is, Canadian beef would no longer be discounted in the U.S. market and could command market prices, reflecting the quality of the product. Accordingly, there would be more of an incentive to produce boxed beef in Canada, rather than shipping ungraded carcasses or live cattle. Further, there would be benefits in offshore markets, where U.S. grades are seen as the standard for quality. On the other hand, the benefits of grade equivalency to the U.S. industries are much less clear. If mandatory retail labelling of graded and ungraded beef products were adopted in Canada, U.S. beef packers might find that they could more easily sell their product if U.S. grades were recognized as being equivalent to Canadian grades.

Even if some form of formal grade equivalency were established, the Canadian cattle and beef industries would still need to devote considerable resources to educating U.S. retailers and consumers. This is not to say that this task is impossible. Indeed, the Tribunal feels that this goal is attainable and that the Canadian industries should proceed with this marketing initiative even without formal recognition of grade equivalency.

Regardless of the negotiations with the United States on this issue, or their eventual outcome, we believe that the Canadian cattle and beef industries should continue to promote Canada "AA" and "AAA" grades in the United States as alternatives to comparable U.S. grades, and Canada "A" grade as a unique product. In other words, it is important that the quality of Canadian beef be sold on its own merits, not just because it has been recognized as being equivalent to U.S. beef.

(iv) Local Ordinances

During the course of the inquiry, the Tribunal was made aware of a local ordinance in King County in the state of Washington that effectively prohibits the sale of Canadian beef in that jurisdiction by requiring the sale of only USDA-graded beef. Other ordinances, such as those in Dade County, Florida, and Dallas, Texas, inhibit access of Canadian beef to those markets by

requiring that all beef that has not been graded by the USDA be clearly labelled as "Ungraded." There may be other such ordinances. The Canadian government should pressure its U.S. counterparts to encourage the elimination of these barriers to trade.

b) Beef Quality and Consistency

The per-capita consumption of beef has been declining in Canada, as well as in the United States, since the mid-1970s, albeit at a slower pace in recent years. Therefore, one of the most fundamental challenges facing the Canadian cattle and beef industries is to hold on to their market share.

(i) Product Quality

Ensuring that the beef sold to Canadian consumers is of consistently high quality is one of the most important challenges facing the cattle and beef industries. The results of a study of Canadian consumers undertaken in 1992 show that nearly one third are not completely satisfied with the consistency of the quality of the beef that they are eating.

Product quality is achieved and improved by a number of factors and by a number of players in the industries. In the longer term, the cattle industry should be striving, through genetic improvement, to produce an animal with less external fat, while still maintaining sufficient marbling to ensure a quality end product. Genetic improvements have already transformed the poultry and swine industries and, with some effort, can make beef more competitive with other meats. However, because the beef animal has a lower reproductive capacity and a longer generational interval than poultry or swine, the same rate of improvement will not be possible. Improvements should be sought in those areas that have a reasonably high degree of inheritability, which will include benefits relating to end product quality and other benefits, such as the rate of weight gain in feeder cattle.

Canada has a strong competitive advantage in the area of cattle genetics and should continue to strengthen those programs that are already in place, as well as develop additional ones as required, which will give cow-calf producers an expanding pool of genetically superior stock from which to choose.

In the shorter term, improved management techniques in the area of feeding and herd health can have a far larger and quicker effect on the quality of the product. For example, as a result of producer responses to the 1972 changes to the beef-grading system, Canada is producing leaner cattle than is the United States. It is generally accepted that Canadian cattle yield a higher percentage of usable beef than do U.S. cattle. In the United States, the beef industry is just now beginning to address concerns about excess surface fat, with large beef packers beginning to supply a one-quarter inch, close-trimmed product.

Ontario's various technology transfer programs, including its "Hoof to Hook" seminars, offer a good example of an industry-wide commitment to improve beef quality.

Consumers and the media are placing increased emphasis on food safety. Concerns are being expressed regarding antibiotics, growth hormones and pesticides. The EC ban on hormone use is one manifestation of this concern. Canada's excellent reputation for meat safety is a competitive advantage that should be exploited wherever possible.

Beef quality is not an issue that only one sector of the cattle and beef industries can address, rather, it is a challenge that all sectors must strive to meet.

(ii) Labelling Regulations

For the most part, the Canadian cattle and beef industries see labelling regulations at the retail level as an important means of addressing consumers' concerns about quality. We agree that labelling beef would allow consumers to match their eating preferences and expectations with the grade of beef that they purchase. The Tribunal believes that consumers are entitled to know whether the beef that they are buying is graded or ungraded. Further, the Tribunal is of the opinion that graded beef sold at the retail level should be fully labelled, e.g. "Canada - Grade AAA," or "USDA - Choice."

The most recent changes to Canada's beef-grading system, which established the three "A" grades of beef, were made, in part, to fulfil consumer demands for different levels of eating satisfaction. The Canadian industry is now in an improved position to target specific market niches, whether it be a lean product for health-conscious consumers or a well-aged and marbled product for the retail and restaurant sectors and the export market.

If labelling regulations do not require grades, the benefits of the revised grading system will be lost, as consumers will still not be able to knowingly purchase a particular quality of beef. The Tribunal recognizes that including the grade on beef labels may represent additional work for the grocery trades and the beef-packing industry. However, we believe that this consideration is outweighed by the benefits to the cattle and beef industries of having consumers more satisfied with the quality of the beef that they are consuming.

(iii) Marketing and Promotion

The cattle and beef industries face a marketing dilemma; consumers want less fat in their diets, and beef, particularly product that is marbled, is perceived as being too fat, therefore, consumers purchase leaner beef, which may be of poorer eating quality.

Consumers need more information about the nutritional attributes and eating qualities of the various grades of beef. The cattle and beef industries need to take the lead in working with the grocery trades to develop appropriate marketing and promotion strategies, including broad product advertising campaigns such as those conducted by the BIC, point-of-sale displays, and packaging that provides nutrition information and preparation instructions.

The beef industry must find ways of meeting consumer needs for quick, easy-to-prepare, nutritional meals. As with so many of the challenges for the future, developing successful new

products will require cooperation among various sectors in the industry and downstream food-processing industries.

c) Cost, Profitability and Industry Alliances

Issues of cost, profitability and strategic industry alliances represent the third set of competitive challenges and opportunities facing the Canadian cattle and beef industries.

(i) Cost Control and Productivity Improvements

In order to prosper in an increasingly competitive marketplace, the Canadian cattle and beef industries must strive to control costs and improve productivity.

In the Canadian beef-packing sector, there are opportunities to improve competitiveness, provided that facilities can be more intensively used to process a greater volume of cattle. This would happen through improved access to the large U.S. market or through additional rationalization of the Canadian industry. Further, if cattle were of a more consistent size, the costs associated with slaughtering and packing would be reduced.

At the present time, the economics of beef production encourage the development of large cattle. However, the retail and foodservice sectors want smaller carcasses to meet the demands of consumers for smaller portions. In other words, the supply side of the industry has been producing larger cattle while the demand side has been requesting smaller beef cuts. The Tribunal believes that it would be a step backward for industry to begin producing smaller cattle. The best hope for a solution to this problem would seem to be for the cattle and beef industries to work with the retail sector to find ways of better utilizing the larger cuts.

(ii) Industry Alliances

The Tribunal believes that improved competitiveness in the Canadian cattle and beef industries will require greater cooperation among the various sectors.

To date, there has been little direct integration in the Canadian cattle and beef industries, and that which has occurred has taken the form of beef packers owning feedlots. The advantages of integration to beef packers is that it reduces the risk of not having a steady supply of fed cattle to process and gives the packer more control over cattle quality. On the other hand, being more closely integrated with cattle-feeding operations places additional financing requirements on beef packers.

In the United States, the cattle and beef industries are more vertically integrated than they are in Canada. For example, some large U.S. companies, such as Cargill, Inc., are involved in the grain industry, feedlot operations and beef-packing operations.

The Tribunal expects that the future will see a variety of joint ventures and partnering arrangements between cattle producers and beef packers in Canada. For example, we may see more "strategic integration," with contractual agreements between the various segments of the

industries. There is a certain stability when a guaranteed source of supply is contracted from the cow-calf producer to the feedlot operator to the packer to the retailer. This type of contractual arrangement appears to be a viable structure to suit the entrepreneurial nature of the cattle and beef industries.

(iii) Risk Management

The prices of both cattle and feed grain can be volatile in the short run, and it is important that the Canadian cattle and beef industries be able to effectively manage this risk.

Forward contracting, in which beef packers agree to purchase fed cattle from feedlots at a certain price, is widely used in the United States, particularly in the Great Plains. The Canadian industries appear to lag behind the U.S. industries in the use of forward contracting.

Other risk management strategies, such as the futures market for cattle, also appear to be more widely used in the United States than in Canada. The Tribunal believes that the Canadian cattle and beef industries must become more sophisticated in their use of risk management tools to reduce fluctuations in profitability.

(iv) Technological Improvements

Technology has played an important role in improving the productivity of the cattle and beef industries. In the feedlot and beef-packing sectors, the largest operations in Canada are as technologically advanced as their similarly sized U.S. counterparts.

The Canadian cattle and beef industries need to continue to stay abreast of emerging technologies, whether in the United States or in other important markets, such as Australia, and to be ready to adopt them if they could improve productivity. Two examples of technological advances are the use of fibre-optic devices to facilitate grading, and the new "hot fat" trimming procedure where the external fat of the carcass is trimmed immediately after slaughter and just prior to chilling.

With regard to the issue of organic washes, the Tribunal finds it difficult to understand why organic washes cannot be routinely used in Canadian beef-packing plants, while beef which has been treated with organic washes can be imported from the United States and other countries. The fact that Canadian beef packers cannot readily make use of organic washes may negatively affect their competitiveness in offshore markets, where countries such as Australia, that do routinely use organic washes, are able to offer products with a longer shelf life. The Tribunal believes that steps should be taken to resolve this issue and to clarify the use of organic washes in Canada.

(v) Environmental Issues

The environment has emerged as an important issue, and the cattle and beef industries are facing a number of concerns, including the use of grain for animals, destruction of rain forests, sustainable agriculture, animal rights, use of grazing land, manure disposal and water pollution.

In Canada, the cattle and beef industries are taking a pro-active approach regarding the protection of the environment. For example, the cattle-feeding industry in Alberta and the provincial government have developed a livestock operations waste management code of practice.

Sustaining a pro-active approach should ensure that the Canadian cattle and beef industries do not encounter the type of negative influences faced by their counterparts elsewhere.

d) Mexican Market

Mexico presents a unique challenge to the Canadian industries because it is a potential market which is three times that of Canada. As the overall demand for beef in the United States and Canada is likely to stabilize or decrease, the Mexican market is the only North American market with growth potential. However, the distance of Canadian beef packers from Mexican markets represents a significant competitive disadvantage.

In the context of the proposed NAFTA, the Canadian cattle and beef industries could be indirectly affected by changes in the trade flows between the United States and Mexico. That is, these industries might be able to meet demand in the U.S. market if beef packers in that country increase their orientation towards Mexico.

Another strategy might be to focus on differentiating Canadian beef in the Mexican market, i.e. by creating a demand in populous southern Mexico for brand-name, grain-fed beef. Since southern Mexico is basically a grass-fed beef market, and is therefore already predisposed to consuming lean beef, there may be room to promote and sell Canadian beef.

The Mexican government is pursuing policies to reform regulations pertaining to land tenure and property rights, and to relocate the beef-packing industry away from urban areas to the centres of cattle production. The beef-packing industry in Mexico is also working to streamline the distribution system by reducing the number of middlemen. The goal of these changes is to make the Mexican cattle and beef industries more efficient in the future.

The challenges to be addressed by the Canadian cattle and beef industries in Mexico will likely be similar to those in other foreign markets. Therefore, Mexico could become a testing ground for the Canadian industries to develop innovative approaches to markets and to learn how to find and hold profitable niches.

e) Markets in the Rest of the World

The final competitive challenge and opportunity which the Canadian cattle and beef industries must address is the developments taking place in markets in the rest of the world.

(i) Offshore Export Opportunities

In contrast to the forecasts of stable beef markets in Canada and the United States, the demand for beef in the Pacific Rim and other emerging nations is likely to continue to grow, as income levels rise.

However, competition for Pacific Rim markets will be fierce, with the United States, Australia and New Zealand devoting significant resources to selling beef in these countries. Certainly, the Canadian cattle and beef industries should not ignore the Pacific Rim markets and should continue their marketing efforts to sell beef there. However, the Tribunal believes that the focus of the industries' export strategy should remain squarely targeted on the United States.

(ii) Countries to be Declared Disease-Free

Canada is among a relatively small group of countries that are free of major bovine diseases, including FMD, brucellosis and bovine tuberculosis. Canada's disease-free status enhances its competitiveness versus those countries that are not disease-free and opens doors to higher-value markets.

If major bovine diseases were eliminated worldwide, more countries would be in a position to compete directly with Canada. For example, if Argentina is successful in obtaining recognition as FMD-free, the supply of frozen manufacturing beef entering Canada and the United States could increase significantly.

It will be important for the Canadian industries to continue to monitor changes in this area so that they can be prepared to meet new FMD-free competitors.

3. Role of Governments and Industry

One of the more significant outcomes of this inquiry has been the comprehensive identification and analysis of government programs, policies and regulations that affect the cattle and beef industries in Canada, the United States and Mexico.

Using a net benefit approach to measure the impact of government support, we found that government intervention, as a whole, benefits the cattle and beef industries in Canada and the United States, while it is a net cost to the cattle industry in Mexico. Overall, during the last two fiscal years that we examined, the level of support available to the cattle and beef industries in Canada and the United States was very similar. We note that the level of support provided to the industries in Canada and the United States generally declined during the period that we analyzed. The announced termination of the NTSP, two years ahead of schedule, will lessen the level of support in Canada even further. Finally, our analysis revealed that regulatory programs

and policies have a greater impact on the competitiveness of the industries than do programs that provide financial assistance.

The Tribunal finds merit in the recommendation, put forth by the CCA in its final submission, that the information which has been compiled on government programs, policies and regulations affecting the cattle and beef industries in Canada, the United States and Mexico be updated on a regular basis. Given the various government initiatives in these industries, transparency of information would be beneficial in assisting officials in the three countries in formulating policies from a common base of knowledge.

The government can assist the Canadian cattle and beef industries in meeting the challenges of the future by improving the regulatory framework within which they operate. Specifically, the government should be prepared to take action where regulations, or the lack thereof, inhibit the competitive goals of the industries. In particular, the Canadian industries would benefit from meat import laws that are more equivalent in effect to those in the United States. Moreover, consumers and the industries would benefit from grade labelling regulations at the retail level. The government should also continue to negotiate with the United States to harmonize the impact of our respective laws and regulations that affect the cross-border trade in cattle and beef. This is particularly important in the case of grade equivalency and in ensuring that the United States effectively implements the 1992 agreement to eliminate border inspection in favour of destination inspection. Finally, the government should continue to pursue its reform of those Canadian grain policies that can negatively impact on the competitiveness of the Canadian cattle and beef industries by increasing the cost of feed grain in certain regions.

During the course of this inquiry, the Canadian cattle and beef industries gave us the clear message that they see their future success as depending largely on their own efforts. They look to governments to address the outstanding regulatory issues.

The Tribunal certainly agrees with the industries' view of the roles that both they and government should play in the future. The Canadian cattle and beef industries must continue to enhance the quality of the beef being produced. Moreover, they must strive to reduce costs and improve profitability in all sectors. They should make greater use of risk management strategies, such as forward contracting and strategic industry alliances. They also need to continue to stay abreast of new technologies. Further, the industries need to take the lead in working with the grocery trade to develop appropriate marketing and promotion strategies to better serve consumer needs. Similarly, the industries must promote, in the United States and other foreign markets, the quality of Canadian beef on its own merits, not simply because it may be recognized as being equivalent to U.S. product.

The challenges and opportunities that we have identified for the Canadian cattle and beef industries affect all sectors of those industries, from cow-calf producers to feedlot operators to beef packers. The members of the Canadian cattle and beef industries must continue to work together to fashion a common vision of the future if they are to remain competitive in an increasingly competitive global market.

APPENDICES

APPENDIX I

ORDER-IN-COUNCIL

P.C. 1992-2378
19 November 1992

WHEREAS a number of factors having an impact on the cattle and beef industries, including recent and expected changes in the conditions of international trade, government policies, input costs and marketing conditions, require awareness and a response from the Canadian cattle and beef industries to maintain and strengthen their competitive positions in international trade;

WHEREAS representatives of the Canadian cattle and beef industries have requested that the Government of Canada undertake a comprehensive study with respect to the competitiveness of the Canadian cattle and beef industry;

WHEREAS it is desirable to have available the most complete and up to date information regarding the nature of the cattle and beef industries in Canada, the United States and Mexico;

AND WHEREAS section 18 of the *Canadian International Trade Tribunal Act* authorizes the Governor in Council to refer to the Canadian International Trade Tribunal for inquiry and report any matter in relation to the economic, trade or commercial interests of Canada;

THEREFORE, HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL, on the recommendation of the Minister of Finance, the Minister of Agriculture and the Minister of Industry, Science and Technology and Minister for International Trade, pursuant to section 18 of the *Canadian International Trade Tribunal Act*, is pleased hereby:

- (a) to direct the Canadian International Trade Tribunal to forthwith inquire into the competitiveness of the cattle and beef industries, namely, by:
 - (i) developing a profile of the cattle and beef industries in Canada, the United States and Mexico in a global context, including trends in production, consumption and international trade;
 - (ii) reviewing conditions and trends in the structure of the cattle and beef industries in Canada, the United States and Mexico on a national and regional basis, including marketing and distribution systems;
 - (iii) identifying and examining factors that affect the competitiveness of the respective cattle and beef industries of Canada, the United States and Mexico in North American and other markets, in particular factors such as government policies, regulatory measures and subsidy and other assistance programs, including those related to transportation, the

availability and cost of inputs such as land and grain, environmental and production quality standards, and access to markets; and

- (iv) providing an overall assessment, based on the above, of the opportunities and challenges facing the Canadian cattle and beef industries in the coming years; and
- (b) to direct the Canadian International Trade Tribunal to hold public hearings with respect to the inquiry and to report to the Governor in Council within twelve months after the date of this Order.

APPENDIX II

LIST OF PARTICIPANTS AND WITNESSES

1. Consultative Forum/Preliminary Hearing - January 14, 1993

Participant/Witness	Title
Dave M. Adams	General Manager Canadian Meat Council
David Andrews	Foreign Trade Chairman Canadian Cattlemen's Association
Gaëtan Bélanger	Secretary La Fédération des producteurs de bovins du Québec
Ted Cochrane	Senior Commodity Advisor Agri-Food Policy Analysis Division Department of Agriculture
Douglas Gear	President Ontario Cattlemen's Association
Dermot Hayes	Associate Professor Department of Economics Iowa State University
H. Bruce Huff	Director Economic Analysis Division Department of Agriculture
Dennis Laycraft	Executive Vice-President Canadian Cattlemen's Association
Mel Lerohl	Professor Department of Agricultural Economics University of Alberta
Les Lyster	Director of Economic Services Alberta Agriculture
Lynn Malmberg	Analyst Lakeside Farm Industries Ltd.

Participant/Witness	Title
Larry Martin	Professor George Morris Centre University of Guelph
Luc Martineau	Counsel for: T. Lauzon Ltée
Wayne Proceviat	Manager, Fabrication Lakeside Packers
Lawrence E. Ross	Director of Meat Merchandising The Great Atlantic & Pacific Company of Canada Limited
Robert Saint-Louis	Professor Department of Rural Economics Université Laval
Erna H.K. van Duren	Assistant Professor Agricultural Economics and Business Ontario Agricultural College University of Guelph
Robert L. Weaver	General Manager Canadian Meat Council
Darcy Willis	Trade Policy Analyst Policy Secretariat Alberta Agriculture

2. Calgary Regional Hearing - March 24 and 25, 1993

Participant/Witness	Title
David Andrews	Foreign Trade Chairman Canadian Cattlemen's Association
Ron Axelson	Manager Alberta Cattle Feeders' Association
Jas. H. (Jim) Graham	Former President Canadian Cattlemen's Association

APPENDIX II

Participant/Witness	Title
Dennis Laycraft	Executive Vice-President Canadian Cattlemen's Association
Lynn Malmberg	Analyst Lakeside Farm Industries Ltd.
Jim Miller	President Selex Trading Ltd.
R.J. (Bob) Richmond	Chief, Beef Section Animal Industry Manitoba Red Meats Forum Inc.
Al Rogerson	General Manager Lakeside Packers
C.E. (Chuck) Sterling	Head, Market Analysis Branch Economic Services Division Alberta Agriculture
Ed Thiessen	Owner Thiessen Farms Ltd.
Gary Wellbrock	Elected Representative Prairie Pools Inc.
Darcy Willis	Trade Policy Analyst Policy Secretariat Alberta Agriculture

3. Ottawa Regional Hearing - April 21 and 22, 1993

Participant/Witness	Title
Jim Caldwell	Director of Government Affairs Canadian Cattlemen's Association
Larry M. Campbell	Secretary Treasurer Canadian Meat Council
Joseph L. Gariup	Director, Fresh Meats Buying & Merchandising National Grocers Co. Ltd.

Participant/Witness	Title
Graeme Hedley	Manager Ontario Cattlemen's Association
Robert Kerr	President Ontario Cattlemen's Association
Carolyn McDonell	National Co-ordinator Beef Information Centre
Robert L. Weaver	General Manager Canadian Meat Council

4. Ottawa Final Hearing - September 20, 1993

Participant/Witness	Title
Jim Caldwell	Director of Government Affairs Canadian Cattlemen's Association
Larry M. Campbell	Secretary Treasurer Canadian Meat Council
Bryan Davidson	Executive Director Prairie Pools Inc.
Dennis Laycraft	Executive Vice-President Canadian Cattlemen's Association
Robert L. Weaver	General Manager Canadian Meat Council
Gary Wellbrock	Elected Representative Prairie Pools Inc.

APPENDIX III

LIST OF SUBMISSIONS

1. Preliminary Hearing - January 14, 1993

Alberta Agriculture - Trade Policy Secretariat
Alberta Cattle Feeders' Association
American Breeders Service
Australian Meat and Live-stock Corporation
B.C. Federation of Dairymen's Associations
Canadian Cattlemen's Association
Canadian Livestock International Inc.
Canadian Meat Council
Canadian Meat Importers Committee
Consumers' Association of Canada
La Fédération des producteurs de bovins du Québec
George Morris Centre - University of Guelph
Lakeside Farm Industries Ltd.
Morrison Lamothe Inc.
National Packers Inc.
Ontario Ministry of Agriculture and Food
Prairie Pools Inc.
Saskatchewan Agriculture and Food
Selex Trading Ltd. & Miller International Genetic Centre
T. Lauzon Ltée
Uni-Viande Inc.
University of Guelph - Ontario Agricultural College

2. Calgary Regional Hearing - March 24 and 25, 1993

Alberta Agriculture - Trade Policy Secretariat
Alberta Cattle Feeders' Association
Beef Information Centre
Canadian Cattlemen's Association
Canadian Meat Council
Consumers' Association of Canada
Lakeside Farm Industries Ltd.
Manitoba Red Meats Forum Inc.
Prairie Pools Inc.
Saskatchewan Legislative Assembly
Selex Trading Ltd. & Miller International Genetic Centre
XL Foods Ltd.

3. Ottawa Regional Hearing - April 21 and 22, 1993

Beef Information Centre
Canadian Meat Council
Canadian Meat Importers Committee
Canadian Wheat Board
Manitoba Agriculture
New Brunswick Agriculture
Ontario Cattlemen's Association

4. Ottawa Final Hearing - September 20, 1993

Agriculture Office of the Embassy of Mexico
Alberta Agriculture, Food and Rural Development
Canadian Cattlemen's Association
Canadian Meat Council
Canadian Wheat Board
Department of Agriculture - Farm Development Policy Directorate
Department of Agriculture - Farm Economic Analysis Division
Department of Agriculture - Policy Branch
Department of Industry and Science - Food Products Branch
Graeme Goodsir Associates, Inc.
Manitoba Agriculture
Manitoba Red Meats Forum Inc.
Ontario Ministry of Agriculture and Food
Prairie Pools Inc.
Washington Cattlemen's Association

5. Other Submissions

Burns, Paul
Butters Ranching
Canadian Beef Export Federation
Canadian Meat Council
Canadian Meat Importers Committee
Consumers' Association of Canada
Cuddy, Carl
Ferme Gobeil Enrg.
Gregson, Robert
Lonk, Gordon
Maclaren Farms
Manitoba Agriculture
Miller Farms
Ontario Ministry of Agriculture and Food
Saskatchewan Agriculture and Food
South Slope Feeders Ltd.

Thede, Harry
Trudy and Doug Desjardins
Washington Cattlemen's Association
Williams, Richard B.

APPENDIX IV

LIST OF CONSULTANT AND STAFF REPORTS

1. Canadian International Trade Tribunal, Competitiveness of the Canadian Cattle and Beef Industries in the North American and World Markets, Staff Report, August 1993.
2. Canadian International Trade Tribunal, Competitiveness of the Canadian Cattle and Beef Industries in the North American and World Markets, Corrigendum to Staff Report of August 1993, September 1993.
3. The WEFA Group, Analysis of U.S. Government Assistance to the Cattle and Beef Industries, July 1993.
4. The WEFA Group, Analysis of U.S. Government Assistance to the Cattle and Beef Industries: Addendum Report, U.S. Meat Import Act Import Supply Control - Net Benefits Determination: Beef Import Scenario with Elimination of Import Supply Control Barriers, August 1993.
5. The WEFA Group, Analysis of U.S. Government Assistance to the Cattle and Beef Industries: Errata Sheets, August 1993.
6. The WEFA Group, Supplementary Tables to the WEFA Group Report: Analysis of the Mexican Cattle and Beef Industries, September 1993.
7. The WEFA Group, Analysis of the Mexican Cattle and Beef Industries, July 1993.
8. Department of Finance, Description of Specific Tax Provisions Available to Cattle Farmers and Beef Processors in Canada and the United States, July 1993.
9. Department of Agriculture, The Impact of Canadian and U.S. Government Policies on the Canadian Cattle and Beef Sectors, July 1993.
10. Department of Agriculture, Revisions to the Exchange Rate Scenarios, August 1993.
11. Department of Agriculture, Beef Cattle Genetic Improvement and the Marketing of Genetic Material, April 1993.
12. Agriculture Canada, PSE for Beef in Canada: An Examination of Methods, August 1993.

APPENDIX V

TRIBUNAL STAFF INVOLVED IN THE INQUIRY

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APPENDIX VI

GOVERNMENT PROGRAMS

Tables 1, 2 and 3 identify and briefly describe the federal government programs and policies in Canada, the United States and Mexico, respectively, that confer a benefit equal to or greater than 0.2 percent of the adjusted value of production of the relevant product.

Table 1	
CANADIAN FEDERAL PROGRAMS RELATING TO THE CATTLE AND BEEF INDUSTRIES	
Assistance Programs	Terms of the Program
Programs Affecting Revenue	
National Tripartite Stabilization Program (NTSP) (CATTLE)	The NTSP is a revenue insurance program funded equally by the federal government, participating provincial governments and participating producers. There are three different stabilization plans under the NTSP: one for the cow-calf sector, one for feeder cattle and one for slaughter cattle. Payments to producers are made when market prices fall below a predetermined support price.
Countervailing Duty on Imports of Boneless Manufacturing Beef from the European Community (EC) (CATTLE)	For imports of EC boneless manufacturing beef, a countervailing duty of approximately \$1.76/kg came into effect in 1985.
Custom Duties on Imports of Beef (CATTLE/BEEF)	There are MFN duties in place on imports of beef; the rate which applies in most cases is 4.41¢/kg. Corresponding rates under the FTA have been going down gradually and are currently "0."
Programs Affecting Costs	
Credit Programs:	
1) Farm Credit Corporation (CATTLE)	1) The Farm Credit Corporation provides mortgage loans to Canadian farmers for the development of viable family farm units. Under the <i>Farm Syndicates Credit Act</i> , loans are available for the cooperative ownership of farm equipment and machinery.
2) <i>Farm Improvement and Marketing Cooperatives Loans Act</i> (CATTLE)	2) The Minister of Agriculture guarantees loans to farmers and marketing cooperatives.

<p>Table 1</p> <p>CANADIAN FEDERAL PROGRAMS RELATING TO THE CATTLE AND BEEF INDUSTRIES</p>	
Assistance Programs	Terms of the Program
<p><i>Farm Debt Review Act</i>/Farm Debt Review Fund</p> <p>(CATTLE)</p>	Under Farm Debt Review Board supervision, the Farm Credit Corporation provides debt restructuring and adjustment to qualifying farmers.
<p><i>Western Grain Transportation Act</i> (WGTA)</p> <p>(CATTLE)</p>	Under the WGTA, the National Transportation Agency pays a portion of the transportation costs attributable to the covered commodity movements. The WGTA has the effect of raising the cost of grain to cattle producers and, therefore, increasing the cost of cattle production.
<p>Feed Freight Assistance Program</p> <p>(CATTLE)</p>	This program is designed to assist in the movement of feed grain from grain surplus to grain deficit regions. Cattle producers in British Columbia, Quebec and the Atlantic provinces benefit.
<p>Canadian Wheat Board Price Pooling</p> <p>(CATTLE)</p>	The Canadian Wheat Board's mandate is to market wheat and barley grown in Western Canada in the best interests of Western Canada's grain producers. Price pooling establishes an equal return for all grain sold by producers to the Canadian Wheat Board. This program results in lower feed grain prices in British Columbia, Alberta and western Saskatchewan, and in higher feed grain prices in Manitoba and eastern Saskatchewan.
<p><i>Health of Animals Act</i></p>	Under this program, owners of cattle are compensated when animals, infected or suspected of being infected with a designated disease, have to be slaughtered.
<p>Countervailing Duty on Imports of Grain Corn from the United States</p> <p>(CATTLE)</p>	For imports of U.S. corn, a countervailing duty came into effect in 1986-87. The duty was \$0.46/bushel. This raised the price of corn to cattle producers. This duty expired in March 1992.
<p>Branch Line Rehabilitation Program</p> <p>(CATTLE)</p>	This program assisted in the upgrading or rehabilitation of 6,825 km of railroad track to enable it to carry hopper car traffic at a minimum speed of 45 km/hr. The program began in 1977-78 and was terminated in 1989-90.
<p>Purchase and Lease of Hopper Cars</p> <p>(CATTLE)</p>	The program was intended to address a shortage of rail cars by purchasing 13,120 hopper cars between 1972 and 1986. As well, the government provides a contribution to the Canadian Wheat Board for the lease of 2,000 hopper cars.

Table 1	
CANADIAN FEDERAL PROGRAMS RELATING TO THE CATTLE AND BEEF INDUSTRIES	
Assistance Programs	Terms of the Program
Other Programs	
Department of Agriculture Research (CATTLE/BEEF)	This includes research grants and internal research on a number of topics, including animal and plant health.
Food Production, Inspection and Grading (CATTLE/BEEF)	Federal inspection and grading programs ensure that products are marketable by eliminating or controlling plant and animal diseases, and by ensuring compliance with food safety and quality standards.

<p>Table 2</p> <p>U.S. FEDERAL PROGRAMS RELATING TO THE CATTLE AND BEEF INDUSTRIES</p>	
Assistance Programs	Terms of the Program
Programs Affecting Revenue	
<p>Federal Marketing Promotion Program</p> <p>(CATTLE)</p>	<p>This program conducts activities that assist producers and handlers of commodities both at home and abroad, such as a market news service, inspection, grading and standardization, plant inspection, and wholesale market development.</p>
<p>Food and Nutrition Service</p> <p>(CATTLE)</p>	<p>The Food and Nutrition Service offers food assistance to the poor and disadvantaged. Food is provided through the use of cash grants, commodity donations and food stamps. Procurements are undertaken on a competitive bid basis. The program is also important as a tool to remove excess agricultural products from the market.</p>
<p>Federal Beef Tariffs</p> <p>(CATTLE)</p>	<p>A tariff rate of 4.4¢/kg on a carcass weight basis is imposed on fresh, chilled or frozen beef and veal products from countries other than Canada. An <i>ad valorem</i> tariff rate of 4 percent is charged on cuts valued at over 66¢/kg. Imports from Generalized System of Preferences and Caribbean Basin Initiative countries enter the United States duty-free.</p>
<p><i>The Meat Import Act of 1979</i></p>	<p>The <i>Meat Import Act of 1979</i> restricts the quantity of meat articles that may be imported into the United States during each calendar year. Import quotas are imposed pursuant to this act if imports are expected to exceed specified levels, unless VRAs are negotiated with the major supplying countries of meat articles. Imports from Canada are exempt from the provisions of this act.</p>

<p align="center">Table 2</p> <p align="center">U.S. FEDERAL PROGRAMS RELATING TO THE CATTLE AND BEEF INDUSTRIES</p>	
Assistance Programs	Terms of the Program
Programs Affecting Costs	
<p>Federal Grazing Fees</p> <p align="right">(CATTLE)</p>	<p>This program administers livestock grazing on federal rangeland. Qualifications for permittees include ownership/control of livestock and sufficient property to graze livestock when it is not on federal land, and the need for year-round grazing to complete ranching operations. Fees are as defined in the <i>Public Rangelands Improvement Act of 1978</i>.</p>
<p>Irrigation Programs</p> <p align="right">(CATTLE)</p>	<p>The Bureau of Reclamation develops and supports irrigation projects to convert desert and other non-agriculturally suited land into productive farmland. Projects focus on water management and preservation in order to ensure resource sustainability.</p>
<p>Federal Farm Credit Programs</p> <p align="right">(CATTLE)</p>	<p>The Farmers Home Administration (FmHA) makes agricultural loans to producers at lower-than-market rates of interest. This agency is generally a lender of last resort for farmers who cannot obtain credit from commercial lenders. The rates of interest, at which these loans are made, are based on the government's cost of borrowing. Loan overhead is taken out of FmHA funds.</p>
<p>Federal Livestock Assistance Program</p> <p align="right">(CATTLE)</p>	<p>This program consists of several different livestock feed assistance programs that are instituted in the event of livestock emergencies.</p>
<p>Feed Grain Programs</p> <p align="right">(CATTLE)</p>	<p>These programs provide support to U.S. feed grain producers through deficiency payments, Commodity Credit Corporation non-recourse loans, acreage reduction programs, "0/92" and target pricing.</p>

Table 2 U.S. FEDERAL PROGRAMS RELATING TO THE CATTLE AND BEEF INDUSTRIES	
Assistance Programs	Terms of the Program
Other Programs	
Federal Inspection and Grading Program (CATTLE/BEEF)	This program inspects all domestic plants, monitors plants that export meat or poultry products to the United States, and provides technical and financial assistance to state inspection programs.
Federal Animal and Plant Health Inspection Service (CATTLE/BEEF)	This program encompasses activities such as plant and animal quarantines, import/export regulation, animal and plant health monitoring and control, laboratory research and biologic regulatory enforcement.
Federal Advisory/Extension Program (CATTLE/BEEF)	Employment of state, area and county extension workers provides the public with assistance and advice in marketing, agricultural production, nutrition, and youth, family and community programs.
Federal Research Programs and Administration Agencies (CATTLE/BEEF)	The Agricultural Research Service performs agricultural- and demonstration-type programs relating to production, utilization, marketing, market research, distribution, home economics, or nutrition and consumer use, and for minor land acquisitions by donation, exchange or purchase. Other services include the Cooperative State Research Service, the Economic Research Service, and the Human Nutrition and Information Service.

Table 3 MEXICAN FEDERAL PROGRAMS RELATING TO THE CATTLE AND BEEF INDUSTRIES	
Assistance Programs	Terms of the Program
Programs Affecting Revenue	
Cattle Border Controls (CATTLE)	Until 1989, exports of cattle required foreign purchasers to obtain a permit. In 1988, this system was replaced with a 20-percent export tariff, which was phased out over a four-year period.
Beef Border Controls (CATTLE)	During 1988 and part of 1989, there was a 10-percent tariff on imports of beef products. While those tariffs were lifted in 1989, import tariffs on beef products were reimposed in November 1992.
Programs Affecting Costs	
Feed Grain Programs (CATTLE)	<p>Under the Balanced Feed Subsidy, low-quality corn sorghum, barley and feed wheat are imported by CONASUPO on the open market and sold at below-market prices to feed mills.</p> <p>Feed grain border controls limit the importation of feed grain, thus supporting domestic feed prices to the detriment of the cattle industry.</p>
Credit Programs (CATTLE/BEEF)	<p>The National Rural Credit Bank in Mexico provides agricultural credit to producers at interest rates below the going rate for normal business loans.</p> <p>Initiated in 1986, the Fiscal Transfer Subsidies Program provides direct financial assistance to beef packers for purchasing equipment.</p>
Other Programs	
Animal Health Programs (CATTLE)	Efforts at controlling animal pests and diseases include quarantine control, sanitation registration, typhoid fever control, eradication, and competitiveness programs.

Table 4

**PROVINCIAL PROGRAMS INCLUDED IN THE
NET BENEFITS CALCULATION**

Alberta

Capital Grants: Off-Farm
 Capital Grants: On-Farm
 Crow Benefit Offset Program
 Extension
 Farm Credit Stability Program
 Fuel Tax Exemption/Farm Fuel Distribution Allowance
 Inspection/Grading
 Interest Rate Subsidy
 Research

British Columbia

Economic and Regional Development Agreement (ERDA)
 Extension
 Farm Income Insurance
 Inspection
 Motor Fuel Tax Exemption
 Range Improvement

Manitoba

Crown Land Leases
 Direct Loans
 Extension
 Fuel Tax Exemptions
 Livestock Development Program
 Young Farmers Interest Rebate

Ontario

Capital Grants - On-Farm
 Extension
 Farm Income Assistance (interest)
 Inspection
 Red Meat Plan II (beef, sheep) - Non-Capital Grant Portion
 Research

Table 4

**PROVINCIAL PROGRAMS INCLUDED IN THE
NET BENEFITS CALCULATION****Quebec**

Animal Health Improvement
Capital Grants - On-Farm
Consolidation of Feeder Cattle Farms
Extension
Farm Income Insurance Stabilization
Farm Loan Insurance Fund
Inspection
Interest Rate Rebate
Research

Saskatchewan

Capital Loan Program
Feed Adjustment Program - Crow Offset
Grants to Municipalities
Livestock Cash Advance

Table 5

**STATE PROGRAMS INCLUDED IN THE
NET BENEFITS CALCULATION****California**

California State College Expenditures
California Veterinary Diagnostic Lab System
Food and Agricultural District Fairs
Food and Agriculture Marketing and Agricultural Production
Meat and Poultry Inspection

Colorado

Agricultural Services Divisions
Colorado State Colleges Expenditure

Florida

Animal Industry
Florida State College Expenditures
Inspection
Marketing

Iowa

Iowa State College Expenditures

Kansas

Kansas State College Expenditures

Minnesota

Dairy and Livestock
Minnesota State College Expenditures

Montana

Inspection and Control Program
Montana State College Expenditures

Nebraska

Nebraska State College Expenditures

Oklahoma

Animal Industry Division
Oklahoma State College Expenditures

Table 5	
STATE PROGRAMS INCLUDED IN THE NET BENEFITS CALCULATION	
South Dakota	
South Dakota State College Expenditures	
Texas	
Texas State College Expenditures	
Washington State	
Commodity Inspection	
Washington State College Expenditures	

APPENDIX VII

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