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Reciprocal Access in U.S./Canadian Grain Trade Background Issues for the U.S. Grain Trade[*]

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Abstract

The purpose of this paper is to review past trade relations in the grains sector between the United States and Canada and to document trade barriers and the potential for the evolution of reciprocal trade. Historical trade flows between the United States and Canada in the grains sector are reviewed. Terms of recent trade agreements and other trade restrictions are described. Then, some of the important differences in the marketing system are described and compared as well as changes in the Canadian grain marketing system. Finally, the concept of reciprocal access is developed in the context of the evolving trading relations between these two countries.

Key Words: grain trade, U.S.-Canada trade, trade policy

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1. Introduction and Purpose

In the period spanned by the CUSTA and NAFTA agreements, grain trade between Canada and the United States has increased. The prevailing trade has been from Canada to the United States in raw grains in part due to U.S. farm programs, supply/demand factors, and marketing problems and constraints within Canada. There has been less trade from the United States to or through Canada, though it has occurred. During this period, there have also been important structural changes in the marketing systems, particularly in Canada, ultimately increasing pressures to integrate at least certain aspects of these marketing systems.

The Canada/U.S. Joint Commission on Grains recognized the importance of *reciprocal access* between these countries' marketing systems to mitigate some of the problems that have emerged. This paper develops the importance and context of reciprocal access in grain trading. Section 2 provides some background data on trade and trade barriers. Section 3 reviews previous studies. Section 4 identifies important differences in the marketing systems, and Section 5 concludes with a focus on principal issues in the future.

2. Status of Bi-Lateral Trade

2.1 Trade Volume 1990-current

Grain Commodities: Trade in wheat, barley, and oats between the United States and Canada largely flowed from Canada to the United States from 1990 to 1996 (Canada Grains Council).[1] Canadian exports of wheat to the United States increased from 290 *tmt* in 1990 to 2,172 *tmt* in 1993. Since 1993, wheat exports have declined to near 564 *tmt* in 1995 and were up to 955 *tmt* in the first 10 months of 1996. In contrast, U.S. exports of wheat to Canada have been less than 35 *tmt* per year, but were 62 *tmt* in the first 10 months of 1996. Durum exports to the United States behave similarly, increasing from 370 *tmt* in 1990 to a high of 466 *tmt* in 1993 and declining to 182 *tmt* in 1995. Exports of Canadian barley to the United States follow a similar pattern, increasing from 389 *tmt* in 1990 to 1791 *tmt* in 1993 and then declining to 782 *tmt* in 1995. Although exports of malting barley were higher in 1993 than in 1990, most of the large volume of barley exports to the United States in 1993 were due to exports of feed barley.[2] U.S. exports of barley to Canada have been limited, but increased to 8.9 *tmt* in 1995. Canadian exports of oats have steadily increased from 171 *tmt* in 1990 to 1400 *tmt* in 1995, while U.S. exports of oats have been less than 3.1 *tmt*.

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[1] All tables and figures are contained in the appendix.

[2] This is likely due to important differences in malting barley varieties (Wilson and Johnson 1995a) which may have constrained the potential for increased flows from Canada to the United States.

Exports of wheat, barley, oats, and products largely flowed from Canada to the United States from 1990-1996, reaching a peak in 1993 (Figures 1-5).

Semi-Processed Grain Commodities:[3] Wheat flour exports from Canada to the United States have similarly increased from 19 *tmt* in 1990 to 164 *tmt* in 1995 (Figures 1, 6). Much of this has been in spring wheat flour. Canadian exports of malt to the United States declined from 20 *tmt* in 1990 to 7.1 *tmt* in 1992. Since then, Canadian malt exports increased to 32 *tmt* in 1995. U.S. exports of malt to Canada were limited up to 1993, but increased to 11.8 *tmt* in 1995 (Figure 7). Canadian exports of wheat gluten to the United States declined from 9,619 *mt* in 1991 to 3,176 *mt* in 1995. Imports of gluten from the United States have ranged from a high of 1,000 *mt* in 1992 to a low of 109 *mt* in 1995 (Figure 8). Canadian and U.S. export trade of starch for food use has fluctuated with one country's exporting more than the other in different years. Canada has dominated export trade of starch for industrial use. U.S. exports of industrial use starch have been less than 555 *mt*, while Canadian exports have ranged from a high of 19,234 *mt* in 1993 to a low of 9,255 *mt* in 1995 (Figures 9-10).

2.2 Tariffs and Tariff Rate Quotas (TRQs) Under CUSTA and NAFTA

Under the CUSTA, annual support levels for wheat, barley, and oats were measured for the United States and Canada to govern trade restrictions. Under the agreement, when U.S. support levels were less than Canadian support levels (based on a moving average), Canadian import licenses would be removed. This occurred for oats in 1990 and wheat in 1991, and Canadian import licenses were removed for these commodities. However, primarily due to high EEP subsidies for U.S. barley, import licenses remained for exports of barley to Canada.

The North American Free Trade Agreement (NAFTA) replaced the Canada-U.S. Free Trade Agreement (CUSTA) by incorporating the phase-out schedules contained in CUSTA. Additional provisions in the NAFTA agreement included 1) Canada increased global import quotas for chicken, turkey, and shell eggs, while 2) the United States maintained the right to restrict imports to protect its price support programs for grains. Under Section 22, the United States applied TRQs on wheat during September 1994-1995. These provisions resulted in a series of disputes and negotiations restricting imports of Canadian wheat, primarily durum (Gardner, 1997). Under NAFTA, all tariffs (with few exceptions) were to be phased out by January 1, 1998.[4]

On July 31, 1995, Canada eliminated its import licensing requirements for wheat, barley, and their products on an MFN basis. The next day, Canada implemented TRQs (Tariff rate

[3] In addition to these grains and semi-processed products, the volume of trade in further processed and consumer products has escalated. See Krause, Dooley, and Wilson for a summary of that trade.

[4] NAFTA tariff rates for market access to Canada for specified commodities in 1996 are listed in Appendix Table 1.

quota) for these products. These are the WTO commitments. Under the WTO/Uruguay Round, non-tariff barriers were converted to tariffs. Many import quotas were converted to TRQs which provided for within-quota quantity and generally high over-quota tariffs. Under GATT requirements, TRQ access commitments are to be increased, within-quota tariff rates are subject to reduction, and over-quota tariff rates are to be lowered over 6 years.[5]

In 1996, Canada applied the NAFTA tariff rates on wheat imported from the United States, but counted U.S. wheat imports toward WTO access commitments (Appendix Table 1). For barley and malt, Canada did not apply the NAFTA tariff rates (Appendix Table 2), but instead applied the higher WTO over quota tariff rates (Appendix Table 3). Canada argued that licensing requirements established before the WTO agreement allowed it to apply these over quota tariff rates and TRQs and that this was consistent with NAFTA. The United States filed a complaint under NAFTA for these WTO tariffs for dairy, poultry, and barley products as applied to imports from the United States.

The United States lost this challenge. Canada won a unanimous decision by all panel members, indicating that Canada has the right to apply the tariffs that were agreed to in the WTO agreements on imports of U.S. dairy, poultry, egg, margarine, and barley products and that these tariffs are consistent with the provisions of NAFTA. Under NAFTA, Canada was allowed to maintain quantitative import restrictions against certain U.S. imports. However, under the WTO, Canada is obliged to end its quantitative import restrictions and has the right to convert them into tariff equivalents (Department of Foreign Affairs and International Trade).

The under-access tariff for barley and barley products was set to be eliminated in January 1998, and actual imports of barley have not reached the under-access limit. This suggests that other factors are limiting the movement of barley into Canada.

Tariff rate quotas on barley and barley products were a major item at trade talks between U.S. and Canadian negotiators. Following these talks in Ottawa in September 1997, the Canadian government indicated it would suspend application of tariff rate quotas on U.S. barley and barley products (Elliot).

2.3 Other Trade Restrictions

End-use Certificates: Under implementing legislation for NAFTA, the USDA was required to implement an end-use certificate system to monitor imports of all wheat or barley from all countries with similar requirements as of April 8, 1994. Canada was the only country imposing end-use certificates on U.S. wheat and, as such, is the only country affected by the regulations. End-use certificates were implemented on February 27, 1995, for all wheat entering

[5] TRQ access commitments for U.S. exports to Canada for 1995/1996 and 2000/2001 are shown in Appendix Table 2.

the United States from Canada. Since Canada does not require end-use certificates on barley, end-use certificates were established for wheat only.

Final rules for end-use certificates require U.S. importers to store Canadian-produced wheat separately from other stocks to preserve its identity until it is delivered for export, or to the exporter, or end user. Importers can commingle Canadian and U.S. wheat when it is being loaded for delivery to the end user. However, exports of Canadian grain cannot be shipped under U.S. export subsidy and other export programs (including EEP, GSM, and PL480). End-use certificates were established to restrict the use of Canadian grain in U.S. export subsidy programs, but do not prohibit the commingling of Canadian wheat for use in domestic food aid programs. Importers are required to submit end-use certificates to the Farm Service Agency (FSA) within 15 work days of the grain's entering the United States. All sales and resales of Canadian-produced wheat are required to be reported within 15 days of the sale. Exporters and end users are also required to submit quarterly reports on consumption amounts and methods (USDA-ERS, *Wheat Situation Yearbook*, 1995; NGTC, *Issue Update*, 1995).

Canada also has import requirements for U.S. wheat. Imports for human consumption must have an end-use certificate and remain segregated from Canadian wheat.[6] Imports of U.S. wheat for feed must have a certain percentage that are colored and must be denatured. An import permit is required under the Plant Protection Act at no fee, and a phytosanitary certificate must be obtained from the Canadian Grain Commission. Further, if delivery of U.S. wheat imports is to a licensed Canadian elevator, the elevator operator must have received prior authorization from the Canadian Grain Commission. CGC authorization will be given only if it is satisfied that elevator capacity and procedures would ensure that Canadian and U.S. grains would not be commingled (Agriculture Canada). The Canadian government has indicated that these requirements are needed to maintain the integrity of the Canadian grain handling system.

Debate has focused on removing end-use certificates in both Canada and the United States.[7] The Joint Commission on Grains proposed this change. The National Grain Trade Council indicated that end-use certificates will put increased demands on the domestic market and infrastructure. Significant reporting requirements are required along with the requirement to preserve identity of the grain.

*Phytosanitary and environment issues (Karnel Bunt, Flagsmut, Dwarf Bunt, and TCK Requirements)**:*** Canada established restrictions for karnal bunt on imports of U.S. grains on March 26, 1996. Under this policy, durum wheat from the continental United States and barley, oats, sorghum, and millet from Arizona, California, New Mexico, and Texas are prohibited from entering Canada. Wheat other than durum and other grains not infested with karnal bunt and flag

[6] These end-use certificates inhibit resale of the grain, thus reducing the flexibility of Canadian end users.

[7] This debate continues. U.S.-Canada discussions in Ottawa focused on end-use certificates with further talks scheduled (Elliot).

smut and from an approved elevator on the U.S. approved elevator list can enter Canada, but must be certified as karnal bunt free (Alberta Agriculture, May 12, 1996). Proof of where the seed was grown must be provided.

Variety Control: Imports of grain for seed into Canada are controlled by the Canada Seeds Act. Regulations to import grains for seed use are very extensive. Seed varieties must undergo a rigorous variety approval process to be sold in Canada. Varieties must meet requirements for agronomic, disease resistance, visual distinguishability, and end-use quality parameters. If varieties fail in any of these areas, they can be rejected. In the Canadian marketing system, varieties within a class must be visually distinguishable from other classes. Specifically,

> The criteria for variety approval comprise scientific as well as non-scientific factors. This system of variety control is considered a key element of the Canadian grain quality system. The Canada Seeds Act regulations are currently under review; Agriculture Canada officials hope to finish a regulatory overhaul in Spring 1996, USDA-FAS, p. 43.[8]

This requirement has been argued to reduce the number of varieties released and has been identified as one of the requirements that could potentially be changed.[9]

3. Inquiries/Studies

Reciprocal trade issues between the United States and Canada have been studied. Of particular note is the Canada/U.S. Joint Commission on Grains study. The Joint Commission examined all aspects of the two countries' marketing support systems for all grains and the effect of those systems on the Canadian and U.S. markets and on competition between the two countries in third country markets. The Joint Commission identified a number of conditions affecting cross-border trade in grains: 1) differences in domestic programs and support levels, 2) strain on U.S. northern tier infrastructure by increased Canadian imports, 3) increased Canadian shipments lowered local U.S. prices, 4) weather effects on trade flows, and 5) limited access to Canadian markets by U.S. producers and shippers.

In addition, agreements, while reducing barriers to trade still have limitations: 1) the general nature of agreements make it difficult to deal with local and specific commodity trade issues; 2) complex, costly, and time-consuming nature of dispute resolution makes it difficult for producers to access these provisions; 3) full commercial arbitrage is limited unless full reciprocal access to each country's domestic markets, grain handling, and transportation facilities is achieved; and 4) trade agreements do not necessarily include provisions to anticipate and respond to emerging trade issues (Canada-United States Joint Commission on Grains, p. 65).

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[8] This was completed in Spring 1997.

[9] Dahl and Wilson provide an extensive review of these provisions and differences.

After extensive deliberations, the Joint Commission made some important recommendations to facilitate the changing competitive and trade environment for grain trade between these countries: 1) policy coordination between the United States and Canada to reduce the trade-distorting effects of policies, 2) establishment of a bilateral producer/industry based consultative committee to anticipate and provide appropriate and timely recommendations to industry and/or governments for preventive actions to address short-term cross-border issues, 3) grain inspection services in both countries to standardize measurements between countries, 4) Canada to examine the non-registered varieties, 5) both countries to eliminate end-use certificates, 6) Canada to deregulate its rail transportation system, 7) both countries to monitor the use of the river system with respect grain movements and agree to seek solutions if problems become apparent, 8) both countries to eliminate export subsidies and excessive discriminatory pricing practice, and 9) that Canada not apply WTO tariff rate quotas on barley (Canada-United States Joint Commission on Grains).

The Joint Commission also indicated that a longer-term objective is to provide reciprocal access over time (p. 95). Issues surrounding the idea of *reciprocal access* were identified in a number of the research papers prepared for the commission. Though the concept was not completely defined, several authors discussed it. Gray and Gardner identified many of the domestic farm programs affecting reciprocal trade. Furtan and Abel identified transparency and differential pricing aspects affecting reciprocal trade. Wilson, Johnson, and Dahl and Loyns and Kraut indicated factors affecting spatial arbitrage. The main body of the report prepared by the commission focused on reciprocal trade. It was pointed out that Canada has less impeded access to the U.S. system than do U.S. firms to the Canadian market. Areas identified of importance for reciprocal access include increasing environmental regulations, differences in grading systems between the two countries, and the impact of Canadian varietal control regulations on reciprocal access.

During the Joint Commission's discussions, numerous issues were identified about problems in the Canadian marketing system. However, the prevailing view was that these were Canadian problems and should be addressed in Canada, as opposed to the Joint Commission. Thus, subsequently and/or in response, Canada initiated its own internal inquiry to identify important changes for the future, particularly given changes within the North American marketing system. The Western Grains Marketing Panel's (WGMP) report examined all aspects of the marketing of western Canadian grains, oilseeds, and specialty crops. The objective of this review was to provide a basis for Canada's future marketing system to be dynamic, efficient, effective, and responsive to best serve the needs of farmers, customers, and other stakeholders. Many of the recommendations by the WGMP would have been responsive to issues surrounding reciprocal access.

One aspect examined was the potential for shipping Canadian grain via the U.S. transportation system. Young reports that a study by the Transport Institute found that in specific situations, transhipment of Canadian grains would be feasible. Primary routes were shipment of grain by barge to the gulf, by rail to the gulf, and, in special cases, from the western prairies

through Montana to the Pacific Northwest. This last route was most feasible when deliveries were made directly to U.S. elevators (Young).[10]

Concurrent and as input into the WGMP, Kraft et al. analysed actual transaction prices for exported Canadian wheat. Results were important since their analysis indicated that on average, the CWB captured premiums of $13/mt from 1980 to 1994. In addition, this study identified several virtues of the Canadian system that warranted the premiums: quality (notably cleanliness and consistency), market development, and technical assistance. The Exchange Group interviewed importers to identify the relative performance of the CWB versus marketing systems of other exporting countries.

The WGMP made 33 recommendations for changes in the Canadian marketing system. Those of particular importance for trade within North America include 1) restructure the governance of the CWB, 2) allow the CWB to make cash purchases, 3) allow for an option of spot and forward cash prices made available to farmers by the CWB for a portion of their sales of licensed wheats excluding durum, 4) restrict the total amount of wheat available for pricing outside the pool to not less than 25% of total farmer deliveries, 5) change to an open marketing system for feed barley, 6) maintain malting barley sales only through the CWB, 7) develop a controlled Identity Preserved (IP) system that would allow unlicensed varieties (U.S.) in an IP system operated by the CGC, 8) institute more rigorous government controls on strikes and lockouts in the grain handling and transportation system, and 9) resolve the problem of vessel delays at the Port of Vancouver by having Transport Canada take a lead role on an urgent basis. However, the Canadian government has not incorporated the major recommendations into legislation, but has proposed letting the new governance of the CWB act on these recommendations when needed.

Several studies (including Johnson and Wilson and Young), have addressed some of these issues, but in a broader context of policy differences. Wilson and Johnson (1995b) analyzed the impacts of critical U.S. policies on North American trade in the barley sector. Of interest to this study was that both the EEP and CRP induced imports from Canada and that changes in the WGTA rail rates would also have increased exports from Canada to the United States.

Young examined the impacts of changes in Canadian grain policies and implications for Montana's grain industry. She found that changes in Canada's rail system will increase shipping rates in Canada substantially, increasing the incentive to export Canadian grain either through or to the United States. Specific comparisons of the shipping rates indicated that shipment of Canadian grain to the Pacific Northwest is not competitive. However, shipment either by rail or rail/barge from Rosetown to the U.S. gulf was cost competitive with both rail and rail/Laker shipments from Rosetown to Quebec City. Young reviewed other studies (Producer Payment Panel and Johnson and Wilson) and examined effects of Canadian wheat imports on Montana

[10] Since then, there have been shipments of unit trains direct from Winnipeg to the U.S. PNW ports from export.

prices for wheat. She indicated that even though other studies did find that changes in grain policies would increase wheat imports, the estimated price effects of wheat imports in Montana and the United States ranged from less than 1 to 2 cents/bushel by Alston, Gray, and Sumner, and Marsh and Johnson.

Even though changes in Canadian grain policies would increase incentives to export grain either to or through the United States, the amount of exports to the United States is largely under control of the Canadian Wheat Board. The CWB markets all board grains (wheat and barley). As such, wheat not sold to the United States through the CWB must be bought back either by the farmer or grain elevator to be sold into the United States. The CWB controls the amount of exports through this process as it sets the buyback price. In practice, most of the wheat bought back for resale to the United States has been done by the grain elevators. Young also suggested that the CWB restricts exports to the United States to avoid retaliation.

4. Marketing System Differences and Changes Toward Integration

Future cross-border trade prospects will be affected in part by the trade policy environment, but also by differences and commercial changes in the marketing system. There are several important fundamental differences among these marketing systems. In addition, some important changes are occurring.

***Canadian Rail Shipping Regulations*:** There are important differences between the rail shipping systems in the two countries that could affect future trade flows. One is that though Canadian rail rates have been increased, they are still less than those that apply from similar U.S. shipping points. These differences are particularly notable in the Northern tier regions of North Dakota and Montana.[11] If everything else is the same with equal access, this difference is important because it should induce some U.S. grain to move to or through the Canadian marketing system. Through this process, the potential for cross-border trade would provide competition to shipping regimes for U.S. grains. Canadian shippers are not treated differently when using the U.S. transportation system and generally have equal access to its capacity at non-discriminatory rates. This would not be true for U.S. shipments through Canada.

Canadian Railcar Allocation: Railcar allocation in Canada is highly administered based on past shipping practices. One important distinction is between the allocation of cars for shipment of CWB grains versus non-board commodities.[12,13] CWB cars are allocated by the railroads for movements of CWB grains, and those cars are allocated by the CWB to its

[11] Fulton and Gray indicated that these differences are as much as $1/bushel.

[12] This system is under dispute in Canada and is under pressure for change. For an extensive review of the evolution of car allocation in the United States, see Priewe and Wilson.

[13] This is notwithstanding the potential implications of various forms of government-owned cars in Canada.

designated shippers and train runs (zones have been proposed) for the movements of CWB grains. The other portion is allocated by the CAPG (Car Allocation Policy Group, a temporary mechanism to replace a previous regime called the Grain Transportation Authority) as non-board allocator, for the movement of non-board grains (i.e., for movements not controlled by the CWB). Normally, these are oats, canola, etc., but would also include any shipments of U.S. grains to or through the Canadian grain marketing system. Thus, allocation of railcars in Canada for shipment of U.S. grains could affect the viability of trade flows to the extent that there are differences between CWB and non-CWB grains. This is in contrast to U.S. railroads which do not distinguish country of origin in allocation of cars, i.e., Canadian shippers have equal access to U.S. railcars through tariff and contractual allocation mechanisms.

Regulated Rail Rates on Grain: Changes in the WGTA increased rail shipping costs paid directly by shippers (previously, the total cost was similar, but a portion was paid directly by the government of Canada to the railroads). It is important that the new higher rail rates (specifically, that portion paid by the shipper) are still substantially less than comparable rates in the United States. However, the legislation (Canada Transportation Act, Division VI *Transportation of Western Grain)* states specifically that these rates are for the movements of "any grain or crop included in Schedule II that is grown in the Western Division... (p. 70) for movements to Thunder Bay or Armstrong... and specifically excludes shipment to British Columbia ports for shipment to the United States." Thus, any U.S. grain moving to/through Canada would not necessarily have access to these rates.

The underlying legislation provides the formula for rate determination and describes its application. Specifically, it establishes a maximum rate scale. These rates are frozen to the year 1999 at which time they become subject to the CTA, unless challenged otherwise.[14] The important point is this is a much different regulatory regime than what exists in the United States, and it clearly only applies to grains grown in Western Canada.

Structural Changes in Canadian Grain Handling and Processing: During the past decade, there have been radical changes in the structure of the Canadian grain marketing system. While the dynamics of these changes seem extreme, it is important that it is likely a result of the cumulative impacts of numerous pressures.

Grain Handling: Before the early 1990s, the Canadian grain handling industry was largely dominated by Canadian pools and a few Canadian private firms. The only major U.S. firm with Canadian handling assets was Cargill which had been in Canada for many years. Numerous pressures have emerged for structural changes including, but not limited to, changes in the rail rate regime and the emergence of a North American marketplace for procurement.

As a result of these and the ensuing competitive dynamics, there have been numerous changes. Each of the Canadian firms and pools is in the process of rationalizing its own systems,

[14] This is likely one of the goals of the CTA dispute about Canadian grain shipments.

resulting in fewer larger-scale country elevators. It is notable that in many cases, these new facilities have the ability to condition grains at the origin similar to that traditionally being done exclusively at export terminals. In addition, two major U.S. firms have entered the industry. ConAgra has entered with new construction of country elevators throughout the prairies, and ADM created a strategic alliance with UGG with options for procurement. The cumulative effect of these changes will likely create an environment with excess handling capacity, greater efficiency, lower marginal costs, and more intense competition for origination.

Structural Changes in Canadian Processing: In addition to these changes, there have been notable structural changes in the Canadian grain processing sector. First, due to growth in the Alberta feeding industry, that province has gone from being a large feed surplus region to potentially and periodically a feed deficit region.[15] In addition, ConAgra has announced a proposed bio-fuel additive plant to be located in Alberta.

The second important change is that several of the major grain processing firms have been acquired by U.S. firms. This includes the acquisition of Canada Malt (the largest malting company in Canada which also owns malt plants in the United States and elsewhere) by ConAgra. In addition, several other Canadian malt plants have taken various forms of U.S. firm ownership.[16] Similar changes have occurred in the Canadian flour sector where ADM (through acquisitions of Canadian-owned plants and, subsequently, a major acquisition of plants owned by a joint venture between MapleLeaf Foods and ConAgra) has established the domineering position.

Changes in Cross-border and Export Infrastructure: There have also been changes which may or will directly make cross-border shipping more efficient and attractive. One of these has been the establishment of handling facilities located at U.S. border points with rail access. These include the joint ventures between Alberta Pool and General Mills at Sweetgrass and the venture between Saskatchewan Wheat Pool and General Mills at Northgate. While some have initially promoted these as being primarily for shipment from Canada to the United States, their strategic development has been to develop and facilitate trade in both directions, varying by commodity and depending on market conditions over time. These are likely natural logistical channels for shipping U.S. feed grains into western Canada and potentially for shipping U.S. grains through Canada to offshore export.

A second change that has potential long-term implications is an announced expansion of export-handling capacity at Roberts Bank in southern British Columbia. This is notable because west coast handling capacity in southern Canada has been constrained which, in fact, is likely an important cause for the escalation of movements of Canadian grain to/through the United States.

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[15] An important movement is for barley to be shipped from Saskatchewan to Alberta, and periodically other feeds are shipped from the United States.

[16] Wilson and Johnson 1995b provide a description of the globalization of the malt industry, and Wilson describes similar changes in flour.

This constraint has also generally limited the ability of U.S. grains moving to/through Canada. In the future, this expansion could provide the needed capacity relief necessary to expand Canadian west coast exports.

5. Reciprocal Access: Principal Issues

One of the visions of the Joint Commission was that ultimately, pressures will escalate for greater integration between the marketing systems in Canada and the United States. The commercial process toward integration of these systems has escalated, which, in the future, will add to pressures to harmonize as much as possible marketing, and possibly policy, mechanisms.

For these reasons, the term *reciprocal access* has been promoted as a concept for discussion about changes to reduce trade frictions. This term was conceived during the Joint Commission process and ultimately held as an ideal longer-term goal.[17] Reciprocal access is an acknowledgment that each country's marketing and policy mechanisms have certain positive virtues and, in a more integrated environment, should be accessible to growers on each side of the border. Notwithstanding the trade barriers, reciprocal access should be viewed as a longer-term goal. The concept can be addressed from two different scopes. One is from the perspective of broader policy mechanisms in which growers would have reciprocal access. The other is that growers would have reciprocal access to certain features of each country's marketing mechanisms and infrastructure.

5.1 Reciprocal Access to Agricultural (Broader) Policy Mechanisms

Farm policy mechanisms on each side of the border have effects on either price differentials and/or trade flows. Of particular importance and interest in the United States, these include the of EEP (supporting U.S. prices relative to Canadian and off-shore)[18] and CRP

[17] In trade discussions reported in January 1998, the United States suggested a pilot project to allow U.S. grain to be shipped directly to Canadian elevators. This is obviously an effort toward effectuating the possibility of reciprocal trade (*Western Producer*). Another step in that direction occurred on January 26, 1998 when the Canadian Grain Commission identified facilities in the Southern prairies that would be eligible to receive grain from U.S. producers (*Agriweek*).

[18] Johnson and Wilson demonstrate the impact of EEP on trade flows in the North American market. Most important is that EEP has the effect of increasing Canadian prices by 7¢/bu.(U.S.) and flows from Canada to the United States by 870,000 mt.

(resulting in reduced production in the United States and therefore supporting prices).[19] In Canada, these would include the initial payment guarantees[20] and the pooling system.[21]

5.2 Reciprocal Access to Marketing System Mechanisms

Some important competitive functions of the marketing system in each country are denied cross-border participants in some cases. In a marketplace with greater reciprocal access, cross-border trade may occur due to these differences.

In Canada, these include CWB marketing mechanisms to capture premiums,[22] lower rail rates, and preferred car allocations. These marketing functions are limited to operate solely for grains produced in western Canada. In contrast, when and as Canadian grain is exported to/ through the United States, it has full non-discriminatory access to comparable U.S. functions. The U.S. handling and shipping system generally has adequate capacity and is efficient enough to induce cross-border shipments. These are purely commercial and non-discriminatory with respect to country of origin.

Reciprocal access involves having access to each country's marketing system (and policy infrastructure). Potential benefits of the U.S. marketing system includes access to transport infrastructure (rail, road infrastructure, barges and port infrastructure), elevators, and risk transfer through U.S. futures markets. While these are primarily a result of commercial relationships and mechanisms, in a number of dimensions, the public sector is involved through providing infrastructure, services, and a regulatory framework.

There is minimal movement of U.S. grains to/through Canada; however, in the future (with expansion of west coast ports and more direct cross-border and bilateral linkages), the likelihood/frequency of U.S. grains moving to/through Canadian infrastructure will increase. At that time, issues related to these barriers and differences will escalate.

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[19] Johnson and Wilson indicated that the CRP in barley has the effect of increasing Canadian barley prices and exports to the United States.

[20] Wilson, Johnson, and Dahl indicated that the value of these was about 10 cents/bu during 1994/95.

[21] In addition, access to the protected barley market (particularly malting barley and malt) would have been an advantage. Trade restrictions in this sector allowed premiums to accrue for malting barley within Canada, but restricted access to this market for U.S. growers. The effect of this has likely diminished with the elimination of TRQs on barley and barley products.

[22] Kraft et al. demonstrate that the CWB is capable of capturing premiums relative to a system with multiple sellers.

5.3 Summary and Pressures for Change

Numerous pressures have evolved to integrate the grain marketing systems in North America. Most important among these include differences in relative supply and demand for specific grain qualities and the demand for alternative logistical channels given changes in world grain trade. In addition, differences in farm and export policy mechanisms have in some cases induced trade distortions and hampered an easy transition to a more fully harmonized system.

Commercially, the grains sector of North America is becoming harmonized more rapidly than is the policy environment. The commercial integration will likely be a two-stage process. First, firms will become more integrated through asset ownership etc. As this is being done, the next stage will be pressures to standardize commercial practices across the geographic region. This is the stage that is yet to evolve. It is interesting that the commercial integration is leading, even though it would likely be more ideal if the policy environment was harmonized first. The fact that the commercial sector is leading the way toward integration suggests that eventually it will provide added pressure to harmonize the policy differences.

As these systems become more integrated there are lessons for each country. For the United States, it is important that farm and export policy mechanisms that are initiated unilaterally are antiquated and counter productive within a freer North American marketing system. Notable among these are the CRP and EEP programs which were each conceived in an era prior to freer trade within North America. In addition, commercially it is important that a portion of the trade that has been induced has been in response to quality shortages and particularly the effects of vomitoxin in the Northern Plains.

A number of issues continue to be important to Canada and will evolve as these systems integrate. The CWB will continue to be the focal point, both within Canada and from the United States. Pressure from the latter will persist so long as the CWB is perceived to have some instilled advantages due to its statutory nature, relative to non-statutory rivals. In addition to this pressure which is not new, two others will likely become important. One is that pressure will eventually emerge on the transaction costs associated with CWB marketings. New entrants into the Canadian grain marketing system were induced partly due to the opportunities associated with rapid structural changes in the industry and to rival the potential market power of incumbents. However, no doubt, once the initial structural dynamics are determined, one of the objectives that will emerge by these new rivals will be to exploit vertical efficiencies, in part due to intra-firm transactions. In the process, if intra-firm transaction costs are less than those of conventional procurement practices, then purchasing through the CWB system will be challenged.

The second pressure will emerge in response to the apparent discriminatory nature or some of the policies governing grain marketing in Canada which gives domestically produced grains an advantage in movements through Canada relative to those produced in the United States. Reciprocal access is already an important issue confronting the future North American grain marketing system. Recognizing that each country's marketing and policy mechanisms have

certain positive virtues is important, and the major issue is the extent that these should be accessible to growers on each side of the border. There are important differences in the marketing mechanisms (functions) and commercial environments determine their bilateral accessibility. In general, in the United States, these functions are performed non-discriminatorily with respect to country of origin. In contrast, in Canada, there are several very important functions (notably those related to shipping and handling) that would treat U.S. grains differently from Canadian grains.

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Appendix Tables and Figures

Appendix Table 1. Canadian NAFTA Tariffs on Grains and Selected Products - 1996.

HS Code	Description	NAFTA Tariff
1001	Wheat	C$0.884/MT
1002	Rye	Free
1003	Barley	C$0.460/MT
1004	Oats	Free
1005.10.10	Corn - Seed, Yellow Dent	C$0.394/MT
1005.10.90	Corn - Seed, Other	C$0.630MT
1005.90.10	Corn - Other, Yellow Dent	C$0.394/MT
1005.90.90	Corn - Other, Other	C$0.630/MT
1006.1	Rice - In Husk	Free
1006.2	Rice - Husked	Free
1006.3	Rice - Semi/Wholly Milled	C$1.102/MT
1006.4	Rice - Broken	Free
1101	Wheat Flour	C$1.124/MT

Source: USDA-FAS Grain and Feed Annual Attache Report - Canada 1996.

Appendix Table 2. Tariff Rate Quota Access Commitments for 1995/1996 and 2000/2001.

Product	1995/1996	2000/2001
Wheat	136,130	226,883
Barley	239,400	399,000
Wheat Products*	123,557	123,557
Barley Products*	11,478	19,131

* Grain Equivalent.
Source: USDA-FAS.

Appendix Table 3. Canada WTO Tariffs for Major Grains (Effective August 1, 1995).

HS Code/Description	Base Rate of Duty	Bound Rate of Duty	Implement Period
1001 Wheat			
1001.10 Durum Wheat			
-1001.10.10 W/in access commit.	4.41C$/MT	1.90C$/MT	1995/2000
-1001.10.20 Over access commit.	57.7%	49.0%	1995/2000
1001.90 Other Wheat			
-1001.90.10 W/in access commit.	4.41C$/MT	1.90C$/MT	1995/2000
-1001.90.20 Over access commit.	90.0%	76.5%	1995/2000
1002 Rye	Free	Free	1995
1003 Barley			
For Malting			
-1003.00.11 W/in access commit.	2.30C$/MT	0.99C$/MT	1995/2000
-1003.00.12 Over access commit.	111.4%	94.7%	1995/2000
Other Barley			
-1003.00.91 W/in access commit.	2.30C$/MT	0.99C$/MT	1995/2000
-1003.00.92 Over access commit.	25.1%	21.3%	1995/2000
1004 Oats			
-1004.00.10 W/in access commit.	Free	Free	1995
-1004.00.20 Over access commit.	18.12C$/MT	Free	1995
1005 Corn			
Seed			
-1005.10.10 Yellow Dent Corn	1.97C$/MT	1.26C$/MT	1995/2000
-1005.10.90 Other	3.15C$/MT	2.02C$/MT	1995/2000
Other Corn			
-1005.90.10 Yellow Dent Corn	1.97C$/MT	1.26C$/MT	1995/2000
-1005.90.90 Other	3.15C$/MT	2.02C$/MT	1995/2000

Appendix Table 3. (cont.)

HS Code/Description	Base Rate of Duty	Bound Rate of Duty	Implement Period
1006 Rice			
-1006.10.00 In Husk	Free	Free	1995
-1006.20.00 Husked	Free	Free	1995
-1006.30.00 Semi-milled, etc.	5.51C$/MT	3.53C$/MT	1995/2000
-1006.40.00 Broken	5.51C$/MT	3.53C$/MT	1995/2000
1101 Wheat or Meslin Flour			
-1101.00.10 W/in access commit.	5.62C$/MT	2.42C$/MT	1995/2000
-1101.00.20 Over access commit.	164.50C$/MT	139.83C$/MT	1995/2000
1107 Malt			
Not Roasted, Whole			
-1107.10.11 W/In access commit.	7.30C$/MT	3.10C$/MT	1995/2000
-1107.10.12 Over access commit.	184.70C$/MT	157.00C$/MT	1995/2000
Not Roasted, Other			
1107.10.91 W/in access commit.	11.00C$/MT	4.70C$/MT	1995/2000
1107.10.92 Over access commit.	188.40C$/MT	160.10C$/MT	1995/2000
Roasted, Whole			
1107.20.11 W/in access commit.	7.3	3.1	1995/2000
1107.20.12 Over access commit.	166.5	141.5	1995/2000
Roasted, Other			
1107.20.91 W/in access commit.	11	Free	1995/2000
1107.20.92 Over access commit.	184.7	Free	1995/2000
Wheat Starch			
1108.11.10 W/in access commit.	22	9.5	1995/2000
1108.11.20 Over access commit.	276	237.9	1995/2000

Appendix Table 3. (cont.)

HS Code/Description	Base Rate of Duty	Bound Rate of Duty	Implement Period
1109 Wheat Gluten			
-1109.00.10 W/in access commit.	17.5%	7.5%	1995/2000
-1109.00.20 Over access commit.	467.4	397.3	1995/2000

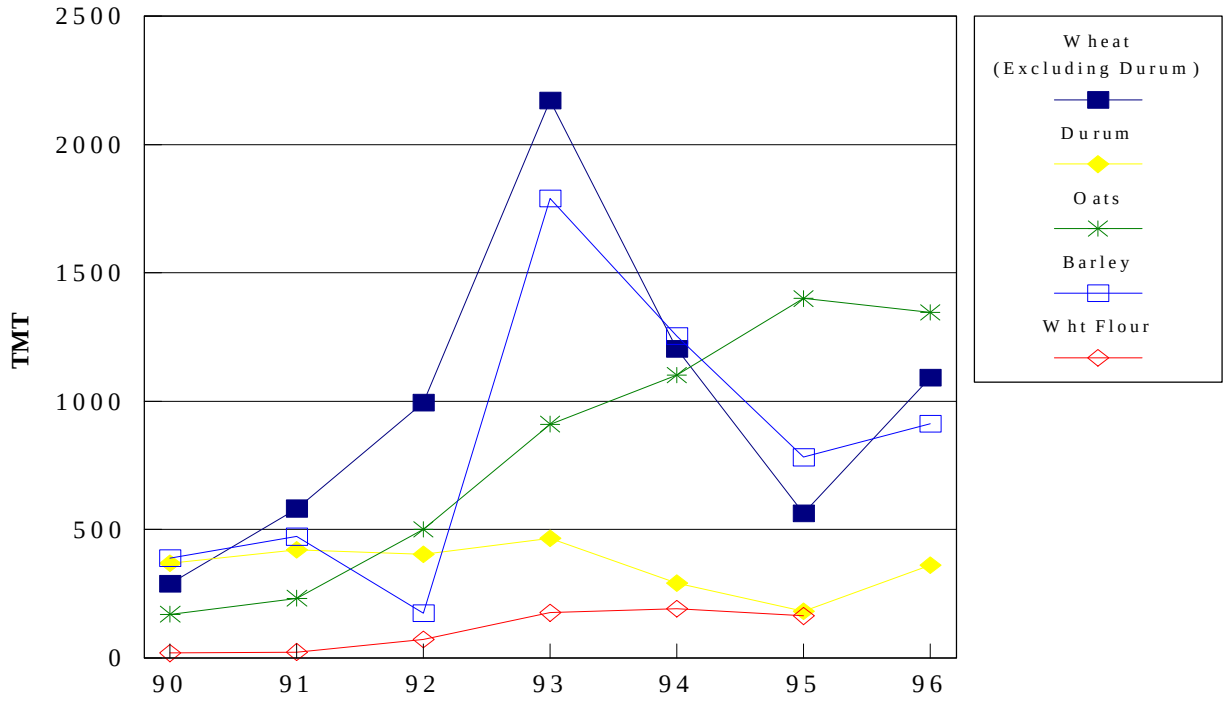

Figure 1. Canadian Exports to the United States, 1990-1996.

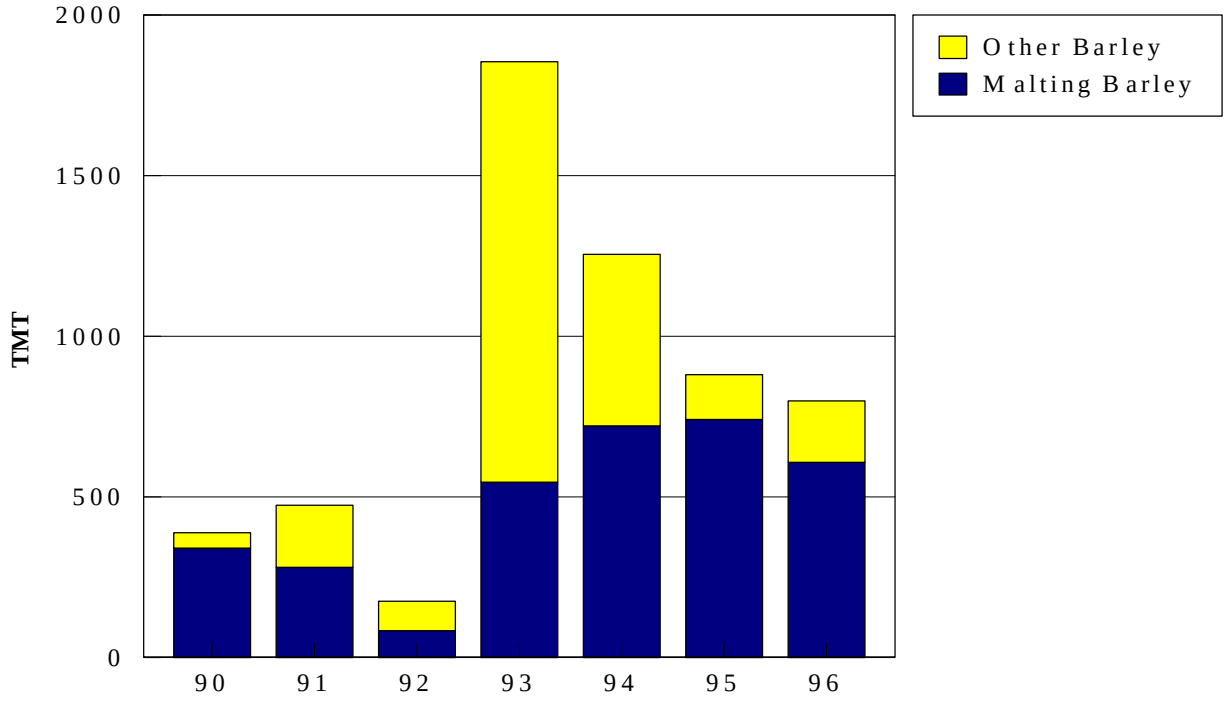

Figure 2. Canadian Barley Exports to the United States, by Type, 1990-1996.

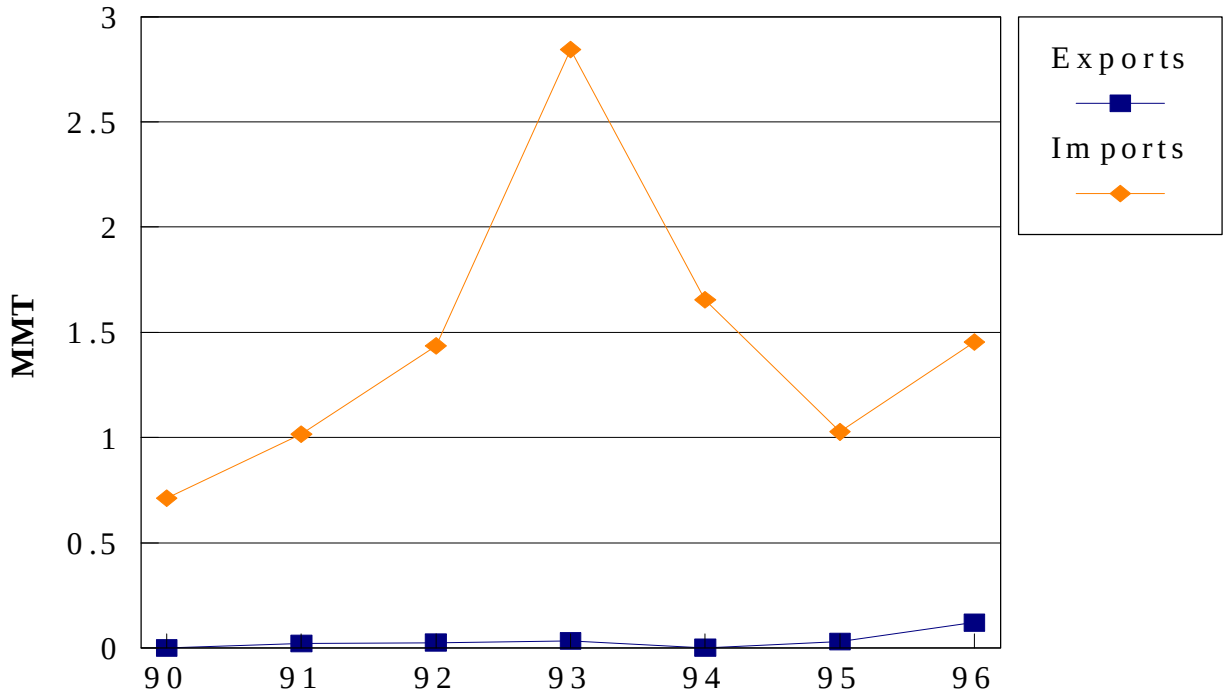

Figure 3. U.S. Wheat Exports to and Imports From Canada, 1990-1996.

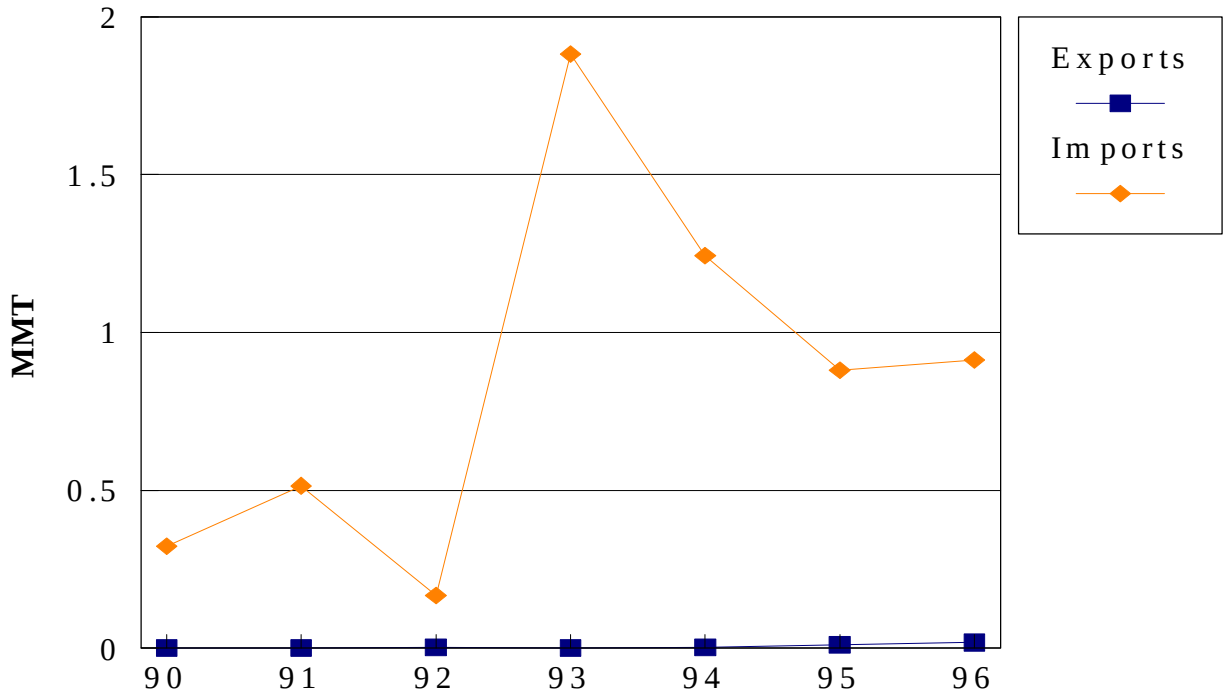

Figure 4. U.S. Barley Exports to and Imports From Canada, 1990-1996.

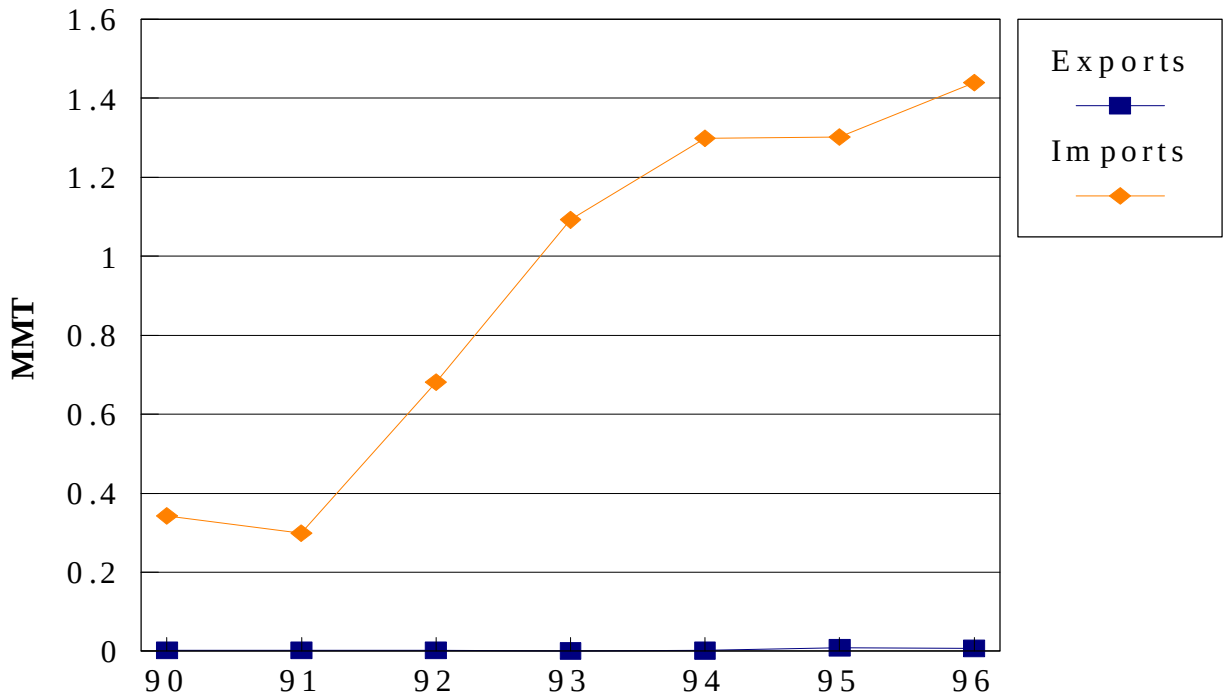

Figure 5. U.S. Oats Exports to and Imports From Canada, 1990-1996.

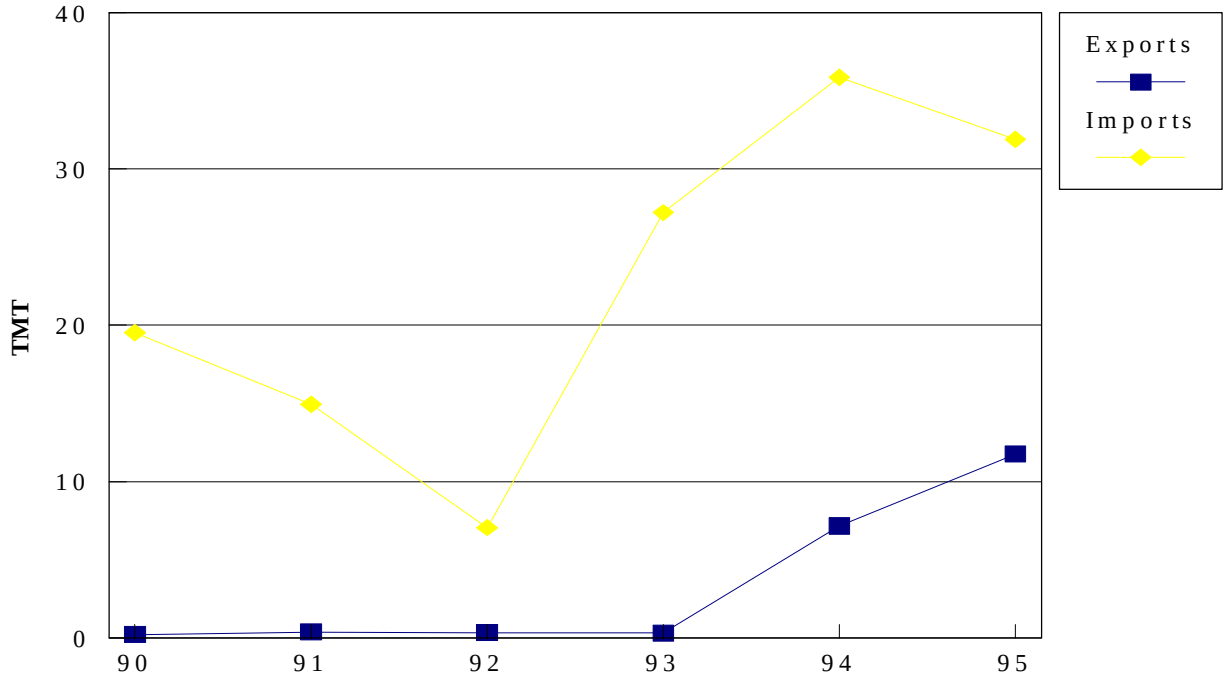

Figure 6. U.S. Malt Exports to and Imports From Canada, 1990-1995.

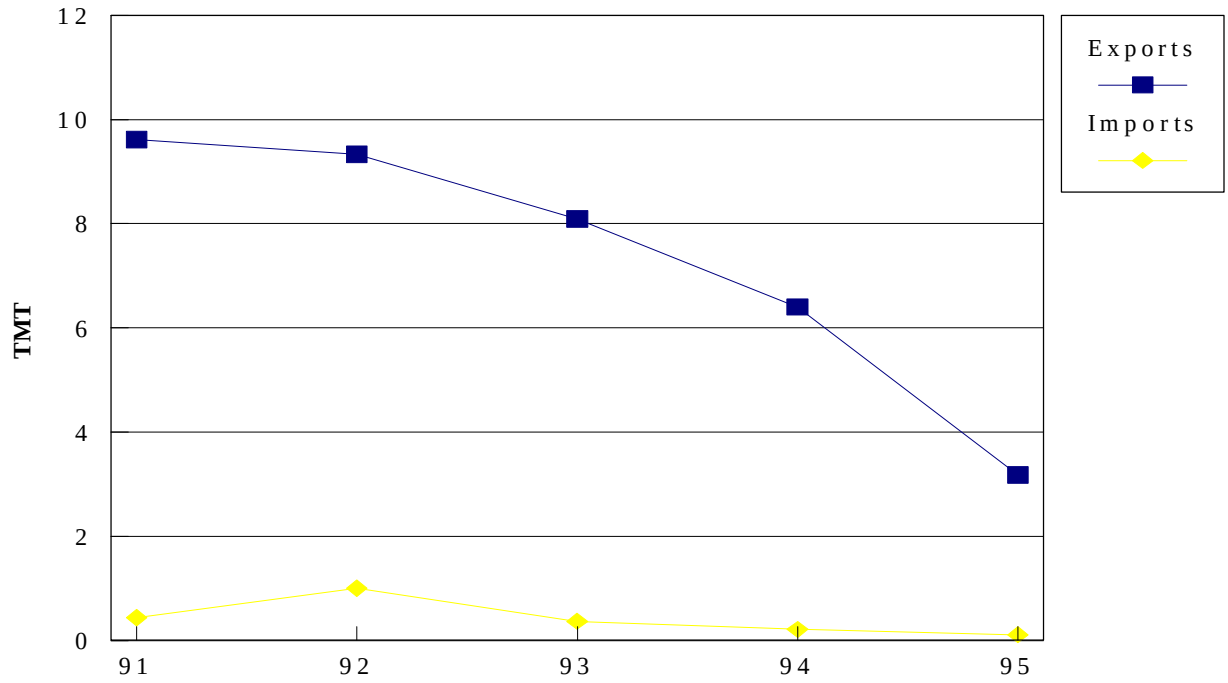

Figure 7. Canadian Exports and Imports of Gluten to the United States, 1991-1995.

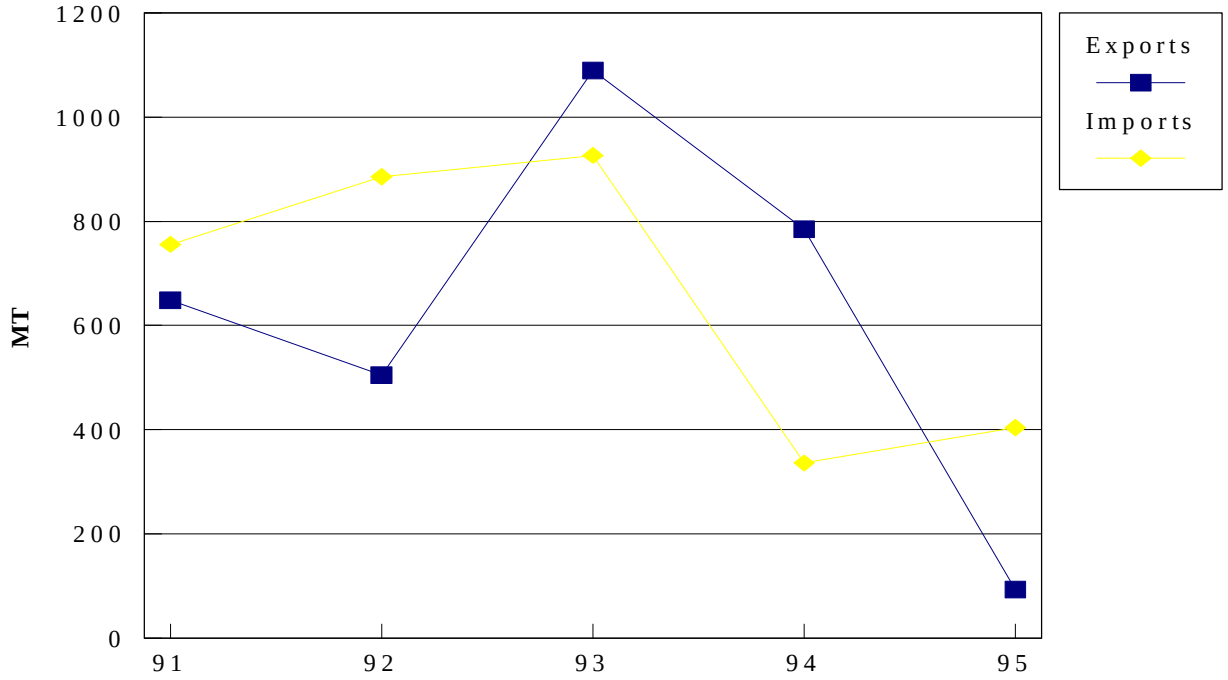

Figure 8. Canadian Exports and Imports of Starch - Food Use to the United States, 1991-1995.

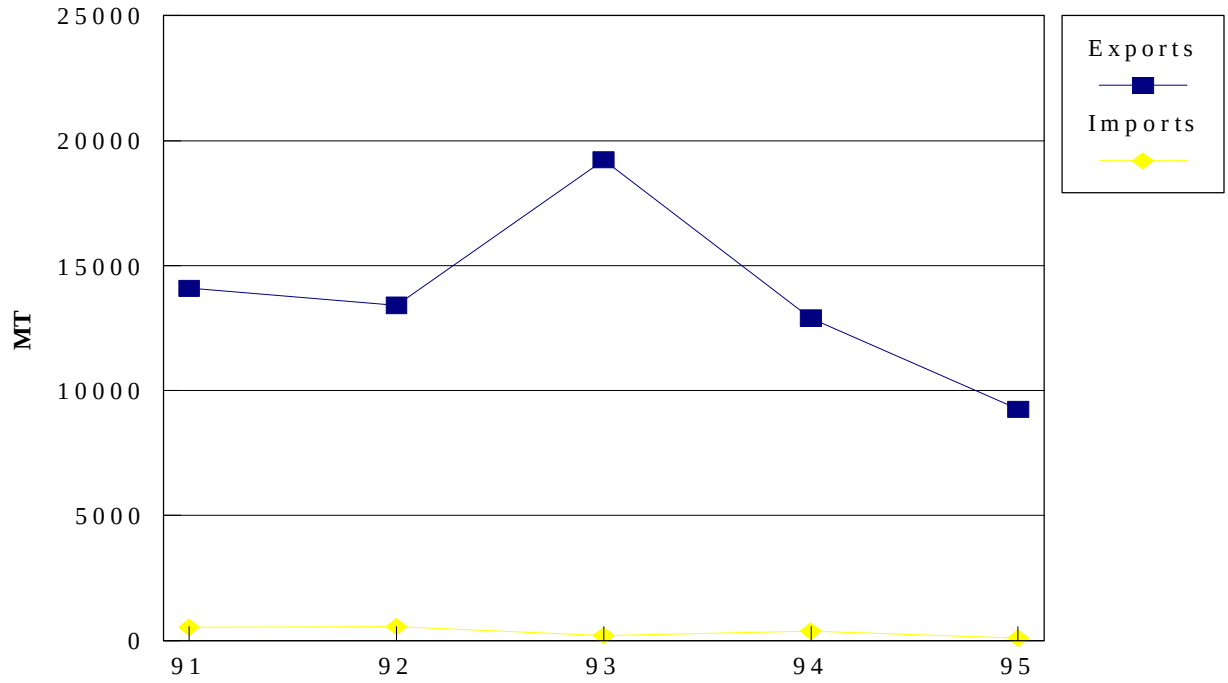

Figure 9. Canadian Exports and Imports of Starch - Industrial Use to the United States, 1991-1995.

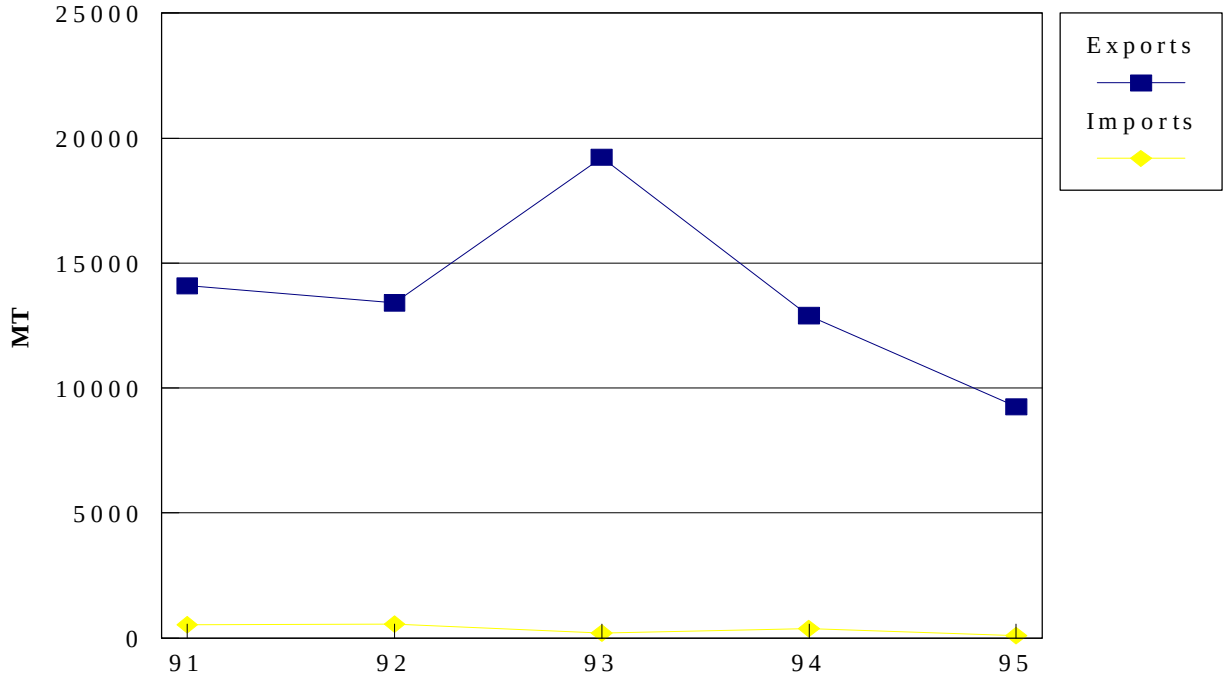

Figure 10. Canadian Exports and Imports of Starch - Industrial Use to the United States, 1991-1995.