

The Canadian Wheat Board: Its Role in North American State Trading

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Background

Recent trade agreements involving Canada, the United States, and Mexico have led to greater north-south trade flows of agricultural products and some competition in the North American grain markets. The 1989 Canadian-U.S. Free Trade Agreement (CUSTA) and the 1993 North American Free Trade Agreement (NAFTA) were important steps towards a more integrated North American market for agricultural products, and the 1994 multilateral Uruguay General Agreement on Tariffs and Trade (GATT) was a move in the same direction. Even so, there are still significant trade barriers in some grains. As well, expanded north-south trade has created additional North American agricultural policy conflicts, and many of these conflicts have been with respect to grains, mainly barley and wheat. The conflicts largely revolve around the role of the state in international trade. Perceptions regarding the Canadian Wheat Board (CWB), a state marketing agency, are at the center of much of the conflict in grains.

The current CWB has been operating for more than sixty years, and it is presently the largest seller of wheat in the world, with exports averaging about 19 million metric tons (mmt) per year. Given the CWB's importance in world markets, the controversy surrounding the CWB goes well beyond the geographic boundaries of North America. State trading enterprises (STEs) like the CWB are expected to come under increased scrutiny by the World Trade Organization (WTO) (Dixit and Josling, 1997). Expectations are that the CWB will be one of the foremost state agencies examined by the WTO, partly due to the pressure exerted by the United States. The United States has claimed that Canada is an "unfair" trader in grains because the CWB has exclusive rights to export wheat and barley from Canada. For instance, the U.S. General Accounting Office (GAO) (1992) investigated the CWB and reported it is a noncompetitive seller due to unfair pricing, price pooling, cost pooling, and government underwriting of initial producer prices and export credit.

The CWB has not backed away from the controversy. To the contrary, the CWB and its strongest supporters actually claim that it can pursue "strategic" trade behavior in global markets. If the CWB is successfully engaged in strategic trade practices, this could have important implications for trading partners—especially developing countries where most of the Canadian grain

is sold. The main purpose of this paper is to discuss institutional aspects of the CWB, its role in the domestic Canadian market, the North American conflicts over the CWB, and the likelihood of the CWB exercising strategic behavior on world markets.

The CWB has been justified at home on economic grounds (Kraft, Furtan, and Tyrchniewicz, 1996; Gray, Schmitz, and Storey, 1997) because, in theory it can be shown that state intervention in trade in particular circumstances is superior to a policy of free trade. The theory of international trade has undergone substantial changes since the early 1980s, and some of the different theoretical arguments have resulted in renewed arguments over the role of government trading (e.g., STEs) in the cereals markets. The institutional, political, and regulatory framework surrounding prairie grains and the CWB is well-documented (Loyns and Carter, 1984; Carter, 1993a; Agriculture Canada, 1992), but only a limited amount of analysis has been conducted on other regulatory aspects of single-desk selling.

Structure of the Industry

Most of the wheat and barley in Canada is grown in the prairie provinces of Alberta, Saskatchewan, and Manitoba.¹ Almost all of the wheat is grown under dryland conditions with a very short growing season. The predominant crop is spring wheat (hard red springs and durum) rather than winter wheat. The dominant class of wheat produced is hard red spring (HRS), which is high in protein “content” and protein “quality” (or strength), both desirable characteristics for pan bread. In contrast, the dominant wheat class in the United States is hard red winter (HRW). In the world markets, there is considerable substitutability between different types of wheat, especially between HRS and HRW.

The Canadian wheat industry is driven by exports. Canada produces only about 5 percent of the world’s wheat harvest in any given year, but with its relatively small population of 30 million people it has a large excess supply of wheat that is sold on world markets. Normally about 70 percent of western Canada’s wheat production is exported each year. On average, about 10 percent of Canadian

¹ Ontario is the only other significant region which produces wheat. Barley production outside the prairies is very limited and is used locally for animal feed.

wheat production is milled for home use, 15 percent is sold domestically as feed, and 5 percent is used locally for seed purposes. Unlike milling wheat, most of the feed wheat used on the prairies is either sold outside of the CWB or used on-farm. Private traders are only permitted to buy feed wheat, which they subsequently sell, based on prices established on the Winnipeg cash and futures market. The wheat grown in Ontario is about 5 percent of the Canadian total and it is sold through the Ontario Wheat Producers' Marketing Board (OWPMB), which is a much smaller agency than the CWB. Unlike the CWB, the OWPMB is controlled by farmers. A large proportion of the Ontario production is soft wheat varieties.

Although western Canadian wheat stocks fluctuate considerably from year to year, they averaged close to 7 mmt over the ten-year period from 1987 to 1996. The stocks-to-production ratio in Canada has fallen in recent years, much like in the United States and the European Union (EU). However, Canadian stocks are held by farmers or grain companies (not by government), while in the United States and the EU, government has historically carried a large share of stocks.² There is a "cash advance, interest free loan" available for CWB grains from the Canadian government, but this is a relatively small program and its continuation has been uncertain for several years.

The United States is the largest wheat exporter, followed by Canada, the EU, Australia, Argentina, and the Republic of Kazakhstan. World wheat trade grew rapidly during the 1970s and then leveled off during the early 1980s and into the 1990s. Developing countries import about 80 percent of total wheat traded. This is important for Canada, because several studies have pointed out that Canada has missed market opportunities and given up revenue by focusing on high quality wheat and not adequately diversifying into medium and lower quality wheat (Carter and Loyns, 1996).

Barley is also one of the major crops on the Canadian Prairies, with annual production of about 12 mmt. The two main end-uses for barley are animal feed and malt production. The CWB has sole responsibility for exporting barley and for selling to domestic maltsters. Today, under 30 percent

² This stocking pattern reflects explicit and implicit government policy. The U.S. and EU stocks have resulted from explicit stocking policy. In Canada, policy dictates that farmer access to the market is regulated by the CWB and, by default, end-of-year stocks are carried by farmers.

of the western Canadian crop is marketed through the CWB and 70 percent or more is sold domestically outside CWB control, primarily into the domestic feed market which is growing rapidly on the prairies.

Globally, Canada is the world's third largest producer of barley, ranking behind the EU (45 mmt) and the former USSR (40 mmt). The EU produces about 30 percent of the world's supply, the former Soviet Union around 25 percent, and Canada about 7 percent. Of the 12 mmt annually produced in Canada traditionally about 3 to 4 mmt were exported, making Canada the world's second-largest barley exporter. Four countries—the EU, Canada, Australia, and the U.S.—account for more than 85 percent of exports. Barley (unlike food wheat) competes with a number of different cereal grains in the feed market, with major export competition from corn and sorghum. Total world trade in coarse grains is about 90 mmt. The United States accounts for approximately 60 percent of this trade, compared to Canada's 5 percent.

Evolution of the Canadian Wheat Board

There was a short-lived CWB established just after World War I in 1919. The first CWB was formally established under the authority of the War Measures Act in 1919 (Wilson, 1978). The board concept originated in Australia where it had been implemented in 1915 in connection with wartime policy of that country. The first CWB was a one-year temporary organization, established in response to the British government's cornering of the Winnipeg wheat futures market and the temporary closing of that futures market. In those days, and even throughout the first two decades of the current CWB, there was limited political will to establish a permanent government grain sales agency.

The current CWB was set up by passage of the CWB Act in 1935. In the early 1930s the federal government, in order to support wheat futures prices, purchased and held wheat futures contracts. It found "that it could not sell the futures later in the crop year without unduly depressing the market," and ". . . by the spring of 1935 it held futures contracts roughly equivalent to the total quantities of wheat in storage in Canada" (Wilson, 1979, p. 98). The federal government realized the futility of its attempt at price support policy. "Depression, as well as war, had created abnormal

conditions under which the futures market could not operate satisfactorily” (Wilson, 1979, p. 97). As a result, the present CWB was created in 1935 as both a temporary and a voluntary agency.³ From 1935 until quotas and compulsory controls were applied to wheat under the War Measures Act in 1943, farmers could deliver either to the board or to the open market.

The transition to compulsory powers in wheat is an interesting story. During World War II, the demand for grain raised prices, and in 1943 the CWB was used as an instrument to help control inflation. For a time, the CWB had price control powers over several grains including flaxseed, canola, and soybeans. In 1943 quotas were imposed on wheat deliveries. The CWB was then retained after the war because most of Canada’s wheat was exported to Britain under a bilateral agreement, and the CWB was the instrument which allowed the Canadian government to guarantee supplies (Fowke, 1957; Bercuson and Cooper, 1997).

In 1949 the CWB was also given exclusive authority over the domestic and export marketing of oats and barley. Since transactions within a province fall under provincial jurisdiction, each of the western provinces was required by the federal government to grant authority to the CWB. Rotstein (1984) convincingly argues the rationale for CWB creation was the same as other Canadian public “commercial” corporations—a response to major forces from outside the sector that are, to a large extent, uncontrollable. The Liberal government in the late 1930s and early war years was committed to terminating the CWB in favor of the open market, but external forces—the culmination of the depression effects and the “extraordinary issues of the war effort”—led to creation of the board. “Hence the genesis of a crown corporation by a government that did not want it” (Rotstein, 1984). In 1967, the Canadian Wheat Board Act, hitherto subject to expiry requiring periodic amendments by Parliament to extend the board’s duration, was amended without time limit, thereby creating a permanent board (Wilson, 1979, p. 102).

In a similar vein to that of Rotstein, Brenner (1987) argues there are two potential economic explanations for state-owned enterprises—economies of scale and externalities. However, he fails

³ In 1938 the Turgeon Commission had recommended the Government, under normal conditions, should remain out of the grain trade (Royal Grain Inquiry Commission Report, Ottawa, 1938, quoted in Wilson, 1979). The large imbalance between world wheat supplies and world demand and the possibility of war were the reasons given for not immediately dissolving the CWB.

to find empirical support for any causal relationship between economies of scale and state ownership, or between externalities and state ownership. Instead, he finds that crises (e.g., wars, economic disasters) often precipitate some form of state ownership. The crises theory certainly appears to fit the establishment of the CWB. The two World Wars and the Great Depression were crucial events leading to the creation of this state agency.⁴ Throughout its history, producers or any other interested parties had no direct participation in running the CWB. It has always been a federal agency, reporting to Parliament, managed by federally-appointed commissioners.

CWB control over domestic interprovincial shipments of feed grains was relaxed in the early 1970s. The domestic pricing distortions created by the CWB had become a public issue during the grains crisis from 1969 to 1972. Western farmer dissatisfaction with excessive controls on feed grains, and eastern feeder concerns with price and supply availability were important factors leading to feed grain policy changes in the 1970s. The key issues at the time were: (a) Disparities between the Prairies' intraprovincial and international prices, (b) an inability of feed grains produced on the Prairies to penetrate the eastern Canadian market on a sustained basis since the CWB asking price often exceeded that of nutritionally competitive American corn, (c) black-market interprovincialsales on the Prairies, and (d) distress selling intraprovincially by feed grain producers in the Prairies in order to maintain cash flow, which was reduced due to CWB delivery quota restrictions. Some changes were made in 1974, and by 1976 the domestic feed grain market returned to a reasonably open system with restoration of unimpeded interprovincial shipments and futures trading of oats, barley and wheat for domestic feed usage.

Until 1988 domestic sales of wheat by the CWB to millers took place at prices that were insulated from world levels. This was referred to as the "two-price wheat policy," first established in 1967 and revised in 1972. During the price boom in the early 1970s, the Canadian government fixed the domestic price to mills at relatively low levels and thus subsidized consumers (assuming the millers and bakers passed this saving on) when world prices were high. At other times,

⁴ The organization of the CWB relative to the organization of the OWPMB reinforces this point. The CWB is an important component of the prairie grain industry; the prairie grain industry for the most part is the Canadian grain industry. The CWB is a federally controlled regulator. In contrast, the OWPMB is a provincial organization, producer-run and much more responsive to producer interests.

consumers subsidized producers. The two-price policy was very controversial over the years; over its lifetime it did not transfer significant revenue to farmers. As one would expect, it encouraged the growth of wheat production in Ontario, outside of the CWB's designated area. The Canadian government discontinued the two-price system in 1988 (Vercammen and Fulton, 1990) as Canada was preparing for the CUSTA agreement.

Oats were removed from the CWB jurisdiction completely in 1989. The decision to remove oats was made on the grounds that it was a relatively small crop and a very small part of CWB activity, that CWB intervention was holding back development of oats production and processing, and that oats commerce had evolved to specification merchandising for which the CWB was not well suited. Carter and Loynes (1996) reported that since removal of oats from the CWB, Canadian prices are more integrated with U.S. prices, exports to the U.S. have increased significantly, and there has been some concentration of production closer to U.S. markets. Overall, the evidence suggests that producers have gained from deregulation of oats.

In a controversial decision, the CWB monopoly over barley sales into the U.S. was removed by the minister in charge of the CWB in 1993. This marketing issue and this particular policy was known as the "continental barley market" (CBM). The prairie pools (major grain handling companies that acted as agents of the CWB in handling and marketing grain and were always publicly supportive of the CWB) opposed this policy reform and succeeded in having the deregulation order disallowed by a Canadian appeals court. The Court restored the CWB's single-desk status in barley after a forty-day period (September 1993) and that decision has not been appealed. It was a Conservative government which initiated the deregulation. But a Liberal government, which appears committed to maintaining the CWB in most of its historic form, replaced the Conservative government in 1993 and did not appeal the decision or take further action on barley. From 1993 until mid-1998, there was an unprecedented degree of controversy on the prairies over organization of grain marketing, especially the role of the CWB. The number of economic studies and court cases related to CWB operation measure the intensity of this controversy.

In June 1998, Bill C-4, An Act to Amend the Canadian Wheat Board, was passed by Parliament. This parliament is controlled by a Liberal majority. The process of presenting and passing the

legislation reflected the turmoil of the time on prairie grain marketing as even the Senate held up passage of the act and made recommendations for change. This is virtually unprecedented in federal agricultural legislation.

The legislation can be characterized as effecting four structural and operational changes. First, governance and accountability of the CWB to producers (who pay all of its costs of operation) have been major issues for several years. The amendments provide for ten of fifteen directors to be elected from producers. That election process is underway as of October 1998. But the minister will appoint five directors and he will also appoint the chief executive officer. In addition, now the board has reporting responsibility to both the Minister of Agriculture and the Minister of Finance. It is not clear how the governance-accountability issue will unravel. Certainly the federal government has retained critical elements of organizational control.

Second, a few aspects of CWB operations have been opened up. There can be greater flexibility in purchasing and paying for grain. Pricing and contracting options are increased. Third, there are a few alternatives available to producers on selling, pooling, and receiving payments which did not exist under the former act. Finally, provision is made to establish a contingency fund from producer money to cover losses on new pricing options.

On balance, except for the governance issues, these changes are relatively small. In fact, outsiders may wonder why these kinds of changes would occupy enormous amounts of political, bureaucratic, lobbying, court, and economists' time. The governance issue could go either way. What is notable is that the amendments did not alter the status of compulsory marketing for wheat and barley. Similarly, they did not alter the important transparency situation surrounding the CWB. And they do not appear to have altered the civil and property rights issues raised in many court cases. They are contrary to several of the key recommendations from the Western Grain Marketing Panel⁵ (WGMP) and the basic producer undercurrent for change. These factors were the basis of the controversy over passage of the bill.

While the amendments were designed in part to shed the cloak of state trading status, that has not been accomplished. What was accomplished is a revamped STE with (in important respects) more federal government interference than before, with the possibility of attracting greater scrutiny under the WTO. At the same time, the organization remains with most of its domestic distortive economic powers, and all of the characteristics which generate external attention. It has also retained its powers of exclusivity over purchase and sale of certain classes of wheat and barley for those who value these powers.

CWB Operations

The CWB is basically a federal government sales agency, owning no facilities for grain handling. In the past the CWB has been referred to as “an agent of her Majesty in the right of Canada for the purpose of marketing in an orderly manner. . . grain grown in Western Canada” (CWB Annual Report, 1995-96). The CWB Act declares most of the grain handling and processing infrastructure in Canada to be “works to the advantage of Canada” and the board procures handling, cleaning, and storage services from elevators and terminals via annual “handling agreements”. From its inception (1935) until the new organization is in place (1999), it will be managed by three to five commissioners appointed by the federal government, and recently employed about 500 staff mostly in the head office in Winnipeg. Commissioners, who can be roughly equated with a board of directors, periodically sought advice from an advisory committee elected by farmers, but that committee had no legal control over the commissioners. Unlike the OWPMB, the CWB only answers to the federal government and not to farmers. This will change in a limited manner under the amended legislation.⁶

At the beginning of each crop year (August 1), the Canadian government (based on CWB recommendations) establishes initial producer prices for grain sold to the CWB. For a time in the

⁵ The WGMP was a group of experts hand-picked by the Canadian Minister of Agriculture, Ralph Goodale, in 1995. Their mandate was to examine all issues in the western Canadian grain marketing industry. The WGMP made several recommendations that would have reduced the monopoly powers of the CWB. For instance, the panel recommended the creation of an open market for feed barley and some liberalization in the wheat market. To date, the minister appears to have chosen to ignore the most important recommendations from the panel.

1970s prices were announced in advance, normally in April, to allow farmers to adjust their seeding plans. Today, ongoing pool return forecasts (PROs) are the method of disseminating CWB price information. Separate prices are established for each grade of wheat but there is only one pool for HRS wheat. Receipts from CWB sales to the domestic and export markets are pooled over the crop year and producers receive an initial payment at delivery. In some years they receive an adjusted payment during the crop year (if prices strengthen considerably) and a final payment about five months after the crop year is over. Some months after the end of the crop year (July 31) the pool is closed, and the CWB deducts its administrative expenses, interest costs, and other allowable expenses. Each producer receives the same price (before freight deductions), no matter when the wheat is delivered to the CWB within a particular crop year, or when and where the CWB sells the grain.

When selling to the CWB, producers' marketing costs are deducted in two stages. Freight costs (to the nearest port), primary elevator handling costs, and cleaning charges are deducted from the initial payment at the time of delivery. Other costs, which include terminal handling costs, interest, insurance, storage, additional freight, demurrage charges, and the board's operating costs, are later charged against the pool before the final payment is advanced to the farmers.

The timing of producer sales to the CWB is currently regulated through individual producer "contracts" with the CWB. However the word "contract" is somewhat misleading, because the CWB is not obligated to purchase all of the grain under the contract. Until a few years ago, the "contracts" were called "delivery quotas". The name was changed, but the basic system of CWB control over farmer deliveries remained. The quotas (contracts) and associated permit books have been in place in some form since 1943, with the original purpose of providing equitable access to markets for all producers. In the 1950s the quotas were used to ration storage space in primary elevators. Since then, the sales strategies of the CWB and the capacity of the transportation system have influenced quota levels, justifying their continuation. Delivery contracts are currently used to match farm

⁶ The board of directors will be composed of 15 members, 10 elected by farmers and 5 appointed by the federal government. The federal government will appoint the chief executive officer, and the board will elect its chair. The board still reports to Parliament through the minister, and the new board has an additional responsibility of clearing its financial plan with the Minister of Finance.

deliveries with CWB sales and to allocate the transportation capacity. Grain held on farms because of CWB quotas is the farmers' responsibility with the exception of some assistance on storage costs via interest free loans (the federal cash advances program).

Pooling is a central feature of the CWB's marketing system. Annual "pools" are established into which all sales revenues accrue irrespective of the sales price, timing of sale, or port of shipment. There are (only) four separate CWB pools—wheat, durum wheat, barley, and designated barley (primarily for malting purposes). Deductions are made for all costs incurred by the CWB in selling the grain for each pool. Pooling establishes returns for grain farmers that are (in prairie grain marketing terminology) *equitable*⁷, both temporally and spatially, in that all wheat or barley sold by grain producers to the CWB in a given crop year (August 1 to July 31) receives the same return before deductions for freight costs, dockage, and grade discounts. The federal government (with input from the CWB) sets initial prices for the base grade in each pool. It is then up to the CWB to administratively set the initial prices for all other categories within a pool. Price spreads within pools are administratively decided, rather than market determined.

Pooling creates economic inefficiencies for a number of reasons. First, it seriously masks information required for production and marketing decisions made by farmers. Grain producers do not know the price they will eventually receive from the CWB. In the case of feed barley, this adds uncertainty in deciding between selling to the CWB versus to the domestic open market, and there are times when this creates major uncertainties for livestock producers. Second and related, the initial payments set by the CWB influence feed grain prices on the prairies, irrespective of world supply and demand. Third, pooling distorts intertemporal prices. The CWB pooling and payment system does not explicitly account for on-farm storage costs, as farmers receive the same net return whether they sell early or late in the crop year. This results in considerable cross-subsidization within each pool (Carter and Loyns, 1996).

⁷ "Equitable" is, of course, a value-related philosophical term which has little practical or economic meaning. Throughout the history and evolution of the CWB "equitable" has been interchangeable with equal.

North American Disputes over the CWB

In theory, the Canadian and U.S. governments have endorsed freer trade in grains with the signing of CUSTA, NAFTA, and the Uruguay Round agreement. Unfortunately in practice, both the U.S. and Canadian governments have stretched or broken this pact by resorting to unilateral policy choices, often revolving around the CWB. For instance, the U.S. government's commitment to free trade has been questioned by unilateral actions taken with respect to placing a limit on imports of Canadian wheat, and by threats to impose permanent import barriers against Canadian grains. At the same time, the Canadian government is reluctant to reduce the role of the federal government's hand in controlling the CWB, and U.S. wheat and barley can not move freely into Canada or on Canadian rails.

North American grain disagreements began with durum wheat (Alston, Carter, Gray, and Sumner, 1997) after the signing of CUSTA. The CWB was never precluded from selling grain into the U.S. market, but CUSTA provided a more formal means of legitimizing sales. With CUSTA there was less threat of imposition of Section 22 of the Agricultural Adjustment Act of 1933, which allowed the U.S. government to impose quotas on imports if it were determined that such imports were threatening U.S. price support programs. Prior to CUSTA, Canadian import barriers were high for grain, while those in the U.S. were relatively small. As a result of CUSTA Canadian import licenses were to be removed and the U.S. tariff was to be lowered, and this has happened in the case of wheat. CUSTA also eliminated Canadian subsidized freight rates on grains exported to the U.S. through the west coast of Canada.

Durum Wheat Disputes in North America

From the late 1980s, imports of Canadian durum into the U.S. increased significantly in relative terms (although they remained small in absolute terms). These shipments soon became a major trade irritant to the U.S. The U.S. government position was that increased Canadian durum sales were inconsistent with the 1989 CUSTA, and the Canadian government strongly disagreed. In response to the imports, in December 1989 the U.S. Congress instructed the U.S. International Trade

Commission (USITC) to examine the “conditions of competition” between the U.S. and Canadian durum industries.⁸ The USITC report in 1990 concluded that the drought of 1987-89 was the main reason for increased durum imports from Canada and price differences were not found to be a factor.

Durum continued to flow into the United States and the issue was not put to rest by the USITC ruling. The case of Canadian durum wheat sales was then heard before the CUSTA binational panel in 1992. The United States alleged that the growth in Canadian exports was due to the CWB selling into the U.S. at less than acquisition cost, and that in addition the Canadian transportation subsidy led directly to increased Canadian exports to the United States. Under Article 701.3 of CUSTA, public entities cannot export agricultural goods to the other country at less than the acquisition price:

Neither party, including any public entity that it establishes or maintains, shall sell agricultural goods for export to the territory of the other party at a price below the acquisition price of the goods plus any storage, handling or other costs incurred by it with respect to those goods. (CUSTA, Article 701.3)

The charge that the CWB was selling into the U.S. below acquisition price was akin to the notion that the CWB was “dumping” into the U.S. market. The CUSTA binational panel did not agree with the U.S. claim, and the panel made its final ruling in favor of Canada in January 1993. The panel found there was no compelling evidence that the CWB was selling below its acquisition cost. In arriving at its decision on acquisition costs, the panel noted that Ms. Ann Veneman, Deputy Secretary of the USDA, and U.S. Trade Representative Clayton Yeutter, on separate occasions, had both defined the term “acquisition cost” to be the CWB’s initial payment.⁹ In the final report, the panel stated that the U.S. government had tried to avoid the Veneman and Yeutter statements; however, the binational panel viewed the Veneman and Yeutter statements as being important. Ironically these official U.S. government statements helped Canada win the case in front of the binational panel.

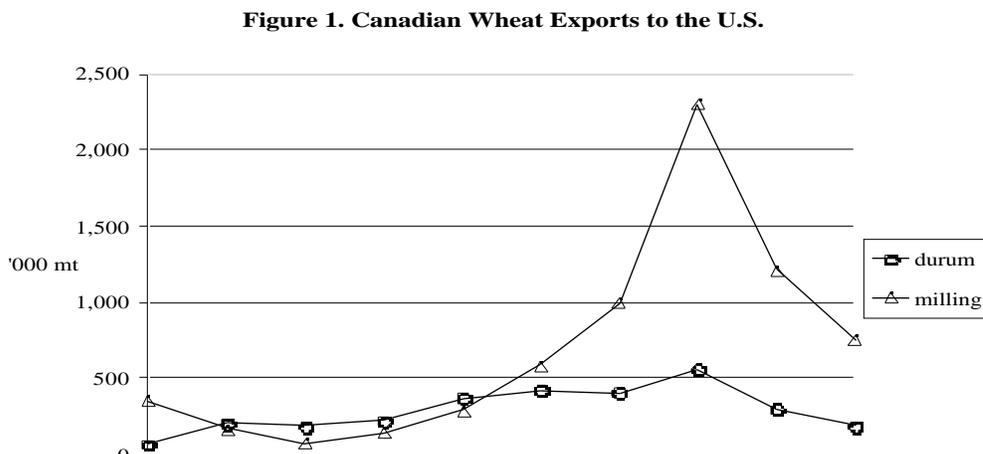
⁸ This was USITC Investigation No. 332-285, “Durum Wheat: Conditions of Competition Between the U.S. and Canadian Industries.”

⁹ See the final report of CUSTA’s binational panel in the matter of “The Interpretation of and Canada’s Compliance with Article 701.3 with Respect to Durum Wheat Sales,” CDA-92-1807-01, February 8, 1993, pp. 39-41.

The concept of acquisition price is difficult to apply in many buying situations in modern commercial grain markets, especially where pooling occurs. The CWB initial payment is a type of “down-payment” which producers receive when they deliver their grain and sell it to the CWB. It is not the full acquisition price if the pool generates a surplus on annual sales; but at the same time, the CWB does not guarantee further payments when the producer makes his delivery. The initial price is established each year by the CWB, based on expected market prices over the course of the crop-year, and the initial payment is set low enough to attempt to avoid a deficit in the pool. Thus, the initial CWB price is always set below the expected average price for the year. Our interpretation of the CWB’s true acquisition price is that it is the crop-year average price paid for grain purchased in the pool. Therefore, in a market in which prices vary, simple mathematics means that some of the pooling agency’s sales during the year are below the acquisition price defined this way. The very nature of price pooling is designed to smooth price fluctuations over the crop-year to producers by returning the average price. All sales cannot be made above the average, and thus it may be impossible for the CWB to meet the terms of CUSTA’s Section 701.3 strictly interpreted. Nor is there anything in the way that the CWB sets its producer prices, of which we are aware, that suggests they are set in relation to any concept of producer costs of production. They are market forecasts for revenue into an annual pool.

Milling Wheat Disputes in North America

The dispute in durum later spread into regular milling wheat shortly after the binational panel ruled against the U.S. on durum. This was due to the fact that Canadian exports of ordinary milling



wheat to the U.S. also increased rapidly after 1990 (see Figure 1). In response to political pressure in the northern wheat-growing regions of the U.S., President Clinton requested that the International Trade Commission (USITC) investigate the effects of wheat imports from Canada in 1994. In July 1994 the USITC reported with a split decision. Three commissioners found that imports from Canada had “materially affected the costs of the wheat program” through lowering prices and increasing the value of deficiency payments, thereby potentially triggering the use of import quotas to protect the program. The other three commissioners found these imports had not materially affected the cost of the U.S. wheat program but that they did have some effects on particular regions and classes of wheat. All six supported the recommendation that higher import barriers should be introduced.

However even before the USITC had reported, in April of 1994 the United States government notified the GATT under Article XXVIII that it intended to amend its tariff rates on wheat and barley imports from Canada (Simone, 1994). It can be inferred from this preemptive action that the United States was not seeking temporary protection from perceived injury, otherwise alternative measures (such as Section 22 legislation) could have been used. It may be concluded that, in the absence of a negotiated settlement with Canada, Article XXVIII offered the best alternative for the U.S., despite the risk that Canada would use the provisions of the article to seek compensation or to retaliate (Carter and MacLaren, 1997).

In August 1994, after protracted negotiations, an agreement between the two countries was reached. There are three elements to this agreement which include: (a) Schedules of tariff rate quotas on durum and non-durum wheat imports by the United States from Canada, (b) the establishment of a joint commission to examine each country’s price support systems for grains and their effects on third country trade, (c) and a peace clause which limited for one year actions on grains and grain products which were not consistent with either the NAFTA or the GATT. While the U.S. withdrew its proposed actions under GATT’s Article XXVIII, Canada maintained the right to challenge U.S. actions under both the NAFTA and the GATT, although agreeing for one year from September 1994 not to use the dispute settlements procedures of either agreement.

Why did Canada agree to this outcome which, at the export levels prevailing during 1993-94, would lead to a loss of export earnings? Could Canada have forced the U.S. to use Article XXVIII of the GATT and then, legitimately, have imposed its own import restrictions on, or sought compensation from, the United States? As Canada had maintained that GATT obligations took precedence over obligations under the NAFTA, it was infeasible to claim as a negotiating ploy that the U.S. was violating Article 401 of the CUSTA by raising tariffs. At the same time, it can hardly be claimed that Canada had entered into the spirit of the Uruguay Round Agreement on Agriculture, in relation to the tariffication process of nontariff barriers for the supply-managed products, with its out-of-quota rates being established at prohibitive levels. Perhaps tradeoffs were made by Canada in grains against temporary peace in supply-managed products.

Carter and MacLaren (1997) evaluated the 1994 wheat trade agreement between the United States and Canada in the context of a potential trade war that could have erupted given the determination of both sides. Using a computable general equilibrium (CGE) model, they concluded that the 1994 agreement appears to have been a success from the viewpoint of the Canadian government and its desire for an outcome that minimized losses in the face of U.S. threats to impose permanent import barriers on Canadian grains. Even though the agreement resulted in economic costs for both countries, it was successful in the sense that it averted a potentially damaging agricultural trade war, or even prevented it from extending to dairy and poultry.

Barley Disputes in North America

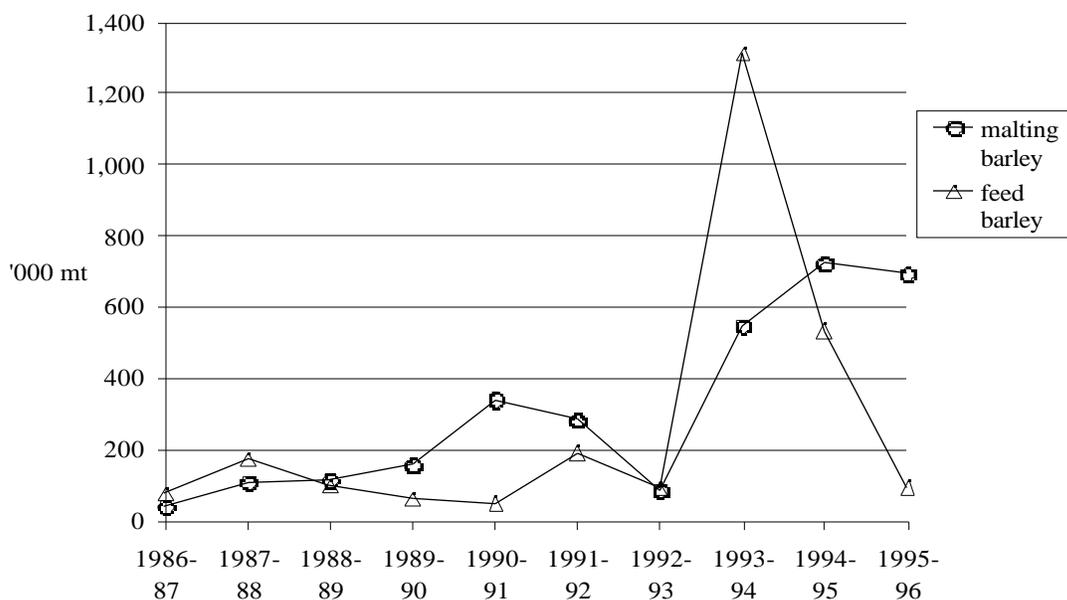
The dispute in barley has not reached either the USITC or the binational panel, because the CWB has not aggressively marketed barley in the United States, apparently out of fear of retaliation on the part of the U.S. (Brooks, 1993). However, within the Canadian public policy arena, the barley debate has been vigorous (Veeman, 1993; Johnson and Wilson, 1995). The CWB (1992) argued that in the case of barley it had market power in the U.S. and thus it was optimal to restrict sales into that market. The CWB also argued that the U.S. barley market was not highly important for Canadian farmers. This claim was challenged by Carter (1993) and by Johnson and Wilson (1994), who found no evidence of CWB market power and, instead, argued there was potential for additional feed and

malting barley sales from Canada to the U.S. They argued the feed grain demand was in the western part of the United States—the Pacific North West (PNW, Oregon, Idaho, and Washington) and California. The CWB claimed this region was exporting feed grain.

Farm groups in Canada are split over this issue of whether or not to aggressively pursue the U.S. barley market, as is the Canadian grain handling and processing industry. For instance, the brewing industry in Canada would prefer free trade in North American malting barley and malt, whereas the Canadian maltsters prefer the *status quo* with the CWB controlling sales. It might seem paradoxical that the Canadians maltsters prefer to buy from a monopoly but they are willing to trade-off any cost of doing so against returns through other forms of favorable treatment by the CWB.

Historically, the Canadian and U.S. barley markets were essentially two separate markets until the CUSTA agreement. There was relatively little north-south trade, and price differentials across the border frequently exceeded transport and handling costs. There were two primary reasons for this market separation. First, the Canadian rail freight subsidy encouraged east-west movement of grain within Canada; and second, the CWB controlled export permits for barley and limited exports

Figure 2. Canadian Barley Exports to the U.S.



to the United States.

Earlier, we have argued (Carter and Loyns, 1996) that a single-desk seller is unwarranted in the case of Canadian barley sales to the United States because Canada is a price taker in the U.S. market. Our analysis and others indicates the inefficiencies associated with having a government single-desk seller in barley far outweigh the relatively small benefit from domestic price discrimination in malting barley within Canada. Alternatively, Brooks (1993) claimed the CWB had market power in the U.S. market and that single-desk selling is important from an economic efficiency standpoint because, he reasoned, the system is most efficient when Canadian farmers do not try to assess the U.S. price of barley.

On August 1, 1993 the Canadian government implemented a *continental barley market* (CBM) by removing the CWB's control over exports to the United States. The continental market was only effective for forty days, but during this relatively short time period it was estimated that between 0.5 and 1.0 mmt of barley were sold to the U.S. (Johnson and Wilson, 1994). Prior to the 40-day record level of exports, the most the CWB ever previously sold in one entire year was 0.47 mmt. (see Figure 2). Johnson and Wilson have estimated that a CBM could result in Canadian exports to the United States reaching 3.5 mmt per year. During the CBM, the CWB was a major, perhaps the largest, exporter of barley to the United States. This reinforces the point that reform of the CWB's control over exports would most likely lead to a higher level of Canadian sales into the U.S. market.

The future role of the CWB in the barley market remains an unsettled issue in Canada. In 1995 the Alberta provincial government held a plebiscite asking its farmers if they wanted freedom to sell their barley and/or wheat to any buyer, including the CWB, in domestic and export markets. About 65 percent of the barley farmers and 62 percent of the wheat farmers voted in favor of marketing options. In 1997 the federal government also conducted a barley plebiscite, albeit with a much narrower question. They asked farmers across the prairies to choose between either the open market or the single-desk CWB. About 37 percent of the farmers voted to terminate the current marketing system, removing all barley from the CWB, and placing it entirely on the open market. These two recent plebiscites are compelling evidence of significant, and growing, discontent among farmers with compulsory marketing in wheat and barley.

In any event, the amendments to the act left the monopoly control on barley exports, and did not distinguish between feed and malting barley as the WGMP had recommended. Growth in domestic livestock production on the prairies is beginning to change the domestic market and to erode export importance for barley. We may be approaching the time when CWB control over barley phases out, much like it did in oats, because of lack of importance and relevance.

Does the CWB Sell into a Competitive World Market?

The CWB's ability to pursue strategic trade behavior may be plausible in theory, but in practice it seems much less convincing. There is reason to believe that, outside the effects of subsidization, the world grain market is competitive, given the large number of exporters and importers and freedom of entry. Exports from different destinations are highly substitutable, and the majority of grain sales are made into price-sensitive markets in developing countries. However, there is a difference of opinion on this issue. Recently, several economists have argued that export STEs such as the Australian Wheat Board (AWB) and the CWB can manipulate the market to the benefit of domestic producers and to the detriment of importing nations. These arguments have been made in the case of the AWB (Ryan, 1994) and the CWB (Brooks, 1993; Gray, Ulrich, and Schmitz, 1993; Kraft, Furtan, and Tyrchniewicz, 1996; and Schmitz, Gray, Schmitz, and Storey, 1997). Others disagree with the proposition that export STEs can individually exploit the grain market (Industries Assistance Commission, 1988; Watson, 1984; Longworth and Knopke, 1982; Piggott, 1992; Carter, 1993b; Carter and Loyns, 1996; Carter, Loyns, and Berwald, 1998; Watson, 1998).

Those who disagree with the claim that the CWB can exploit grain markets (e.g., Carter, Loyns, and Berwald, 1998; Rutter, 1996) argue that if exploitation of importers is taking place, then prices received by producers selling through the CWB ought to be above competitive levels. They point to the lack of evidence showing farmgate prices in Canada are any higher due to the CWB. Of course, it is always possible that the CWB is exploiting importers, but the additional revenue never actually reaches the producer at the farm gate. There could be extra marketing costs under the CWB due to inefficiency or waste arising from the CWB monopoly position.

There is some related literature that does not focus on STEs *per se*, but does analyze competition in the grain market. Papers written in the 1960s and 1970s that argued that the international grain market is imperfectly competitive¹⁰ were reviewed by Kolstad and Burris (1986). Kolstad and Burris observed that there are more non-zero bilateral wheat trade flows than a perfectly competitive model would predict. Assuming wheat to be homogeneous and using a spatial equilibrium model, they then tested alternative hypotheses regarding market structures, and concluded that the Canadian-U.S. duopoly model was the most appropriate market structure for the international wheat market.

Paarlberg and Abbott (1986) studied five major wheat trading nations, using a model of imperfect competition. Using revealed preference methodology, they calculated each nation's conjectured slopes of excess demand and supply functions. Paarlberg and Abbott concluded that conjectures (*i.e.*, beliefs) formed by the U.S., Japan, and the EEC do not react to other nations' policies. However, conjectures for Canada and Australia were found to react to policies in other nations.

In an analysis of the 1980 U.S. grain embargo against the USSR, the U.S. Department of Agriculture (1986) found that grain is basically fungible, and thus the embargo had little impact on the USSR and little impact on world prices and trade volumes. The embargo study implies that the world grain market is efficiently arbitrated, even under substantial attempts to distort trade flows.

Thursby (1988) developed a model where a statutory marketing board and private exporters are Cournot rivals. She attempted to determine whether or not Brander-Spencer type export subsidies could be welfare improving. Her model is characterized by the rivalry of two exporting countries, where the rival country exercises its power through a marketing board and the home country through private traders. She theoretically demonstrated that the optimal trade policy for the home country changes from an export subsidy to an export tax when there is more than one exporting firm. Thursby considered the implications for the United States wheat policy, and concludes that an export tax would make more sense than an export subsidy. In an empirical exercise, Anania, Bohman, and Carter (1992) also considered the applicability of the export subsidy argument to the United

¹⁰See McCalla and Josling (1981) for further evidence of imperfect competition in agricultural trade.

States wheat market, and concluded that a U.S. export subsidy for wheat would not lead to welfare gains for the U.S., contrary to Haley's (1988) finding.

Vanzetti and Kennedy (1989) argued that examples of market power can be found in international commodity markets such as wheat, meat, and wine. They estimate conjectural variations in the world wheat market and conclude that a small country like Australia has only limited ability to influence the world price. However, large exporters like the United States and the EU are found to have considerable ability to influence world price through strategic behavior.

Love and Murniningtyas (1992) focused on Japanese buying behavior in the international wheat market and measured the monopsony market power of the Japanese Food Agency (JFA). They econometrically estimated excess supply and demand functions, with nested hypotheses for testing market power. Love and Murniningtyas found that the JFA exercises a high degree of monopsony power in the world wheat market. They conclude that Japan has significant market power in wheat, which is a surprising result given that Japan accounts for only about 5 percent of the world wheat imports.

Is CWB Strategic Behavior Plausible in the Case of Barley?

Prior to the 1993 continental barley market, Gray, Ulrich and Schmitz (1993) in a study conducted for the prairie pools argued that continental market would result in lower export prices for barley due to elimination of the single-desk. Carter (1993b) argued the opposite and suggested that export barley prices would remain the same under a continental barley market, compared with the situation under the CWB's single-desk. Clark (1995) studied the issue *ex post*, testing for structural breaks in barley prices before and after the continental market, and his results supported Carter. Clark concluded that CWB arguments suggesting that single-desk selling improves barley revenues needs to be subject to greater public scrutiny, a gentle suggestion that the CWB arguments were invalid. Carter and Loyns (1996) studied developments in barley before and after the continental barley market and found that CWB claims of market power in barley were not confirmed. The United States turned out to be an important market for barley, contrary to earlier CWB assertions.

Schmitz, Gray, Schmitz, and Storey (1997) produced a report for the CWB on barley marketing in praise of the single-desk. They claim the net benefit of the CWB's single-desk in barley is worth (on average) \$3.52/mt in feed barley, \$42.01/mt for 6-row malting, and \$34.06/mt for 2-row malting. According to Schmitz *et al.* (1997), the CWB fetches an additional \$72 million out of the barley market each year, at no additional cost to farmers. They ignore the fact that (theoretical) premiums do not show up at the farm gate for either feed (Carter and Loyns, 1996) or malting barley (Rutter, 1996). They did not address the issue of the costs associated with regulated marketing. Schmitz *et al.* (1997) assume that under the current marketing system, the open market price of feed barley on the Canadian prairies exceeds the price in the U.S. market, and every other market except Japan. For instance, in 1991-92 Schmitz *et al.* (1997) assume the Canadian domestic price to be \$117/mt compared to \$106 in the U.S. (see Table 5.2 in Schmitz *et al.* (1997). This assumption ignores the wealth of evidence to the contrary. For instance, Ulrich, Schmitz, and Furtan (1991) found that the Canadian feed barley market is spatially price inefficient and that Canadian domestic barley prices are low relative to U.S. levels.

Schmitz *et al.* (1997) found that removal of the single-desk would result in Canada exporting 1.7 mmt of feed barley to Japan annually, which is more than total Japanese imports! CWB feed barley sales to Japan are now approximately 0.5 mmt per year, or roughly one-third of that market. Canada does not have a quality advantage over Australia in this market, evidenced by the drop in CWB sales to Japan in the recent past.

Using confidential CWB sales data (from 1985 to 1995) and using a mean difference test, Schmitz *et al.* reported that the Japanese feed barley price averages \$24 to \$28 over the price in two other markets (U.S. and the rest of the world). Saudi Arabia accounts for a large share of the rest of the world. This result of the Japanese premium is plausible because of the fact that U.S. export enhancement program (EEP) export subsidies and EU export restitutions did not apply to Japan. What is surprising is the fact that Schmitz *et al.* (1997) claimed their finding of a Japanese premium is evidence of "market power". Market power tests are not as simple as they suggest, and more than a claimed price premium is required to produce evidence of market power. Price differences may exist in markets for many reasons. Canada is a minor player in the global feed grain market (with a market

share of 5 to 10 percent) so it is unclear how the CWB monopoly by itself would provide market power in feed barley. Schmitz *et al.* (1997) claim the Canadian maltsters are being exploited by the CWB, yet the maltsters are strong supporters of the single-desk (Malting Industry Association of Canada, 1996).

One explanation for the malting industry support for CWB control is that the total value of services provided by the CWB to maltsters, in the form of very favorable (to the maltsters) selection rates, maltster free storage and inventory control, and flat competitive pricing on offshore sales, far exceeds the extra price they may pay. There has been no analysis of this hypothesis.

Schmitz *et al.* (1997) do not provide a mean difference test for malting barley, so it is difficult to determine what drives the malting barley result. Approximately 25 percent of the malting barley selected in Canada is sold for final consumption into the captive domestic market. This represents only about 5 percent of the prairie barley production. The majority of the malting barley is exported as either barley or malt, and it is unclear why importers would pay the CWB more than necessary, and there is no evidence that they do. Canadian exports of malting barley are sold into the U.S. and China. Canadian malt exports are mainly destined for Japan, the U.S., Korea, Mexico, and Brazil. The WGMP found that offshore buyers do not pay a premium for Canadian malting barley.

Schmitz *et al.* assume that the CWB can optimize sales across markets and across time, and do so in a superior fashion compared to multiple sellers. This is an interesting claim for a government agency. Despite the superior marketing ability of this state agency, Schmitz *et al.* admit there were problems with the 1994-95 barley pool that cost farmers. They assume the overall cost to farmers that year was \$7 million. This is much lower than the estimate of Mr. Ken Beswick (former CWB commissioner), who has commented on the 1994-95 CWB barley pool losses. The \$180 million loss in the 1994-95 crop year, according to Beswick, is determined as \$20/ton under “competitive global markets,” on 9 million tons used in the domestic market (United Grain Growers-UGG, *Members Exchange*, Summer 1996. p. 1.)

It is also worth noting that in forums outside of Canada, the CWB denies price discriminating. CWB officials have testified in front of the USITC to the effect that they do not price discriminate.¹¹ The importance of the single-desk and the CWB's role in export market manipulations is overemphasized by Schmitz *et al.* (1997). The CWB does not deal directly with many buyers of barley. Instead, it appoints members of the private trade as accredited exporters to negotiate sales. For example, sales of malting barley to the U.S. and feed barley sales to Saudi Arabia are handled this way. In fact, most of the world barley trade is conducted by private grain companies. In cases where a government agency is in place, *e.g.*, the CWB or the Japanese Food Agency (JFA), the private trade buys from the exporter (CWB) and sells to the importer (JFA). The two government agencies do not deal directly with one another. Bilateral state trading accounts for less than 10 percent of world barley trade. All other trade is handled by private companies (*e.g.*, Cargill, Louis Dreyfus, Continental).

Is CWB Strategic Behavior Plausible in the Case of Wheat?

A CWB-commissioned study (Kraft, Furtan, and Tyrchniewicz, 1996) indicated that the CWB has been able to extract a premium of about \$C13/mt, and they attribute this premium to the discriminatory powers of a single seller. The CWB highlighted its ability to exploit important markets in developing countries, such as Brazil or China.

Are these claims of strategic trade behavior plausible? Perhaps not, because even the CWB regularly contradicts itself on this issue—sometimes arguing that it can price discriminate and sometimes arguing it prices competitively. For instance, as part of the 1994 USITC hearings on Canadian wheat exports to the United States (see footnote 11), the CWB argued that it typically sells wheat to the United States through accredited agents, and thus the CWB may not know the final landed price or final destination of a shipment. Earlier, in 1990 the USITC determined that flour millers in the United States were not paying premiums for Canadian durum wheat.

¹¹ See the United States International Trade Commission, *Transcript of Proceedings Before the USITC, Investigation No. 22-54 (Wheat, Wheat Flour and Semolina)*, Washington D.C.: Capitol Hill Reporting, April 1994.

Around 75-80 percent of the world wheat is imported by developing countries and their main consideration is price. In other words, most of the market is a “bulk” market as opposed to a quality conscious market. The bulk market is unwilling to pay for product differentiation in wheat and in their view there is a high degree of substitutability among wheats. The CWB sells about 80 percent of its wheat into markets where price is more important than quality (Carter, Loyns, and Berwald, 1988). Of the top wheat markets for the CWB, most are developing countries. These are not high quality, high protein markets. It is really only Japan, the United Kingdom, and the U.S. that are quality markets, willing to pay for high protein wheat.

The price premiums found by the Kraft *et al.* do not show up at the farmgate for the individual producer (Carter and Loyns, 1996). Furthermore, Kraft, Furtan, and Tyrchniewicz fail to distinguish price premiums due to wheat quality or particular services, such as favorable credit terms and technical assistance accompanying a sale, from those due to the exercise of monopoly power by a single-desk seller, nor did they analyze producer returns.

Carter and Loyns (1996) examined U.S.-Canadian farmgate returns to wheat and found no evidence of any CWB price premium. Rutter (1996) and Groenewegen (1998) produced evidence that supports this conclusion. This is no surprise because Canadian grain must be priced competitively in world markets, and the majority of Canadian wheat sales are into markets where price is more important than quality. Even if the CWB could draw out premiums, would they offset the additional cost to the system? There is growing evidence that they do not.

The EEP Factor

The CWB (1995) has argued that the U.S. EEP segmented world markets, and that a single-desk seller can take advantage of this opportunity for further price differentiation. The EEP argument put forth by the CWB overlooks the fact that most markets were eligible for EEP, leaving few high priced “nonsubsidized” markets. Using International Wheat Council data, Booz, Allen, and Hamilton (1995) report that over 60 percent of CWB wheat sales are made into bulk (*i.e.*, low priced) markets. This observation is consistent with the data shown in Table 1.

Table 1. CWB Wheat Exports by Destination (Average: 1986/87-1995/96)

Importer	Average Market Share (%)
China	22.3
USSR (former)	17.0
Japan	7.1
S. Korea	5.6
Iran	4.8
Brazil	4.3
Algeria	3.8
Cuba	2.3
Indonesia	2.2
Iraq	1.8
Mexico	1.7
U. Kingdom	1.5
Other	25.6

Source: Canada Grains Council, Statistical Handbook, 1997

Price premiums may also be due to other factors rather than the existence of market power. For example, Canadian grain quality standards and certification are usually argued to add value to Canadian grain. Such premiums also would be available to private sellers and do not require a monopoly seller in order to be realized (Industries Assistance Commission, 1988; Piggott, 1992). Such premiums also come with costs.

The theoretical case for single-desk selling is not unlike the “new trade theory”, which suggests the possibility that government intervention in trade may be in the national interest. However, the empirical validity of the “new trade theory” is questionable because it is virtually impossible to formulate useful interventionist policies given the empirical difficulties in modeling imperfect markets (Krugman, 1987; Baldwin, 1992). Policy makers cannot estimate import demand elasticities without

great uncertainty and, given these empirical difficulties, formulating optimal trade policies could do more harm than good. The Krugman-Baldwin critique of the new trade theory clearly applies to STEs for agricultural products.

As explained above, the AWB and CWB claimed there was an entire schedule of prices across markets due to EEP. The non-EEP market was very small, and whether or not the law of one price held within those markets is not worth worrying about. In the EEP markets, it is more plausible to argue that the law of one price held for marginal sales. This view is contrary to the AWB and CWB but it is supported by two previous studies. In an analysis of the 1980 U.S. grain embargo against the USSR, the U.S. Department of Agriculture (1986) found that grain was basically fungible and thus the embargo had little impact on the USSR and little impact on world prices and trade volumes. The embargo study implies that the world grain market was efficiently arbitrated. Goodwin (1992) studied wheat prices in five markets and found that wheat prices in spatially separated markets were closely linked and adhered to the law of one price.

Implications for Developing Countries

One of the key arguments in the new trade theory is that, under imperfect competition, a government may be able to shift profits from foreign to domestic firms through the use of either export subsidies or taxes. While there may be some (limited) evidence of imperfect competition in international agricultural markets, there is insufficient knowledge as to the nature of strategic competition in these markets. This means there is a big gap between the theoretical case for strategic intervention and its empirical validity. It is virtually impossible to formulate strategic trade policies in agricultural trade given the empirical difficulties and information hurdles.

What are the implications for developing countries if strategic behavior is effectively being implemented by STEs? For instance, the CWB argues that it price discriminates against poor countries such as Brazil and China, charging prices above competitive levels for wheat (*e.g.*, see CWB, 1995). It seems amazing that the CWB would triumph such behavior, and presumably they

do so in an attempt to influence political support at home.¹² These claims of strategic export behavior certainly must raise questions within importing nations. If the claims by the CWB and AWB are true, then the international implications are quite serious, as it implies that significant income transfers from poor to rich countries are taking place due to STEs. However, producers in the rich countries do not necessarily benefit because of possible STE inefficiency and waste.

What is the most pragmatic approach for developing countries in response to these practices? One obvious response would be to purchase wheat from some other source which offers more competitive prices. Alternatively, a formal complaint could be placed through the WTO, which is already investigating the behavior of STEs in agricultural trade. Presumably, the WTO has the authority to address the drawbacks of STE strategic behavior on poor countries.

Summary

The CWB is a nontransparent state marketing authority that has exclusive control over exports of Canadian wheat and barley and sole authority over domestic marketing of milling wheat and malting barley. It is a federal government marketing board which has had no accountability to farmers. The CWB was set up under wartime conditions to service the mother country and to help control inflation at home. In recent years, the CWB has come under increased scrutiny at home and abroad. The home pressure for deregulation of the CWB will likely continue, because there is growing evidence of less and less legitimacy for retention of the CWB's single seller status. The CWB maintains that its existence is important because of its discriminatory powers in international markets and the claim is that this ability is strengthened in an export subsidy environment. The Canadian government continues to support the CWB perhaps because it provides for central control over the industry and central control over exports.¹³ From time to time this state control is enacted.

¹² In this context, the claims by economists who find premiums from price discrimination under state trading, raises the broader welfare issue associated with resource allocation distortions when markets are imperfectly competitive. Arguments supported by second best solutions to justify this type of distortion, are not convincing.

¹³ While providing testimony in support of amendments to the CWB Act (*i.e.*, Bill C-4), a senior official from the Canadian Department of Agriculture and Agri-Food stressed the significant public functions and public policy aspects of the CWB. See Howard Migie's testimony regarding Bill C-4 in front of the Canadian Standing Senate Committee on Agriculture and Forestry, MA 34299-Agriculture, Ottawa, April 21, 1998.

Examples of when state control was executed include World War II, the post war bilateral agreement with Britain, the 1980 U.S. grain embargo, and the 1994 Canada-U.S. voluntary export restraint. Revisions to the CWB Act in 1998 continue virtually all of the monopoly controls and have not removed them from the power of the state.

If strategic trade policy is being implemented by the CWB, this could raise concerns in developing countries. In fact, such price discrimination would be objectionable to all buyers, and among others, it is objectionable to economists on theoretical grounds because of the implied resource distortions. This paper has discussed the theory and empirical evidence in relation to strategic trade behavior on the part of the CWB. We conclude that in the case of the CWB there is no compelling evidence of such behavior. In fact, the domestic anti-competitive aspects of the CWB are probably far more important than genuine foreign market power issues.

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